NYSERDA 2022 OFFSHORE WIND SOLICITATION ORECRFP22-1

Chapter 7 Appendices - Part 2

Public version

Community Offshore Wind LLC

Lease OCS-A 0539

Annual Report and Accounts 2019/20

Bring Energy to Life

nationalgrid

Bring Energy to Life

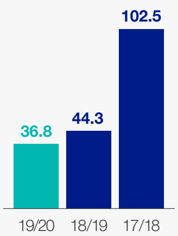
National Grid operates at the heart of the energy system, connecting millions of people safely, reliably and efficiently to the energy they use every day.

Highlights

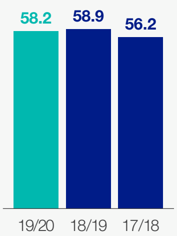
We have continued to make strategic and operational progress while maintaining excellent safety levels across all our networks. We have retained a focus on our environmental sustainability record and employee engagement.

Group financial highlights

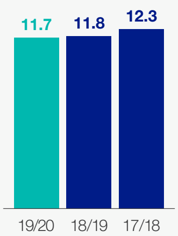
Statutory EPS (p)*



Underlying EPS (p)* Ⓐ



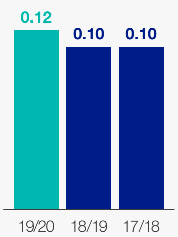
Group Return on Equity (RoE) % Ⓐ



* From continuing operations

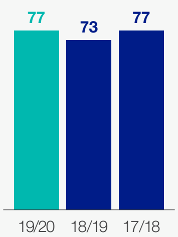
Group operational highlights

Group safety performance (lost time injuries per 100,000 hours worked in 12-month period)



Scope 1 and 2 greenhouse gas emissions (CO_2 equivalent, m tonnes)

Employee engagement (%)



Scan here to view the story

The job that can't wait

We believe that people are the key to unlocking a clean energy future, and we ran a recruitment campaign in the UK to attract talent to 'the job that can't wait'. We were delighted with the response to the campaign, which saw a sevenfold increase in applications to our Advanced Apprenticeship scheme and started a national conversation about the importance of STEM at all stages of education.

Further reading

Online report

The PDF of our Annual Report and Accounts 2019/20 includes a full search facility. You can find the document by visiting the 'About us' section at www.nationalgrid.com/about-us/annual-report-and-accounts.

QR codes

Throughout the report there are QR codes that you can scan to easily view content online. Simply open your camera app on your smartphone device to scan the code.

More detail

Throughout this report you can find links to further detail within this document.

Contents

Reporting currency

Our financial results are reported in sterling. We convert our US business results at the weighted average exchange rate during the year, which for 2019/20 was $1.29 to £1 (2018/19: $1.31 to £1).

Alternative performance measures Ⓐ

In addition to IFRS figures, management also use a number of 'alternative measures' to assess performance. Definitions and reconciliations to statutory financial information can be found on pages 240 – 249. These measures are highlighted with the symbol above.

Business model
What we do

National Grid plc is one of the world's largest investor-owned energy utilities, committed to delivering electricity and gas safely, reliably and efficiently to the customers and communities we serve.

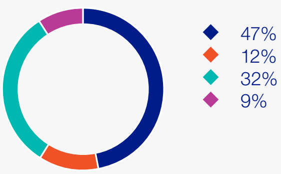
Our core regulated businesses
National Grid owns a range of high-quality, long-term assets. All our assets share low commercial risk profiles and are typically supported by long-term contracts or stable regulatory arrangements. Our core regulated businesses in the UK and US generated over 90% of our operating profits this year.

Our other energy businesses
Supporting the core regulated businesses, we also own a diverse and growing portfolio of commercial energy businesses also operating across the UK and US. These include our Grain LNG terminal and electricity interconnectors between the UK and continental Europe, which generate revenue by selling capacity to store or transmit energy. Our UK metering business generates revenue primarily through meter rentals. We also own a commercial property business which develops and sells surplus land.

Our business is organised into segments, based upon activity and location

Key:
- ◆ UK Electricity Transmission
- ◆ UK Gas Transmission
- ◆ US Regulated
- ◆ National Grid Ventures and other activities

Statutory operating profit (%)



Underlying operating profit (%) Ⓐ

RAV, rate base and other assets (%) Ⓐ

Core regulated

◆ UK Electricity

Electricity
Our UK electricity business comprises both the electricity transmission network (ET) and a separate Electricity System Operator (ESO).

We own the high-voltage transmission network in England and Wales. We are responsible for ensuring electricity is transported safely and efficiently from where it is produced; reaching homes and businesses safely, reliably and efficiently. We also facilitate the connection of assets to the transmission system.

4,481
miles (7,212 kilometres) of overhead lines (2018/19: 4,481 miles; 7,212 kilometres)

1,391
miles (2,239 kilometres) of underground cable (2018/19: 1,437 miles; 2,312 kilometres)

Our role as ESO
The ESO now operates as a separate company within National Grid effective from 1 April 2019. We are responsible for making sure supply and demand of electricity is balanced in real time across Great Britain (GB). While we operate as the ESO across GB, we do not own the transmission assets in Scotland.

Although the ESO is legally separate from ET, its results are still presented to the Board as part of the UK segment, and therefore no change has been made to our reportable operating segments.

◆ UK Gas Transmission
Our UK Gas Transmission (GT) business comprises both the gas transmission assets and an integrated gas system operator.

We also own and operate the high-pressure gas transmission network in Great Britain. We are responsible for making sure GB's gas is transported safely and efficiently from where it is produced to where it is consumed.

As the Gas System Operator we are responsible for ensuring that supply and demand are balanced in real time on a day-to-day basis.

4,740
miles (7,630 kilometres) of high-pressure pipe (2018/19: 4,760 miles; 7,660 kilometres)

◆ US Regulated

Electricity
We own and operate transmission facilities across upstate New York, Massachusetts, New Hampshire, Rhode Island and Vermont.

Our electric locations by state:
- New York;
- Massachusetts; and
- Rhode Island.

9,109
miles (14,659 kilometres) of overhead lines (2018/19: 8,881 miles; 14,293 kilometres)

Gas
We own and operate gas distribution networks across the northeastern US and are responsible for connecting millions of customers to the energy they use.

Our gas locations by state:
- New York;
- Massachusetts; and
- Rhode Island.

35,682
miles (57,425 kilometres) of gas pipelines (2018/19: 35,560 miles; 57,228 kilometres)

◆ National Grid Ventures and other activities

National Grid Ventures (NGV) manages our diverse portfolio of energy businesses that are similar to our core regulated operations. This operating segment represents our main strategic growth area outside our regulated core business, in competitive markets across the US and the UK. The business comprises commercial operations in energy metering, electricity interconnectors, renewables development and the storage of liquefied natural gas (LNG) in the UK.

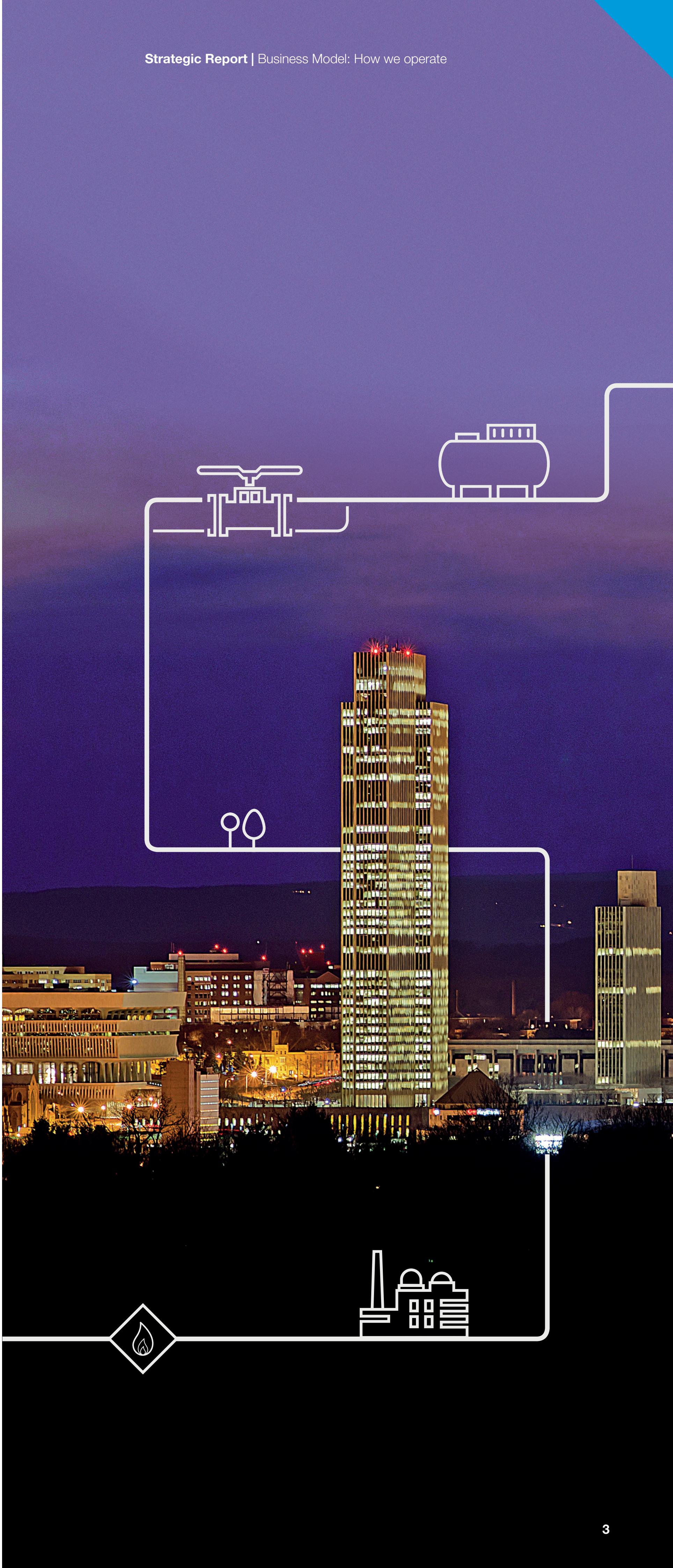
In July 2019, we completed the acquisition of Geronimo, a leading wind and solar developer in North America. In December, we announced the start of commercial operations at the 200 MW Crocker Wind Farm in Clark County, South Dakota.

Our other activities that do not form part of any of the segments over the page or NGV, primarily relate to our UK property business together with insurance and corporate activities in the UK and US, and the Group's investments in technology and innovation companies through National Grid Partners (NGP).

8.8 million
metering: gas meters (2018/19: 9.9 million)

1,000,000 m³
liquefied natural gas tank space (2018/19: 1,000,000 m³)

7.8 GW
GW capacity of interconnectors in operation or under construction (2018/19: 7.8 GW)



Business model
How we operate

Our operating model creates a stable, reliable and sustainable business that benefits our

What we rely on

The key **internal resources** that we rely on to do business are:

- our physical assets that move the energy;
- appropriate funding that allows us to invest in our workforce and assets; and
- our talented workforce that ensures energy is moved efficiently and reliably.

We also rely on maintaining **strong relationships** with a number of key external stakeholder groups to ensure we best meet their needs and maintain our licence to operate (see pages 44 – 47).

How we do business

We combine these input factors with our **technical expertise** to achieve our purpose and vision.

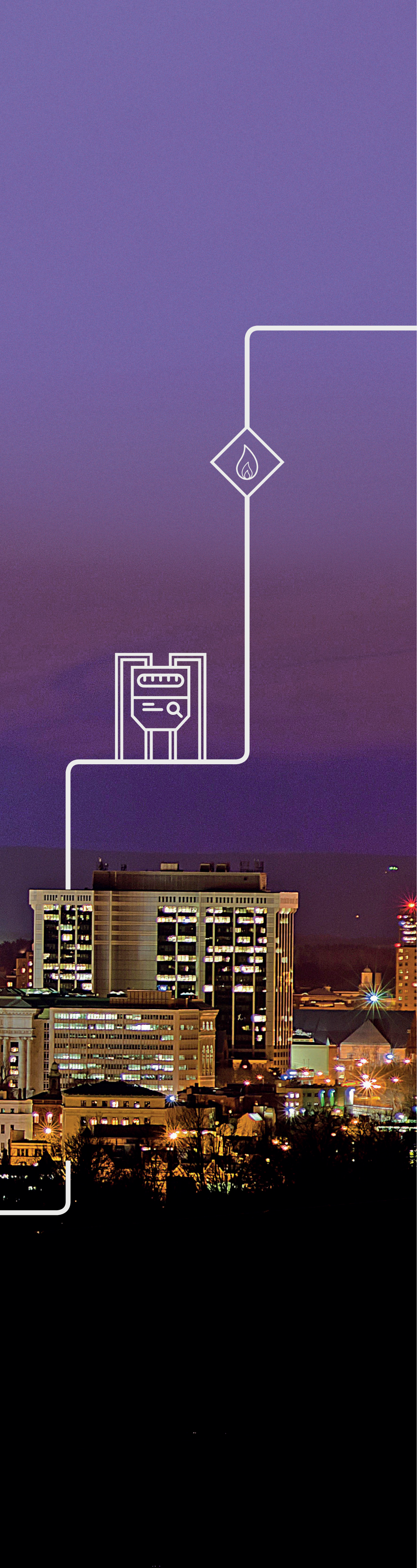
We do all of this in accordance with **our culture** and values, which guide everything that we do.

Our strategy is designed to maintain and develop our business model and is supported by robust governance and risk management processes.

The value we create

We deliver value for our **stakeholders**, which include our customers, as well as **financial value** for shareholders, by:

- operating within our regulatory frameworks thereby being efficient and compliant;
- performing well against our regulatory incentives, delivering customer benefits and good returns;
- managing our cash flow requirements and securing low-cost funding; and
- maintaining a disciplined approach to investment in our networks.



What we rely on

Internal resources

Physical assets

We own electricity and gas networks that transmit energy over long distances from where it is produced. In the US, we also distribute it locally to where it is consumed. These networks are built to last for many decades. Such networks account for the vast majority of our asset base. We also own three subsea electricity interconnectors, with three further subsea cables under construction as well as LNG importation facilities.

c.£4.8bn p.a.

average investment in our assets over the past three years (on a constant currency basis)

Funding

We fund our business through a combination of shareholder equity and long and short-term debt. We maintain an appropriate mix of the two and manage financial risks prudently.

63%

regulatory gearing (net debt as a proportion of the value of regulatory assets and other invested capital)

Employees

Our highly skilled, dedicated employees have a strong public service ethos. They manage and maintain the physical energy infrastructure, and assist and develop the many stakeholder relationships that are crucial to the Company's success.

As we support the changes needed to build a net zero energy system, we are providing employment opportunities and supporting our workforce to build the skills necessary to support these changes. By attracting and retaining the people capable of supporting the journey to net zero in the energy sector we can help the places we operate reach their emissions targets.

23,069

employees worldwide

Strong relationships

Customers

In the UK we do not own the energy that flows through our electricity cables and gas pipes. This energy is owned by our customers, such as electricity generators and gas shippers. These industrial customers, together with domestic consumers through a small portion of their energy bills, pay to use our networks. In the US, we have nearly seven million residential and commercial accounts.

Contractors and suppliers

We work in partnership with our supply chain, which has complementary experience, skillsets and resources. We agree mutually beneficial contractual arrangements and, wherever possible, leverage economies of scale and use sustainable and global sourcing opportunities.

Communities and governments

The societal impact of our activities means that a range of stakeholders have a legitimate interest in and influence on the work we do. These include national and regional governments, local communities, our supply chain, and business and domestic consumers of the energy we transport.

Economic, health, safety and environmental regulators

We are subject to economic regulation by bodies that are entirely independent of the Company. These economic regulators set the prices we can charge for providing an economic, efficient and non-discriminatory service. Our regulated revenue therefore covers day-to-day running costs, financing capital expenditures to renew and extend our networks, and incentives or penalties relative to performance targets. It also affords our shareholders a fair return on their investment.

The energy we transport and the activities we undertake are intrinsically hazardous; therefore our operations have to comply with laws and regulations set by government agencies responsible for health, safety and environmental standards.

Business model
How we operate continued

How we do business

Our technical expertise

Over the many decades in which we have played a vital role connecting people to the energy they use, National Grid has built safe and reliable networks. We continue in our efforts to develop a well-respected and trusted reputation for engineering excellence.

We combine our extensive skills, knowledge and capabilities with innovation to ensure our core competencies continuously create value for shareholders and wider stakeholders alike.

We are recognised for our excellence in:

Asset management
We invest in and maintain our assets across their life as cost-effectively as possible.

Our focus ensures efficient management of our assets across their lifetime.

9.0% Ⓐ
Asset growth 2019/20

Engineering
The skills of our engineers are vital in delivering safe, efficient, reliable and sustainable performance for all our businesses. Our workforce strives to:
- find practical and innovative solutions to complex problems;
- employ risk-based decision-making; and
- adopt common approaches and continuous improvements.

Our engineering expertise supports the delivery of a reliable network.

Capital delivery
We add value for our stakeholders by ensuring safe and effective delivery of large and complex infrastructure projects, ranging from large portfolios of smaller works to stand-alone mega projects.

£5.4bn Ⓐ
Capital investment in 2019/20

Innovation
Our innovation activities are focused on future-proofing the business for our customers as the energy landscape changes. Collaboration is crucial as we search for new technologies and techniques that will support this transformation. We are therefore investing in technologies through our venture capital and innovation arm, NGP, while continuing to partner with industry, academia, and policymakers.

£134m
Fair value of NGP portfolio at 31 March 2020

Our culture

National Grid's culture is the values, beliefs and behaviours that characterise our Company and guide our practices.

We are working hard to progress as an inclusive employer that values diversity. The knowledge and expertise of our employees is fundamental to our business success. To enable our employees to reach their full potential, we are investing in building the skills and capabilities of our workforce.

We maintain high standards of ethical business. We also promote the right behaviours that are aligned with our values and culture by recognising our employees through a company-wide reward system that supports both what they achieve and how they have delivered their achievements.

Strategy and risk management

Our strategy places the customer at the heart of our decision-making and consists of three long-term priorities:
- optimising our operational performance;
- growing our core business; and
- evolving for the future.

As the energy industry continues its transition to a cleaner future, we have evolved our strategy so that it clearly articulates our priorities, while positioning our business to continue to deliver long-term economic benefits in the regions in which we operate.

The evolved strategy is founded on four strategic pillars which are to:
- enable the energy transition for all;
- deliver for our customers efficiently;
- grow our organisational capability; and
- empower our people for great performance.

We have well-established governance structures that include comprehensive risk management, strong controls and financial discipline.

Further reading
About our strategy on pages 16 – 17 and how it is evolving on page 12.
Internal control and risk management on pages 22 – 25.
Our commitment to being a responsible business on pages 48 – 56.

The value we create

For stakeholders and wider society

Society
We provide the energy systems that help economies grow in a sustainable, affordable and reliable way. We continue to work with partners and customers on the technologies required to make net zero a reality.

70%
Current reduction in greenhouse emissions

Investors
We aim to be a low-risk investment proposition, focused on generating shareholder value through dividends, supported by asset growth from investing in essential assets under primarily regulated market conditions, to servicing long-term sustainable consumer-led demands.

11.7% Ⓐ
Group Return on Equity 2019/20

Our employees
We seek to create an environment in which our workforce can make a positive contribution, develop their careers and reach their full potential.

77%
Employee engagement score 2019/20

Customers
By delivering the energy they need and dealing with them in a transparent and responsive manner, we seek to build trusted relationships with our customers as we deliver services to them.

Economic, health, safety and environmental regulators
Through constructive, transparent engagement and consistent, reliable delivery of our commitments, we build trust with our regulators.

0.12 LTIs
(per 100,000 hours worked in a 12-month period)
Group safety performance 2019/20

Contractors and suppliers
We maintain responsible and efficient supply chains in which our interests and those of our suppliers are aligned with the interests of customers.

£6.0bn
Group supply chain spend 2019/20

Communities and governments
We help national and regional governments formulate and deliver their energy policies and commitments. The taxes we pay help fund essential public services. We have an important role to play in sustainability, enabling the transition to a low-carbon future.

£47m
Contribution to communities 2019/20

Further reading
Our Key Performance Indicators (KPIs) on pages 18 – 20
Our stakeholders on pages 44-47
Our commitment to being a responsible business on pages 48 – 56

Financial value
The chart below describes how our businesses create financial value. Further detail can be found in our financial review on pages 28 – 37.

1

Revenue and profits
The vast majority of our revenues are set in accordance with our regulatory agreements (see pages 28 – 37), and are calculated based on a number of factors including investment in network assets; performance against incentives; allowed returns on equity and cost of debt; and customer satisfaction.

2

Cash flows
Our ability to convert revenue to profit and cash is important. By managing our operations efficiently, safely and for the long term, we generate substantial cash flows. Coupled with long term debt financing, as well as additional capital generated through the take up of the shareholder scrip dividend option during periods of higher investment, we are able to invest in growing our asset base and finance returns through dividends.

3

Investment
We invest efficiently in our networks to deliver strong and sustainable growth in our regulated asset base over the long term. We continually assess, monitor and challenge investment decisions so we can continue to deliver safe, reliable and cost-effective networks.

Capital allocation
Our capital allocation is determined by the need to fund our businesses to deliver the investment and outputs required under our regulatory frameworks in the UK and US. The investments we make in our business seek a balance between growth and cash flow.

Chairman's Statement

Sir Peter Gershon
Chairman

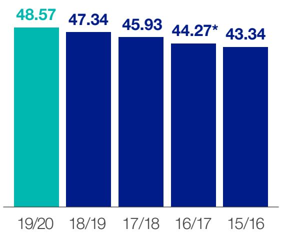
“National Grid evolved its vision to reflect our belief that a responsible business needs to stand for something beyond profit.”

Final dividend of

32.00

p per share proposed to be paid on 19 August 2020

Full year dividend (pence per share)



*excludes a special dividend of 84.375p.

The Annual General Meeting will be held on 27 July 2020. This year, it will be held behind closed doors as a result of the COVID-19 pandemic. More details on how to watch a presentation following the AGM can be found on our website: www.nationalgrid.com.

As we all continue to face the unprecedented challenge of COVID-19 around the world, National Grid remains committed to doing the right thing for our employees, our customers, our communities and our suppliers.

Our priority throughout this period continues to be keeping our key workers safe. We have well-developed procedures in place to manage the effect of a pandemic, and we swiftly and successfully implemented our business continuity plans which allowed us to maintain safe working environments for our workforce. That ensured they could play their part in this time of global crisis by keeping our networks running and the energy flowing to hospitals, care homes, businesses and homes. I would like to thank them for their dedication and resilience.

In mid-April, after our financial year end, the extraordinary resilience of our US employees also enabled power to be quickly restored to over 200,000 customers across New York, Rhode Island and Massachusetts following extensive storm damage, despite the additional constraints arising from COVID-19.

Some short-term delay to our capital programmes was inevitable given the lockdown measures put in place by governments to control the spread of COVID-19. However, work on our capital programmes has now resumed. In the US, the suspension of debt collection and customer termination activities across our jurisdictions resulted in lower customer collections and additional provisioning for bad and doubtful debts.

We are now working diligently to prepare for the future, in which the safety of our employees and customers will remain of paramount importance.

The Board's ongoing priorities are our societal responsibilities, the balance sheet and liquidity. In support of these and in recognition of the uncertainty surrounding the evolution of the pandemic, we are keeping a number of scenarios under regular review. Our current base case assumes a scenario of continued gradual easing of restrictions in all our operating territories, to keep the spread of the pandemic under control.

Against that backdrop, I am pleased that we are able to use our extensive resources to help support the communities we serve to get through and recover from the pandemic. Although the Company has implemented a number of measures to limit discretionary external spending, it has not implemented pay reductions, furlough or compulsory redundancy schemes.

Nationalisation

The Board spent a lot of time in 2019 considering our response to the Labour Party's proposal to nationalise nearly all of National Grid's UK assets. We implemented some measures which would have strengthened our ability to secure a fair price for these assets, should the Labour Party have won the General Election. Although the Conservative Party secured a majority at this election, we note that the new Labour leader pledged his support for common ownership in a range of sectors, including energy, in his leadership campaign.

The path to net zero

Our focus for the future is to lead the way in the delivery of a clean energy transition. During the year, National Grid committed to reduce its own emissions to net zero by 2050, and we also saw significant legislative action towards a net zero ambition.

The UK and States of New York and Massachusetts each established legally-binding targets to achieve net zero emissions by 2050, while Rhode Island maintained its legally-binding target of 80% emission reductions by 2050. We welcome this progress as it is clear that decarbonisation and the pathway to reach net zero will remain one of the major long-term issues facing our economies.

While the pathway to decarbonisation of electricity has been identified, there is no obvious solution for the decarbonisation of heat. We continue to work with governments and others in the industry to identify solutions, but it is clear that the right regulatory and policy frameworks will be critical to enable a fair and affordable transition to a clean energy future.

Reviews

Although the power outage in Great Britain on 9 August 2019 caused significant disruption, the Board is pleased that the subsequent internal and external reviews confirmed our systems operated correctly and identified the failure of certain generators and railway assets as the cause. The external reviews highlighted a number of recommendations which we hope are implemented to improve the resilience of the overall GB infrastructure in future. The Board believes it is important that the current external review of the structure of the ESO results in a stable outcome which best enables the UK to meet its 2050 net zero commitment.

The Board was deeply concerned that the actions taken to implement a moratorium on new gas connections in downstate New York resulted in strong public criticism of the Company by Governor Cuomo, significant reputational damage, difficulties for customers, and a settlement with the New York Public Services Commission. The Board commissioned two external reviews which have provided valuable insights into how our US business got into this situation and a number of recommendations, which are being implemented at pace by our new President of the US business. As we continue working with the Public Services Commission to find a long-term solution, we will ensure our approach to meeting increasing demand for energy in New York State takes account of all key stakeholders.

Financial reporting

The International Financial Reporting Standard (IFRS) technical requirements make reporting some of the performance measures that we use as a regulated business challenging. We provide additional information, on page 32, about both our significant assets and liabilities that do not form part of our audited accounts, to help our investors gain a fair, balanced and understandable view of our business. Where practicable we reconcile these with our statutory measures in 'Other unaudited financial information' on pages 240 – 249.

How we generate and preserve value

Our dividend policy aims to grow the ordinary dividend per share at least in line with the rate of RPI inflation each year for the foreseeable future. As is usual practice, the Board reviews this policy regularly, taking into account a range of factors including expected business performance and regulatory developments. Following stress testing of the finances of the Company against a number of potential COVID-19 scenarios, the Board has decided to recommend a final dividend in line with this policy. Accordingly, the Board has recommended an increase in the final dividend to 32.00p per ordinary share ($2.0126 per American Depository Share). If approved, this will be paid on 19 August 2020 bringing the full year dividend to 48.57p per share ($3.0799 per American Depository Share), an increase of 2.60% over the 47.34p per share for the financial year ended 31 March 2019.

We completed the sale of our remaining stake in Cadent in June 2019 for £1,965 million, and the proceeds were reinvested in the business to support the significant capital investment programme and asset growth across the Group over the medium term.

Regulatory issues

We continue an open dialogue with our regulators. In the UK, we submitted our final business plans for RIIO-2 in December 2019.

We are resuming settlement negotiations in the KEDNY/KEDLI rate cases in the interest of agreeing on a multi-year rate plan that mitigates bill impacts for our customers while allowing us to maintain safe and reliable service, advance our clean energy goals, and earn a reasonable return. If we are unable to reach a negotiated settlement, the rate cases will continue to a litigated outcome at which time we would then plan to file a new multi-year rate case proposal.

In light of the financial hardships that our customers have experienced from the COVID-19 pandemic, Niagara Mohawk Power Corporation (NMPC) delayed the implementation of certain previously approved rate increases. NMPC also delayed the filing of a rate case this spring and are exploring options including an extension of the current rate plan or a rate case filing later this summer.

Appointments and Board changes

US Executive Director Dean Seavers stood down from the Board for personal reasons in November 2019. The Board appointed Badar Khan, who was already a member of the Executive Committee, as interim President of the US business. Following a thorough process to identify a permanent successor, which included both internal and external candidates, I'm pleased that Badar was confirmed as President of the US business in April 2020.

The Board was pleased to welcome two new Non-executive Directors during the year – Jonathan Silver, who has a strong background in finance and US government policy, and Liz Hewitt, who brings extensive business, financial and investment experience from international companies across a range of sectors.

You can read more details of all our Board members' experience and the Committees they support in the Corporate Governance review on pages 63 – 107.

Culture and Responsible Business

The recent tragic death of George Floyd and the subsequent widespread expressions of public support for the Black Lives Matter movement have reinforced the right of everyone to equal opportunities, to have their voice heard, and to feel safe as they go about their daily life. These recent events highlight that companies have a vital role to play in addressing inequality and injustice wherever we see it, encouraging our employees to speak up, challenge and act where something does not feel right. We will not condone intolerance of any kind at National Grid.

The Board hosted several meetings throughout the year with a cross-section of employees to ensure the voice of the employee was heard by the Board, and was pleased with the effectiveness of these sessions.

During the year, National Grid evolved its vision to reflect our belief that a responsible business needs to stand for something beyond profit. We have a responsibility to demonstrate our commitment to society more broadly, and that's why our vision is to be at the heart of a clean, fair and affordable energy future.

Our purpose and values are key to our Company's DNA. In particular, they have enabled all our employees to respond with huge commitment, agility and flexibility to the challenges of COVID-19. I am immensely grateful to them.

Peter Gershon

Sir Peter Gershon
Chairman

Chief Executive's review

John Pettigrew
Chief Executive

We've made strong progress against our strategic priorities despite a challenging year.

The far-reaching and devastating global consequences of COVID-19 cannot be underestimated and we all owe a debt of gratitude to those who have been on the frontline fighting this virus across the world.

At National Grid, our role throughout this crisis has been to play our part in keeping the lights on and the gas flowing. Keeping the networks running, keeping our customers connected to the power they rely on and expect, and protecting the communities where we live and serve has never been more important.

I'm immensely proud of the way all our workforce have responded to this pandemic, and particularly those who go out to work every day in the field and in our control rooms to ensure we continue to power hospitals, homes and society during such a challenging period.

We took immediate action to lessen any financial hardship our customers may have faced, suspending debt collection and customer termination activities across our US jurisdictions, and delaying planned bill increases in New York State. We have also strengthened customer support activities to help lower-income customers manage their energy bills during the crisis and beyond.

We donated a total of £600,000 to the National Emergencies Trust, the Trussell Trust and University Hospitals Birmingham Charity in the UK, and $1 million to community-based charities across our US jurisdictions to provide help and support to the people that needed it most. We also introduced a programme of practical help, encouraging our thousands of UK employees to volunteer for half a day per week with charities working on the COVID-19 response.

We are planning additional support activities for the communities we serve for the post COVID-19 environment, including employability skills support and helping small and local businesses in our supply chain. We recognise that the impact of COVID-19 will be felt over the long term, and we are committed to applying our Responsible Business principles for our workforce, our communities and the economy in our response.

While the end of the financial year was dominated by responding to the COVID-19 pandemic, 2019 saw uncertainties particularly in the UK where the external environment was dominated by Brexit and a General Election.

Leading the clean energy transition

It's been a year of significant progress in the clean energy transition with climate change rising up the agenda for the public and politicians alike. We've seen climate change protests across the world, and an increased commitment from governments to take action, including in the geographies in which we operate. The UK legislated for net zero emissions by 2050, and New York and Massachusetts each set an economy-wide limit of net zero carbon emissions by 2050, with New York additionally legislating the target of 100% carbon-free electricity

"National Grid has a leading role to play in ensuring a cleaner energy future in all our regions."

by 2040. Rhode Island maintained a legally binding target to reduce carbon emissions by 80% by 2050 and the Governor signed an executive order targeting 100% renewable electricity by 2030.

At National Grid, we have evolved our strategy and vision to reflect our belief that we have a responsibility to ensure that the energy future we help to shape is one where everyone shares the benefits and where we enable the communities we serve to deliver a clean transition. That's why our vision is **to be at the heart of a clean, fair and affordable energy future**. You can read more about our new strategy on page 12. Throughout this report, we have reported our performance against the strategy that was effective until 31 March 2020, and which is set out on pages 16 – 17.

During the year, we committed to reducing our own emissions to net zero by 2050 and to continue to facilitate the industry-wide transition to a low-carbon future.

We worked with the UK government to accelerate the transition to electric vehicles to cut carbon emissions and improve air quality for communities the length and breadth of the country. We were pleased to see a £500 million commitment in the 2020 Budget to support the rollout of new rapid-charging hubs so drivers are never more than 30 miles from a charging point.

We are developing the world's first zero-carbon industrial cluster in the UK's Humber region in partnership with Drax and Equinor. The Zero Carbon Humber consortium will use carbon capture and storage to create a zero-carbon region by 2040.

We are developing hydrogen trials and investing to understand the impact of hydrogen on our existing gas assets to address the decarbonisation of heat. While gas clearly has a role to play for many years to come, we understand the urgency of finding a solution to decarbonise heat in a way that is fair, affordable and not overly disruptive to consumers.

We've started construction work on our Viking Link interconnector, connecting Great Britain and Denmark, and continue construction on IFA2 and North Sea Link. Our interconnectors have a key role to play in a decarbonised energy sector, enabling the most efficient use of renewable energy across Europe.

Delivering for investors

During the year, we spent more than £5 billion growing and enhancing our US and UK energy networks, through a combination of organic growth, reinvesting the proceeds from the Cadent sale and innovative financing methods such as our green bond. We achieved this strong performance while also delivering a high level of asset growth of 9%. The proposed final dividend of 32.00p, which is still subject to shareholder approval, brings our full year dividend to 48.57p, an increase of 2.60% and in line with our policy. This is covered 1.2 times by our underlying earnings per share of 58.2p.

Safety

In the UK and NGV businesses, we've seen a strong safety performance this year. We continue to focus our efforts on developing a generative safety culture, and in the UK we've seen our lowest ever number of lost time injuries.

In the US, we're focused on improving safety and ensuring it is front of mind for all our workforce after seeing a deterioration in performance over the last 12 months. Tragically, we also had a fatality in the US where one of our colleagues was struck by a vehicle which had driven into a clearly marked out area where he was working.

Delivering for our customers

Customer performance remains a key metric and I'm pleased we've seen a steady increase in our customer satisfaction scores for GT and ET. However, our scores were below target in the US, our metering business and the ESO. We have identified areas of improvement and action has already started to address some of these.

Optimising performance

We set out our ambition last year to increase efficiency in our UK and US regulated businesses, becoming more responsive to customers' needs, while also delivering sustainable cost savings. This year we reduced our costs in both regions by significantly more than our £50 million UK target and the $30 million US target through a variety of measures including careful contract management and negotiation and improving workforce productivity. Removing these costs from our business will help to minimise future increases to customer bills.

In the UK Transmission businesses, the weighted average Return on Equity of 12.4% was maintained and within the 200 to 300 basis points outperformance that we committed to under RIIO-T1. In the US, Return on Equity of 9.3% represented 99% of our allowed return, benefiting from revenues from rate case increases in addition to control of our costs and was up 50 basis points on last year. Our Group Return on Equity was marginally lower at 11.7%, down 10 basis points from last year, partly due to lower income from our other businesses.

National Grid has continued to deliver world-class reliability and responded well to storms in the US. We were recognised with the EEI's Emergency Assistance Award and the Emergency Recovery Award for our fast and effective response to storms in 2019. In the UK, we regret the disruption caused by the power outage on 9 August 2019 but welcomed the Ofgem and government reports into the incident which confirmed that the outage was not caused by National Grid infrastructure. We were pleased that they agreed with our view that, given an increasingly complex and challenging energy network, it is appropriate to carry out a review of the Security and Quality of Supply Standards.

We were pleased with the stakeholder group support we received for the RIIO-2 business plans we submitted in December 2019. The Open Hearings expected in April 2020 were delayed due to COVID-19, but we continue to work with Ofgem and all our stakeholders to find the most appropriate framework to balance the needs of our customers and investors. You can read more about the composition of the stakeholder group on pages 45 – 47.

We welcomed Ofgem's decision to apply the Strategic Wider Works model as part of the RIIO-T1 framework to the Hinkley Seabank Connection Project, which we believe is in the best interests of consumers.

In the US, we secured our Massachusetts Electric rate order with a five-year performance-based mechanism and an allowed Return on Equity of 9.6%.

In New York, we enforced a temporary gas moratorium in May 2019, which led to a very challenging period for all our stakeholders. We found operational solutions to resolve the issue for the short term and have now submitted our report into long-term solutions to the State of New York Public Services Commission (NYPSC). We are listening to our stakeholders' concerns and will continue to work with the NYPSC as we try to resolve the issue in the coming months.

Growing our assets

We completed the sale of our remaining stake in Cadent for £1,965 million and reinvested the proceeds in our capital investment programme.

In the US, we invested £3.2 billion in the year on projects including the completion of the Gardenville substation upgrade in West Seneca, New York, which will supply an affordable and reliable source of renewable power for decades to come. We delivered asset growth in the US of 12.2%, up 300 basis points on the prior year.

In the UK, we awarded the £400 million tunnelling contract for our London Power Tunnels 2 project in December 2019. This 20.85-mile (33.5-kilometre), £1 billion link will provide resilience across South London from Wimbledon to Crayford and is due to complete in 2028. Another highlight has been the completion of the tunnelling for our Feeder 9 project under the Humber, which has been a critical investment in our gas infrastructure. These are just two of the projects which contributed to capital investment during the year of £1.3 billion and asset growth of 4%.

Our interconnector portfolio continues to grow with new subsea power links to France, Norway and Denmark planned over the next four years. IFA2, the 149-mile (240-kilometre) subsea cable between Great Britain and France is on track to become operational later this year, and work also continues on our North Sea Link to Norway which is expected to be operational in 2021/22. Construction is now underway on Viking Link, the 472-mile (760-kilometre) subsea cable between Great Britain and Denmark.

Evolving to a low-carbon future

In our role at the heart of the clean energy transition, we have continued to take action to enable decarbonisation across our business.

We completed our acquisition of Geronimo, a leading wind and solar developer in North America, in July 2019. Since the acquisition, Geronimo has announced the commercial operation of its 200 MW Crocker Wind Farm in South Dakota, along with the signing of a power purchase agreement with Basin Electric Power Cooperative for its 128 MW Wild Springs solar project, also in South Dakota.

The ESO is also preparing to enable a green energy future and by 2025, aims to have transformed the operation of Great Britain's electricity system so it can operate with zero carbon.

I was pleased to note that 2019 was the cleanest year on record for the UK as, for the first time, the amount of zero carbon electricity used by the UK's homes and businesses outstripped that from fossil fuels for a full 12 months.

As the UK energy industry continues to evolve, we are working closely with the government and regulator to review the most appropriate structure for the ESO following legal separation last year.

Unlocking future potential

I was pleased that our focus on diversity was recognised with Forbes naming us one of the Best Employers for Diversity 2020, and the US Human Rights Company Foundation awarding us Best Place to Work LGBTQ Equality. Our environmental commitments were also recognised with a place for the fourth consecutive year on the CDP A list, which names the world's most pioneering companies leading on environmental transparency and performance.

National Grid continues to focus on being a responsible business and increasing our positive impact on society. The unprecedented global challenge of COVID-19 demonstrated more than ever the importance of being a responsible business, and we concentrated our efforts on how best to support our workforce and our communities through this difficult time.

In addition to the immediate volunteering programme we set up to support those who needed it most during the COVID-19 pandemic, we partner with charity organisations to encourage and enable our employees to volunteer with them. In early 2020, we launched a community investment strategy which will provide access to skills development for 45,000 people across the US and the UK, as we help to equip future generations to be part of the clean energy transition.

We invest millions every year in training to ensure our workforce have the skills to meet the changing needs of a net zero economy, as well as supporting STEM-related activities for tens of thousands of schoolchildren around our key infrastructure projects.

Looking ahead

I'd like to end by expressing my gratitude to all our workforce who have worked tirelessly to achieve the performance we have delivered this year, and to ensure the networks keep running as efficiently and safely as ever through unprecedented times.

John Pettigrew
Chief Executive

Scan here to view our video

Evolving our strategy for the future

We have evolved our strategy in order to better reflect our purpose and in response to our business environment.

The evolved strategy reflects a belief that we have a responsibility to ensure that the energy future we help to shape is one where everyone shares its benefits. We will continue to connect people to the energy they need for the lives they lead, safely, reliably and securely.

Our purpose

Our purpose remains to **Bring Energy to Life**, providing the heat, light and power people and businesses rely on and supporting local communities to prosper.

Vision

To be at the heart of a clean, fair and affordable energy future

Values

Every day we…do the right thing, find a better way and make it happen

Bring Energy to Life

Strategy

National Grid builds, owns and operates large-scale, long-life energy assets primarily in networks and renewables that deliver fair returns and high societal value. The Company's portfolio of largely regulated assets in stable geographies is underpinned by a strong and efficient balance sheet.

Priorities

Enable the energy transition for all

Deliver for customers efficiently

Grow organisational capability

Empower colleagues for great performance

Our vision

National Grid stands for more than profit. The Company is committed to making a positive contribution to society, whether that's helping the young people of today to become the energy problem-solvers of tomorrow, supporting customers to use energy more efficiently, or tackling climate change.

That's why the Company's vision is to be at the heart of a **clean, fair and affordable** energy future, ensuring everyone benefits from the energy transition, that bills are not a burden for individuals or families, and that no one gets left behind.

Our strategy

National Grid's strategy is to build, own and operate large-scale, long-life energy assets primarily in networks and renewables that deliver fair returns and high societal value. The Company's portfolio of high-quality, low-risk assets in stable geographies is underpinned by a strong and efficient balance sheet.

This strategy sets the bounds of National Grid's business and will ensure it is set up to play a leading role in the energy future. It will be delivered through four priorities.

Our priorities

We have four strategic priorities to make our purpose possible and achieve our vision.

Enable the energy transition for all
Fully decarbonising the electricity grid through modernisation, increased flexibility and by connecting renewables quickly and efficiently. Leading the way in the decarbonisation of gas, investing in a range of solutions like renewable natural gas, blending hydrogen in networks and carbon offsetting. Decarbonising transport by building electricity network flexibility and supporting charging infrastructure.

Deliver for customers efficiently
Providing safe, reliable and affordable energy for customers around the clock, ensuring operational excellence and fiscal discipline in everything National Grid does, building productive partnerships with regulators and policymakers, and unlocking real value for customers and the communities they live and work in.

Grow organisational capability
Anticipating and adapting to changes in the energy sector in faster and smarter ways, remaining at the cutting edge of engineering and asset management, and innovating more sustainable energy solutions.

Empower colleagues for great performance
Building diverse and inclusive teams that reflect the communities the Company serves, attracting the best talent, prioritising learning and developing the skills needed now and in the future to accelerate the energy transition.

Our values

As a purpose-led, responsible business, how National Grid delivers for its customers and communities is as important as what is delivered. Colleagues right across the Company, in the United Kingdom and the United States, are committed to:

Doing the right thing, keeping customers, communities and the wider public safe.

Finding a better way, delivering excellent performance at best value and innovating new energy solutions.

Making it happen, with a strong focus on excellence, efficiency and results.

Our business environment

As well as managing through the COVID-19 pandemic, our societal ambition remains to achieve net zero, with emphasis on fairness and affordability, digitalisation and decentralisation during the transition.

Net zero

2019 was a turning point for climate action, from protests on the street to legislative action. Governments around the globe are considering and acting on ambitious carbon reduction targets.

70%
National Grid's reduction in carbon emissions since 1990.

Net zero
by 2050
Our net zero commitment is to reduce our own greenhouse gas emissions to net zero by 2050.

The future of heat

In the absence of both clear technology roadmaps and public policy frameworks that underpin the decarbonisation of heat by 2050, we currently continue to believe that our gas assets will have useful purposes beyond 2050. In common with the Committee on Climate Change's Net Zero report in May 2019, we believe that the future of heat is one reliant on multiple technologies and fuels, with an enduring role for natural gas. However, the scale and purpose for which the networks will be used is dependent on technological developments and, crucially, policy choices of governments and regulators.

The future of heat is uncertain, and its decarbonisation is reliant on relatively nascent technologies, such as hydrogen and carbon capture usage and storage, as well as biogas and heat pumps. These new and evolving technologies will need to be used in new contexts and on a scale that has not yet been demonstrated. We do not believe that any of these technologies can, in the next 30 years, reach sufficient scale to represent an existential threat to our gas businesses.

2019/20 developments

Climate risk continues to rise up the corporate agenda, against the rapidly evolving societal attitudes to climate change and the role of energy companies in leading and meeting net zero commitments.

At least 9 countries have legislated or are in the process of legislating, and at least 112 countries are discussing legislating, net zero targets by 2050 or sooner.

UK

The UK became the first major economy to commit to a legally binding target of net zero emissions by 2050.

2019 was the cleanest year on record for the UK as, for the first time, the amount of zero carbon electricity used by the UK's homes and businesses outstripped that from fossil fuels for a full 12 months.

US

The states of New York and Massachusetts each set an economy-wide limit of net zero carbon emissions by 2050, with at least 85% of reductions from their states' own energy and industrial emissions (and the remainder possible via carbon offsets). New York additionally legislated the target of 100% carbon-free electricity by 2040.

Rhode Island maintained a legally binding target to reduce carbon emissions by 80% below 1990 levels by 2050, and Governor Raimondo signed an executive order targeting 100% renewable electricity by 2030.

Across the wider US, one in three Americans – more than 110 million people – live in a community which has committed to or achieved a 100% clean electricity target.

Our response

- In both the UK and US, we are taking important steps to address the future of heat, engaging across the industry and with government and regulatory bodies. In the US, we collaborated with industry partners to develop interconnection guidelines for renewable natural gas (RNG) in New York State that seek to facilitate growth of this clean energy resource. In the UK, we have conducted three feasibility studies on the potential role of hydrogen and how our networks could facilitate its uptake.
- For our UK regulated business, the single biggest contributor towards our net zero target to reduce is Sulphur Hexaflouoride (SF_6), and we will be leaders here. In the US, through our gas pipeline replacement programme, we replaced 460 miles (740 kilometres) of pipe in 2019/20, reducing greenhouse gas emissions from the unintended release of natural gas.
- The ESO has agreed contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system. This aids our ambition to be able to operate GB's electricity system carbon free by 2025.
- The world's largest offshore wind farm, the 1.2 GW Hornsea Project One wind farm, is connected to our electricity transmission network and first generated power in 2019.
- In January 2020, we announced the launch of our first ever green bond. Raising approximately €500 million, the bond's proceeds will finance or refinance UK electricity transmission projects with environmental benefits.
- We have partnered with Drax Group and Equinor to explore how large-scale carbon capture usage and storage and hydrogen could convert the UK's Humber region into the world's first net zero carbon industrial cluster.
- New York Transco, a joint venture in which NGV is a partner, was selected to develop the New York Energy Solution transmission project, unlocking renewable energy upstate for customers downstate.
- NGV completed its acquisition of Geronimo, a leading US onshore wind and solar developer, to establish a foundation on which to grow a large-scale renewables business, such as the 200 MW Crocker Wind Farm in South Dakota. The £209 million deal also secured a controlling share of a 379 MW solar and wind generation joint venture, Emerald Energy Venture LLC ('Emerald'), with Washington State Investment Board.
- Interconnectors played an important role in helping the UK use more zero carbon electricity than that from fossil fuels, and we are currently constructing three additional interconnectors: IFA2 to France, North Sea Link to Norway and Viking Link to Denmark.
- We believe our gas businesses can facilitate the transition to a decarbonised gas system and are investing in solutions such as renewable natural gas and blending hydrogen in our network.
- We have committed to meeting the Task Force on Climate-related Financial Disclosures (TCFD) recommendations in full (see pages 57 – 62).

Our business environment continued

Fairness and Affordability

National Grid delivers energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring that no one is left behind in the short term during the COVID-19 crisis, or in the longer-term transition to clean energy.

#1

The US national ranking of our Massachusetts Electric utility energy efficiency programme by the American Council for an Energy-Efficient Economy (ACEEE).

3%

UK transmission network costs per average household dual fuel bill.

2019/20 developments

UK

Cost of energy remains a key priority, evidenced by 2019's implementation of the energy price cap, and two of Ofgem's key priorities: to 'drive down prices' and 'decarbonise to deliver a net zero economy at the lowest cost to consumers'.

With the government's recent commitment to net zero, industry participants and advisors, such as the Committee on Climate Change, have stressed the importance that net zero is delivered in a fair way as a 'just transition' across society, with vulnerable consumers protected.

US

Energy costs remain a priority for consumers and regulators, and fairness is high on the agenda in the discussion about decarbonisation pathways and their associated costs.

State regulators continue to explore innovative regulatory frameworks that reward utilities for managing customer bill impacts, while delivering desired regulatory and policy outcomes. This includes adjustments to the cost-of-service model that are more forward-looking, and which establish new shareholder incentives for cost efficiency.

Our response

- Our US and UK regulated businesses are pushing for greater affordability and innovative ways to minimise the total cost of energy to consumers.
- In the UK, we have generated £603 million of savings for consumers in the first seven years of the RIIO arrangements, excluding any share from Cadent.
- Our £150 million Warm Homes Fund has helped over 42,000 households suffering from fuel poverty access heating systems and become more energy efficient. This is the largest private sector investment in energy efficiency ever made in the UK.
- Our utility energy efficiency programmes continued to deliver excellent results for US customers, achieving annual electricity savings equal to 3.7% of sales in Massachusetts and 1.1% in New York. All three states that we serve rank in the top five in energy efficiency performance nationally according to the ACEEE.
- In response to the COVID-19 crisis, we have expanded customer support, paused late payment collections activities, and placed a freeze on related service cutoffs.
- In our Massachusetts Electric Company rate order, we gained approval for our proposed five-year forward-looking ratemaking mechanism that includes a consumer dividend and earnings sharing mechanism that rewards efficient company performance.
- In upstate New York, we delivered an estimated $200 million in net societal benefits in our second year of performance incentives. Such benefits increase the affordability of energy and were achieved by reducing electric system peak to mitigate supply costs, increasing adoption of energy efficiency and facilitating uptake of heat pumps for beneficial electrification, among other initiatives.
- In Albany, New York, we worked with the public transit authority to launch four electric buses to test customer experience with the technology and enable expansion to other fleets across our territory. This is an example of our efforts to make electric transport options more widely accessible to all.

Decentralisation

The energy system continues its transition from high to low carbon. This change coincides with a shift to more decentralised generation, including renewables and battery storage. As the volume of this intermittent and distributed generation increases, a more resilient and flexible system will be required; one that makes best use of available energy resources to meet consumers' needs in a balanced, efficient and economical way.

6 MW 48 MWh

The largest battery storage facility in northeastern US was installed by National Grid on the island of Nantucket in 2019 as a flexible and reliable alternative to undersea cables.

2019/20 developments

UK

Last year 29% of generation was connected at the distribution network level or behind-the-meter. The July 2019 Future Energy Scenarios (FES) document suggested that by 2050 this could rise to 58%. This is driven by new technology and business models enabling solutions such as solar panels, electric vehicles and battery storage to be more accessible to all consumers.

US

Distributed energy resource investments and installations continue to grow across the US. This includes not only small-scale solar photovoltaics, but also electric vehicles, distributed storage and demand-side resources. Utilities across the country are exploring how to integrate these resources into the grid, ensuring their utilisation is effective, safe and reliable.

Our response

- We are supporting growth in distributed energy resources (DERs) in our US service territories, where our US regulated business connected 314 MW of generation in calendar year 2019. We also made investments in the grid to enable future growth, including to increase distribution system capacity and to deploy advanced communications, monitoring and controls technologies essential to enhanced DER integration.
- We continued our partnership with leading home solar panel and battery storage company, Sunrun, securing new contracts for grid services from rooftop solar and storage across the US, with nearly 40 MW capacity and ancillary services in calendar year 2019.
- Our 'bring-your-own' device demand response programme expanded in Massachusetts and Rhode Island and received the Energy Storage North America (ESNA) Innovation Award and the Peak Load Management Alliance (PLMA) Program Pacesetter Award. It enables residential customers to receive a financial incentive for enrolling their devices to be managed by us to create grid flexibility.
- Since the start of financial year 2019/20, ET continues to process or has processed 207 connection applications, of which 20% have been made for transmission connected batteries, and a further 14% have been made up of a new customer type, where the customer mixes their generation make-up, for example solar with batteries.
- The ESO is working on a £10.3 million innovation project to explore how DERs can be used to restore power in the highly unlikely event of a total or partial blackout of the UK electricity transmission network.

Digitalisation

Businesses and lives are being transformed by innovations such as artificial intelligence and virtual reality. The energy landscape has seen many changes as companies look to create new business models and reduce energy prices through digital technologies. Technology commercialisation, consumer demand and regulatory stimulus will continue to drive these trends.

>80%

The reduction in the US call centre volume during major storms, after implementing proactive two-way outage texting to improve communications with customers about service outages and restoration.

2019/20 developments

In 2019, the application of digital technologies across the energy industry continued at pace globally. Bloomberg New Energy Finance tracked 379 applications, projects, partnerships and product developments for industrial digitalisation. This is 78% more than in 2018, and they expect a further increase in activity in 2020, as positive results of digitalisation drive its increased use.

Utility networks in all geographies are identifying significant potential for their businesses through digital transformations. Advances in technologies to operate systems, manage assets and engage with customers will be a key facet of our business going forward.

Our response

- For our digital transformation, we are adopting a Group-wide centralised hub model supported by regional delivery. Strategy for the transformation is formed centrally with regional autonomy.
- We expanded a personalisation platform to serve more than two million customers in Massachusetts and Rhode Island. Advanced data and analytics proactively identify eligible customers and present the next best offer to individuals, increasing offer enrolment and reducing bad debt.
- ConnectNow, our ET network connections project, will improve the customer experience of connecting to the network. Focusing on small scale connections such as solar, storage, electric vehicle charging and data centres, this digital platform assists customers through the application process, providing transparency and facilitating communication.
- We are harnessing advances in digital technology and innovation to improve business performance. For example, the ESO in collaboration with the Alan Turing Institute has used data science and machine learning to deliver a 33% improvement in solar forecasting. This will help the ESO run the system more efficiently, and enable more solar capacity to be connected and utilised.
- In 2020, the ESO launched a free Carbon Intensity application, aimed at empowering people to make conscious decisions about how they consume energy by showing them the greenest times of day to use electricity.
- NGP invested in Dragos, a leading cybersecurity provider of industrial control systems and operational technology. Our cybersecurity team conducted a pilot of Dragos' asset identification, threat detection and response software platform to help secure National Grid's critical infrastructure in the UK and US.
- Dragos was among eight new investments and six follow-on investments made by NGP, whose portfolio at the close of the fiscal year comprised 21 investments at a fair value of £134 million ($167 million).

Our response to COVID-19

COVID-19 is affecting countries, communities, supply chains and markets, including the UK and our service territory in the US. Since the World Health Organisation declared the outbreak as a pandemic on 11 March 2020, National Grid has applied UK and US Federal and State government advice and guidance on dealing with the potential and actual spread and impact on our business and our customers.

The Company has successfully activated its crisis management framework which includes identifying the areas that are deemed critical and the corresponding level of reliability and service continuity needed to deliver normal services during the pandemic. Our plans include continued safe and reliable service during large numbers of workforce absence due to illness. Under government guidelines in both the UK and the US, utility workers are identified as key/essential workers and have been subject to specific guidance and permissions on family arrangements and movements. We have moved to working from home arrangements, where possible, and have also identified critical areas including control rooms, call centres, dispatch and key sites including generation and LNG facilities, terminals, substations and compressor stations. For all these activities plans are in place to maintain critical safety and maintenance activities, which includes sequestering some employees.

Some of our work, especially in the US, requires contact with members of the public. To safeguard our employees and the public we are following government requirements and recommendations for social distancing. This includes our collections, meter installations and shut-off arrangements while continuing to provide a safe and reliable network. We have also made arrangements to ensure that those customers with financial difficulties who cannot make payments do not have services cut off.

Finally, we are also working with our supply chains so that our systems and networks have the necessary materials and parts. Our regular engagement with government agencies and our regulators, as well as following all advisory services regarding management of the spread of COVID-19, is expected to continue for the foreseeable future.

Case study – NGV

Our response to COVID-19 in our communities

NGV has helped the University Hospitals Birmingham (UHB) Charity to launch a special appeal, to raise £1 million to support patients and staff through the COVID-19 pandemic.

The donation has been used to purchase almost 400 tablet computers that will be used by patients to help them speak to their loved ones while they are in isolation. The tablets will be distributed across the UHB Charity's five hospitals, including the Nightingale Hospital, which has recently been established at the National Exhibition Centre in Birmingham, UK.

Scan here for the full story.

Delivering against our strategy

Our strategy in 2019/20 focused on three strategic priorities for our business, delivering for customers safely and efficiently today while setting a growth pathway for the future.

Customer first

We have a vital role to play in enabling customers to benefit from the changes in our industry. The clean energy transition and associated technological advancements mean we can provide our customers with a more cost-effective service, while leaving no-one behind. We measure customer satisfaction as a KPI within each of our business segments.

Our three strategic priorities

1. Optimise performance

Our customers want us to be more efficient to make their energy more affordable, so we must find ways to improve how we run our business.

We need to enhance the customer experience and our productivity through more efficient and customer-focused processes. Given the scale of our core business in the UK and US, even small improvements will have a huge impact on our overall performance. Finding new ways of optimising operations will be an important factor in our ability to compete and grow.

Examples of progress in 2019/20

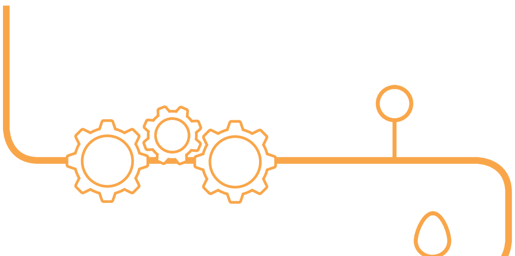
- Continued the transition begun through our UK and US programmes to leaner and more efficient operating models in the UK and US core businesses;
- Submitted price controls for the UK electricity, gas and system operator business as part of RIIO-2;
- Received authorisation of a new five-year rate plan for our electric distribution companies in Massachusetts; and
- Continued embedding our Business Management System (BMS) across the Group by publishing BMS standards through the employee handbook, the National Grid Book, in order to increase standardisation across business activities.

2. Grow core business

Delivering strong operational performance provides a foundation from which we can invest in our core business and pursue other opportunities.

In the US and UK, we continue to look for business development opportunities that are close to our core business.

In NGV, we will build on our successful efforts to pursue opportunities in interconnectors and large-scale renewables.



- Grew our UK and US regulated businesses capex to £5.4 billion;
- In January 2020 we celebrated the completion of the new, three-mile (five-kilometre) Humber Tunnel that will house a key gas pipeline between Yorkshire and North Lincolnshire;
- Interconnectors IFA2, Viking Link and North Sea Link are under construction and are on track to be delivered to plan; and
- Delivered the largest battery storage facility in the northeastern US on Nantucket as a flexible alternative to undersea cables.

3. Evolve for the future

We need to future-proof our business against the effects of a changing energy landscape. Our networks are already managing changes to the generation mix, while the needs and expectations of our customers are evolving.

Our preparations for the future are underway. For example, at NGV this collaboration brings together our non-network businesses to focus on targeted investment in the energy sector outside of our core business.

We are also looking to develop new capabilities that are essential for long-term success. For example, NGP is increasing our capability in new and disruptive energy technologies to meet the changing needs of our customers and communities.

- Following legal separation on 1 April 2019, this is the first year the ESO operated as a separate entity from the UK electricity transmission company, evolving for its customers and stakeholders;
- We are expanding a software platform using advanced data and analytics to proactively identify and present offers to customers in Massachusetts and Rhode Island;
- NGP, launched in 2018, growing with a portfolio fair value of £134m at 31 March 2020; and
- NGV completed the acquisition of Geronimo, a developer of wind and solar generation.

Further reading
See more on these in the Principal Operations sections on pages 38 – 43

Progress against our strategy

The Board uses a range of metrics, reported periodically, against which we measure Group performance. These metrics are aligned to our strategic priorities.

Performance reported in this section is based on the strategy that is outlined on pages 16 – 17. We report our performance measures as follows:

KPIs

- Principal measures that track individual progress against each of our three strategic priorities. See below.
- Non-financial measures that underpin delivery of all three strategic priorities. See below.

Other performance indicators

- Financial measures that result from the delivery of our strategic priorities are set out in our financial review, on pages 28 – 37.
- Business-unit-level measures that are specific to our three strategic priorities. These are set out within our Principal Operations review, on pages 38 – 43.

Link to strategy

Optimise performance

Grow core business

Evolve for the future

A Indicates an alternative performance measure

Link to remuneration

Remuneration of our Executive Directors, and our employees, is aligned to successful delivery of our strategy. We use a number of our KPIs as specific measures in determining the Annual Performance Plan (APP) and Long Term Performance Plan (LTPP) outcomes for Executive Directors. While not explicitly linked to APP and LTPP performance outcomes, the remaining KPIs and wider business performance are considered. For further detail, please see our Directors' Remuneration Report, on pages 88 – 107.

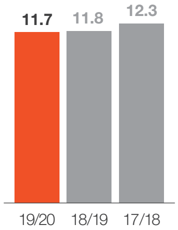
Principal measures

Strategy link | **KPI and performance** | **Progress in 2019/20**

Group Return on Equity (RoE, %) A

We measure our performance in generating value for shareholders by dividing our annual return by our equity base. This calculation provides a measure of whole Group performance compared with the amounts invested in assets attributable to equity shareholders.

Target: 11–12.5% each year



The UK regulated businesses delivered a weighted average RoE of 12.4%, consistent with the return achieved in the prior year. US RoE increased to 9.3% (2018/19: 8.8%), with increased revenues from new rates driving improved US regulatory performance. Group RoE of 11.7% was marginally lower than 2018/19 (11.8%), with benefits arising in the prior year from the Fulham property sale and US legal settlements.

Customer satisfaction

We measure customer and stakeholder satisfaction, while also maintaining engagement with these groups and improving service levels.

	2019/20	2018/19	2017/18	Target
UK Electricity Transmission (/10)	8.2	7.9	7.7	6.9
UK Electricity System Operator (/10)	7.6	–	–	8.1
UK Gas Transmission (/10)	8.0	7.8	7.6	6.9
US Residential – Customer Trust Advice survey (%)	59.8	58.7	56.6	61.6
Metering NPS score (index)	+40	+44	+39	–

Our UK customer satisfaction (CSAT) KPI comprises Ofgem's electricity and gas transmission customer satisfaction scores. Figures represent our baseline targets set by Ofgem for reward or penalty under RIIO (maximum score is 10). We have seen a steady increase in CSAT for GT, through our efforts to understand the impact that our actions have with a particular focus on responding to their queries. In the first year post separation from ESO, we have also focused on building direct relationships with our ET customers, to understand the experience they need us to deliver and redesigning our service accordingly. Due to legal separation in April 2019, the scores also reflect the independent ESO result. The ESO CSAT score was below target for the year 2019/20 and we have identified query response times and tailoring communications as improvement areas for the next 12 months. Action has already begun to take place within the value streams to address these areas and they will form part of new insight plans for the ESO in 2020/21.

The US metric measures customers' sentiment with National Grid by asking customers their level of trust in our advice to make good energy decisions. The metric, which is tied to the value customers feel they receive from National Grid, has improved over the past few years yet was below target in 2019/20.

NPS scores reported represent the Metering business. Although the score has dropped since 2018/19, we have identified areas of improvement, for example, making sure metering queries raised by our customers are progressed more efficiently.

Principal measures continued

Strategy link	**KPI and performance**	**Progress in 2019/20**

Network reliability

We aim to deliver reliability by planning our capital investments to meet challenging demand and supply patterns, designing and building robust networks, having risk-based maintenance and replacement programmes, and detailed and tested incident response plans. We measure network reliability separately for each of our business areas. The table below represents our performance across all our networks in terms of availability. For both our UK and US networks we continued to maintain excellent reliability.

%	2019/20	2018/19	2017/18
UK Electricity Transmission	99.999974	99.999984	99.999984
UK Gas Transmission	99.999589	99.989632	99.996151
US Electricity Transmission	99.955	99.952	99.953
US Electricity Distribution	99.994	99.995	99.995
IFA interconnector	91.4	93.9	92.6
BritNed interconnector	98.6	98.2	97.8
NEMO Link interconnector	96.1	–	–

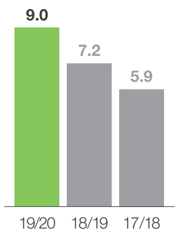
In both the UK and US, we continued to maintain high levels of reliability on all our networks.

IFA interconnector availability was lower in 2019/20 as this was the first year of a major refurbishment project at IFA, where we are rebuilding the site to remain operational for the next 30 years.

Total regulated asset growth (%) Ⓐ

Maintaining efficient growth in our regulated assets ensures we are well positioned to provide consistently high levels of service to our customers and increases our future revenue allowances.

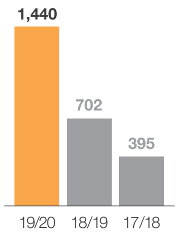
Target: 5–7% growth each year



Asset growth during the year was 9.0% (2018/19: 7.2%). This was primarily driven by the accelerated US rate base growth of 12.2% (2018/19: 9.2%) and higher levels of investment in other assets, such as in NGP. This is combined with increased UK RAV growth of 3.8% (2018/19: 3.6%).

Cumulative investment in delivering new low-carbon energy sources (£m)

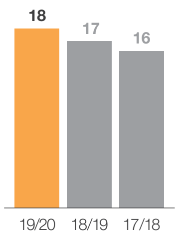
We invest in new low-carbon energy sources primarily through our interconnector businesses (North Sea Link, IFA2 and Viking Link), investments in companies delivering low-carbon energy sources (for example, our investment in Sunrun) and investments into large-scale renewables (for example, our new investment in Geronimo).



Investment in delivering new low-carbon energy sources increased in the year by £738 million (105%). Principally from increased investment in our interconnector projects under construction, with IFA2 nearing completion, further progress made on North Sea Link and the commencement of construction on Viking Link. In addition, the acquisition of Geronimo was made in July 2019, a leading wind and solar developer in North America.

Cumulative low-carbon generation connected to our UK network (GW)

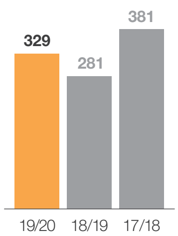
Low-carbon generation supported by our network to date.



A total of 18.3 GW of low-carbon generation is currently connected to our network, following additional offshore wind capacity connecting at Hornsea 1 (+800 MW) and East Anglia 1 (+680 MW). The government's offshore wind sector deal and continued cost reductions observed in the latest Contracts for Difference (CfD) allocation round, indicates further increases in capacity over the coming years.

Connections of renewable schemes to US electric distribution network (MW)

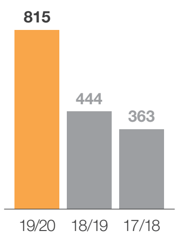
The table represents the amount of customer-owned renewable energy capacity installed on our distribution network across our US footprint. Given the variability and unpredictability of customer-driven projects, the Company does not presently have a MW target. Current targets primarily focus on regulatory compliance and customer need date attainment.



There has been a 17% increase in the installed capacity compared to the previous year. Rhode Island installed a record amount of capacity (100 MW) while the installed capacity in Massachusetts was on par with 2018/19. Although New York experienced a decline in customer-ready projects to interconnect, it received a record amount of capacity (3,000 MW). The Company continues to make progress in Massachusetts and Rhode Island to enable greater renewable energy integration by completing area-wide transmission and distribution studies. While non-residential systems have represented less than 7% of connected applications, they have accounted for 78% of the installed capacity over the last three years.

NGV capital investment (£m) Ⓐ

NGV is focused on investment in a broad range of energy businesses across the UK and US, including our interconnector business, large-scale renewable generation, LNG storage and regasification, and energy metering.



Excluding NGP, NGV capital investment has increased in the year by £371 million (84%). There has been increased investment in our interconnector projects under construction, with IFA2 nearing completion, further progress made on North Sea Link and the commencement of construction on Viking Link. In addition, an acquisition of Geronimo was made in July 2019, a leading wind and solar developer in North America.

Progress against our strategy
continued

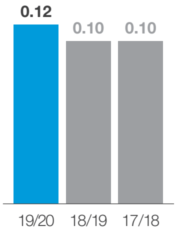
Non-financial measures

KPI | **Performance** | **Progress in 2019/20**

Group lost time injury frequency rate (LTIs per 100,000 hours worked)

This is the number of worker lost time injuries per 100,000 hours worked in a 12-month period (including fatalities) and includes our employee and contractor population.

Target: < 0.1 LTIs

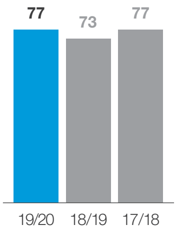


As at 31 March 2020, our Group lost time injury frequency rate (LTIFR) was 0.12, which is higher than the Group target of 0.10. This is a combined employee and contractor LTI rate, which reflects our continued focus on encouraging good safety behaviours across the entire workforce.

The majority of lost time injuries are a result of individual issues such as slips, trips and falls, and soft tissue injuries from inappropriate tooling, lifting and carrying. We continue to address these and other incidents by implementing best practice injury prevention techniques that mitigate potential for harm factors. Although this fiscal year saw injury challenges in our US business, where, tragically, we lost a colleague in a road traffic accident, we will continue to focus on improving our generative safety culture.

Employee engagement index (%)

This is a measure of how engaged our employees feel, based on the percentage of favourable responses to questions repeated annually in our employee engagement survey. Our target is to increase engagement compared with the previous year.

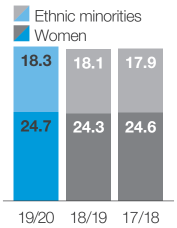


We measure employee engagement through our employee engagement survey (EES). The results of our 2019/20 survey, which was completed by 82% of our employees, have helped us identify specific areas where we are performing well and those areas we need to improve. At Group level, the overall results of the 2019/20 EES showed a positive trend from the 2018/19 survey, with 26 questions significantly improving and just seven questions showing a significant decline.

Our engagement score was 77%, which is four points ahead of the 2018/19 results.

Workforce diversity

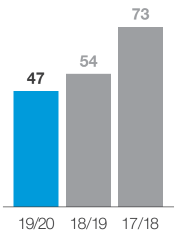
We measure the percentage of women and ethnic minorities in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 53).



During 2019/20, the representation of our female and ethnic minority groups has increased as we continue to build our diverse talent pipeline.

Contribution of our corporate responsibility work (£m)

Working with communities is important for creating shared value.



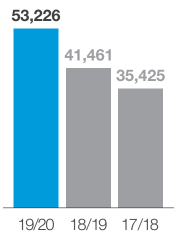
We use the London Benchmarking Group measurement framework to provide an overall community investment figure which includes education (but excludes investment in university research projects). While we have no specific target, our overall aim is to ensure we add value to society to enable communities to thrive.

In the UK, the overall contribution of our activities was valued at nearly £39 million. In the US, our contribution was just over £7.5 million.

This gives us a combined Group-wide contribution of nearly £47 million. This was lower than prior years because some events were cancelled due to COVID-19.

Education, skills and capabilities

We support the development of young people's skills and capabilities through skills-sharing employee volunteering. In particular, we focus on STEM subjects as these support our future talent recruitment and our desire to see young people gain meaningful employment.

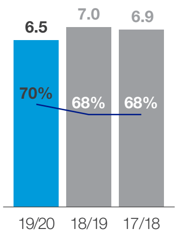


We measure quality (>1 hour) interactions with young people on STEM subjects. In the UK, in 2019/20, we have had 1,707 quality interactions with young people on STEM subjects. We had 51,519 interactions in the US. Overall we have seen a total of 53,226 interactions with young people on STEM, an increase of 11,765.

Climate change - Scope 1 and 2 emissions

This is a measure of our reduction of Scope 1 and Scope 2 emissions of the six primary Kyoto greenhouse gases. Our target is to reduce our greenhouse gas emissions by 80% by 2030, 90% by 2040 and net zero by 2050, compared with our 1990 emissions of 21.6 million tonnes. The percentages in the adjacent chart reflect a reduction in our emissions from a 1990 baseline.

We seek to continuously improve our environmental performance, in instances going beyond regulatory requirements, through implementation of our ISO 14001-certified Environmental Management System and Environmental Sustainability Standard.



Our Scope 1 greenhouse gas emissions for 2019/20 equate to 3.9 million tonnes of carbon dioxide equivalent (2018/19: 4.5 million tonnes) and our Scope 2 emissions (including electricity line losses) equate to 2.6 million tonnes (2018/19: 2.5 million tonnes). This is a total of 6.5 million tonnes of carbon dioxide equivalent for Scope 1 and 2 emissions. These figures include line losses and are equivalent to an intensity of around 447 tonnes per £1 million of revenue (2018/19: 469 tonnes).

Our Scope 3 emissions for 2019/20 were 29.8 million tonnes (2018/19: 32.3 million tonnes).

Our global underlying energy use is 28,223 GWh where the UK and US are responsible for 8,112 GWh and 20,111 GWh respectively. This includes gas and electricity network losses and fuel used for US power generation.

We measure and report in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol. 100% of our Scope 1, 2 and 3 emissions, are independently assured against ISO 14065 Greenhouse Gas assurance protocol. This data complies with the UK government's Streamlined Energy and Carbon Reporting (SECR) requirements and is our first disclosure to comply with SECR.

Further reading
You can read more about the Task Force on Climate-related Financial Disclosures and our wider sustainability activities and performance on pages 57 – 62.

Innovation

Our innovation activities are focused on future-proofing the business for our customers as the energy landscape changes. Collaboration is a key part of our approach to innovation.

Innovation in our UK principal operations

Our commitment to net zero continues to shape our innovation strategy. Our innovation portfolio enables us to identify and target carbon savings for our own operations and we are also developing innovation projects to ensure we are prepared and play a pivotal role in the decarbonisation of energy for power and heat, transport and industry. We also search for new technologies and techniques to improve the way we work.

We place a high value on collaboration to inform, generate ideas and solve the challenges we see ahead of us. We work in collaboration with technical organisations, academia and suppliers in the energy sector that align with our goals and objectives.

The ESO has been innovating to ensure we continue to provide secure, affordable and sustainable supplies of energy in a fast-changing world. Our innovation programme is used to learn and then accelerate market development. The year ahead will see even more projects generated by the ESO, including the world's first Black Start from Distributed Energy Resources (DERs). This is a £10 million Network Innovation Competition (NIC) project with SP Energy Networks. It will develop and demonstrate coordination of DERs to provide a safe and effective Black Start service and lower cost to consumers.

The UK electricity transmission network is continuing with innovation investments. We are focused on reducing our carbon footprint from our construction activities and seeking ways to reduce the greenhouse gas impact from gas-insulated assets. We have engaged extensively with regional stakeholders in our Zero 2050 South Wales project to better understand the changes in decarbonising society and our role as a transmission business as our energy landscape evolves. We have made progress in the construction of our transmission accelerator at Deeside, recognising the need to test and adopt new technologies faster, and we continue to research technologies to enhance our cyber security and further digitise our grid infrastructure.

Similarly, our UK gas transmission business has led our research to better understand the role of transitioning to a hydrogen future. Our Hydrogen Portfolio of projects aims to identify the opportunities and potential challenges to hydrogen injection into the National Transmission System (NTS). Working in collaboration with industry we aim to fill the gaps in the vision for a national hydrogen deployment. The portfolio includes safety and integrity reviews, demonstrating how existing networks can transition from gas to hydrogen.

Additionally in the UK, NGV has been active in establishing consortia to better integrate offshore renewables, and to commercially deploy hydrogen and Carbon Capture and Storage technologies targeting industrial decarbonisation in the Humber and London regions.

Innovation in our US principal operations

Similar to the UK, our US innovation approach is designed to enable our networks and customer services to adapt to a low-carbon, distributed and digitised future. We focus innovation and Research and Development (R&D) on the advancement of products, systems and work methods that prepare the way for more efficient and safer networks that further proliferate the integration of renewables.

In Massachusetts, we continue to explore how best to integrate solar energy, storage and electric vehicle charging into the distribution network. Our Solar Phase III programme comprises an additional 14 MW of photovoltaics (PV) and 5.8 MW of energy storage. The aim is to analyse the impact of future high levels of distributed renewables on distribution systems and in this stage the programme will also test the economic and technical benefits of localised balancing from energy storage. Several New York Reforming the Energy Vision (REV) pilots are also underway, testing market solutions in support of Distribution System Operation (DSO) developments, smart city opportunities and renewable heating technologies. These projects are providing the knowledge and experience to evolve our systems for the grid of the future.

In our US gas businesses, our innovation continues to prioritise increasing public safety, protecting our workforce, reducing the cost of the work we perform and reducing our impact on the environment. For example, we are testing robotics to enhance existing pipelines and reduce gas emissions and have several programmes exploring the introduction of renewable natural gas and alternative low-carbon heating solutions for our customers.

National Grid Partners

NGP, our dedicated corporate innovation and investment function, has had a strong second year of operation delivering value to the Group. In 2019, we established and built our central disruptive innovation capability while continuing to make strategic investments in our incubation and corporate venture capital portfolios. NGP also expanded its programming to include culture and entrepreneurial programming and founded a global utility council branded as the 'Next Grid Alliance' to encourage collaboration within our peer group on solutions for the industry. This forum of peers allows National Grid to tap into the wealth of innovation and investment learnings from across the industry and share our own best practices.

Our investment portfolio includes direct investments in seventeen start-up companies and four venture funds to date with a fair value of £134m at 31 March 2020. The venture fund investments are focused on expanding access to start-ups in key innovation regions including Israel and the United Kingdom. We also successfully exited our positions in Pixeom and Aporeto during 2019, providing financial returns from those investments.

NGP's investments provide valuable insights, collaborations and deployment opportunities that strengthen and future-proof our core business activities. For example, we have deployed cyber detection and response solutions from Dragos, asset management decision software from Copperleaf, and demand response management services from Autogrid. Several portfolio companies are in pilot on areas such as gas infrastructure risk prevention and manhole explosion prevention.

In April 2019, we created a central innovation team, targeting disruptive innovations and introduced design thinking, agile delivery, and lean start-up methods to our organisation. While in its infancy the team has explored innovation opportunities in collaboration with our core businesses with several projects progressing into prototype stages during 2020. This organisation is also tasked with creating centralised innovation reporting to allow National Grid to track the value created through its sustaining innovation efforts across the Group.

NGP has launched a series of initiatives designed to provide our employees with the types of experiences to further foster an entrepreneurial culture and skill set. These activities include an apprenticeship programme, entrepreneur-led speaker series, employee immersions and sprints in Silicon Valley, and secondments and advisory board positions within NGP's portfolio. These initiatives aim to provide strong training and retention programmes to develop the next generation of entrepreneurial leaders within the Group.

NGP has delivered strategic and financial value to the core businesses and looks forward to delivering on our mandate to invest in valuable start-ups, to tackle innovation and business development projects that can improve our business, and to act as a catalyst for change across the broader Group.

More details can be found at www.ngpartners.com including details of each of our portfolio investments.

Further reading
Further details about our R&D and innovation activities can be found in Additional Information on pages 237 – 239.

Internal control and risk management

The Board is committed to protecting and enhancing our reputation and assets, while safeguarding the interests of our shareholders.

Managing our risks

National Grid is exposed to a variety of uncertainties that could have a material adverse effect on the Group's financial condition, our operational results, our reputation and the value of our shares.

The Board oversees the Company's risk management and internal control systems. As part of this role, the Board sets and monitors the amount of risk the Company is prepared to seek or accept in pursuing our strategic objectives – our risk appetite. The Board assesses the Company's principal risks and monitors the risk management process through risk review and challenge sessions twice a year.

Risk management process

Overall risk strategy, policy and process are set at Group level with implementation owned by the business. Our enterprise risk management process provides a framework through which we can consistently identify, assess, prioritise, manage, monitor and report risks. The process is designed to support the delivery of our vision, strategy and business model as described on pages 2 – 7.

Our corporate risk profile contains the principal risks that the Board considers to be the main uncertainties currently facing the Group as we endeavour to achieve our strategic objectives. These top risks are agreed through discussions about the Group's risk profile with the Executive Committee and the Board. The risks are reported and debated with the Executive Committee and the Board every six months.

When determining what our principal risks should be, a broad range of factors are considered. We test principal risks annually to establish their impact on the Group's ability to continue operating and to meet its liabilities over the assessment period. We test the impact of these risks on a reasonable worst-case basis, alone and in clusters, over a five-year assessment period. This work informs our viability statement (see pages 26 – 27). The five-year period was carefully considered in light of the current COVID-19 pandemic. The Board considered, with appropriate assumptions, that this period remained appropriate for our stable regulated business model. The Board, Executive Committee and other leadership teams discuss the results of the annual principal risk testing at the end of the year.

Top-down, bottom-up assessment

Risk management activities take place through all levels of our organisation. Through a 'top-down, bottom-up' approach, all business areas identify the main risks to our business model and our business objectives. Each risk is assessed by considering the financial, operational and reputational impacts, and how likely the risk is to materialise. The business area identifies and implements actions to manage and monitor the risks. These are collated and reported at functional and regional levels on a regular cadence. The most significant risks for the UK, US and NGV businesses are highlighted in regional risk profiles and reported to the Executive Committee and the Board through a formal process twice a year. Additionally, the Executive Committee and the Board may also identify and assess other principal risks. These risks and any associated management actions are cascaded through the organisation as appropriate.

Emerging risks

We have an established process to identify and monitor emerging risks, which is designed to provide sufficient warning of concerns which may impact the business. The process is designed to ensure adequate steps are taken to prevent the occurrence or manage the impact of surprises.

The Enterprise Risk Management (ERM) process monitors management information from a wide variety of sources to take into account consideration of emerging risks. This includes:

- Top-down analysis which is performed through the annual risk management process of broad thinking to consider the biggest impacts for the Company.
- Facilitation of risk discussions across our various businesses. Most importantly, we review various sources of management information, internal and external factors to identify potential emerging risks.
- Monitoring the external market to consider other emerging risks within the regions we operate in. The following diagram shows our approach and inputs used to analyse the emerging risks.

Continuous cycle to identify and manage emerging risks:

Changes during the year

The Company's risk profile has been developed drawing upon the most significant risks across our business profiles. With the addition of principal risks addressing climate change and our response to the COVID-19 pandemic, 10 principal risks are now carried at Executive Committee and Board level as detailed below. All of our principal risks were reviewed at least twice across the year, including Key Risk Indicators (KRIs), developed last year to help embed the risk appetite framework in the business and enhance the monitoring and mitigation of risks.

Principal risks

In 2019/20, we reviewed our assessment of the potential threats, opportunities and impacts from climate change. This included the impact of both our operations on climate change and of climate change on our operations, as well as the transitional risk during the journey to a net zero economy in developing a new climate change principal risk (see case study on page 23).

Since the onset of the COVID-19 pandemic, we have continually assessed its impact on our workforce, finances and all aspects of our operations, including the impact on the Electricity System Operator on managing the rapid decrease in energy demand across all UK networks, with regular reports provided to the Board. The Board has agreed that a new principal risk is included (see page 25). A negative outcome from RIIO-2 and the continuing possibility of a hard Brexit remain our most important emerging threats in the UK business. However, the Board considers, after testing with management, that these events do not need to be classified as principal risks as they are well covered below this level of risk and are regularly reviewed by the Directors.

More recently, political escalations have been considered as a threat against the Company's ability to operate in New York. Following the failure to obtain necessary permits to build a new pipeline, and the Company's associated decision to enact a moratorium, various actions have been taken to address the threat of loss of licence in New York. During November 2019, a settlement was agreed to immediately resume connecting gas services in Brooklyn, Queens and Long Island for applications that had been put on hold. A total of $36 million in customer assistance, gas conservation measures and clean energy investments has been committed by the Company along with the appointment of an external monitor and the requirement to deliver a plan to address service to customers through winter 2020/21. The settlement agreement also provides a framework for identifying longer-term solutions to address the supply constraints in downstate New York. In considering this emerging threat, we have supported the Company's other jurisdictions to take into consideration the possibility of New York governmental decisions influencing other states in the area. Both our Rhode Island and Massachusetts businesses have been working to lay solid foundations regarding clean energy strategies, investments and close monitoring of pipeline operations to help address these issues.

Case study on climate change moving from an emerging risk to a principal risk

Our risk registers typically include risks likely to manifest within the short to medium, rather than longer term. In the case of climate change, weather-related event risks previously featured, as did transition risks associated with the decarbonisation of heat and electricity and these were included as a threat in several of our existing principal risks (e.g. energy interruption, disruptive forces).

Over the last 12 to 18 months, facilitated workshops were held with each of the core businesses to ensure completeness of risk capture specifically relating to climate change and our net zero commitment, considering both physical and transitional risks.

Consideration was given to whether the individual or combined risks arising from increased variability in temperature, and/or greater wear and tear on assets under more extreme weather conditions such as flooding and higher temperatures, should feature more prominently. This was especially pertinent in the light of updates in climate science, observations of the changing weather such as increased intensity and frequency of storms on the US east coast, and wildfire ferocity in locations such as South America, California and Australia. We also understand the growing urgency to find a solution to decarbonise heat and the future of gas in a way that is fair, affordable and not overly disruptive to consumers.

As a result, a recommendation to develop a bespoke climate change risk was considered by the Executive Committee and Board, and discussed with US, UK and NGV executives and subject matter experts. The addition of a bespoke climate change principal risk was finalised in autumn 2019.

Our principal risks and uncertainties

Accepting that it is not possible to identify, anticipate or eliminate every risk that may arise, and that risk is an inherent part of doing business, our risk management process aims to provide reasonable assurance that we understand, monitor and manage the main uncertainties that we face in delivering our objectives. This aim includes considering inherent risks, which in turn exist because of the nature of day-to-day operations in our industry, and financial risks, which exist because of our financing activities. Our principal risks, and a summary of actions taken by management, are provided in the table below. We have provided an overview of the key inherent risks we face on pages 227 – 230, as well as our key financial risks, which are incorporated within note 32 to our consolidated financial statements on pages 182 – 194. Risk trends reported below take into account controls, any additional mitigation actions and may be influenced by internal or external developments.

People risks

It is through the high-quality work of our employees that we will achieve our vision, respond to the changing needs of our stakeholders and create a competitive advantage. Building and fostering an engaged and talented team that has the knowledge, training, skills and experience to deliver our strategic objectives is vital to our success. We must attract, integrate and retain the talent we need at all levels of the business.

Risks	Actions taken by management
Failure to build sufficient capability and leadership capacity (including effective succession planning) required to deliver our vision and strategy. ***Risk trend: Neutral (18/19 Neutral)** *****Risk trends are assessed to include any external factors outside our control as well as the strength and effectiveness of our controls and additional mitigations as reviewed by management up to 31 March 2020.	We have embedded strategic workforce planning in our US and UK organisations. This process helps to effectively inform financial and business planning, as well as human resourcing needs. Our entry-level talent development schemes (graduate training and apprenticeships) are a potential source of competitive advantage in the market place. We are involved in a number of initiatives to help secure the future engineering talent we require, including the UK annual residential work experience week and the US Pipeline and Graduate Development Programmes. We also continue to develop the rigour of our succession planning and development planning process, particularly at senior levels. It is now being applied deeper into the organisation as well as continued attention in relation to the ethnic diversity of both our management and field force population. There are multiple activities underway to drive this agenda, including 'neutral' talent and selection processes, development interventions and a global review of our inclusion and diversity strategy and resources. During the year, in the UK, a three-year labour agreement was reached with our trade unions, introducing revised terms and conditions.

Financial risks

While all risks have a financial liability, financial risks are those which relate to financial controls and performance. Financial risk management is a critical process used to make investment decisions and aims to maximise investment returns and earnings for a given level of risk.

Our key financial risks are described in note 32 to our financial statements on pages 182 – 194.

Internal control and risk management
continued

Strategic and regulatory risks

Strategic risk is the risk of failing to achieve the Company's overall strategic business plans and objectives, as well as failing to have the 'right' strategic plan. We voluntarily accept some risk so we can generate the desired returns from our strategy.

Management of strategic risks focuses on reducing the probability that the assumed risk would materialise, while improving the Company's ability to effectively respond to the risk should it occur. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. These risks link to our strategic priorities of 'Grow our core business' and 'Evolve for the future'. The political climate and policy decisions of our regulators in 2019/20 were key considerations in assessing our risks.

As referred to above, the new climate change related risk is classed as a strategic and regulatory risk but is also an operational risk, in particular as regards weather-related events in the northeastern US (where storm planning and preparation are key to what we do), flood defence in both the UK (where flood resilience works are being developed) and the US (where flood contingency plans are in place) and the investigation of the impact of rising temperatures and widening temperature ranges on the performance and operation of our networks.

Risks	Actions taken by management
Failure to identify and/or deliver upon actions necessary to ensure our business model, strategy, asset management and operations respond to the physical and transitional impacts of climate change and demonstrate our leadership of climate change within the energy sector. ***Risk trend: Increasing (New Principal Risk)** *Risk trends are assessed to include any external factors outside our control as well as the strength and effectiveness of our controls and additional mitigations as reviewed by management up to 31 March 2020.	Putting in place measures to develop: • evolution of our environmental sustainability metrics to better reflect our strategy, measure our impact and track our progress; • organisational design changes appropriate to meet this challenge with a single point of contact for all climate change actions and activities; • approval of a revised environmental sustainability strategy, including our strategy for heating and gas, with granular actions identified to achieve net zero; and • working with regulators and industry parties in the UK and the US on the future of heat and the role of gas in the long term. Note that a number of the above measures also address the physical impacts of climate change on our operations. We have committed to full compliance with the Task Force on Climate-related Financial Disclosures (TCFD) requirements including physical and transitional scenario analysis (see pages 57 – 62). Ongoing work to address transition risks and opportunities includes: • ensuring our electricity network is reliable and able to actively support and contribute to a future where renewables and intermittency of supply are increasing; • supporting the charging infrastructure required for increased use of electric vehicles; • promoting energy efficiency programmes for customers in the US; • facilitating decarbonisation in the US and UK including zero carbon operation of the GB electricity system through ESO in the UK; and • continuing work on programmes to develop skills in our current and future workforce.
Failure to influence future energy policy and secure satisfactory regulatory agreements. **Risk trend: Increasing due to energy regulatory environment (18/19 Increasing Risk)**	In both the UK and the US, we strive to maintain a good understanding of the regulatory agenda and emerging issues, so that robust, public interest aligned responses can be selected and developed in good time. Our reputation as a competent operator of important national infrastructure is critical to our ability to do this. We have plans and governance structures in place to address specific issues such as RIIO-2 and US rate case filings. Ongoing work to support our regulatory relationships includes: • our internal teams focused on messaging around gas capacity, large-scale renewables, utilities of the future and electric vehicles; • establishment of US and UK Regulatory Steering Committees; and • increased focus on understanding the needs and expectations of all our stakeholders through regulatory relationship surveys, investor surveys and review of media sentiment.
Failure to respond to shifts in societal and political expectations and perceptions leads to threats to the Company's licence to operate and ability to achieve its objectives. **Risk trend: Increasing due to current political environment (18/19 Increasing Risk)**	Processes and resources are in place to review, monitor and influence perceptions of our business and our reputation by: • enhancing and consolidating our digital roadmap and social channels; • developing an internal forum to increase management of stakeholder and media reputational issues; • delivering on our commitment to be a responsible business (see pages 48 – 56); • implementing campaigns to recruit for the future – e.g. 'the job that can't wait', (see page 1); and • promoting partnerships and discussions of decarbonisation across the jurisdictions where we operate. These processes, along with twice-yearly Board strategy discussions, are reviewed regularly to ensure they continue to support our short- and long-term strategy. We regularly monitor and analyse market conditions, competitors and their potential.
Failure to adequately anticipate and minimise the adverse impact from disruptive forces such as technology and innovation on our business model. **Risk trend: Neutral (18/19 Neutral)**	NGP, our central innovation function, is developing our strategy with regards to new technology and monitoring disruptive technology and business model trends, acting as a bridge for emerging technology into the core regulated businesses and business development teams. In addition, NGP is investing in emerging start-up companies and in venture funds and the NGV function will further the focus on new strategies, business development and technology and innovation.

Operational risks

Operational risks relate to the losses resulting from inadequate or failed internal processes, people and systems, or due to external events. These risks normally fall within our low-risk appetite level as there is no strategic benefit from accepting the risk, as it will not be in line with our vision and values.

Our operational principal risks have a low likelihood of occurring. However, should an event occur, without effective prevention or mitigation controls, it would be likely to have a high level of impact. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. Operational risks are managed through policy, standards, procedure-based controls, active prevention and monitoring. The operational risks link to our strategic priority to 'Optimise Performance'. Principal risk assessment includes reasonable worst-case scenario testing i.e. gas transmission pipeline failure, loss of licence to operate, cyber security attack – and the financial and reputational impact should a single risk or multiple risks materialise.

Risks	Actions taken by management
Failure to prepare and respond to significant disruptive factors caused by the COVID-19 pandemic because of poor development and execution of our response plans resulting in an impact on our ability to maintain our networks, provide service, support our people and meet our liquidity/financial targets, as well as reputational and regulatory obligations. ***Risk trend: Increasing (New Principal Risk)** *Risk trend for COVID-19 was assessed outside our standard assessment period due to the risk being added as a principal risk after 31 March 2020.	The COVID-19 pandemic impacts multiple areas of our business, therefore our response to this risk involves a comprehensive plan, to support the safety of our workforce and customers, that is frequently revised and adjusted due to the dynamic profile of this risk. This includes: • people: monitoring of absence and wellbeing, and monitoring of current working practices; employee 360 degree communications planning; • operations: prioritisation of critical processes, sequestering of essential staff and redeployment of workforce, assessment of our supply chain resilience and analysis of network availability and reliability; • stakeholders: frequent engagement with internal and external stakeholders, including customers, shareholders and regulators; • safety procedures: customer and workforce engagement for essential repairs, monitoring of agreed regulatory deviations; and • finance: monitoring of cash flow levels, review and where necessary suspension of customer collection arrangements; access to short and long-term debt facilities.
Catastrophic cyber security incident caused by the abuse of digital systems leading to the loss of confidentiality, availability and integrity. **Risk trend: Increasing due to the dynamic nature of the cyber security threat (18/19 Increasing Risk)**	We continue to commit significant resources and financial investment to maintain the integrity and security of our systems and our data by continually investing in strategies that are commensurate with the changing nature of the security landscape. This includes: • collaborative working with UK and US government agencies including the Department for Business, Energy and Industrial Strategy (BEIS), the Centre for Protection of National Infrastructure (CPNI) and the Department for Homeland Security on key cyber risks; • development of an enhanced critical national infrastructure security strategy; • our involvement in the US with developing the National Institute of Standards and Technology Cyberspace Security Framework; • awareness, training and self-assessments; and • cyber response incident procedures and contingency planning.
Catastrophic asset failure results in a significant safety and/or environmental event. **Risk trend: Neutral (18/19 Neutral)**	This year, we continued to focus on risk mitigation actions designed to reduce the risk and help meet our business objectives. We incorporated monitoring action status into various business processes and senior leadership including: • putting a Group-wide process safety management system in place to make sure a robust and consistent framework of risk management exists across our higher hazard asset portfolio, with safety-critical assets clearly identified on the asset register; • implementing asset management and data management standards with supporting guidelines to provide clarity around what is expected, with a strong focus on what we need in place to keep us safe, secure and legally compliant; and • in support of this, we developed a capability framework to make sure our workforce have the appropriate skills and expertise to meet the performance requirements in these standards.
Failure to predict and respond to a significant disruption of energy that adversely affects our customers and/or the public. **Risk trend: Increasing (18/19 Neutral)**	We continue to apply a holistic approach encompassing preventative and mitigating actions including pre-emptive measures to maintain network reliability such as: • flood contingency plans for substations; • system operator supply and demand forecasting; • our UK GT Winter Preparedness Plan; • US gas mains replacement programmes; • US storm hardening programme; and • diversity of suppliers in our US gas procurement. Should energy flow disruptions occur: • business continuity and emergency plans are in place and practised, including Black Start testing; and • critical spares are maintained to ensure we can quickly and effectively respond to a variety of incidents – storms, physical and cyber-related attacks, environmental incidents and asset failures. The ESO considered the significant impact on the UK power networks on responding to the unprecedented decrease in energy consumption and demand during the COVID-19 restrictions.
Failure to adequately identify, collect, use and keep private the physical and digital data required to support the Company's operations and future growth. **Risk trend: Decreasing (18/19 Decreasing Risk)**	Controls for our IT processes have been redefined and are aligned to the National Institute of Standards and Technology (US) and the Network Information and System Regulations (UK). We continue to progress and improve our data management processes including: • implementation of our data and other related business management standards; • data governance councils for UK and US regions; and • increased levels of data leadership and capability with the recruitment of a Chief Data Officer and establishment of an associated function.

Viability statement

The Board's consideration of the longer-term viability of the Company is an extension of our business planning process. The process includes financial forecasting, a robust risk management assessment, regular budget reviews as well as scenario planning incorporating industry trends, considering any emerging issues and economic conditions. Our business strategy aims to enhance our long-term prospects by making sure our operations and finances are sustainable.

Utilising our established top-down/bottom-up risk management process, the principal risks facing the Company as described on pages 23 – 25 are identified, monitored and challenged. Over the course of the year, the Board has considered the principal risks shown in the table below in detail. The Board considered the preventative and mitigating controls and risk management actions in place and discussed the potential financial and reputational impact of the principal risks against our ability to deliver the Company's business plan. These factors were also carefully reassessed in light of the COVID-19 factors.

The assessment of the potential impact of our principal risks on the longer-term viability of the Company tests the significant solvency and liquidity risks involved in delivering our business objectives and priorities. After careful consideration of the uncertain and dynamic COVID-19 events, including reviewing the fast-changing external factors and their cumulative impact in the medium and long term, and other considerations including: our long-term business model, high-quality, long-term assets and stable regulatory arrangements; the Board's stewardship responsibilities; and the Company's ability to model a range of severe but plausible reasonable worst-case scenarios, the Board concluded that it remains appropriate to consider a five-year timeframe over which we should assess the long-term viability of the Company.

Operational impacts

Scenario 1 – A significant cyber-attack.

Scenario 2 – Significant supply disruption event occurring in the US leading to loss of licence.

Scenario 3 – A catastrophic gas pipeline failure in the US.

Scenario 4 – Emerging technology leads to significant numbers of people going 'off grid'.

Scenario 5 – Significant physical damage due to climate change events in the US and the UK along with reputational damage through failure to adjust our business model to meet customer expectations.

Performance impacts

Scenario 6 – The breach of personal data information.

Scenario 7 – The result of a 'Hard Brexit' in the UK.

Scenario 8 – A poor outcome to RIIO-2 negotiations.

Cluster impacts

Scenario 9 – A significant supply disruption event in the US leading to loss of licence coupled with a 'Hard Brexit' and challenging RIIO-2 results in the UK.

Scenario 10 – Failure to adequately respond to the COVID-19 pandemic including triggering a gas pipeline failure and supply disruption in the US leading to loss of licence coupled with challenging RIIO-2 results in the UK.

The following factors have been taken into account in making this decision:
- we have reasonable clarity over a five-year period, allowing an appropriate assessment of our principal risks to be made;
- in order to test the five-year period, the Board considered whether there are specific, foreseeable risk events relating to the principal risks that are likely to materialise within a five to ten-year period, and which might be substantial enough to affect the Company's viability and therefore should be taken into account when setting the assessment period; and
- each principal risk was considered for inclusion within the testing and, where appropriate, a reasonable worst-case scenario was identified and assessed for impacts on operations and/or financial performance over the five-year assessment time period as detailed below.

In addition to testing individual principal risks, the impact of a cluster of the principal risks materialising over the assessment period was also considered. COVID-19 and our management of the issues the business faces during the pandemic, was also noted as an emerging risk that resulted in the addition of a new principal risk. Recent external developments such as the Northeast Supply Enhancement (NESE) Pipeline and events in the downstate NY gas business regarding National Grid's licence and the ability to provide continuing supply to our customers were also considered along with the ongoing regulatory environment in our operating jurisdictions. We also carefully considered the impact of our response to COVID-19 on our business plans and financial models. In the opinion of the Board, the reasonable worst-case scenarios represent the estimated cumulative impact with principal risk clusters.

The reputational and financial impacts for each scenario were considered (to the nearest £500 million). The principal risk relating to leadership capacity was not tested as the Board did not feel this would threaten the viability of the Company within the five-year assessment period. Further, considering the breadth of ramifications COVID-19 may have across different areas of the Company and its consequential power to exacerbate the negative consequences of other principal risks, any potential undesired outcome of COVID-19 was considered in aggregation with other principal risks in the scenarios.

The Board assessed our reputational and financial headroom and reviewed principal risk testing results against that headroom. The testing of risk groups and clusters also included an assessment of the impact upon the business plan, as adjusted for expected impacts of COVID-19. No principal risk or cluster of principal risks was found to have an impact on the viability of the Company over the five-year assessment period. Preventative and mitigating controls in place to minimise the likelihood of occurrence and/or financial and reputational impact are contained within our assurance system.

In assessing the impact of the principal risks on the Company, including our two new principal risks of Climate Change and Response to COVID-19, the Board has considered the fact that we operate in stable markets and the robust financial position of the Group, including the ability to sell assets, raise capital and suspend or reduce the payment of dividends. It has also considered Ofgem's legal duty to have regard to the need to fund the licensed activities of National Grid Gas plc, National Grid Electricity System Operator Limited and National Grid Electricity Transmission plc.

Each Director was satisfied that they had sufficient information to judge the viability of the Company. Based on the assessment described above and on pages 22 – 25 the Directors have a reasonable expectation that the Company will be able to continue operating and meet its liabilities over the period to May 2025.

Principal risk	Viability scenario	Matters considered by the Board
Major cyber security breach of business, operational technology and/or CNI systems/data.	**Scenario 1** – A significant cyber attack.	**The Board received updates on cyber security in:** • March 2019; • July 2019; • December 2019; and • March 2020.
Failure to predict and respond to a significant disruption of energy that adversely affects our customers and/or the public.	**Scenario 2** – An extended outage in the US. Included in the cluster testing of **Scenario 9 and 10**.	**Two Board Strategy sessions held during the year:** • bi-annual overviews; • review of the gas business strategies; • external reviews of operational issues within the US gas business; and • review of the sequence of events on Friday 9 August.
Catastrophic asset failure resulting in a significant safety and/or environmental event.	**Scenario 3** – A gas transmission pipeline failure in the US. Included in the cluster testing of **Scenario 10**.	• the Board reviews the current safety performance of the Company at each meeting; • safety is a fundamental priority and is looked at in detail by the Safety, Environment and Health Committee (SEH Committee) who have delegated authority from the Board; and • our Electricity and Gas Engineering Reports to the SEH Committee also provide progress updates on our asset management improvements.
Failure to adequately identify, collect, use and keep private the physical and digital data required to support Company operations and future growth.	**Scenario 5** – The breach of personal data information.	• annual updates on the Company's information systems.
Failure to build sufficient leadership capability and capacity (including succession planning) required to deliver our vision and strategy.	N/A	• bi-annual updates on people matters; • considered capabilities to support the delivery of strategic priorities; and • Nominations Committee: considers the structure, size and composition of the Board and committees and succession planning. It identifies and proposes individuals to be Directors and establishes the criteria for any new position.
Failure to deliver any customer, investor and wider stakeholder propositions due to increased political and economic uncertainty.	**Scenario 6** – The state ownership of the energy sector in the UK.	**The Board received updates and reviews of:** • the impact of Hard Brexit and access to the Internal Energy Market; • proposed response to the Labour Party's proposal to nationalise UK's assets; • implementation of measures to strengthen ability to obtain fair price for UK assets if potential threat of state ownership materialised; and • UK and US regulatory strategies.
Failure to influence future energy policy and secure satisfactory regulatory agreements.	**Scenario 7** – A poor outcome of RIIO-2 negotiations. Included in the cluster testing of **Scenario 9 and 10**.	**The Board received updates and reviews of:** • US regulatory strategy; • UK regulatory strategy; • UK ESO regulatory strategy; • key regulatory policy issues for 2019/20; and • RIIO-2.
Failure to respond to the asset failure resulting in a significant safety and/or environmental event.	**Scenario 4** – Emerging technology leading to significant numbers of people going 'off grid'.	• bi-annual updates from National Grid Partners; and • during the year, Board strategy sessions considered digital strategy as well as technology and innovation.
Failure to respond to disruptive factors caused by the COVID-19 pandemic resulting in an impact on our networks, our people and our financial targets.	Included in the cluster testing of **Scenario 9 and 10**.	• Board briefings including a weekly update from the CEO and CFO on our crisis management response; • COVID-19 updates on operational issues, people absences and wellbeing to the Board; and Finance Committee consideration of liquidity; • review of our Business Continuity Planning response and effectiveness of the Crisis Management controls to the SEH Committee; and • briefings from the CFO and finance team on possible financial impacts including a range of scenario modelling and planning.
Failure to respond to physical and transitional impacts of climate change and demonstrate our leadership within the energy sector.	N/A	• Board briefings reviewing our sustainability metrics to reflect and track our impact and progress; and • disclosures with the TCFD including physical and transitional scenario analysis.

Financial review

Summary of Group financial performance

Performance management framework

In managing the business, we focus on various non-IFRS measures which provide meaningful comparisons of performance between years, monitor the strength of the Group's balance sheet as well as profitability and reflect the Group's regulatory economic arrangements. Such alternative and regulatory performance measures are supplementary to, and should not be regarded as a substitute for, IFRS measures, which we refer to as statutory results. We explain the basis of these measures and, where practicable, reconcile these to statutory results in 'Other unaudited financial information' on pages 240 – 249.

Specifically, we measure the financial performance of the Group from different perspectives:

- Capital investment and asset growth: Currently we expect to invest c. £5 billion per year.
- Accounting profit: In addition to statutory IFRS measures we distinguish between adjusted results, which exclude exceptional items and remeasurements, and underlying results, which further take account of: (i) volumetric and other revenue timing differences arising from our regulatory contracts, and (ii) major storm costs, which are recoverable in future periods, neither of which give rise to economic gains or losses. In doing so, we intend to make the impact of such items clear to users of the financial information in this Annual Report.
- Economic profit: Measures such as Return on Equity and Value Added take account of the regulated value of our assets and of our regulatory economic arrangements to illustrate the returns generated on shareholder equity.
- Balance sheet strength: Maintaining a strong investment grade credit rating allows us to finance our growth ambitions at a competitive rate. Hence, we monitor credit metrics used by the major rating agencies to ensure we are generating sufficient cash flow to service our debts.

This balanced range of measures of financial well-being informs our dividend policy, which is to grow the dividend per share at least in line with UK Retail Price Index inflation for the foreseeable future.

Initial assessment of the potential impact of the COVID-19 pandemic on the Group's position and results

The COVID-19 pandemic has affected our reported results in the year. To date, we have experienced a more significant impact in our US businesses than in our UK businesses, mainly due to our large US customer base. The most significant impact on our results for 2019/20 is the increase in the bad debt charge, which rose from £181 million last year to £234 million this year for the Group as a whole, and increased in the US from £146 million last year to £231 million this year. The increase in the US charge reflects the impact of moratoriums in response to regulatory instructions as requested by regulatory authorities in the US states in which we operate, which restrict our ability to collect debts due. However, we remain committed to continuing to supply our customers and termination of customer connections has been cancelled.

Additionally, in the US, lower gas volumes (reduced customer demand) increased timing outflows in March 2020, with warm weather also a factor in this increase. In our UK Transmission businesses, the disruption has resulted in a pause to some capex work and although some adaptations to the new environment have been required, there has been no significant cost increase in 2019/20. COVID-19 has not caused a significant disruption to our NGV businesses. In total, other than the US bad debt charge, there has been a relatively small impact on our underlying results for 2019/20 and incremental operating costs of around £10 million have been incurred as a direct consequence of the disruption caused by the pandemic.

For 2020/21, we expect some continuing impact, driven largely by our US operations where we are expecting (i) higher levels of bad debt, (ii) additional direct COVID-19 costs, and (iii) deferral of rate increases. However, given regulatory mechanisms and precedents, we expect to recover a large part of this. In the UK, we do expect to see some limited cost impact from COVID-19. We are also currently working with regulators on support mechanisms for our customers, which may lead to cash flow impacts in 2020/21, but we would ultimately expect to be recoverable. Therefore whilst COVID-19 will impact earnings and cash flow in the short term, we currently anticipate limited economic impact longer term. However, there could be a range of impacts on cash flows and earnings, which could be different from our current assessment.

Summary of Group financial performance for the year ended 31 March 2020

Financial summary for continuing operations

£m	2019/20	2018/19	Change
Statutory results:			
Operating profit	**2,780**	2,870	(3)%
Profit after tax	**1,274**	1,502	(15)%
Earnings per share (pence)	**36.8p**	44.3p	(17)%
Dividend per share (pence), including proposed final dividend	**48.57p**	47.34p	3%
Capital expenditure	**5,079**	4,321	18%
Alternative performance measures:			
Underlying operating profit	**3,454**	3,427	1%
Underlying profit after tax	**2,015**	1,998	1%
Adjusted earnings per share (pence)	**55.2p**	59.0p	(6)%
Underlying earnings per share (pence)	**58.2p**	58.9p	(1)%
Underlying dividend cover	**1.2**	1.2	–
Capital investment	**5,405**	4,506	20%
Retained cash flow/adjusted net debt	**9.2%**	9.4%	20bps
Regulatory performance measures:			
Asset growth	**9.0%**	7.2%	180bps
Group Return on Equity	**11.7%**	11.8%	(10)bps
Value Added	**2,040**	2,071	(1)%
Regulatory gearing	**63%**	66%	(300)bps

We explain the basis of these alternative performance measures and regulatory performance measures and, where practicable, reconcile them to statutory results on pages 240 – 249.

The Group's statutory results for the year were adversely impacted by exceptional charges. The impact on statutory EPS as a result of these charges is presented after each item. These included additional environmental provisions and a reduction in the discount rate applied to certain provisions across the Group (8.6p)and a deferred tax charge due to the reversal of the expected reduction in the UK corporation tax rate originally enacted by the Finance Act 2016 (5.6p). Last year's statutory results were adversely impacted by exceptional charges incurred in respect of the Massachusetts Gas labour dispute (6.2p), our UK and US cost efficiency and restructuring programme (4.7p) and the impairment of development costs in respect of the termination of the NuGen and Horizon nuclear connection projects (3.3p).

Statutory operating profit was also adversely impacted by commodity remeasurement losses of £125 million in 2019/20 (2018/19: £52 million gains) from mark-to-market movements on derivatives which are used to hedge the cost of buying wholesale gas and electricity on behalf of our US customers.

Underlying operating profit was up 1% as higher rate case revenues in our US Regulated businesses and lower operating costs more than offset higher deferrable storm costs, higher bad debts costs, increased depreciation, the non-recurrence of favourable US legal settlements and sale of our Fulham property site in 2018/19. The combination of these factors was partly offset by higher net financing costs, driven by the implementation of IFRS 16 and higher average net debt. Underlying profit after tax increased by 1% and, combined with a higher share count, resulted in a 1% decrease in underlying EPS to 58.2p.

Capital investment of £5.4 billion increased our asset growth to 9%. We delivered Value Added (our measure of economic profit) of £2.0 billion in 2019/20, slightly lower than in 2018/19. Group RoE of 11.7% was comparable to 11.8% in 2018/19, reflecting the higher new rate allowances in our US businesses, while 2018/19 benefited from the Fulham sale and legal settlements. RCF/net debt at 9.2% remained consistent with the Company's strong investment grade credit rating. The recommended full-year dividend per share of 48.57p is in line with policy and is covered 1.2 times by underlying EPS.

The adoption of IFRS 16 'Leases' during the year increased our net debt by £474 million, with a corresponding increase in right-of-use assets recorded on the balance sheet. This standard has resulted in lower operating costs within our businesses, offset by a higher depreciation charge and a higher interest cost.

Profitability and earnings

The table below reconciles our statutory profit measures for continuing operations, at actual exchange rates, to adjusted and underlying versions.

Reconciliation of profit and earnings from continuing operations

	Operating profit			Profit after tax			Earnings per share		
£m	2019/20	2018/19	Change	2019/20	2018/19	Change	2019/20	2018/19	Change
Statutory results	**2,780**	2,870	(3)%	**1,274**	1,502	(15)%	**36.8p**	44.3p	(17)%
Exceptional items	**402**	624		**491**	480		**14.2p**	14.2p	
Remeasurements	**125**	(52)		**148**	19		**4.2p**	0.5p	
Adjusted results	**3,307**	3,442	(4)%	**1,913**	2,001	(4)%	**55.2p**	59.0p	(6)%
Timing	**147**	(108)		**102**	(72)		**3.0p**	(2.1)p	
Major storm costs	**–**	93		**–**	69		**–p**	2.0p	
Underlying results	**3,454**	3,427	1%	**2,015**	1,998	1%	**58.2p**	58.9p	(1)%

Exceptional income/(expense) from continuing operations

	Impact on operating profit		Impact on profit after tax		Impact on EPS	
£m	2019/20	2018/19	2019/20	2018/19	2019/20	2018/19
Changes in environmental provision	**(402)**	–	**(299)**	–	**(8.6)p**	–
Massachusetts Gas labour dispute	**–**	(283)	**–**	(209)	**–**	(6.2)p
UK and US cost efficiency and restructuring programme	**–**	(204)	**–**	(160)	**–**	(4.7)p
Impairment of nuclear connections development costs	**–**	(137)	**–**	(111)	**–**	(3.3)p
Deferred tax arising on the reversal of the reduction in UK corporation tax rate	**–**	–	**(192)**	–	**(5.6)p**	–
Total	**(402)**	(624)	**(491)**	(480)	**(14.2)p**	(14.2)p

This year we have classified the following items as exceptional:

- **Changes in environmental provisions:** a £326 million net increase in the provision for estimated costs and cost sharing allocations borne by the Company associated with environmental clean-up related to former manufacturing gas plant facilities, formerly owned or operated by the Group or its predecessor companies and additionally, £76 million for the impact of a reduction of 0.5% in the real discount rate applied to the environmental provisions across the Group; and
- **Deferred tax arising on the reversal of the reduction in UK corporation tax rate:** The Finance Act 2016 reduced the UK corporation tax rate to 17% with effect from April 2020. A £192 million deferred tax charge has been made, following the reversal of this legislation, which retains the UK corporation tax rate at 19%, resulting in an increase in deferred tax liabilities.

In the prior year we classified the £283 million cost arising as a result of the Massachusetts Gas labour dispute as exceptional, along with the £204 million charge relating to the UK and US cost efficiency and restructuring programme and the £137 million impairment charge relating to nuclear connection development costs.

We also exclude certain unrealised gains and losses on mark-to-market financial instruments from adjusted profit; see notes 5 and 6 to the financial statements for further information. Net remeasurement losses of £125 million on commodity contract derivatives were incurred in addition to net remeasurement losses of £64 million on financing-related instruments and a further £1 million of remeasurement losses related to our share of post-tax results of joint ventures.

Financial review
continued

Timing over/(under-recoveries)

In calculating underlying profit, we exclude regulatory revenue timing over- and under-recoveries and major storm costs. Under the Group's regulatory frameworks, most of the revenues we are allowed to collect each year are governed by regulatory price controls in the UK and rate plans in the US. If more than this allowed level of revenue is collected, the balance must be returned to customers in subsequent years; likewise, if less than this level of revenue is collected, the balance will be recovered from customers in subsequent years. We also collect revenues from customers and pass these on to third parties (e.g. NYSERDA). These variances between allowed and collected revenues and timing of revenue collections for pass-through costs give rise to over- and under-recoveries.

The following table summarises management's estimates of such amounts for the two years ended 31 March 2020. All amounts are shown on a pre-tax basis and, where appropriate, opening balances are restated for exchange adjustments and to correspond with subsequent regulatory filings and calculations. All amounts are translated at the current year average exchange rate of $1.29:£1.

£m	2019/20	2018/19
Balance at start of year (restated)	403	301
In-year (under)/over-recovery	**(147)**	**111**
Balance at end of year	256	412

Timing over-recoveries of £146 million in UK Electricity Transmission were more than offset by timing under-recoveries of £54 million in UK Gas Transmission and timing under-recoveries of £239 million in US Regulated in 2019/20. In calculating the post-tax effect of these timing recoveries, we impute a tax rate, based on the regional marginal tax rates, consistent with the relative mix of UK and US balances. For the year ended 31 March 2020 this tax rate was 31%.

Major storm costs

We also take account of the impact of major storm costs in the US where the aggregate amount is sufficiently material in any given year. Such costs (net of certain deductibles) are recoverable under our rate plans but are expensed as incurred under IFRS. Accordingly, where the total incurred cost (after deductibles) exceeds $100 million in any given year, we exclude the net costs from underlying earnings. In 2019/20, although we experienced a number of storms, the $98 million of deferrable storm costs we incurred (in aggregate) fell just below this threshold. During 2018/19 we experienced bad weather events across the year, with storms unusually occurring during April and May as well as in the winter months. In that year the total net costs exceeded the $100 million threshold and were excluded from our underlying results.

Segmental operating profit

The tables below set out operating profit on adjusted and underlying bases.

Adjusted operating profit

£m	2019/20	2018/19	Change
UK Electricity Transmission	1,320	1,015	30%
UK Gas Transmission	348	303	15%
US Regulated	1,397	1,724	(19)%
NGV and Other activities	242	400	(40)%
Total	**3,307**	**3,442**	**(4)%**

Underlying operating profit

£m	2019/20	2018/19	Change
UK Electricity Transmission	1,174	1,092	8%
UK Gas Transmission	402	341	18%
US Regulated	1,636	1,594	3%
NGV and Other activities	242	400	(40)%
Total	**3,454**	**3,427**	**1%**

The statutory operating profit for all three reportable segments fell in the year primarily as a result of the £402 million exceptional charges referred to earlier. The reasons for the movements in underlying operating profit are described in the segmental commentaries below. Unless otherwise stated, the discussion of performance in the remainder of this financial review focuses on underlying results.

UK Electricity Transmission

£m	2019/20	2018/19	Change
Revenue	3,702	3,351	10%
Operating costs	(2,386)	(2,573)	(7)%
Statutory operating profit	**1,316**	**778**	**69%**
Exceptional items	4	237	(98)%
Adjusted operating profit	**1,320**	**1,015**	**30%**
Timing	(146)	77	(290)%
Underlying operating profit	**1,174**	**1,092**	**8%**
Analysed as follows:			
Net revenue	2,174	1,954	11%
Regulated controllable costs	(306)	(332)	(8)%
Post-retirement benefits	(48)	(49)	(2)%
Other operating costs	(31)	(65)	(52)%
Depreciation and amortisation	(469)	(493)	(5)%
Adjusted operating profit	1,320	1,015	30%
Timing	(146)	77	(290)%
Underlying operating profit	**1,174**	**1,092**	**8%**

Although we legally separated our NG ESO plc business from NGET plc during the year, we continue to report these two businesses in aggregate, within our UK Electricity Transmission segment.

UK Electricity Transmission statutory operating profit increased by £538 million in the year. In 2018/19, there were £137 million of exceptional costs related to the cancellation of nuclear connections (net of termination income) and £100 million in relation to our cost-efficiency and restructuring programme. Timing over-recoveries of £146 million in 2019/20 compared to under-recoveries of £77 million in the prior year primarily due to the collection of prior year balances.

Adjusted operating profit increased by £305 million (30%), driven by £223 million favourable year-on-year timing over-recoveries. Underlying operating profit increased by 8%. Net revenues (excluding timing) were relatively flat, with higher re-opener allowances for cyber and data centres, funding for ESO legal separation and the RPI uplift, being fully offset by output and allowances true-up in the annual iteration, along with lower ESO incentive income. Regulated controllable costs were lower, with efficiency savings and lower Electricity System Operator separation costs, partly offset by higher IT costs and inflation. Post-retirement benefit costs were little changed year-on-year. Other costs were lower, mainly relating to 2018/19's provisions against income recognised on early termination of connections.

The decrease in depreciation and amortisation charges reflects a benefit from the release of provisions related to prior years.

UK Gas Transmission

£m	2019/20	2018/19	Change
Revenue	927	896	3%
Operating costs	(580)	(629)	(8)%
Statutory operating profit	**347**	**267**	**30%**
Exceptional items	1	36	(97)%
Adjusted operating profit	**348**	**303**	**15%**
Timing	54	38	42%
Underlying operating profit	**402**	**341**	**18%**
Analysed as follows:			
Net revenue	685	669	2%
Regulated controllable costs	(127)	(144)	(12)%
Post-retirement benefits	(19)	(27)	(30)%
Other operating costs	(20)	(14)	43%
Depreciation and amortisation	(171)	(181)	(6)%
Adjusted operating profit	348	303	15%
Timing	54	38	42%
Underlying operating profit	**402**	**341**	**18%**

UK Gas Transmission statutory operating profit increased £80 million in the year. In 2018/19, £36 million of costs in relation to our efficiency and restructuring programme were treated as exceptional. Timing under-recoveries of £54 million in 2019/20 compared to £38 million in the prior year reflecting lower than expected volumes and higher shrinkage costs.

Adjusted operating profit increased by £45 million (15%), including £16 million year-on-year adverse timing under-recoveries. Underlying operating profit increased by 18%. Net revenue (excluding timing) was higher, reflecting the re-opener allowances for cyber and data centres, the RPI uplift and the impact of 2018/19's Avonmouth pipeline project revenue allowance clawback. Regulated controllable costs were £17 million lower, driven by efficiency savings. Post-retirement costs were lower, mainly related to the 2018/19 Guaranteed Minimum Pension (GMP) ruling. Other costs were higher principally due to the non-recurrence of provision releases in 2018/19.

The depreciation charge was lower than in 2018/19 as a result of an additional charge in the prior period following a detailed review of asset lives.

US Regulated

£m	2019/20	2018/19	Change
Revenue	9,205	9,846	(7)%
Operating costs	(8,325)	(8,421)	(1)%
Statutory operating profit	**880**	1,425	(38)%
Exceptional items	392	351	12%
Remeasurements	125	(52)	(340)%
Adjusted operating profit	**1,397**	1,724	(19)%
Timing	239	(223)	(207)%
Major storm costs	–	93	(100)%
Underlying operating profit	**1,636**	1,594	3%
Analysed as follows:			
Net revenue	5,745	5,868	(2)%
Regulated controllable costs	(1,871)	(1,895)	(1)%
Post-retirement benefits	(95)	(94)	1%
Bad debt expense	(231)	(146)	58%
Other operating costs	(1,296)	(1,309)	(1)%
Depreciation and amortisation	(855)	(700)	22%
Adjusted operating profit	**1,397**	1,724	(19)%
Timing	239	(223)	(207)%
Major storm costs	–	93	(100)%
Underlying operating profit	**1,636**	1,594	3%

US Regulated statutory operating profit fell partly as a result of the £177 million year-on-year adverse swing in commodity contract remeasurements. Exceptional charges also increased reflecting £392 million environmental costs detailed above. In 2018/19, £283 million of exceptional costs were incurred for the Massachusetts Gas labour dispute in addition to £68 million of restructuring costs. Timing under-recoveries of £239 million in 2019/20 compared to timing over-recoveries of £223 million in 2018/19, driven by revenue decoupling, commodity recoveries and lower net energy efficiency collections contributed to a reduction in statutory and adjusted operating profit.

Adjusted operating profit decreased by £327 million (19%), including £462 million year-on-year adverse timing under-recoveries, partly offset by £93 million of deferrable storm costs qualifying as major (in aggregate) in 2018/19. Underlying operating profit increased by 3%. Net revenues (excluding timing) increased by £257 million as the benefits of rate case increments (including KEDNY, KEDLI and Niagara Mohawk) and £82 million from foreign exchange movements. A stronger US dollar increased underlying operating profit by £23 million in the year. US Regulated controllable costs decreased as a result of cost efficiencies (principally from benefit of restructurings and contract management), partly offset by workload increases and inflation. Bad debt related costs increased by £85 million, driven by £117 million additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to the growth in assets. Other costs were higher due to increased property taxes and higher storm costs partly offset by lower cost of removal. Deferrable storm costs were removed from underlying results last year.

NGV and Other activities

£m	2019/20	2018/19	Change
Statutory operating profit	**237**	400	(41)%
Exceptional items	5	–	n/a
Adjusted operating profit	**242**	400	(40)%
Timing	–	–	n/a
Underlying operating profit	**242**	400	(40)%
Analysed as follows:			
NGV	269	263	2%
Property	63	181	(65)%
Corporate and Other activities	(90)	(44)	105%
Underlying operating profit	**242**	400	(40)%

National Grid Ventures' statutory operating profits were broadly in line with 2018/19, with higher use of our LNG import terminal at Grain and lower business development costs, offset by lower revenues from our declining meter population and costs related to the Geronimo business.

In 'other' activities, we incurred net costs of £27 million, compared to a net profit of £137 million in 2019/20. The performance of the Property business was lower than prior year reflecting the sale of the Fulham site to the St William joint venture in 2018/19. Corporate and other activities did not include last year's benefit of £95 million of legal settlements to recover costs associated with a US systems implementation. The National Grid Partners operating loss of £11 million was £3 million higher than in 2018/19.

Financing costs and taxation

Net finance costs

Net finance costs (excluding remeasurements) for the year were 6% higher than last year at £1,049 million, with the £56 million increase mostly driven by the impact of IFRS 16, lower capitalised interest and adverse foreign exchange movements, partly offset by interest on tax settlements. The effective interest rate of 4.1% on net debt was 20bps lower than the prior year rate of 4.3%.

Joint ventures and associates

The Group's share of net profits from joint ventures and associates increased as a result of St William's first year of profits. Our Minnesota-based joint venture, Emerald Energy Ventures LLC, which we acquired in July also contributed £1 million of post-tax earnings in 2019/20.

Tax

The underlying effective tax rate of 19.9% was 30bps higher than last year. The tax charge for the year benefited from the release of reserves following settlement of tax audits relating to earlier years and gains on chargeable disposals which are offset by previously unrecognised capital losses. In the prior year, significantly higher gains on property disposals that were offset by previously unrecognised capital losses resulted in a lower underlying effective tax rate. The Group's tax strategy is detailed later in this review.

Discontinued operations

We completed the sale of our remaining 39% interest in Quadgas HoldCo Limited, the holding company for the Cadent gas networks, in June 2019 for approximately £2 billion. As described further in note 10 to the financial statements, we have treated all items of income and expense relating to the disposal of Quadgas HoldCo Limited within discontinued operations.

Financial review
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Capital investment, asset growth and value added

Value added is a measure that reflects the value to shareholders of our dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), net of the growth in overall debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making and long-term management incentive arrangements.

A key part of our investor proposition is growth in our regulated asset base. The regulated asset base is a regulatory construct, representing the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulatory asset base over the long-term and this in turn contributes to delivering shareholder value. Our regulated asset base comprises our regulatory asset value in the UK, plus our rate base in the US. We also invest in related activities that are not subject to network regulation and this further contributes to asset growth.

Capital investment

Capital investment comprises capital expenditure in critical energy infrastructure, equity investments, funding contributions and loans to joint ventures and associates, the acquisition of Geronimo during 2019/20 and, in the case of National Grid Partners, investments in financial assets.

	At actual exchange rates			At constant currency		
£m	2019/20	2018/19	Change	2019/20	2018/19	Change
UK Electricity Transmission	1,043	925	13%	1,043	925	13%
UK Gas Transmission	249	308	(19)%	249	308	(19)%
US Regulated	3,228	2,650	22%	3,228	2,688	20%
NGV and Other activities	885	623	42%	885	626	41%
Total	5,405	4,506	20%	5,405	4,547	19%

Investment in UK Electricity Transmission increased primarily due to Hinkley-Seabank and London Power Tunnels 2 spend. In UK Gas Transmission, investment reduced due to completion of the Feeder 9 gas pipeline replacement project and lower asset health spend. In the US, investment was up 20% on a constant currency basis, reflecting increased capital expenditure in New York (gas pipe replacement and mandated gas works) and higher spend in Massachusetts due to 2018/19's disruption to capex spend caused by the labour dispute. Investment in National Grid Ventures continued to increase with ongoing construction on three new subsea interconnectors, IFA 2 (France), North Sea Link (Norway) and Viking Link (Denmark) and the acquisition of Geronimo, a renewable energy business based in Minneapolis, Minnesota in July 2019 for total consideration of £209 million. In addition, a total amount of £61 million (including joint ventures) was invested by National Grid Partners in the year.

Asset growth and value added

To help readers' assessment of the financial position of the Group, the table below shows an aggregated position for the Group, as viewed from a regulatory perspective. The measures included in the table below are calculated in part from financial information used to derive measures sent to and used by our regulators in the UK and US, and accordingly inform certain of the Group's regulatory performance measures, but are not derived from, and cannot be reconciled to, IFRS.

There are certain significant assets and liabilities included in our IFRS balance sheet, which are treated differently in the analysis below, and to which we draw readers' attention. These include the £1.5 billion reduction in IFRS deferred tax liabilities we recognised in relation to US tax reform in 2017/18, which, from a regulatory perspective, remains as a future obligation. The UK RAV is higher than the IFRS value of property, plant and equipment and intangibles, principally because of the annual indexation (inflationary uplift) adjustment applied to RAV, compared to the IFRS value of these assets (held at amortised cost). In addition, under IFRS we recognise liabilities in respect of US environmental remediation costs, and pension and OPEB costs. For regulatory purposes, these are not shown as obligations because we are entitled to full recovery of costs through our existing rate plans. In our Value Added calculation, we have recognised an asset to reflect expected future recovery of the £117 million COVID-19 related provision for bad and doubtful debts that we have included in 2019/20. Regulatory IOUs which reflect refunds due to customers in future periods are treated within this table as obligations but do not qualify for recognition as liabilities under IFRS. Adjusted net debt movements exclude proceeds from the Cadent disposal and, in 2019/20, exclude movements on derivatives which are designated in cash flow hedging arrangements and for which there is no corresponding movement in total assets and other balances.

	2019/20			2018/19		
£m	31 March 2020	31 March 2019	Change	31 March 2019	31 March 2018	Change
UK RAV	20,431	19,692	4%	19,692	19,005	4%
US rate base	20,644	18,407	12%	17,565	16,087	9%
Total RAV and rate base	41,075	38,099	8%	37,257	35,092	6%
NGV and Other	4,105	3,351	23%	2,815	2,300	22%
Total assets	45,180	41,450	9%	40,072	37,392	7%
UK other regulated balances[1]	(357)	(302)		(278)	(474)	
US other regulated balances[2]	1,791	1,987		1,898	1,920	
Other balances	(514)	(679)		(158)	(343)	
Total assets and other balances	46,100	42,456	3,644	41,534	38,495	3,039
Increase in goodwill			81			–
Cash dividends			892			1,160
Adjusted net debt movement			(2,577)			(2,128)
Value added			2,040			2,071

1. Includes totex-related regulatory IOUs of £411 million (2019: £519 million), over-recovered timing balances of £24 million (2019: £68 million under-recovered) and under-recovered legacy balances related to previous price controls of £78 million (2019: £149 million).
2. Includes assets for construction work-in-progress of £1,510 million (2019: £1,813 million), other regulatory assets related to timing and other cost deferrals of £642 million (2019: £189 million) and net working capital liabilities of £361 million (2019: £15 million).

Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2019, finalisation of US balances, to reflect the impact of IFRS 16 and to remove the investment in Cadent.

During 2019/20, our combined regulated asset base and NGV and Other businesses' assets grew by £3.7 billion or 9% on a constant currency basis compared to an increase of 7.2% in the prior year. UK RAV growth was 3.8% including RPI indexation of 2.6% while US rate base grew strongly by 12%.

Value added, which reflects the key components of value delivery to shareholders (i.e. dividend and growth in the economic value of the Group's assets, net of growth in net debt) was £2.0 billion in 2019/20. This was slightly lower than last year's £2.1 billion, with improved US returns and the impact of asset growth, offset by the loss of interest and dividend income from Cadent and higher cash tax. Of the £2.0 billion value added, £0.9 billion was paid to shareholders as cash dividends and £1.1 billion was retained in the business. This measure excludes any benefit arising from the sale of our 39% interest in Quadgas Holdco Limited. Value added per share was 58.9p compared with 61.2p in 2018/19.

Cash flow, net debt and funding

Net debt is the aggregate of cash and cash equivalents, borrowings, current financial and other investments and derivatives (excluding commodity contract derivatives) as disclosed in note 29 to the financial statements. 'Adjusted net debt' used for the RCF/adjusted net debt calculation is principally adjusted for pension deficits and hybrid debt instruments. For a full reconciliation see page 245.

The following table summarises the Group's cash flow for the year, reconciling this to the change in net debt.

Summary cash flow statement

£m	2019/20	2018/19	Change
Cash generated from continuing operations	**4,914**	4,464	10%
Cash capital expenditure and acquisition of investments	**(5,098)**	(4,148)	23%
Dividends from joint ventures and associates	**75**	68	10%
Business net cash flow from continuing operations	**(109)**	384	(128)%
Net interest paid	**(884)**	(846)	4%
Net tax (paid)/received	**(199)**	(75)	165%
Ordinary dividends	**(892)**	(1,160)	(23)%
Other cash movements	**10**	15	(33)%
Net cash flow from continuing operations	**(2,074)**	(1,682)	23%
Quadgas sale proceeds	**1,965**	–	n/a
Discontinued operations	**(91)**	85	(207)%
Non-cash movements	**(1,387)**	(1,930)	(28)%
Increase in net debt	**(1,587)**	(3,527)	(55)%
Net debt at start of year	**(26,529)**	(23,002)	15%
Impact of adoption of IFRS 16	**(474)**	–	n/a
Net debt at end of year	**(28,590)**	(26,529)	7.8%

Cash flow generated from continuing operations was £4.9 billion, £450 million higher than last year, principally due to exceptional items in 2018/19 and favourable working capital (mainly higher inflows from collection of prior year winter receivables), partly offset by adverse timing on revenues and provisions. Cash expended on investment activities increased for the reasons described above. Net interest paid increased due to the growth in net debt and also higher interest income received in 2018/19. The Group made net tax payments of £199 million during 2019/20. A 46% scrip take-up in the year reduced the cash dividend to £892 million, £268 million lower than in 2018/19, when the scrip take-up was 26%. Proceeds of £1,965 million (plus £6 million of interest) from the Quadgas HoldCo Limited disposal, were partly offset by outflows for residual provisions and accruals classified within discontinued operations. In 2018/19, discontinued operations included dividend and interest income of £156 million from our investment in Quadgas. Non-cash movements primarily reflect changes in the sterling-dollar exchange rate, the impact of adopting IFRS 16 'Leases', accretions on index-linked debt, finance lease additions and other derivative fair value movements.

Overall, the increase in net debt was driven by continuing high levels of capital investment and the impact of a stronger US dollar on the translation of US dollar-denominated debt. As at 31 March 2020 the Group reduced its total financial liabilities denominated in US dollars from $21 billion at the start of the year to $20 billion at 31 March 2020, as a hedge of foreign exchange movements in the value of its US businesses.

During the year we raised over £2.9 billion of new long-term senior debt including 13 bond issues, and £1.1 billion of hybrid debt refinancing. The Board has considered the Group's ability to finance normal operations at the same time as funding a significant capital programme, in light of the potential impacts of COVID-19. This includes stress-testing of the Group's finances under a 'reasonable worst case' scenario and consideration of levers available to ensure our businesses are adequately financed. As a result, the Board has concluded that the Group will have adequate resources to do so. In April, we issued £0.9 billion of debt through 2 bonds, evidencing our ability to raise new finance. In addition, as at 17 June 2020, we have £5.8 billion of undrawn committed facilities, all of which have expiry dates beyond June 2021. The three major credit rating agencies – Moody's, Standard & Poor's (S&P) and Fitch – have all maintained their strong investment grade ratings of National Grid plc on stable outlook.

Financial position

The following table sets out a condensed version of the Group's IFRS balance sheet.

Summary balance sheet

£m	31 March 2020	31 March 2019	Change
Goodwill and intangibles	**7,528**	6,953	8%
Property, plant and equipment	**48,770**	43,913	11%
Assets held for sale	**–**	1,956	n/a
Other (liabilities)/assets	**(349)**	(507)	(31)%
Tax balances	**(4,168)**	(4,000)	4%
Pension liabilities	**(953)**	(218)	338%
Provisions	**(2,654)**	(2,199)	21%
Net debt	**(28,590)**	(26,529)	7.8%
Net assets	**19,584**	19,369	1%

Financial review
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Property, plant and equipment increased as a result of the continuing capital investment programme, foreign exchange gains and the impact of adopting IFRS 16 'Leases'. Assets held for sale comprised our 39% interest in Quadgas, which was sold in June 2019. Pension liabilities increased in the US, as a result of lower asset valuations and foreign exchange movements, partly offset by a lower discount rate. Provisions increased principally as a result of additional environmental provisions recognised in the year and foreign exchange movements. Other movements are largely explained by net working capital inflows and changes in the sterling-dollar exchange rate.

Regulatory gearing, measured as net debt as a proportion of total regulatory asset value and other business invested capital, was 63% as at 31 March 2020. This was down from 66% at the previous year-end and remains appropriate for the current Group credit rating of A-/A3 (S&P/Moody's).

Retained cash flow as a proportion of adjusted net debt was 9.2%, which is above the long-term average 9% level currently indicated by Moody's as consistent with maintaining our current Group rating.

Off-balance sheet items

There were no significant off-balance sheet items other than the commitments and contingencies detailed in note 30 of the financial statements.

Economic returns

In addition to value added, one of the principal ways in which we measure our performance in generating value for shareholders is to divide regulated financial performance by regulatory equity, to produce Return on Equity (RoE).

As explained on page 245, regulated financial performance adjusts reported operating profit to reflect the impact of the Group's various regulatory economic arrangements in the UK and US. In order to show underlying performance, we calculate RoE measures excluding exceptional items of income or expenditure.

Group RoE is used to measure our performance in generating value for our shareholders by dividing regulated and non-regulated financial performance, after interest and tax, by our measure of equity investment in all our businesses, including the regulated businesses, NGV and Other activities and joint ventures.

Regulated RoEs are measures of how the businesses are performing compared to the assumptions and allowances set by our regulators. US and UK regulated returns are calculated using the capital structure assumed within their respective regulatory arrangements and, in the case of the UK, assuming 3% RPI inflation. As these assumptions differ between the UK and the US, RoE measures are not directly comparable between the two geographies. In our performance measures, we compare achieved RoEs to the level assumed when setting base rate and revenue allowances in each jurisdiction.

Return on Equity

£m	2019/20	2018/19	Change
UK Electricity Transmission	**13.5%**	13.7%	-20bps
UK Gas Transmission	**9.8%**	9.5%	30bps
UK weighted average	**12.4%**	12.4%	–bps
US Regulated	**9.3%**	8.8%	50bps
Group Return on Equity	**11.7%**	11.8%	-10bps

The overall weighted average RoE for the two UK transmission businesses was 12.4%, representing 230 basis points outperformance of the base allowed return. Electricity Transmission performance reduced in the year with improved totex incentive performance offset by lower SO incentives including a reversal of profits recognised in 2018/19. Gas Transmission return increased due to improved totex performance in 2019/20.

RoE for the US Regulated business of 9.3% was 50bps higher in 2019/20, with improved performances in KEDNY, across Massachusetts and in Rhode Island all contributing to this increase. The achieved RoE represents 99% of the weighted average allowed return across all jurisdictions. US returns exclude the impact of the Massachusetts Gas labour dispute in 2018/19. They are also not impacted by the COVID-19 related bad debt provision recognised in 2019/20 and include an adjustment reflecting our expectation for future recovery of these bad debt costs.

Overall Group RoE, which incorporates Property, Corporate and Other, and financing performance was 11.7%, slightly lower than 2018/19.

Tax transparency

As a responsible tax payer, we have voluntarily increased our tax disclosures, which continue to be an area of significant interest to many of our stakeholders.

Tax strategy

National Grid is a responsible tax payer. Our approach to tax is consistent with the Group's broader commitments to doing business responsibly and upholding the highest ethical standards. This includes managing our tax affairs, as we recognise that our tax contribution supports public services and the wider economy. We endeavour to manage our tax affairs so that we pay and collect the right amount of tax, at the right time, in accordance with the tax laws in all the territories in which we operate. We will claim valid tax reliefs and incentives where these are applicable to our business operations, but only where they are widely accepted through the relevant tax legislation such as those established by government to promote investment, employment and economic growth. We do not have operations in tax havens or low tax jurisdictions without commercial purpose.

We have a strong governance framework and our internal control and risk management framework helps us manage risks, including tax risk, appropriately. We take a conservative approach to tax risk. However, there is no prescriptive level or pre-defined limit to the amount of acceptable tax risk.

We act with openness and honesty when engaging with relevant tax authorities and seek to work with tax authorities on a real-time basis. We engage proactively in developments of external tax policy and engage with relevant bodies where appropriate. Ultimate responsibility and oversight of our tax strategy and governance rests with the Finance Committee, with executive management delegated to our CFO. For more detailed information, please refer to our published global tax strategy on our website.

Country-by-country reporting summary

In the current year for the first time we have disclosed in the table below data showing the scale of our activities in each of the countries we operate in. This allows our stakeholders to see the profits earned, taxes paid and the context of those payments.

Tax jurisdiction	Revenue Unrelated party £m	Revenue Related party[1] £m	Revenue Total £m	Profit/(loss) before income tax[2] £m	Income tax accrued – current year[3] £m
United Kingdom	5,282	113	**5,395**	1,821	179
United States	9,258	82	**9,340**	(82)	(2)
Ireland	–	–	**–**	–	–
Isle of Man	–	16	**16**	3	–
Luxembourg	–	–	**–**	–	–
Netherlands	–	55	**55**	12	–
Total	14,540	266	**14,806**	1,754	177

1. Related party revenue only includes cross-border transactions.
2. Profit/(loss) before income tax from continuing operations after exceptionals.
3. See the tax charge to tax paid reconciliation below for further information.

Our Hong Kong entity is UK tax resident and our entities in Australia and Canada are dormant. Therefore, those jurisdictions have not been included in the table above.

Our Isle of Man company is a captive insurance company which is treated as a controlled foreign company for UK tax purposes and as such UK corporation tax is paid on its profits by National Grid. In the Netherlands, we have a finance company which raised external finance for the Group and an old holding company which held trading investments which were sold many years ago, which is in the process of being liquidated. The finance company is taxed on its profits in the Netherlands at the corporate tax rate of 25%, whilst the holding company's profits are offset by tax losses on which deferred tax has not previously been recognised.

Transfer pricing is not a significant issue for the Group since there are limited transactions between Group companies, but any transactions between related parties are made on an arm's-length basis and aligned to OECD principles.

Group's total tax charge to tax paid

The total tax charge for the year disclosed in the financial statements in accordance with accounting standards and the equivalent total corporate income tax paid during the year will differ.

The principal differences between these two measures are as follows:

Reconciliation of Group's total tax charge to tax paid

£m	2019/20	2018/19
Total Group tax charge/(credit)	**480**	339
Adjustment for Group non-cash deferred tax	**(348)**	(251)
Adjustments for Group current tax (charge)/credit in respect of prior years	**45**	52
Group current tax charge/(credit)	**177**	140
Group tax instalment payments payable/(repayable) in respect of the prior year	**78**	92
Group tax instalment payments payable/(repayable) in the following year	**5**	(69)
Repayment due to the Group in respect of current year estimated payments	**47**	–
Group tax payments/(refunds) in respect of prior years paid in the current year[1]	**(113)**	(93)
Group tax payments relating to tax disclosed elsewhere in the income statement	**5**	5
Group tax paid/(repaid)	**199**	75
Profit/(loss) before income tax[2]	**1,754**	1,841
	%	%
Effective cash tax rate	**11.3**	4.1
Effective tax rate (see note 7)	**27.4**	18.4

1. Tax refunds in respect of prior years are primarily driven by a refund received in respect of tax losses carried back to earlier years following agreement of historical US Federal tax audits.
2. Profit/(loss) before income tax from continuing operations after exceptionals.

Effective cash tax rate

The effective cash tax rate for the Group is 11.3%. The difference between this and the accounting effective rate of 27.4% (see note 7 on page 143) is due to the following factors.

National Grid is a capital-intensive business, across both the UK and the US, and as such invests significant sums each year in its networks. In 2019/20 the total capital expenditure was £5,079 million. To promote investment, tax legislation allows a deduction for qualifying capital expenditure at a faster rate than the associated depreciation in the statutory accounts. The impact of this is to defer cash tax payments into future years.

Given the substantial amounts of expenditure qualifying for deduction incurred by National Grid this has left us in a net tax loss position in the US in the year ended 31 March 2020. Consequently, in the current period we made no significant federal tax payments.

In the current year we made significant cash tax payments in the UK (£306 million). This was offset by the receipt of cash for tax losses carried back to earlier years in the US as a result of settlement of prior year audits. These receipts in the US also contributed to a lower overall effective rate of cash tax for the Group.

The Group continues to fund deficit payments into its defined benefit pension schemes and has made significant payments into the Gas and Electricity schemes during the course of the year. These payments have further reduced the overall cash tax paid in the UK.

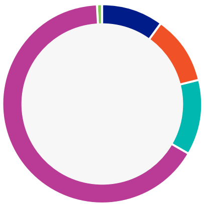
Financial review
continued

Group's total tax contribution

In the current year we have expanded this disclosure to cover our global total tax contribution. The total amount of taxes we pay and collect globally year-on-year is significantly more than just the tax which we pay on our global profits.

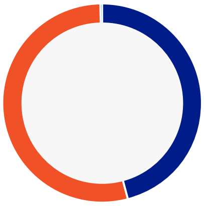
Group's total tax contribution 2019/20 (taxes paid/collected)

Taxes borne



Key:	£m
People	164
Product	185
Profit	199
Property	1,076
Miscellaneous	11
Total	**1,635**

Taxes collected



Key:	£m
People	533
Product	625
Miscellaneous	1
Total	**1,159**

	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	**Total tax contribution £m**	Number of employees as at 31 March 2020
United Kingdom	306	226	57	586	**1,175**	6,321
United States	(107)	850	303	573	**1,619**	16,748
Ireland	–	–	–	–	**–**	–
Isle of Man	–	–	–	–	**–**	–
Luxembourg	–	–	–	–	**–**	–
Netherlands	–	–	–	–	**–**	–
Total	199	1,076	360	1,159	**2,794**	23,069

1. See the tax charge to tax paid reconciliation above for further information.

For 2019/20 our total tax contribution globally was £2,794 million (2018/19: £2,620 million), taxes borne were £1,635 million (2018/19: £1,422 million) and taxes collected were £1,159 million (2018/19: £1,198 million). Whilst total tax collected in 2019/20 has remained consistent with the prior year, the total taxes borne by the Group has increased from the prior year primarily as a result of higher property and profit taxes being paid.

Two thirds of the tax borne by the Group is in relation to property taxes of which c. £850 million are paid in the US across over 1,100 cities and towns in Massachusetts, New Hampshire, New York, Rhode Island and Vermont. These taxes are the municipalities principal source of revenue to fund school districts, police and fire departments, road construction and other local services.

In the UK we participate in the 100 Group's Total Tax Contribution Survey. The survey ranks the UK's biggest listed companies in terms of their contribution to the total UK government's tax receipts. The most recent results of the survey for 2018/19 ranks National Grid as 21st highest contributor of UK taxes (2017/18: 25th), 18th in respect of taxes borne (2017/18: 23rd) and 5th in respect of capital expenditure (£1,200 million) on fixed assets (2017/18: 4th). Our ranking in the survey is proportionate to the size of our business and capitalisation relative to the other contributors to the survey.

However, National Grid's contribution to the UK and US economies is broader than just the taxes it pays over to and collects on behalf of the tax authorities.

Both in the UK and the US we employ thousands of individuals directly. We also support jobs in the construction industry through our capital expenditure, which in 2019/20 was £5,079 million, as well as supporting a significant number of jobs in our supply chain.

Furthermore, as a utility we provide a core essential service which allows the infrastructure of the country/states we operate in to run smoothly. This enables individuals and businesses to flourish and contribute to the economy and society.

Development of future tax policy

We believe that the continued development of a coherent and transparent tax policy across the Group is critical to help drive growth in the economy. In the UK we continue to contribute to research into the structure of business tax and its economic impact by contributing to the funding of the Oxford University Centre for Business Tax at the Saïd Business School.

We are a member of a number of industry groups which participate in the development of future tax policy, such as the Electricity Tax Forum and CBI Employment Taxes Working Group, together with the 100 Group in the UK, which represents the views of Finance Directors of FTSE 100 companies and several other large UK companies. We undertake similar activities in the US, where the Company is an active member in the Edison Electric Institute, the American Gas Association and the Global Business Alliance. This helps to ensure that we are engaged at the earliest opportunity on tax issues which affect our business.

We continue to engage on consultations where the subject matter of which directly impacts taxes borne or collected by our business, with the aim of openly contributing to the debate and development of tax legislation.

Pensions

In 2019/20, the defined benefits pensions and other post-retirement benefits operating costs decreased by £97 million to £197 million, principally as a result of our UK restructuring programme and the GMP equalisation ruling. Employer contributions during the year were £327 million (2018/19: £418 million), including £86 million (2018/19: £84 million) of deficit contributions.

As at 31 March 2020, the total UK and US assets and liabilities and the overall net IAS 19 (revised) accounting deficit is shown below. Further information can be found in note 25 to the financial statements.

Net pension and other post-retirement obligations

	UK	US	Total
Plan assets	14,364	9,384	23,748
Plan liabilities	(12,844)	(11,857)	(24,701)
Net surplus/(deficit)	1,520	(2,473)	(953)

As at 31 March 2020, pension assets of £1,589 million in the UK pension schemes and £260 million in the US Niagara Mohawk Plan were recognised on the basis that these plans were in a surplus position.

Dividend

The Board has recommended an increase in the final dividend to 32.00p per ordinary share ($2.0126 per American Depository Share) which will be paid on 19 August 2020 to shareholders on the register of members as at 3 July 2020. If approved, this will bring the full year dividend to 48.57p per ordinary share, an increase of 2.6% over the 47.34p per ordinary share in respect of the financial year ended 31 March 2019. This is in line with the increase in average UK RPI inflation for the year ended 31 March 2020 as set out in the announcement of 28 March 2013, in which we stated that our dividend policy aims to grow the ordinary dividend per share at least in line with the rate of RPI inflation each year for the foreseeable future.

At 31 March 2020, National Grid plc had in excess of £5 billion of distributable reserves, which is sufficient to cover more than two years of forecast Group dividends. If approved, the final dividend will absorb approximately £1,123 million of shareholders' funds. This year's dividend is covered approximately 1.2x by underlying earnings.

The Directors consider the Group's capital structure and dividend policy at least twice a year when proposing an interim and final dividend and aim to maintain distributable reserves that provide adequate cover for dividend payments.

Brexit

As described elsewhere in the Strategic Report, our Brexit working group considered the issues and consequences of the UK's decision to leave the EU. In the last month of 2018/19, and in anticipation of the original 29 March 2019 deadline for the UK to exit the EU, we executed our plan to bring forward the procurement of key items for capital delivery and operations in case of delays at ports. In the context of the Group financial statements, however, these actions did not have a material effect.

New accounting standards

As of 1 April 2019, we adopted IFRS 16 'Leases'. This did not have a material impact on the Group's results or financial position, although as described in note 37 to the financial statements, on transition our property, plant and equipment and net debt each increased by £0.5 billion to take account of the additional lease obligations. We note that the rating agencies already made adjustments to impute this and accordingly, adoption of the new standard does not impact our credit ratings.

Post balance sheet events

In the period between 31 March 2020 and 17 June 2020, there have continued to be substantial environmental, economic and social changes in both the UK and US. As described further in the Strategic Report, these have had, and will continue to have, significant ramifications for the Group. Other than as disclosed in respect of those areas where forward-looking forecasts are relevant (notably goodwill impairment reviews (note 11 to the financial statements), expected credit losses on financial instruments including trade receivables (notes 19 and 32) and the presumption of the going concern basis generally (note 1)), none of these developments have impacted or caused adjustment to the financial statements.

Principal operations – UK

Our UK business performed well in 2019/20. We maintained our focus on safe, reliable, customer-led, innovative and efficient operations.

Our UK performance

Optimise performance

Measure	2019/20	2018/19	2017/18
Return on Equity (£m) Ⓐ	**12.4**	12.4	12.1
Statutory operating profit (£m)	**1,663**	1,045	1,528
Underlying operating profit (£m) Ⓐ	**1,576**	1,433	1,560
Adjusted operating profit (£m) Ⓐ	**1,668**	1,318	1,528
RIIO-T1 customer savings (£m)	**128**	101	78

Grow core business

Capital expenditure (£m) Ⓐ	**1,292**	1,233	1,309
Asset growth (%) Ⓐ	**3.8**	3.6	4.5

Customer first

Customer satisfaction: ET
(out of 10)
8.2
(2018/19: 7.9)

Customer satisfaction: ESO
(out of 10)
7.6
(2018/19: N/A)

Customer satisfaction: GT
(out of 10)
8.0
(2018/19: 7.8)

Highlights

Our UK business performed well in 2019/20 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations. On 1 April 2019, we completed the legal separation of the ESO within a newly formed subsidiary company which holds the ESO licence. To ensure appropriate ring-fencing between itself and the rest of the National Grid Group, the company is governed by its own Board of Directors including three independent directors. Following separation, we moved the Gas System Operator (GSO) function to become part of the Gas Transmission business to further simplify our structure.

Optimise performance

Our safety ambition is to have a culture where we always do the right thing regarding safety. Our strategy is to be proactive in our safety management by engaging our leaders and employees and implementing a consistent and simple risk-based approach. This strategy will enable us to develop the highest level of safety culture maturity. To support this ambition, we are focusing more on leading indicators that measure our positive efforts on safety management to help prevent incidents, while continuing to track more traditional lagging indicators.

As at 31 March 2020, our LTIFR was 0.06. This is better than our UK target of <0.08, and is our best ever LTIFR performance. Our Electricity Capital Delivery business has worked more than a year without having any LTIs in approaching five million person hours of complex construction activity. This outstanding result was driven by a relentless focus on the work we do and commitment to keeping one another safe.

We delivered a good year of returns, with a Return on Equity of 12.4%. Statutory operating profit and underlying operating profit were higher at £1,663 million and £1,576 million respectively.

We have committed to reduce our direct emissions to net zero by 2050 and to increase our influence to support the overall industry-wide transition to a low-carbon future. We have developed solutions to enable the rollout of a strategic backbone for electric vehicles throughout the UK and are working in partnership with industry to develop Carbon Capture and Storage (CCS) solutions. We continue to engage with stakeholders to shape and define the delivery of the £500 million funding commitments to help grow the UK's rapid charging network made in the Chancellor's March 2020 Budget. In addition, the Chancellor announced at least £800 million for a CCS Infrastructure Fund which will support CCS in at least two sites.

Following the floods of 2007, we instigated an investment programme to protect assets against future flooding. The programme ensures overall resilience of the network to threats, focusing on protection of specific sites against the threat of flooding and reducing the likelihood of consumers being affected by a flooding incident on the ET system. Following detailed modelling and consultation with the Environment Agency, permanent flood defences were installed at Thorpe Marsh 400 kV substation in 2014 and a demountable barrier was procured to protect the 275 kV substation which is located on higher ground. Neither of the substations were jeopardised during the flooding event. The ET network remained resilient during Storm Ciara in February 2020.

Customer first

As noted in the Chief Executive's review, at the end of 2019/20, we found new ways to put the customer first in the face of the COVID-19 pandemic.

We work with our customers to meet their needs and deliver successful outcomes for all parties. We were pleased to see continued improvement in our CSAT scores in our ET and GT businesses, achieving scores of 8.2 (2018/19: 7.9) and 8.0 (2018/19: 7.8) respectively. For the ESO, our CSAT score in 2019/20 was 7.6.

In October 2019, we welcomed Ofgem's 'minded-to' position on Hinkley-Seabank connection to use the existing Strategic Wider Works (SWW) mechanism for this vital project. In May 2020, we reached agreement on the final cost and the regulatory funding model. The allowance for the project is £656 million and will be funded through the existing SWW mechanism rather than the Competition Proxy Model (CPM). The project remains on target to be ready for connection in 2025.

Grow core business

In December we awarded the £400 million tunnelling contract associated with our London Power Tunnels 2 project, a 20.8 mile (33.5 kilometre), £1 billion link from Wimbledon to Crayford which will provide significant resilience across South London when completed in 2028. We have embarked on a partnership with a social enterprise, My Kinda Future, to inspire the next generation of engineers in South London and to help us with local recruitment and upskilling required around our key sites. The team will work on designs and set up across key sites this year, launching four different tunnel-boring machines in 2021. Four other major contracts associated with the cable and substation works will be let this year. These partners will form an enterprise, focused on innovation and collaboration to successfully deliver the project outcome, rewiring London and connecting with the capital.

We took over the Western Link HVDC cable with our Joint Venture partner Scottish Power Transmission on 23 November 2019. The link is a submarine HVDC link between Scotland and England and Wales which delivers up to 2,250 MW. We are working with Ofgem after they opened an investigation into the delivery and operation of the cable in January 2020.

A particular highlight has been the completion of the tunnelling for Feeder 9 under the Humber estuary, a critical reinforcement of the gas network.

Evolve for the future

We published and submitted our business plans to Ofgem in December 2019 for our ET, GT and ESO businesses for the 2021–2026 RIIO-2 price control period. These plans have been developed following our largest ever engagement exercise to date, with customers, industry stakeholders, businesses and households across the country.

Our plans include investment to maintain network reliability and provide flexibility and optionality for the UK to achieve net zero greenhouse gas emissions by 2050, while being protected against new threats:

- Our ET plan has a baseline total expenditure spend of £7.1 billion over the five-year period. Our ET business assumes connection of 15.3 GW of customer capacity, providing the UK with clean power and flexible storage, as well as increased investment to maintain reliability and resilience. The baseline spend for ET, under our proposed financial plan, would see consumer bills reduce slightly in real terms.
- Our GT plan has a baseline total expenditure spend of £2.8 billion over the five-year period. Our GT business, which comprises GB gas system operator and gas transmission, includes an increase in asset health and cyber resilience investment, as well as a programme of work to test and prove hydrogen conversion options. The baseline spend for GT, under our proposed financial plan, would see consumer bills reduce slightly in real terms.

These plans will deliver a safer, cleaner, greener and more affordable energy system. We have challenged ourselves to ensure our business plans deliver at the lowest cost and create optionality as we develop the pathway to net zero. We continue to constructively work with our regulator, Ofgem, ahead of draft determinations in the summer and final determinations in November 2020.

The wellbeing of our workforce is important to us. 38% of our UK employees have undertaken mental-health-related training courses during the year, an increase of 30% compared to last year.

The UK cost efficiency programme that we announced in 2018 continues to deliver a more efficient and agile business ahead of RIIO-2. Through this initiative we have simplified ways of working with a leaner organisation and more efficient IT and back office activities. In 2019/20, the programme enabled us to deliver efficiency savings of £54 million in ET, and £19 million in GT.

We have made good progress on the £116 million Dorset Visual Impact Provision (VIP) project, with site establishment and preliminary civil works well underway. We are on track to underground 5.5 miles (8.8 kilometres) of overhead line and remove 22 pylons in the Dorset Area of Outstanding Natural Beauty (AONB) by 2022. Funding and planning applications have been submitted for the Peak District East VIP project. This £43 million project will remove six pylons and 1.2 miles (2 kilometres) of overhead line in the Peak District National Park. The planning application for Snowdonia VIP project has been submitted. This project will replace a

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section of overhead line which goes through Snowdonia National Park with cables in a 2.1 mile (3.4 kilometre) tunnel. Engineering and consenting activities have also commenced on the first of our RIIO-2 portfolio of VIP projects: the undergrounding of 2.7 miles (4.4 kilometres) of overhead line through the North Wessex Downs AONB.

Our GSO became part of the GT business with effect from 1 January 2020, providing even greater transparency and clarity around the management of Great Britain's gas and electricity networks. A unified GSO and GT structure is a better way to be organised, offering greater alignment, simplified governance, clearer accountability, and better coordination between system operator and gas asset management. It makes the legal separation of the ESO even clearer.

In our GT business we are reviewing the potential to decarbonise the gas network through a transition to carbon-free hydrogen. Working with the UK gas networks on the Gas Goes Green programme, we are identifying the steps required to repurpose our assets to carry hydrogen either as a blend or up to 100%.

nationalgridESO

System Operator

As the ESO, we continue to help facilitate the move to a lower-carbon economy while simultaneously delivering safe, reliable and affordable energy to the end consumer. We operate an electricity system that is transitioning towards net zero and have seen several new energy records set, as greater levels of renewables continue to connect to the network and coal power stations close. During the spring of 2019 there were 18 consecutive days where coal-fired generation was not part of the generation mix; solar output peaked in May 2019 at around 9.5 GW and the maximum wind output of 16.86 GW was recorded in December 2019. In combination, these changes to the generation mix have led to 2019 being the first year on record in which low-carbon sources generated more electricity than fossil fuel sources. In 2020, we have continued to see further records set. Further details about the ESO power generation mix can be found at: www.nationalgrideso.com/great-britains-electricity-explained

Our ESO RIIO-2 plan proposes new activities that will generate net benefits of around £2 billion for consumers over the five-year RIIO-2 period and spend over its two-year price control (2021–2023) of £514 million. The ambitious ESO plan focuses on how the ESO must evolve to meet the challenges of the changing energy landscape. Supported by a new, bespoke regulatory model designed to drive the right behaviours and outcomes, the ESO will facilitate the transition to a zero-carbon power system. Under RIIO-2, the ESO will lower average annual consumer bills by around £3.

Following the cessation of the UK's Capacity Market scheme in November 2018 due to the ruling of the European Court of Justice, we worked closely with BEIS and Ofgem to initiate contingency plans making sure that security of supply could be maintained during the 2019/20 winter period. On 24 October 2019, the EU Commission ruled on the validity of the Capacity Market state aid challenge, confirming their original decision in 2015 to grant state aid approval. Following the announcement, we have resumed our role as the Electricity Market Delivery Body and ran auctions in early 2020.

On 15 May 2018, Ofgem opened an investigation into the ESO (when it still formed part of National Grid Electricity Transmission plc) pertaining to an alleged breach of its licence condition to operate the system in an economic and efficient manner, including the production and publication of forecasts of demand on the electricity transmission network. The investigation is ongoing.

On 9 August 2019, following the near simultaneous tripping of two large power generators, we experienced power outages in various parts of England and Wales. The frequency on our network dropped resulting in low frequency demand disconnections, preventing further issues. Service was restored within 45 minutes to all customers. In September 2019, we published the technical report into the event. In January 2020 Ofgem published its findings which supported many of the recommendations we included in our report. We operate one of the safest and most resilient power networks in the world and, while we recognise the disruption that the outage caused, our systems performed as they should. We have worked closely with Ofgem, the government, the wider energy industry and other sectors like transport to learn the lessons from this incident.

On 1 April 2019, National Grid ESO became a separate legal entity within the National Grid Group. The major programme to achieve this saw the creation of the NGESO Board, which includes three Non-executive Directors and the creation of a new office space, physically separate from other parts of National Grid. Following separation, we moved the GSO function to become part of the GT business to further simplify our structure and to provide greater clarity. We will continue to regularly review the way we are structured to make sure we are delivering the best possible service for our customers.

Principal operations – US

Our US business performed well operationally and financially in 2019/20, despite challenges across our jurisdictions. We maintained our focus on safe, reliable, customer-led, innovative and efficient operations. We continued to optimise our operational performance.

Our US performance

Optimise performance

Measure	2019/20	2018/19	2017/18
Return on Equity (£m) Ⓐ	**9.3**	8.8	8.9
Statutory operating profit (£m)	**880**	1,425	1,734
Underlying operating profit (£m) Ⓐ	**1,636**	1,594	1,704
Adjusted operating profit (£m) Ⓐ	**1,397**	1,724	1,698

Grow core business

Capital expenditure (£m) Ⓐ	**3,228**	2,650	2,424
Asset growth (%) Ⓐ	**12.2**	9.2	7.4
Rate base* (£m) Ⓐ	**20,644**	17,565	14,762

* US rate base is as previously reported at historical exchange rates

Customer first

US Residential – Customer Trust Advice

59.8%

(2018/19: 58.7%)

Highlights

In the US, in 2019/20 we improved our storm restoration efforts, successfully replaced hundreds of miles of leak-prone pipe in our gas network, exceeded our electric vehicle charging deployment goals ahead of schedule, reached record-setting Distributed Generation (DG) in Rhode Island, and renewed our focus on safety culture.

The clean energy future continues to be a focus in the US. The Company's net zero by 2050 announcement was in line with the ambitious targets and important steps being taken by governments, regulators and across our communities, to deeply decarbonise economy-wide. The US business is currently building a plan to achieve this new target, which will impact our fleet, building stock, and pipeline replacement efforts. At the end of March 2019, we had already reduced emissions by 71% below 1990 levels in the US, exceeding our interim target of 45% by 2020 group wide. We achieved this by focusing on a range of activities, which include a major pipeline replacement programme to minimise gas losses through leakage and the reduction of a high-emission greenhouse gas called SF_6 in our electricity networks.

An important milestone we reached, contributing to decarbonisation, was exceeding our electric vehicle charging station deployment goals ahead of schedule in New York. We enabled over 1,405 ports at roughly 184 customer sites and have a number of customers who are eagerly awaiting an extension of the programme, which will be proposed to our New York State regulator in a future rate case.

In the renewable space, we interconnected a record number of DG projects for our customers in Rhode Island, totalling 99.8 MW and connecting 1,938 applications.

We were pleased to accept a number of awards that demonstrate our commitment to our workforce and customers in 2019/20. National Grid was listed in the top ten of DiversityInc Top Utility and we earned a designation as a "Best Place to Work for LGBTQ Equality" by the Human Rights Campaign Foundation in the Corporate Equality Index 2020.

Forbes named National Grid one of the Best Employers for Diversity in 2020. Edison Electric Institute honoured National Grid in 2019 with an Emergency Assistance Award and Emergency Recovery Award for restoration efforts during hard-hitting storms.

Safety continues to be a critical pillar of our daily operations. The Company is fully committed to the well-being and safety of our workforce and customers alike. This year, a tragic event took the life of one of our employees and reminded us to continue striving to 'find a better way' to improve our safety culture. As at 31 March 2020, our LTIFR was 0.16. We have focused safety culture transformation programmes to engage our workers on hazard and risk awareness, and required controls to prevent safety incidents. We have asked our workforce to direct their attention to the safety of themselves and their colleagues every day.

Optimise performance

During 2019/20, the US business focused on growth, customer value, and deep decarbonisation. Our US Regulated net revenue was £123 million (2%) lower, with £257 million of incremental rate cases and £85 million of exchange rate benefit, more than offset by £465 million adverse timing (lower volumes and commodity recoveries). We invested £3.2 billion in energy infrastructure and technology solutions during the year. We also added 41,043 active new customer accounts across gas, electric and DG combined.

Our energy infrastructure investments are designed to bring cleaner energy to our customers and enhance reliability. One of our larger investments, The Metropolitan Reliability Infrastructure Project, will increase system reliability and operational flexibility of the existing transmission system in Brooklyn, New York. It will also increase supply diversity options and provide capacity for operation in case there is an outage. The project consists of roughly 40,000 feet of transmission main that will connect the Southern line to the Brooklyn Backbone and our Greenpoint Facility by autumn 2021.

Through our gas pipeline replacement programme, we have successfully replaced 460 miles (740 kilometres) of pipe in 2019/20, compared to 400 miles (644 kilometres) in 2018/19. By replacing leak-prone pipe, we are significantly reducing unintended release of natural gas, reducing methane emissions and keeping our customers and communities safe. An innovative robotic sealing technique has helped us to seal cast iron pipes in congested urban areas like Boston and New York City. We are on schedule to replace our leak-prone pipe inventory across the US enterprise within the next 20 years.

A challenge we are currently facing that came to the forefront in 2019/20, is significant growth in demand for natural gas across our service area in New York City and Long Island. That growth is expected to continue over the next 10 years due to increased demand from new construction and conversion of oil to natural gas. As a solution to the gas supply issue, we supported the NESE Pipeline project to meet increased demand. When NESE was not approved by New York State, we ceased to connect new customers to gas in order to ensure we could continue to deliver gas to our existing customers safely and reliably. The New York Public Service Commission ultimately ordered us to connect some of those new customers, which we accomplished by increasing use of temporary supply solutions. We are now working with New York State, our stakeholders and our customers to find long-term solutions to gas supply constraints in the region.

In 2019, we experienced an unprecedented gas supply disruption on Aquidneck Island that required temporarily stopping service to about 7,500 customers. This was caused by a reduction in transmission flow coming into our system in Rhode Island. Since then, we have been working hard to learn from the event and have cooperated with a federal investigation and the Division of Public Utilities and Carriers in a summary investigation. The Division's report, released in autumn 2019, reflected National Grid's fundamental commitment to safety and exemplary emergency response. We have already addressed many of the proposed recommendations included in their report, securing additional winter gas supply, expanding our energy efficiency and demand response programmes and improving long-range planning. We now remain focused on securing the ongoing needs of Aquidneck Island and Rhode Island's energy future.

Customer first

As noted in the CEO review, at the end of 2019/20, we identified new ways to put the customer first in the face of the COVID-19 pandemic.

Our unwavering commitment to our customers was demonstrated by a few initiatives designed to make it easier for our customers to do business with us. We converted more customers to paperless billing by improving our paperless capabilities, strengthened our online marketplace where customers can purchase energy efficiency and smart home products, increased the speed at which we verify our customers' identity who call into the customer service line, and improved estimated time of restoration calculations during storms.

Our proactive outage communications and our Interactive Voice Recording upgrades increased our customer satisfaction scores, while storms and challenges with gas shortages in Rhode Island and downstate New York have caused some headwinds. As a result, customer ease has remained relatively flat and improvements in trust have increased slightly.

We continue to work towards quick and efficient storm response to improve these scores. We have improved our restoration efforts over the past decade by developing an emergency response team that works hard to service our customers. The team focuses on forestry, staging crews, materials, advanced analytics and reporting tools, while employing a classification index that anticipates restoration times based on storm types. We demonstrated efficient and successful storm response in April 2020 when 70 mph+ winds caused power outages for over 200,000 customers across all of our jurisdictions.

National Grid has a long history as a leader in economic development, investing in the communities across our territory. We have seen record-breaking economic development grant activity in New York over the past five years. We help our customers evaluate infrastructure needs and improve productivity, efficiency and profitability so that they remain and grow in the region.

The town of Lima, New York, recently experienced a significant economic boost with the expansion of Bristol ID Technologies creating new jobs within this rural community. The Company's electric capital investment grant provided $118,000 to help offset the new electric infrastructure required for this impactful business expansion, resulting in higher-volume production at a reduced cost and more clients.

Grow core business

In September, the Massachusetts Department of Public Utilities (MADPU) approved an electric rate case, which enables us to deliver on important investments in reliability and storm response, provide greater assistance to income-eligible customers and support electric transportation and energy storage policies that are helping drive us towards a clean energy future. The Company had not updated its rates since 2016 and will not file a new rate case for Massachusetts Electric until 2023.

In December, our Rhode Island Gas and Electric Infrastructure, Safety, and Reliability (ISR) plans were filed with the Rhode Island Public Utilities Commission (RIPUC). The plans provide mechanisms to fund maintaining and upgrading the gas and electric distribution systems by replacing aging equipment, addressing load growth, and responding to emergencies. In addition, the Gas ISR plan allows for proactive replacement of leak-prone pipe. Both of these plans were approved by the RIPUC in March 2020.

In the latest gas rate case, filed April 2019 for KEDNY/KEDLI, the Company proposed a suite of demonstration projects to explore low-carbon heating solutions. The solutions are divided into programmes or technologies. The rate case is still underway. Over the past year, we have taken meaningful steps to develop low-carbon heating solutions. In coordination with all New York's gas utilities, we have developed the RNG Interconnection Guideline. RNG is pipeline-compatible, gaseous fuel with lower lifecycle carbon dioxide equivalent emissions than geologic natural gas. The purpose of the guideline is to provide a necessary technical framework that can incorporate RNG into the natural gas distribution network.

Get to know our net zero workforce

Emma Burke (Associate Engineer, Transmission Network Technology Deployment)

What attracted Emma Burke to National Grid was the opportunity to work with new technologies in energy efficiency and storage. She began in the Graduate Development Programme (GDP), which introduced her to the energy industry and the technologies that improve the electric grid, and then moved onto the Technology Deployment programme. Alongside a network of supportive colleagues she met while participating in the programme, she strives to make a positive impact on energy technology and evolve with a changing industry.

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Evolve for the future

Over the past few years, the Company has been hard at work decarbonising the transportation sector.

In partnership with the Capital District Transportation Authority, National Grid deployed four electric public buses in Albany, New York. National Grid and the transportation authority will monitor the range, charging timelines, electricity usage and performance of the vehicles throughout its route network. If the demonstration proves to be successful, the Company will work with other transportation authorities to deploy more electric buses across the region.

In upstate New York, National Grid's EV charging programme surpassed its EV charging installation goal. The Company originally planned to complete 56 projects through this programme with an approximate $3 million allocation. However, we have more than tripled that goal with the completion of over 184 projects. Over 40 of the programme's site hosts serve disadvantaged communities.

Looking ahead

In 2018/19, the Company announced the Accelerate Programme, an ambitious, three-year efficiency challenge that set out an aspirational target of a 20% efficiency improvement in operational and capital expenses across the US business by 2020/21. The Accelerate Programme is aimed at improving both the quality and cost-effectiveness of our services to customers. This programme will continue to allow us to find a better way, so we can grow and serve customers long into the future. As we forge ahead into our clean energy future, we continue to identify pathways for deep decarbonisation along with the states we serve, focusing on the power, heat and transportation sectors. As one of the world's largest investor-owned utilities, we will work alongside policymakers to ensure we can deliver clean, safe, reliable and affordable energy to customers today and tomorrow.

National Grid Ventures and other activities

Our NGV and other activities business performed well in 2019/20. We maintained our focus on safety and reliability while developing new projects to support the energy transition.

Customer first

BritNed availability

98.6%

(2018/19: 98.2%)

Nemo Link availability

96.1%

(2018/19: NA)

IFA availability

91.4%

(2018/19: 93.9%)

Interconnector capacity by 2024

7.8 GW

Optimise performance

Statutory operating profit Ⓐ

£237m

(2018/19: £400m)

Underlying operating profit Ⓐ

£242m

(2018/19: £400m)

Adjusted operating profit Ⓐ

£242m

(2018/19: £400m)

Grow core business

Capital investment Ⓐ

£885m

(2018/19: £623m)

Highlights

This section relates to NGV, non-regulated businesses and other commercial operations not included within the business segments.

NGV, which operates separately from our core regulated units, is focused on investment in a broad range of energy businesses that operate in competitive markets across the UK and US. Its portfolio includes electricity interconnectors, LNG storage and regasification, energy metering, large-scale renewable generation and competitive transmission.

Our 'other' activities comprise NGP, the venture investment and innovation arm of National Grid plc, as well as UK property and US non-regulated businesses, which include LNG operations and corporate costs.

In aggregate, the NGV and other segment delivered £237 million of statutory operating profit, £242 million underlying operating profit and accounted for £885 million of continuing investment in 2019/20.

As at 31 March 2020, our LTIFR was 0.05. This is better than our NGV target of 0.08.

Operational performance

Electricity interconnectors: NGV is the leading developer and operator of electricity interconnectors to and from the UK. NGV's operational portfolio currently comprises 4 GW of interconnector capacity.

BritNed is an independent joint venture between National Grid and TenneT, the Dutch transmission system operator. It owns and operates a 1 GW HVDC link between GB and the Netherlands. In 2019/20 BritNed's availability was 98.6%.

The England-France interconnector (IFA) is a 2 GW HVDC link between the French and British transmission systems, with ownership shared between National Grid and Réseau de Transport d'Electricité (RTE). In 2019/20, IFA's availability was 91.4%.

Nemo Link is an independent joint venture between National Grid and Elia, the Belgian transmission system operator. It owns and operates a 1 GW HVDC link between GB and Belgium. Nemo Link's availability was 96.1% in 2019/20.

LNG storage and regasification: Grain LNG is one of three LNG importation facilities in the UK. It operates under long-term take or pay contracts with customers and provides importation services of ship berthing, temporary storage, ship reloading and regasification into the NTS. Utilisation of terminal capacity was 30.8% in 2019/20, up from 18.8% in 2018/19. Grain LNG set a record for the highest single-day gas send-out from a European terminal in November 2019.

Grain LNG's road tanker loading also offers the UK's transport and off-grid industrial sector a more environmentally friendly alternative to diesel or heavy fuel oil. The facility allows tanker operators to load and transport LNG in bulk across the UK via road or rail.

UK metering: National Grid Metering (NGM) provides installation and maintenance services to energy suppliers in the UK's regulated market. It maintains an asset base of around 8.8 million domestic, industrial and commercial meters, down from 9.9 million in 2018/19.

US competitive transmission: NGV is a part-owner of Millennium Pipeline, which provides consumers in the northeastern US with additional natural gas infrastructure to meet growing demand for cleaner and more reliable energy. It is strategically positioned to serve utility and power plant loads across New York State and into New England.

NGV is also a part-owner of New York Transco, which energised three new transmission upgrade projects in New York in 2016 that provide several ongoing benefits, including reducing upstate to downstate transmission congestion to save money for electricity consumers and offering better access to clean energy, and supporting the retirement of traditional power generation. The assets include the Ramapo to Rock Tavern 345 kV Line, Frasers-Coopers Corner 345 kV Line and Staten Island Unbottling.

US battery storage: NGV is a 50-50 joint venture partner with NextEra Energy Resources in two battery energy storage systems on Long Island. These include two 5 MW, 40 MWh battery energy storage systems in East Hampton and Montauk, New York. The batteries have helped decrease emissions and enabled energy peak-shaving during the busy summer months on the eastern end of Long Island.

UK property: National Grid Property deals with the management and regeneration of our brownfield surplus estate in the UK. Our specialist team works with our communities to return these redundant sites back into beneficial use to provide new homes and employment opportunities across the UK.

In 2019/20, we disposed of 34 sites and exchanged contracts on a further five land sales, to facilitate the delivery of thousands of new homes across the UK. Our joint venture with Berkeley Group, called St William Homes, has entered its sixth year and recorded its first profit in 2019/20. Around 7,600 homes are already under construction across London and the South East.

Grow core business

Electricity interconnectors: NGV will grow its interconnector portfolio by 3.8 GW in the next four years, with new subsea power links to France, Norway and Denmark.

Construction continues on the 149-mile (240-kilometre) IFA 2 interconnector. Developed with RTE, the 1 GW subsea cable will connect Great Britain and France. The link is expected to be operational in 2020.

North Sea Link (NSL) will connect Great Britain and Norway. Developed between National Grid and the Norwegian transmission system operator Statnett, NSL will be 447 miles (720 kilometres). The 1.4 GW link is expected to be operational in 2021/22.

Preliminary construction works have now also commenced on the Viking Link interconnector. Developed together with Danish transmission system operator Energinet, Viking Link will be a 1.4 GW 472-mile (760-kilometre) long subsea link connecting Great Britain and Denmark.

NGV will have 7.8 GW of operational interconnector capacity when Viking Link becomes operational in 2023/24.

US large-scale renewables: NGV completed its acquisition of Geronimo, a leading wind and solar developer in North America based in Minneapolis, in July 2019. Since the acquisition, National Grid has announced the commercial operation of its 200 MW Crocker Wind Farm in South Dakota, along with the signing of a Power Purchase Agreement with Basin Electric Power Cooperative for its 128 MW Wild Springs solar project, also in South Dakota. These developments, together with further activities that build on their strong pipeline of future renewable energy projects, complement the 379 MW portfolio of operational wind and solar assets which are held in joint venture with Washington State Investment Board and operated by National Grid.

US competitive transmission: In April 2019, New York Transco's New York Energy Solution (NYES) was selected by the New York Independent System Operator to provide transmission upgrades that will relieve congestion of New York's bulk electric power system, while enhancing reliability and facilitating upstate clean energy resources to the downstate demand centers. The upgrades will be taking place on an existing 54.5-mile (88-kilometre) utility corridor and on utility-owned land. New York Transco is well into the consenting and permitting process for the NYES project, which remains on track for a late 2023 service date. NGV expects to participate in additional public policy electric transmission projects in New York that will be necessary to accommodate increasing amounts of renewable energy, in particular offshore wind.

UK property: St William continues to grow and we now expect the joint venture to deliver around 20,000 new homes across London and the South East. A further four sites have been negotiated into the joint venture during 2019/20 with further sites expected to be negotiated into the joint venture during 2020/21. In the next 12 months, we expect our St William Homes joint venture to complete construction of over 100 new homes across London.

Scan here to view the story

National Grid Property entered into a new joint venture agreement with Places for People, one of the largest regeneration, development and property management companies in the UK and a registered provider of affordable housing. As part of the venture, we aim to build up to 500 new homes on the first three sites, and delivering 10 sites into the joint venture over the next three years.

Evolve for the future

UK Carbon Capture, Utilisation & Storage (CCUS): In 2019 NGV launched Zero Carbon Humber, a consortium looking to develop the world's first zero-carbon industrial cluster in the UK's Humber region by 2040. Such a project would protect 55,000 jobs in the region and establish the UK as a world leader in CCUS technology.

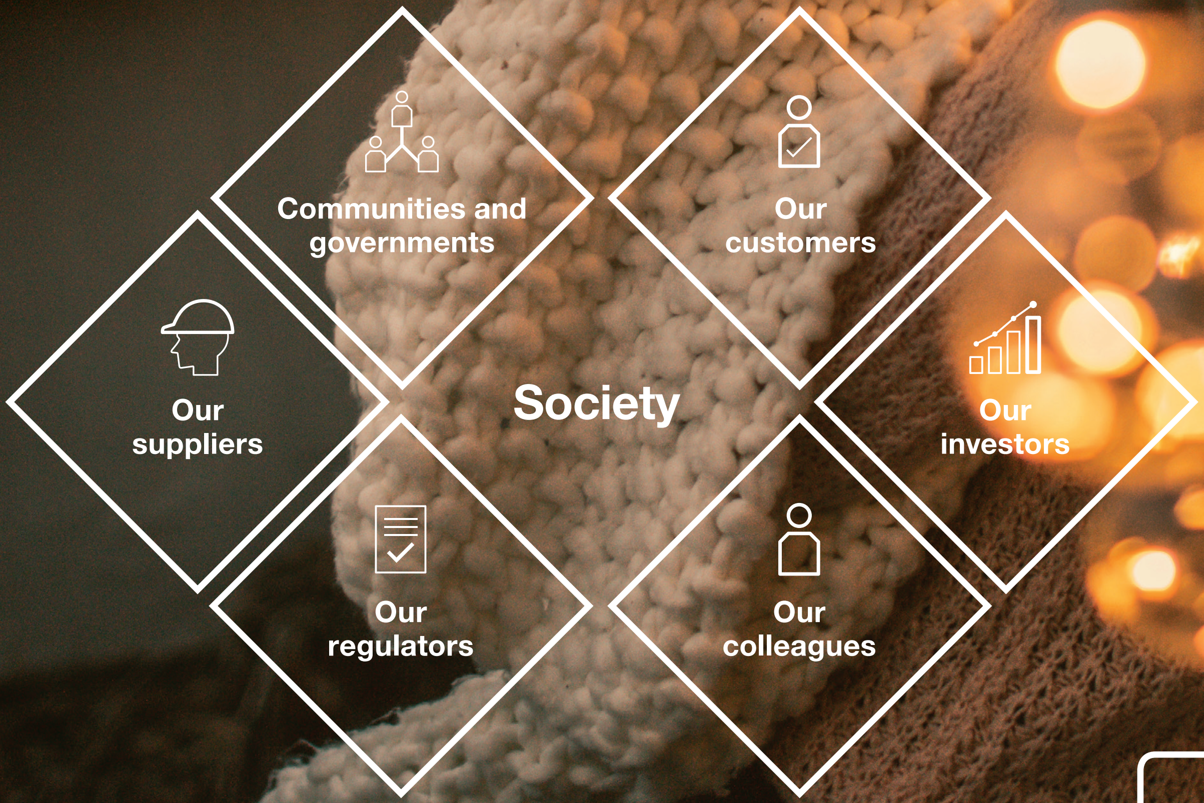
US offshore wind: Ørsted and Eversource, with support from NGV, are developing the Revolution Wind offshore wind farm which was awarded competitive tenders to supply electricity to distribution utilities in Rhode Island and Connecticut. The proposed 704 MW wind farm will be located over 15 miles (24 kilometres) south of the Rhode Island and Massachusetts coasts. The project is expected to be operational by 2023, pending permits and final investment decisions. NGV has the option to acquire the transmission connection between Revolution Wind and the onshore electric transmission network.

National Grid Partners: NGP is the venture investment and innovation arm of National Grid. NGP's portfolio at the close of the fiscal year comprises 21 companies at a fair value of £134 million.

Our stakeholders

As the Board of Directors, we prioritise our responsibilities to our different but interrelated stakeholder groups and wider society. We endeavour to ascertain the interests of our stakeholders and reflect them in the decisions that we make. We recognise that in balancing those different perspectives, it isn't always possible to achieve each stakeholder's preferred outcome.

You can find out more about our key stakeholders and their interests, how we engaged with them and how this influenced decision-making in our 'Section 172(1) Statement' that follows. For more details on how our Board operates, including the matters it discussed and debated during the year, see pages 64 – 87.



How we create value for our stakeholders

The long-term success of our business is critically dependent on the way we work with a large number of important stakeholders. We aim to create value for our stakeholders every day by maintaining levels of business conduct that are governed by our values. We continue doing so as the energy landscape changes.

How our Board keeps up to date with stakeholder interests

Reporting and monitoring: Our Company-wide engagement collates information on stakeholder interests that informs business-level decisions, with an overview of developments being reported on a regular basis to the Board or a Board Committee. In some cases, this will be through an annual or more frequent round-up for the business area interfacing with the relevant stakeholder (this is generally the case for customers and suppliers).

Direct engagement: In other instances, one or more members of the Board may be involved directly in the engagement (such as shareholder or other investor networking). In each case, it is important for all members of the Board to gain sufficient understanding of the issues relating to every stakeholder, so their views are taken into account in Board discussions. The table below sets out our focus on the key relationships and shows how the relevant stakeholder engagement is reported up to the Board or Board Committees to help inform decisions made by Directors.

We have provided some examples of how particular engagement outcomes were considered by the Board below, noting that these examples are not exhaustive in summarising all our stakeholder considerations. Within each example, when outlining how the Board considered the impact on a particular stakeholder group, we also list the broader range of stakeholders the Board considered as part of its discussions.

We considered the interests of our stakeholders in reviewing matters such as our liquidity and financial arrangements, our dividend, operational matters, for example resolving the gas supply issues in New York City and Long Island and developing our business plans. You can also read more about how the Board showed regard for the interests of various stakeholder groups through a worked example of its response to the COVID-19 pandemic on page 65.

This section, How we create value for our stakeholders, serves as our section 172 (1) statement.

Stakeholder group	How we engage and communicate	How stakeholder interests have influenced decision-making and the execution of our strategy
Our investors – individual shareholders	**Company engagement** The Company Secretariat team, together with the Company's Registrar, engage with our retail shareholders throughout the year to deal with enquiries relating to shareholdings. **Board-level engagement** Updates from Company-level engagement with shareholders are provided to the Board as appropriate. The AGM and shareholder networking programme provide the Board with valuable opportunities to engage with our shareholders. All members of the Board attended the 2019 AGM to discuss proposals and answer shareholder questions as necessary. The shareholder networking programme in 2019 included presentations, and a visit to our Gas National Control Centre in Warwick where shareholder attendees had direct one-to-one contact with senior management, Board members and engineers across a two-day period. During the shareholder networking programme and 2019 AGM, the Board members listened and responded to views of our shareholders. Any resulting actions were fed back to the businesses as necessary.	We recognise the importance of keeping an engaged shareholder base so that we can closely monitor their interests. As such, the Company Secretariat team, in collaboration with our Registrar, implemented an asset reunification programme in January 2020. This exercise provided us with an opportunity to re-unite as many shareholders as possible with their unclaimed assets. The programme will continue throughout 2020 and so far, as at 30 May 2020, £13 million was reunited with the respective shareholders and we have re-engaged 8,372 shareholders on the register. Ongoing engagement between our investors and the political sub-group of our Executive Committee highlighted concerns around the UK Labour Party's policy for state ownership of the UK operating companies. The Board, in line with its fiduciary duty to its shareholders, took steps to protect the value of shareholdings in the event of UK state ownership. **Views of other stakeholder groups considered** Customers, Regulators, Communities and governments, Our colleagues, Suppliers
Our investors – institutional (equity investors and debt investors)	**Company engagement** Over the year, the Investor Relations team held 436 investor meetings across 10 countries and 26 cities: met with over 400 institutions, representing 49.9% of our share register; and hosted three site visits, offering investors the opportunity to meet divisional management and view our assets. Our engagement programme focuses on updating investors on the regulatory and operational progress in our UK, US and NGV businesses, as well as the growth opportunities available to us. During the year, the Debt Investor Relations team in Treasury held meetings between senior Group Treasury representatives and debt investors in the UK, Continental Europe and the US. Topics covered included our financial results, US rate case filings and bond issuance. The team also met with debt investors at various conferences over the course of the year. **Board-level engagement** The Board received regular feedback on investor perceptions and opinions about the Company and as part of our engagement programme we provide the opportunity for our current and potential investors to meet with the Chairman, the Executive Committee and operational management. Additionally, the Board received the results of an independent audit of investor perceptions where interviews were carried out with investors to establish their views on the performance of the business and management. The findings and recommendations of the audit were then reviewed by the Board.	The investor perception study highlighted that senior management was held in high regard and that the ability to maintain operational excellence is taken for granted. The survey further noted that there was an opportunity for the Company to raise the profile of the role it is playing in the energy transition and also emphasised the strategic benefits of the combination of the Company's UK and US assets. Our investors also expect that we stand for something far more than providing economic returns. To facilitate the change towards net zero, in January 2020, we also announced the launch of our first green bond, issued by National Grid Electricity Transmission plc. The €500 million proceeds from the bond issuance will finance electricity transmission projects with environmental benefits. An ESG data book was published in the year to measure the overall performance of the Company in operating responsibly, while creating positive social impact. In preparing this data book, we held discussions with investors to identify the most commonly used ESG data providers, and reviewed these questionnaires to determine the most relevant data to communicate to investors. During this process over 400 questions were reviewed. Subsequently, these were consolidated and refined down to those included in this document. **Views of other stakeholder groups considered** Regulators, Communities and governments, Our colleagues

Our stakeholders continued

How we create value for our stakeholders continued

Stakeholder group	How we engage and communicate	How stakeholder interests have influenced decision-making and the execution of our strategy
Our colleagues	**Company engagement** Engagement with our people takes many forms, including reviewing and implementing actions from the EES results; Employee Resource Group (ERG) sessions, which provide the opportunity for ERG chairs and leads to discuss the importance and impact of their group and provide valuable feedback on inclusion and diversity related topics; meetings with trade union representatives, and leadership offsites located at a range of different business locations in the UK and US. **Board-level engagement** The annual EES provides senior leaders and the Executive Committee and Board with an insight into how our employees are feeling about the Company and its direction. Action plans are developed to progress any areas of improvements that are identified. The Board also conducts site visits and meets with a wide range of employees through our employee engagement programme: you can read more on this on page 73. The Executive Committee also received regular talent updates and considered the remuneration structure for senior management.	The topics discussed and actions from Board and Executive Committee's engagement with our people can be found on page 73. The Board was pleased to see a continued improving trend in overall employee engagement through the 2020 EES results. The introduction of the Leadership Index has allowed leaders to gain feedback from their direct reports on areas where their personal actions, style and behaviours can have an immediate impact on enablement and engagement. The Leadership Index will be a key focus area for 2019/20.
Our regulators	**Company engagement** **UK** – regular interactions with Ofgem and the Health and Safety Executive. The Company also organises stakeholder fora and consultations with stakeholders, including members of the public, our suppliers and customers around specific projects and proposed business plan submissions for RIIO-2. We work with other networks and organisations outside of the energy industry to identify good practice. **US** – regular interface with both federal and state regulators and customers on an ongoing basis, as well as the pre-filing stakeholder engagement programme in the build-up to and during any rate case process. Specific engagement was undertaken regarding the decarbonisation pathways and the Niagara Mohawk Power Corporation advanced metering infrastructure. **Board-level engagement** The Board met with the Chair, CEO and incoming CEO of Ofgem in November 2019. The topics of conversation included our net zero ambition, with a focus on practical solutions to move the agenda forward. The discussions also covered RIIO-2. The outcomes of engagement activities are reported to the appropriate forum and ultimately to the Executive Committee and Board. In the US, any rate case engagement is reported up to the Executive Committee and the ordering of Executive Committee and Board as appropriate. The Board met with the Governor of Massachusetts and a member of the Governor's office in March 2019. Recognising the severity of the adverse reaction of various stakeholders to the gas moratorium that was enforced by the Company in downstate New York, the Board commissioned two external reviews to understand how the US business had made the original decision. Long-term solutions are being implemented.	In the UK, discussions with our regulators have contributed to the productive outcome of key business issues such as: • the 9 August 2019 power outage: the Company had regular engagement with Ofgem and the UK government, and the Board regularly discussed the outcome of investigations and reports focused on this, including the response to Ofgem on the findings from the investigation. In January 2020, the Board welcomed Ofgem's report on this incident which confirmed that our actions did not cause the outage. • the future of our ESO business, which will be reviewed by Ofgem following legal separation last year. • RIIO-2 business plans: for the development of the RIIO-2 business plans, we have followed Ofgem's enhanced stakeholder engagement process, which is based on greater engagement with our industry and end consumers to prioritise their needs in our RIIO-2 business plans. Three independent groups were established to provide challenge throughout this process – two independently Chaired User Groups, (one for the ESO and one for the transmission businesses) and an Ofgem Challenge Group. Regular discussions were held at the Executive Committee and the Board on progress with stakeholder engagement, the development of the RIIO-2 business plans and on interactions with the challenge groups. On invitation, the Chairs of the Chaired Independent User Groups met with the Board in 2019. Following a period of engagement with Ofgem, we submitted our final business plans for RIIO-2 in December 2019. Thereafter, engagement has continued with Ofgem evidencing various aspects of the Company's RIIO-2 business plans such as the formal question and answer process to explore our RIIO-2 business plan submission ahead of its draft and final determinations later in 2020. In the US we refined the Company's regulatory strategy and business planning for rate cases and other US regulatory priorities. The Company's rate case pre-filing stakeholder engagement programme has become a major contributor to the Company's successful rate case outcomes. The external reviews conducted on the gas moratorium have highlighted lessons and recommendations which are already being implemented. In the short term, all affected customers have been contacted and plans are in place to make sure that they are connected to a gas supply in the near future. Medium- to long-term solutions that are in the best interests of our customers and regulators continue to be progressed. The Board is closely monitoring the output of these developments. **Views of other stakeholder groups considered** Customers, Investors, Communities and governments, Suppliers, Our colleagues.

Stakeholder group	How we engage and communicate	How stakeholder interests have influenced decision-making and the execution of our strategy
Communities and governments	**Company engagement** Regular discussions and satisfaction surveys to journalists and government. Policy and public affairs and in house US government relations teams develop, grow and leverage the Company's relationships with key politicians, officials, wider stakeholders and influencers to ensure the Company is connected with legislation and government policy. Engagement with local communities in the form of consultations during construction phases of projects and work with environmental education centres. We liaise with land owners and wider communities where the Company has assets and we have established dedicated teams to manage relationships. **Board-level engagement** During the year, the Board received regular updates on the potential impact of renationalisation which had been included as a policy in the Labour Party manifesto ahead of the December 2019 UK General Election. Regular updates were also received in relation to Brexit. The downstate New York gas moratorium and feedback from engagement with the Governor of New York formed an important part of the Board's agenda for the US business.	The Board agenda continued to be strongly focused on community and governmental issues this year such as: • the December 2019 UK General Election and the resulting exit from the European Union on 31 January 2020. We have continued to work with our UK regulators and the UK government to ensure that free trade agreements are negotiated for our interconnectors so that consumers continue to reap their benefits. We have also looked after the interests of our European staff and sought to ensure continued co-operation in energy balancing across Europe in the future. • in the US, the impact on communities following the gas moratorium in downstate New York was considered in depth by the Board and the Safety, Environment and Health Committee. We progressed dialogue with the New York State Governor and enacted settlement agreements and are now developing long-term solutions. • the clean energy agenda: UK and US governments and communities are strongly focused on carbon reduction activities. To focus on meeting our net zero commitment and embedding sustainability into our culture, we applied a sustainability lens across our operations and challenged our businesses to commit to challenging targets. In the US, at the state level, we have strong alignment with policymakers and regulators who, like us, are committed to a cleaner energy agenda. In the UK, we continue to work to maintain access for customers to european energy that is affordable and renewable, and the Board also approved the Company's announcement of its target to become carbon neutral by 2050. **Views of other stakeholder groups considered** Customers, Investors, Regulators, Suppliers, Our colleagues
Our customers	**Company engagement** **UK customer programme** – we use several channels such as operational fora, liaison meetings, market research, stakeholder events and interactive customer listening sessions to engage with our customers. We have in place a robust governance structure to ensure our engagements and insights are shared at all levels. This includes a strategic meeting accountable for customer and stakeholder experience across the UK core business. It is chaired by our UK Executive Director and attended by the UK Executive Committee members on a quarterly basis. To support this, we have a committee made up of senior leaders from across the UK business. This governance is designed to ensure our pipeline of work addresses customer needs and continuously raises the bar. We also ensure customer experience remains one of our top priorities by measuring and tracking progress against our customer experience strategy throughout the Company. **US customer team** – collects and communicates 'voice of customer' feedback throughout the business, gathered via customer surveys on a tracking and ad hoc basis to measure customer sentiment of residential, commercial and wholesale customers. An online community of 6,000 residential customers enhances insight with fast and continuous feedback. We are also leveraging design to inform customer experience solutions, process changes and product development. **Board-level engagement** In the year, the Board received updates on both the UK and US customer strategies. Bi-annual reports were also submitted to the Board from the UK, US and NGV businesses.	In the UK, feedback received through our stakeholder-led RIIO-2 business plan provided an understanding on how satisfied our customers are with the service we provide. Their views on the outputs we should provide during RIIO-2, how these should be delivered and the effect on their bills, were considered by the Board. In the US, we have incorporated 'voice of the customer' in Executive Committee and Board papers and received feedback to support our five new strategic imperatives which will guide our customer focus. The Executive Committee and Board also received updates on the US KEDNY/KEDLI and Niagara Mohawk rate case filings. **Views of other stakeholder groups considered** Investors, Regulators, Our colleagues, Communities and government
Our suppliers	**Company engagement** Strategic relationship meetings are conducted regularly between suppliers and the procurement team. We work closely with our suppliers and peers to build on our knowledge and promote best practice in the industry to combat issues such as climate change. **Board-level engagement** Bi-annual reports relating to our suppliers were submitted to the Executive Committee and annual reports to the Board.	In collaboration with our suppliers, our focus is on delivering low-carbon and sustainable schemes for our projects. We established major contracts that will support our role in accelerating the clean energy transition. For example: • the Board were updated on the six-year, £400 million contract with Hochtief-Murphy Joint Venture, who will deliver the tunnelling and shaft work for the London Power Tunnels 2 project; and • the Board received an update on the chosen supplier, Balfour Beatty, who had been chosen to be the civil works supplier for the Company's interconnector to Denmark. The four-year, £90 million contract will deliver the British onshore civils works for the project. **Views of other stakeholder groups considered** Investors, Regulators, Communities and government, Customers

Our commitment to being a responsible business

In 2019, National Grid conducted a comprehensive review of where we can create the most positive impact on society. The resulting principles of responsibility are being embedded to inform everything we do as a business.

Responsibility at National Grid

Our purpose is to "Bring Energy to Life" and we do this through the delivery of the electricity and gas that powers our customers and communities; safely, reliably, and efficiently. But we also have an important role as a responsible citizen in society as a whole, in our communities, and as a responsible employer.

To further this ambition, during 2019/20 we applied the lens of being a purpose-led organisation, including the principles of an ESG (Environmental, Social and Governance) framework, to review and adapt the way we manage our business responsibly, looking at everything from our strategic investment process, to our role in the community, to our procurement processes and policies. This brings together, and enhances, our focus on the environment, people and communities that have been at the core of our approach to responsible business for many years.

We have committed to embedding the following five key elements of being a responsible business into our strategy and goals. These are areas where the Company can create maximum total societal impact: the environment, our governance, our colleagues, the communities we serve and operate within, and the economy.

This approach has informed and guided our response to the COVID-19 crisis, with a focus on caring for our colleagues, supporting the communities and customers we serve, and helping protect and restore the economies we operate within.

Our approach to reporting

This section contains information relating to the key focus areas that are considered material to shareholders, as identified by our internal review of total societal impact.

We have rigorous policies in place that support our approach to corporate responsibility and we report on a number of non-financial performance measures relating to these policies.

Our principles of responsible business

Our communities

We are committed to delivering sustainable energy safely, reliably and affordably for the communities we serve. In 2019 we recognised the importance of ensuring that our communities enjoy the benefits of the clean energy transition and that no one should be left behind in delivering those benefits.

These shifts in our sector will require investment. We are committed to working with the communities we serve to help them meet, or exceed, their overall climate and carbon ambitions, and we will look to do so in an affordable way. As we develop long-term affordability targets, we will ensure that National Grid's cost to our customers is reported transparently on an annual basis.

As well as affordability, the principle of fairness is also important. We will play our role in ensuring that no-one is left behind in the transition to clean energy, and that the associated benefits are enjoyed by all. A fully decarbonised transportation infrastructure, for example, should be accessible by everyone across the communities we serve.

Finally, we embrace our responsibility to maintaining the delivery of energy to the communities we serve, safely and reliably.

Engaging with our communities

We regularly seek feedback from our customers to find out what they think of us and the services we provide, and take the appropriate action to improve and exceed customer satisfaction. You can read more about our customer satisfaction performance on page 18.

Supporting communities to thrive

Responsibility in our communities means safely maintaining the resilient energy systems society expects and has become accustomed to, as well as ensuring that our economic and social role in the community has the greatest possible positive impact. That's why we partner with charity organisations and encourage and enable our employees to volunteer to work with them. In early 2020 we launched a Company-wide community investment strategy to ensure that our programmes enable skills development with a focus on lower-income communities. These programmes are intended to create employment opportunities in the energy sector, related to the clean energy transition. We are committed to tracking programme participants from initial interaction all the way through to eventual employment either at National Grid, our partners, suppliers or other organisations involved in the challenge of meeting net zero. Our goal is to create 45,000 jobs across the US and UK through this new initiative.

"In early 2020 we launched a Company-wide community investment strategy to ensure that our programmes enable skills development with a focus on lower-income communities."

45,000

Jobs to be created across the UK and US to support lower-income communities

£47m

(2018/19: £54m)

Contribution of our corporate responsibility work

Part of our responsibility is to serve society fairly and affordably. In the US we already care for vulnerable customers with low-income programmes, bill discounts and free energy efficiency advice. In response to the COVID-19 crisis, we have expanded customer support, paused late payment collections activities, and placed a freeze on related service cutoffs.

In the UK, National Grid established a £150 million Warm Homes Fund. This is the largest private sector investment in energy efficiency ever made in the UK, and is designed to support local authorities, registered social landlords and partnerships to help approximately 50,000 households suffering from fuel poverty. Protecting vulnerable customers remains a key priority as we seek to ensure that no-one gets left behind in the transition. And by engaging with customers to reduce their energy usage, we can also help them reduce their carbon emissions, contributing to the overall decarbonisation of the economy.

Reliability and resilience are part of our regulatory duty, but also our social contract. There isn't a choice between a clean energy system and a reliable one. Due to the effects of climate change, we expect our network will need to be more prepared to recover from extreme weather events, and we are committed to ensuring the reliability of supply, as well as playing a leading role in disaster recovery.

Case study – UK

The Hinkley Connection Project

Our project will connect the UK's first nuclear power station for a generation; introduce T-pylons to our network; and release low-carbon and renewable energy from the south west. It's a positive and exciting future. Getting there, however, means impacting communities with construction for seven years.

In return, we're helping local people create a future of their own and are investing in the local economy via adult skills and employment. Working with stakeholders we have created bespoke training and support for the long-term unemployed. Our aim is to help more than 300 long-term unemployed into work; so far, 49% of those under training have gained employment.

We listened to government agencies, local authorities, job centres and charities – as well as our customer, EDF. Their feedback helped us design a course that responds to local labour markets and, with retention a key challenge, encourages trainees to complete it. Based on stakeholder feedback, we emphasised traffic management training.

Stakeholders challenged us to focus training in areas most affected by construction and we are now revisiting our approach.

Through our commitment to benefit the communities in which we operate, we are connecting with people, as well as low-carbon generation, leaving a legacy of job creation and upskilling.

Case study – US

Ideal Dairy Farm, New York

The New York State Energy Research and Development Authority and National Grid work collaboratively to deliver technical and financial resources to the agriculture community across New York State. We are pleased Ideal Dairy, LLC has been a beneficiary of this scheme.

Energy costs are a significant expense for a farm. Expansion has always been part of Ideal Dairy farm. Recognising the importance of greater economies of scale, Ideal Dairy decided to proceed with a multi-million dollar expansion project. National Grid provided financial incentives for the energy-efficient equipment as well as an economic development grant for a new commercial underground three-phase 1,600 amp service to support this expansion. The new well-lit parlour and barns with efficient ventilation systems keep the areas bright and comfortable for the cows and workers. This optimises production.

Ideal Dairy has grown from 1,230 cows in 2016 to 2,300 cows while doubling production to 22,000 gallons of milk a day through efficiencies. With the success of this project, they added a freestall barn in 2019 and plan for another one in 2021. They anticipate this will enable them to grow to 3,000 cows. Through this expansion, Ideal Dairy is improving the environment by reducing their energy consumption, and keeping their workers satisfied, whilst serving their community.

Our commitment to being a responsible business continued

Environmental: The path to net zero

We are embracing our role at the heart of the energy system and understand the critical role we play in tackling climate change. The markets in which we operate have announced ambitious carbon reduction targets and further legislative actions are anticipated in all our markets. These targets will be challenging and we embrace the opportunity to support the delivery of these goals.

While the biggest impact we can have is supporting the economy-wide clean energy transition, it is important we also reduce our own direct impact on the environment.

In 2012, we developed our environmental sustainability strategy, "Our Contribution", to set a framework for embedding sustainable decision-making into our business operations. We focused on three key areas – climate change, responsible use of natural resources and caring for the natural environment – and set targets to deliver progress through the end of 2020. In 2019/20, we have continued to advance our work.

We continue to focus on carbon reduction being factored into both our major investment decisions and our tender process for major construction projects. These actions encourage not only our teams, but also our supply chain to deliver lower-carbon solutions. Supply chain emissions are classified as Scope 3 emissions and, as such, the tender carbon weighting will help us reduce our Scope 3 emissions.

We also have programmes in place to ensure that we are making improvements to the natural environment. One such programme focuses us on finding better ways to deliver an increase in environmental benefits on non-operational land, while working with local partners and communities. Work under this programme prioritises local environmental benefits, for example increasing pollination, community access to green space and bio-diversity (see the Pollinator Meadow Project case study below).

"In 2019 we furthered our commitment to combating climate change with the announcement that we will aim to achieve net zero for our direct emissions by 2050."

Our Contribution Progress Highlights

Metric	End of Calendar Year 2020 Target	Progress through 2019/20
Reduce Scope 1 and 2 GHG Emissions	45% reduction	70% reduction
Send zero office waste to landfill	100% from major sites	95%
Reuse or recycle recovered assets	100% by 2020	100%
Recognise and enhance the value of our natural assets	50 sites	50 sites with 8 additional sites in progress
Carbon pricing	Implement carbon pricing in major investment decisions	On track to complete in major business areas by end of 2020

Case study – US

Pollinator Meadow Project – Pawtucket, Rhode Island

Our electric transmission corridors must be regularly maintained to prevent vegetation from endangering the wires. We see this as an opportunity to practise environmental stewardship.

As meadows are becoming rare as more New England pastures grow back into forests, transmission line corridors are increasingly important as low growing-shrub and meadow habitat. To assess the viability and practicality of incorporating wildflower plantings into our vegetation management program, we implemented a pollinator pilot project in Pawtucket, Rhode Island. During this pilot, we converted almost two acres of transmission line corridor to wildflower meadow. The project was a success and the flowers continue to flourish. We will continue to monitor the project and are committed to creating at least one new pollinator site in the US per year, over the next five years.

Projects like these not only help the environment, but also allow us to build connections with local environmental organisations and customers and increase public understanding of our vegetation management programmes.

Case study – UK

Chairman's Awards: Save Evie's Whale

The annual Chairman's Awards are a demonstration of how we use governance to bring our purpose, vision and values and the role we play in society to life. Every year more than 150 teams submit entries that show how the work we do at National Grid contributes positively to our people, our customers and communities now and in the future.

In 2019 the "Save Evie's Whale" campaign was chosen as the winner of the Chairman's Awards at an event in New York. The campaign was inspired by Evie O'Grady, the seven-year-old daughter of one of our employees, who made a drawing of a whale – because she was so upset about the number of whales dying due to plastic pollution in our oceans. Evie's drawing and her story became an inspiration to encourage employees to think about the environmental impact of single-use plastics. In June 2019 we made a commitment to remove single-use plastics from sale at our UK offices by 2020.

The "Save Evie's Whale" campaign brought that commitment to life and provided a platform to engage with employees and suppliers about reusable cups and other materials, and effective recycling behaviours. Piloted in our Warwick UK offices, with the campaign we have successfully eliminated plastic straws and plastic cutlery and eliminated over 46,000 polystyrene containers and 22,000 plastic containers going into general waste annually. The programme also created significant cost savings by reducing the use of consumables, improving recycling rates, and cutting the volume of waste generated. "Save Evie's Whale" has since been rolled out in offices across the UK, and also at local schools and community groups, inspiring behaviour change in society. Over 4 million pieces of single-use plastic have so far been eliminated.

4 million+

pieces of single-use plastic eliminated

Building on earlier actions to manage office waste, we launched waste reduction campaigns across our offices in the UK and the US. In the UK we have eliminated over four million items of single-use plastics, mainly related to food and beverages (see the Save Evie's Whale case study on the previous page). In 2019, we also diverted 95% of office waste from our targeted sites away from landfill, and are aiming to complete work at the remaining sites in 2020.

Our Further Commitments to Reducing our Impact and Achieving Net Zero

As we work to meet our 2020 'Our Contribution' commitments, we will continue to reduce our carbon footprint, maximise the value of our resources and enhance the environment; however, we recognise that we can do more to combat climate change and improve the environment. To accomplish this, as part of our Responsible Business review, we are developing new metrics and targets to further challenge us and allow for monitoring and evaluating our performance. These will be announced later this year.

The cornerstone of our revised targets is our commitment to achieve net zero for our scope 1 and 2 greenhouse gas emissions by 2050 that was announced in November 2019. This replaces our previous target of an 80% reduction by 2050 to better align with our ambitions. We also set more ambitious interim targets for our emissions reductions of 80% by 2030 and 90% by 2040.

To achieve these targets, we will also progress our emission reductions by continuing, and accelerating, current emissions reduction programmes, and by looking for new, innovative ways to reduce our emissions. We are reducing leakage from our gas pipelines through our gas mains replacement programmes and through innovative robotic pipe sealing techniques. We are piloting the use of parts of our gas network for the distribution of hydrogen and RNG. We are working with suppliers to evaluate potential alternatives to SF_6.

Energy efficiency is one of our key focus areas. We have ongoing energy reduction targets in our US and UK core office facilities. As an example of our progress, in the UK, we have exceeded our target by reducing energy consumption by 11% from a 2015/16 baseline. In the US, we performed whole-building LED replacements at two of our key locations and expect to yield annual site electricity savings of 6% and 17%. We are also working to reduce our transport energy use through the purchase of alternative fuel fleet vehicles and employee programmes promoting the purchase/lease of electric vehicles.

For the US and UK, our operational energy use is 2,330 GWh, our facilities energy use is 285 GWh, our transport energy use is 405 GWh and electricity energy losses from our networks are 12,311 GWh. US generation is also responsible for 12,892 GWh. In these figures, facilities energy use is defined as the energy used in powering and heating our offices, whilst operational energy accounts for energy used in fulfilling our primary business. Transport covers business travel, including our own fleet, hire cars and personal car use for business.

Understanding National Grid's greenhouse gas emissions

We monitor and report our greenhouse gas emissions in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol.

Scope 1: Direct Emissions from the operational activities of National Grid.

Scope 2: Indirect Emissions from gas and electricity purchased and used by National Grid.

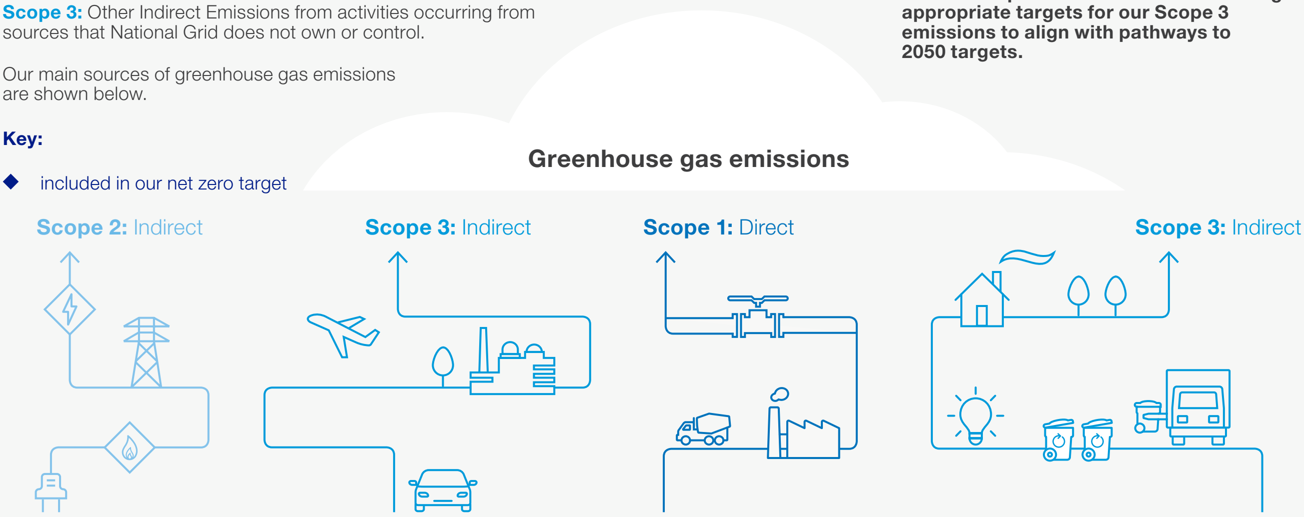
Scope 3: Other Indirect Emissions from activities occurring from sources that National Grid does not own or control.

Our main sources of greenhouse gas emissions are shown below.

We have committed to achieving net zero emissions for our Scope 1 and 2 emissions by 2050. Most of our Scope 3 emissions are emitted from two key business activities: the sale of gas and electricity to customers in the US (82%) and the purchase of goods and services (18%). We are working with our customers and our supply chain to reduce Scope 3 emissions and assessing appropriate targets for our Scope 3 emissions to align with pathways to 2050 targets.

Key:

◆ included in our net zero target



Upstream

Scope 2 ◆
- Line losses from our electricity transmission and distribution lines
- Energy purchased for use at our facilities
- Use of electric drive compressors in our gas business

Scope 3
- Purchased goods and services
- Business travel
- Employee commuting

Our operations

Scope 1 ◆
- LIPA electricity generation
- Leaks and venting from our gas transmission and distribution systems
- SF_6 leaks from our electric equipment
- Fleet vehicle use
- Gas-fired compressor use

Downstream

Scope 3
- Use of 'sold product' or emissions from our customers' use of the gas and electricity we purchase on their behalf
- Waste management

Our commitment to being a responsible business continued

Our colleagues

We employ around 23,000 people, located both in the UK and the US. Our people are the lifeblood of National Grid. Their safety and wellbeing are our primary concern and a priority for every one of us at National Grid – they underpin everything we do. Any safety incident is one too many and we continually strive to improve safety for our employees. Our ambition is to ensure that all of our employees and contractors are able to go home safely at the end of each and every day.

Our COVID-19 response started with supporting our people to work safely from home or as required in the field for essential activity, and to support their physical and mental health needs wherever they are. We have also facilitated volunteering opportunities during the crisis, and increased paid-time available for volunteerism.

Preparing our colleagues for the clean energy transition

Responsibility towards our people also means training them and (re)skilling them for the evolving needs of our businesses. The necessary skills and profiles of our employees and those at our partners and competitors are changing. We need forward-thinking, creative minds to help meet the challenges we face in connecting people to the energy they use. We anticipate a number of areas of increased focus in the future, such as data analytics to manage more complex grid flows and the customer interactions needed to balance supply and demand. We will also need skills to design and implement new energy technologies, such as renewables and heat pumps. Technicians will have skills to install and maintain energy efficiency measures and technologies as well as skills to support the deployment and enablement of new heating technologies such as hydrogen and change management skills to bring society along in the green transition. In 2019 National Grid commissioned a "Net Zero Skills Report" to identify the jobs needed to help society achieve net zero and provide a basis for engagement with stakeholders working on the challenge alongside us.

Investing in our colleagues

Our people and our communities will benefit from the time and financial investments we are making in ensuring that the future skills needed for National Grid, and the broader energy industry, are available. We are developing national and local skills development partnerships and initiatives, with a focus on the lower-income communities we serve. We aim to give access to 45,000 young people from these communities over the next five years, tracking their progress from first interaction right through to employment at National Grid, our partners and suppliers, or adjacent companies and industries. Our employees are expected to play a critical role in these programmes.

Keeping our colleagues safe

The safety of all our employees, contractors and the general public is of prime importance to us. We measure the safety of our employees and contractors and this is reflected in our KPIs, shown on page 20. To ensure we maintain our high standards of safety performance, we have effective policies, procedures and training in place so we can continue to perform at the level we and our stakeholders expect.

Delivering energy every second of every day is critical to the functioning of the economies and communities we serve. The reliability of our energy networks is one of the highest priorities after safety. Our networks continue to provide reliability running at more than 99.9% availability in both the UK and US. You can read more about this on page 19, and find out how we manage our operational risks on pages 22 – 25.

Engaging with our colleagues

Through a third-party partner, we carry out an annual EES to measure engagement levels and to help us address areas employees believe we need to improve. Employee engagement forms one of our KPIs – you can read more about this and our performance on page 20.

> **"We create an environment in which our employees can make a positive contribution, develop their careers and reach their full potential."**

Employee engagement score	The Times
77	**Top 50**
(2018/19: 73)	Employers for women

Living wage

In the UK, we are accredited by the Living Wage Foundation. Our commitment to our direct employees extends to our contractors and the work they do on behalf of National Grid. We believe that everyone should be appropriately rewarded for their time and effort. We also go above the Living Wage requirements and voluntarily pay our trainees the Living Wage.

We undertake a Living Wage review each year to ensure continued alignment. We also increase individual salaries as required.

Our culture

The culture we strive for stems from embracing our values: every day we do the right thing, find a better way and make it happen. You can read more about our values on page 12. We also know that building sufficient capability and leadership capacity (including effective succession planning) is an important factor in delivering our vision and strategy. You can read more about how we are mitigating the risks in this area on pages 22 – 25.

Health and wellbeing

We take a proactive, risk-based approach to managing health and wellbeing at National Grid. We continue to focus our efforts on creating sustainable wellbeing behaviour change within our workforce. We do this mainly through education and training and by managing our key wellbeing risks.

Our wellbeing programme focuses on musculoskeletal injury prevention and mitigation, chronic disease prevention, support for a healthy lifestyle and mental wellbeing. We engaged in mental health awareness week focusing on tools to support managers and employees dealing with mental health and wellbeing. The training has been well attended. We supported World Mental Health Day to focus on suicide prevention and encouraging employees to talk and help remove stigma. In 2019, the UK and NGV businesses signed up to the Mental Health at Work Commitment focusing on six key commitments which are implemented and monitored through the Thriving at Work standard. In the US, we are tackling musculoskeletal and soft tissue injuries through preventive athletic training programmes to encourage stretching and flexing before undertaking manual tasks. In 2019, the US launched a Fatigue Risk Management System, with essential training for employees and supervisors to identify and mitigate fatigue risk in each area of Operations.

Gender pay gap

We review gender and ethnicity pay gaps annually in both the UK and US and although we are broadly comfortable with our performance, we continue to strive to recruit and develop more women and ethnic minorities. For more information about our UK gender pay, visit our website at: www.nationalgrid.com/careers/understanding-our-uk-gender-pay-gap

Promoting an inclusive and diverse workforce

National Grid is dedicated to building a workforce which is representative of the communities we serve, in all aspects of diversity. We also continue to provide an inclusive culture across each stage of our colleague journey.

Our inclusion and diversity policies demonstrate our commitment to providing an inclusive, equal and fair working environment by:

- driving inclusion and promoting equal opportunities for all;
- ensuring our workforce, whether part-time, full-time or temporary, is treated fairly and with respect;
- eliminating discrimination; and
- ensuring that selection for employment, promotion, training, development, benefit and reward is based on merit and in line with relevant legislation.

We are committed to transparency and reporting annually on our progress on BAME and female representation on our Board, at manager level, among new joiners and our workforce as a whole. We remain focused on bringing the best diverse talent into our organisation and supporting them to reach their full potential.

We also adopt this approach to our future talent, with our Apprenticeship and Graduate programmes actively encouraging applications from diverse candidates. During 2019/20, in the US we attracted 31% female applicants and 51% ethnically and racially diverse applicants to our graduate development roles. We also took 36% female applicants and 52% ethnically and racially diverse applicants into our internship programmes. Our UK Graduate Programme attracted 25% female applicants and 57% ethnically and racially diverse applicants. Our UK Industrial Placement and Student Internship programmes attracted 28% female applicants and 45% ethnically and racially diverse applicants.

A total of 18.3% of our workforce have declared themselves to be of 'minority' racial or ethnic heritage and we currently have 24.7% females across our total workforce. We are very much aware, however, of the number of 'declined to state' responses we have across all diverse characteristics and as a result in 2019/20 we launched our #thisisme campaign, not only to increase our disclosure rates, but also to demonstrate our commitment to a culture of openness and security for colleagues to share who they are. This year also saw a number of our most senior leaders participate in reverse mentoring. This allowed them to get a different perspective on life, not only at National Grid but also more generally. This has provided a mutual knowledge share and dialogue between senior individuals from our organisation and more junior individuals from a diverse range of background with fantastic feedback from all parties.

We continually work to ensure our application, assessment, development and training provisions more broadly, are all inclusive and accessible. We offer our current colleagues training and development programmes which ensure they are aware of acting on bias, while providing specific development programmes for our diverse colleagues in both the UK and US. We have 17 Employee Resource Groups (ERG) (11 in the US; 6 in the UK), which are all highly active and visible across the business, with events and awareness-raising campaigns throughout the year (including a strong presence at WorldPride in New York this year). Our ERGs also provide a crucial support network to our diverse colleagues.

We continue to participate in numerous awards and benchmarks to recognise the great work of our colleagues (including Disability Confident, The Times Top 50 Employers for Women, Best Places to Work for LGBT Equality and Forbes 2019 Best in State Employer; we were also shortlisted in the Top 10 Outstanding Employers at The Ethnicity Awards for 2019). These also offer us the opportunity to learn, focus our strategy and continually improve our approach to inclusion and diversity. We have close partnerships with external best practice organisations and are active members of sector- and industry-wide groups which ensure we are sharing best practice and campaigning at a sector-wide level for greater inclusion for all.

Our policy is that people with disabilities should be given fair consideration for all vacancies against the requirements for the role. Where possible, we make reasonable adjustments in job design and provide appropriate training for existing employees who become disabled. We are committed to equal opportunity in recruitment, promotion and career development for all employees, including those with disabilities. Our policy recognises the right for all people to work in an environment that is free from discrimination.

The gender demographic table that follows shows the breakdown in numbers of employees by gender at different levels of the organisation. We have included information relating to subsidiary directors, as this is required by the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013.

We define 'senior management' as those managers who are at the same level, or one level below, the Executive Committee. Our definition also includes those who are directors of subsidiaries, or who have responsibility for planning, directing or controlling the activities of the Group, or a strategically significant part of the Group, and are employees of the Group.

Gender demographic as at 31 March 2020

	Our Board[1]	Senior management[2]	Whole company[3]
	number	number	number
Male	8	165	17,379
Female	4	82	5,690
Total[6]	**12**	**247**	**23,069**
Male (%)	66.7	66.8	75.3
Female (%)	33.3	33.2	24.7

1. 'Board' refers to members as defined on the Company website.
2. 'Senior management' refers to Band A/B employees as well as subsidiary directors.
3. This measure is also one of our Company KPIs. For more information, see page 20.

Our commitment to being a responsible business continued

Total headcount as at 31 March 2020[4]

The tables below show the breakdown of employees by work pattern and diversity.

Work pattern

	Full-time		Part-time[5]	
	number	%	number	%
UK	6,027	95.3	294	4.7
US	16,629	99.3	119	0.7
Total[6]	**22,656**	**98.2**	**413**	**1.8**

4. In scope are active, permanent employees. Out of scope are temporary employees.
5. Employees recorded in our system as part time, or have <1 full time equivalent.

Gender

	Male		Female	
	number	%	number	%
UK	4,548	72.0	1,773	28.0
US	12,831	76.6	3,917	23.4
Total[6]	**17,379**	**75.3**	**5,690**	**24.7**

Ethnicity demographic as at 31 March 2020

'Minority' refers to racial/ethnic heritage declarations as recorded in our system. Those who have not stated their ethnicity are excluded from the baseline.

White	17,482
Minority	3,918
Declined to state	1,669
White (%)	81.7
Minority (%)	18.3

Employee turnover

Turnover is defined as employees who have left in the last 12 months as a percentage of headcount last year. Voluntary turnover relates to employees who have left through either resignation or retirement. Non-voluntary attrition includes any other leave reasons – including dismissal and severance.

	Voluntary	Non-voluntary	Total
	%	%	%
UK	6.4	4.8	11.2
US	7.7	1.6	9.3
Total[6]	**7.4**	**2.4**	**9.8**

6. Included in 'Total' are Non-executive Directors and Executive Directors.

National Grid traditionally has low voluntary turnover and high employee tenure, driven by high engagement and good career opportunities as evidenced by our high internal churn rates. Non-voluntary attrition is in the majority comprised of severance.

Training days per employee

From 1 April 2019 to 31 March 2020, the total number of training days delivered per employee (as recorded in our HR systems), across the whole Company was 6.0 days (2018/19: 5.3). There was also a reduction in training activity towards the tail-end of March as a result of the COVID-19 lockdown in both our UK and US businesses.

Promotion rate

The table below shows the rate of promotion within the business. Promotion rate is defined as the number of employees who were promoted to a higher grade as a percentage of headcount last year.

	Promotion rate %
UK	14.1
US	16.1
Total	**15.5**

The economy

Our economic contribution to society comes primarily through the delivery of safe and reliable energy. Crucially, we make sure energy reaches homes and businesses safely, reliably and efficiently. But our contribution as a responsible, purpose-led business also comes as an employer, a tax contributor, a business partner, and community partner.

We help national and regional governments formulate and deliver their energy policies and commitments. Our approach to regulatory consultation is to seek a framework that puts consumers at the centre of our price control, while enabling the clean energy transition. Evolving that partnership to help enable the clean energy transition and slow the pace of climate change before it cannot be reversed, will also be key in protecting future economic growth, and safety and wellbeing in society.

Our geographic footprint means that our economic contribution is felt in lower-income communities that can truly benefit from the ripple effect of our local presence, from rural communities in New England, to the UK where most of our economic contributions are made outside London. Our tax contribution helps to fund services and we are committed to a coherent and transparent tax policy and recognise our economic role in society in doing this (more information on tax can be found on pages 28 – 37).

> **"We are fair to our suppliers and committed to paying them promptly."**

We are fair to our suppliers and committed to paying them promptly. We also influence our supply chain to operate as responsible businesses, requiring all suppliers to share our commitment to respecting, protecting and promoting human rights.

This includes alignment to the United Nations Compact Guiding Principles, the International Labour Organisation standards and the Ethical Trade Initiative Base Code as a reference standard.

Governance

Our approach to corporate governance plays an important role in helping us develop our culture at National Grid – a culture that embraces diversity and inclusion, and an environment where everyone can fulfil their potential. Our Board will continue to play a vital role in setting the tone right from the top. We apply a robust framework to ensure that stakeholder considerations are suitably captured and enhancements made to strengthen the views of stakeholders in the boardroom.

Human rights

Respect for human rights is incorporated into our employment practices and our values, which are integral to our Code of Ethical Business Conduct – the way in which we conduct ourselves allows us to build trust with the people we work with. We earn this trust by doing things in the right way, building our reputation as an ethical company that our stakeholders want to do business with, and that our employees want to work for. We were recently recognised by Ethisphere as one of 2020's World's Most Ethical Companies. Although we do not have specific policies relating to human rights, slavery or human trafficking, our Global Supplier Code of Conduct (GSCoC) integrates human rights into the way we do business. Throughout our supply chain alongside other areas of sustainability we create value, preserve natural resources and respect the interests of the communities we serve and from which we procure goods and services. Through our GSCoC, we expect our suppliers to comply with all legislation relating to their business, as well as adhering to the principles of the United Nations Global Compact, the International Labour Organisation (ILO) minimum standards, the Ethical Trading Initiative (ETI) Base Code, the UK Modern Slavery Act 2015, the US Trafficking and Violence Protection Act 2000 and, for our UK suppliers, the requirements of the Living Wage Foundation.

Anti-bribery and corruption

We have policies and governance in place that set and monitor our approach to preventing financial crimes, fraud, bribery and corruption, including our Code of Ethical Business Conduct (covering bribery and corruption). We have a Company-wide framework of controls designed to prevent and detect bribery.

We investigate all allegations of ethical misconduct thoroughly and, where appropriate, we take corrective action and share learnings. We also record trends and metrics relating to such allegations – only a small percentage of these relate to bribery or corrupt practices, so we do not consider them to be material for reporting purposes.

Governance and oversight

We review and update our framework regularly so we can make sure our procedures remain proportionate to the principal risks we have identified.

Our UK and US Ethics and Compliance Committees (ECC) oversee the Code of Ethical Business Conduct and associated awareness programmes. Any cases alleging bribery are required to be referred immediately to the relevant ECC so the members can satisfy themselves that cases are investigated promptly and, where appropriate, acted upon, including ensuring any lessons learnt are communicated across the business.

The Audit Committee receives an annual report on the procedures currently in place to prevent and detect fraud and bribery. You can read more about the Audit Committee's role on pages 76 – 81. None of our investigations over the last 12 months have identified cases of bribery.

Anti-financial crimes policy

We have launched a new Anti-Financial Crimes policy which applies to all employees and those working on our behalf. It sets out our zero-tolerance approach to bribery, fraud, money laundering, tax evasion and other corrupt business practices.

To ensure compliance with the UK Bribery Act 2010 and other relevant legislation, we operate an anti-financial crime risk assessment process across the Company to identify higher-risk areas and make sure adequate procedures are in place to address them. Fraud and bribery risk assessments are conducted annually across the business. As part of our global training strategy, we introduced an e-learning course for all employees so they can adequately understand the Company's zero-tolerance approach to fraud, bribery or corruption of any kind.

> **"Our Code of Ethical Business Conduct sets out the standards and behaviours we expect from all employees to meet our values of Do the Right Thing, Find a Better Way and Make it Happen."**

Ethical business conduct

Our Code of Ethical Business Conduct sets out the standards and behaviours we expect from all employees to meet our values of Do the Right Thing, Find a Better Way and Make it Happen. The document is issued to all employees and is supported by a global communication and training programme to promote a strong ethical culture. Additionally, we provide briefings for high-risk areas of the business, such as Procurement. Our Code is updated every three years and is currently being updated with a release date later in 2020. In addition, we have a new Ethics Business Management Standard which provides a framework around our ethics programme and describes what is expected of the business.

Compliance framework

Each of our business areas is required to consider its specific risks and maintain a compliance framework, setting out the controls it has in place to detect and prevent bribery. As part of our compliance procedure, the business is asked to self-assess the effectiveness of its controls and provide evidence that supports its compliance.

Each year, all function heads are asked to certify the compliance in their area, and to provide details of any exceptions. This culminates in presentation of a Certificate of Assurance from the Chief Executive to the Board (following consideration by the Audit Committee).

Working with our supply chain

Our GSCoC is issued to our suppliers annually and sets out our expectations and fundamental principles, including preventing and detecting bribery and corruption, which should extend into the supply chain. All our suppliers must comply with all laws relating to their business which includes human rights, business ethics, resilience, supplier diversity, skills development and environmental sustainability, as well as adherence to the principles of the United Nations Global Compact, in accordance with all applicable local, state, federal, national and international laws or regulations including the UK Bribery Act 2010 and the US Foreign Corrupt Practices Act 1977. We provide specific guidance and briefings for high-risk areas, so contractors, agents and others who are acting on behalf of National Grid do not engage in any illegal or improper conduct.

Whistleblowing

We have confidential external speak-up helplines available 24/7 in all the regions where we operate. We publicise the contact information to our employees and on our external website so concerns can be reported anonymously. Our policies make it clear that we will support and protect whistleblowers and any form of retaliation will not be tolerated.

Our commitment to being a responsible business continued

Preventing modern slavery

We strive to prevent modern slavery from taking place anywhere in our business or in our supply chain.

We expect all our suppliers to be compliant with the Modern Slavery Act and to publish a Statement if required. Each year, we update our own Statement and publish this on our Company website in line with the Modern Slavery Act's requirements. In 2019, our Statement was independently assessed by Development International, a new ranking of the nation's largest publicly listed organisations, and we were listed in the top quartile for FTSE 100 listed companies. In 2018, we were also assessed by the Business & Human Rights Resource Centre (BHRRC) and were positioned 12th in the FTSE 100 ranking and recognised as one of a 'small cluster of leaders standing out' in this space. BHRRC did not publish a ranking in 2019.

We work closely with our suppliers and peers to build on our knowledge and promote best practice in the industry to combat modern slavery. During 2019, we continued to engage with suppliers identified as being within potentially high-risk categories. Through this engagement, which included a US workshop following on from the UK workshop in 2018, we encouraged our suppliers to conduct similar risk assessments with their own supply chain.

We also facilitated an industry masterclass to discuss common issues in the sector and work more closely together to increase awareness and drive positive change.

We are an active member of the United Nations Global Compact Modern Slavery Working Group, signatories to the Construction Protocol, and are working with Achilles to develop a community approach to address the issue. We are also revising our procurement process, so that modern slavery criteria and identifying human rights risks form part of our sourcing process.

In 2019 we signed up to the People Matter Charter which has been created by the Supply Chain Sustainability School, of which we are a partner member, to develop and implement consistent workforce standards throughout our industry.

Non-financial information

This section provides information as required by regulation in relation to:

- environmental matters;
- our employees;
- social matters;
- human rights; and
- anti-corruption and anti-bribery.

In addition, other information describing the business relationships, products and services which are likely to cause adverse impacts in relation to the matters above, can be found as follows:

- business model – pages 2 – 7;
- KPIs – pages 18 – 20;
- principal risks – pages 22 – 25; and
- Audit Committee Report (our due diligence) – pages 76 – 81.

Our policies and related governance

Descriptions of the policies and the outcomes pursued in relation to the above matters are discussed, where material, throughout this section. A full list of our policies can be found online, at www.nationalgrid.com/about-us/corporate-governance

In addition to our policies, we have a suite of Business Management System (BMS) standards. These standards provide the foundation for bringing energy to life for our stakeholders. They act as our guiderails by defining the minimum requirements for the high value and risk activities most important to our business – allowing our leaders to effectively drive change instead of responding to it.

The BMS delivers benefit in four key ways:

Risk Mitigation: The BMS defines and sets minimum requirements for our principal and other risks so they can be effectively and consistently managed across our businesses.

Best Practice: The BMS establishes a common language and framework for what constitutes best practice and provides the opportunity for Communities of Practice (CoP) to share across the organisation.

Standardisation: The BMS helps us build efficient processes and lean functions in our business areas with global responsibilities – HR, IT, Procurement, Finance and Corporate Affairs. By building one way of doing things, we can capture the maximum benefit from our work.

Simplification: The BMS acts as a catalyst to challenge and remove documentation and rules that don't deliver value. The standards will also increase the freedom of leaders to act, knowing the boundaries which can't be compromised as they strive to work in new and innovative ways.

Some of the BMS standards that we pursue to ensure consistent governance on a range of non-financial matters, can be seen below. They are not limited to this selection. These have been summarised for the purpose of the Non-Financial Information Statement.

Policies and documentation

People

- Our Code of Ethical Business Conduct for employees: helps our ethical reputation while ensuring we maintain stakeholder confidence in our ability to deliver on our ethical commitments.
- The Wellbeing and Health BMS Standard: enables our business to proactively manage our health risks and controls by fostering a proactive approach to wellbeing that can measure and target areas of greatest impact for the business.
- The Occupational Safety BMS Standard: ensures that no matter where in the world our employees or contractors work, they can expect to receive the same consistent and high level of protection for their own safety.
- The Process Safety BMS Standard: helps to protect people and the environment from the risk of major accidents by establishing a safety-focused culture. Process safety is an important commitment at National Grid. Our aim is to be recognised as a high performer in process safety through the demonstration of industry-leading risk controls, performance and cultural maturity across the management of all of National Grid's major hazard assets.
- The Human Resources BMS Standard: sets out what is expected of our leaders when managing their employees throughout the employment lifecycle.
- The Performance Excellence BMS Standard: sets out how we at National Grid 'find a better way'. It provides the basis for continuous improvement across everything we do.

Environment

- The Environmental Sustainability BMS Standard: establishes environmental compliance and environmental sustainability performance requirements for all operational and non-operational activities.

Society

- The Stakeholder Engagement BMS Standard: defines performance requirements for digital and physical external stakeholder engagement by creating a consistent approach towards addressing the most important stakeholder issues and opportunities.

Human rights and anti-corruption and anti-bribery matters

- Procurement Standard: defines how to improve efficiency within our supply chain expenditure.
- Global Supplier Code of Conduct.
- Modern Slavery Act.
- Human rights.

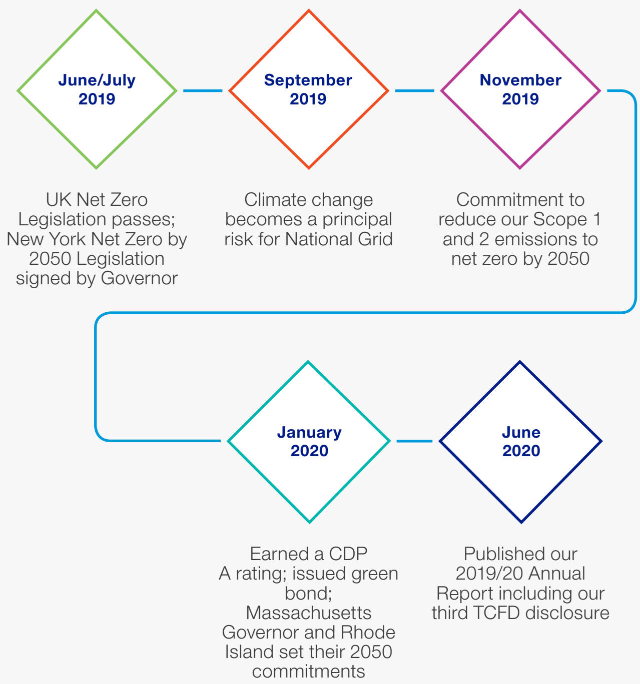
Task Force on Climate-related Financial Disclosures (TCFD)

National Grid has committed to implementing the recommendations of the TCFD in full, and below is our third disclosure which builds on our previous two.

This year we have continued to make good progress on the recommendations, aided by developments in the markets we operate in, with aggressive 'net zero emissions' and renewable targets set in the UK, New York State, Rhode Island and Massachusetts in the last 12 months, as well as increasing public scrutiny and focus across the sector and in corporate boardrooms. This year, we have progressed our scenario planning work, elevated climate change as a principal risk to our Group risk register, issued our first green bond, and evolved our greenhouse gas emission reduction targets. Our work was recognised by CDP as we were named on its climate change A List for the fourth year in a row.

In our 2018/19 disclosure, we outlined the areas we planned to focus our attention on during 2019/20. The table below outlines those actions, the progress we have made against each during this financial year, and our areas of focus for the upcoming financial year.

Key Milestones in 2019/20



Focus Area	Actions outlined in 2018/19	Progress made in 2019/20	Actions to progress in 2020/21
Governance	Ensuring senior leadership has an appropriate understanding and responsibility for the risks and opportunities associated with climate change.	The Board and Executive Committee have discussed climate change throughout the year and taken actions as follows: • engaged with key stakeholders on aspects of the net zero transition, for example, bringing in the UK Committee for Climate Change to speak to Electricity Transmission executives; • senior leadership devoted a day to responsible business and our total societal impact, including climate change; and • committed National Grid to reduce our Scope 1 and 2 emissions to net zero by 2050.	Continue to increase knowledge and skills among senior leadership in this area and include climate change expertise as a factor to consider in our Board succession planning.
Strategy	The use of climate-related scenarios to inform our business strategy (and disclosure of the possible outcomes under those scenarios).	We have undertaken an analysis of the impact to our business model of transitional scenarios where decarbonisation goals are, or are not, met. The details of this are presented in the scenarios section of this disclosure.	Assess the physical risk to our assets using updated climate scenarios and quantify the potential impacts. Incorporate this work into the transition scenario analysis. Build on the transitional scenarios we have developed.
Risk Management	Embedding climate change into our risk management process.	After a full review of our risks, climate change is now a principal risk for the Group, from its previous status as an emerging risk. See page 23. We also developed 'business unit specific risks' to ensure that each part of the business has specific climate change risks.	Deliver identified control actions to mitigate climate change risk. Continue to review the risk and controls as further information is developed, including through scenario planning work.
Metrics and Targets	The development of metrics and targets to assess performance, and influence decision-making and remuneration.	We announced our commitment to be net zero for Scope 1 and 2 emissions by 2050 in November 2019. We revised our interim Scope 1 and 2 targets to an 80% reduction by 2030 and a 90% reduction by 2040. In addition, our NGESO published an update to their operability strategy showing the milestones to deliver zero carbon operation of the Great Britain Transmission network by 2025. See page 39.	Personal objectives will be set throughout the business to ensure delivery against our commitments. Continue monitoring our metrics and targets and develop and/or evolve metrics, as needed.

Task Force on Climate-related Financial Disclosures (TCFD) continued

How do we approach the governance of climate-related risks and opportunities?

The **Board of Directors** is responsible for the oversight of climate-related risks and opportunities impacting the Group. During the year, there has been an increased focus on climate-related matters as the landscape evolved with regulatory developments and changes in stakeholder expectations. The Board was involved in the following discussions relevant to climate change:

- Approving the Group's commitment to achieve net zero for our Scope 1 and 2 greenhouse gas emissions by 2050 replacing our previous target of 80% reduction by 2050. In addition, we have set the following interim targets: 80% reductions by 2030 and 90% by 2040.
- Climate change was elevated to a principal risk during the year, with the risk now being owned by Alison Kay, a member of the Executive Committee who has responsibility for Group Safety, Health and Environment. The governance process that was undertaken to upgrade the risk from an emerging risk to a principal risk is described in the case study on page 23.
- Strategy sessions were held, which included discussions related to climate change and considered the scenario testing performed this year (discussed on page 26). Topics discussed included the clean energy transition, the future of heat, as well as our strategy for renewables and electrification of vehicles. In addition, the Board held four sessions to consider our role as a responsible business and our role as a key facilitator of the energy transition featured.
- Approving the RIIO-2 submissions which reflect our investment proposition for supporting the UK energy transition.
- Quarterly review of performance on our environmental sustainability metrics and targets.

Responsibility for asset investment and maintenance planning is delegated by the Board to the **Executive Committee** who then further delegates the responsibility to the core operational businesses.

What is the oversight process for climate change related risks and opportunities?

The **Safety, Environment and Health Committee** (SEH Committee) is responsible for assessing the Group environmental sustainability strategy and performance, as well as how the Company adapts its business strategy considering potential climate change risks and opportunities. As part of this, the SEH Committee tracks, challenges and seeks assurance for the delivery of the plans approved by the Executive Committee.

The **Audit Committee** remains responsible for reviewing and approving the content of our TCFD disclosures and is taking an increasingly active role in overseeing disclosures around metrics and targets. The Committee considered papers in September 2019, November 2019, March 2020 and May 2020 summarising the financial reporting and disclosure considerations in respect of climate change.

The **Finance Committee** is responsible for overseeing our financing strategy. This year, the Committee reviewed and approved our Green Financing Framework. This framework, published in November 2019, aims to facilitate the disclosure, transparency and integrity of our Green Financing for our stakeholders.

A **TCFD steering group** oversees progress against the TCFD recommendations and the publication of our annual disclosure. The group reports to the Chief Financial Officer, Andy Agg.

Future Intent

As the climate change landscape is evolving, we will continue to build upon the good base level of experience and knowledge within senior management (including at Board and Executive levels), as well as consider climate change expertise in our Board succession planning. The SEH Committee will continue to monitor our environmental sustainability performance quarterly and approve updates to our environmental sustainability strategy and targets annually. The Audit Committee will continue to oversee the programme to evolve the assurance model for our responsible business reporting. The Finance Committee will consider the financial impact of environmental factors on our credit metrics and relevant considerations with regards to debt investors.

What is our strategy for responding to climate change?

Our strategy focus is three-fold: tackle the climate crisis by helping the markets we operate in transition to a net zero economy, while reducing our own impact on the environment and ensuring our networks operate reliably under changing conditions. Our strategy is informed by the evolving climate change policy and ambitions of the states and countries in which we operate, by the risks and opportunities identified during our continuing climate change scenario testing and by our ambition to have a positive impact.

Our financing strategy, which includes us issuing debt from our operating companies, is focused on aligning the debt issuances to the business purpose of each of our regulatory deals. As part of this strategy, we launched a Green Financing Framework to enable us to issue green bonds, loans or other financial instruments in November 2019. Green bonds allow us to access new capital pools and engage with investors who are keen to work with asset owners to facilitate the clean energy transition. In January 2020, we issued our first green bond in the UK, with the €500 million proceeds being used to finance projects with an environmental benefit across our UK electricity business. We are currently evaluating issuing a green bond in the US in 2020.

Regulatory Framework

The next 10 years are a crucial period with expected rapid change in the energy system, and therefore it is vital that the funding and regulatory framework is in place to deliver against these targets. Across our business, we are developing proposals for our regulatory rate filings that support our strategy to enable the transition and reduce our own impact.

UK RIIO-2 Business Plans

Our RIIO-2 Business Plans were developed through a comprehensive stakeholder engagement programme throughout the RIIO-2 process and have also evolved to reflect the UK government target, announced in June 2019, to achieve net zero emissions by 2050. Our plans cover a crucial period (2021 – 2026) for investment to help deliver the UK's net zero target. The route to net zero emissions is not yet clear but our plans are flexible enough to deliver the investment needed in the 2020s. We have built a plan to align with the pathway to net zero by 2050.

In our Electricity Transmission business, we propose £1.35 billion of expenditure to connect new generation and transport electricity across the country to where it is consumed, connect us to neighbouring electricity markets and support the Electricity System Operator in being able to operate a zero-carbon electricity system by 2025. Whilst consistent with Ofgem's business plan criteria, we recognise that these investments alone are insufficient to deliver net zero targets and have therefore proposed whole system options to accelerate progress towards net zero, for example through ultra-rapid vehicle charging at motorway service areas. As the optimal path to achieving net zero is unclear, we developed a series of uncertainty mechanisms that allow our plans to flex to deliver against the range of low-carbon system developments our customers could bring forward.

In our Gas Transmission business, we recognise that natural gas has an important role to play in supporting the transition to a low-carbon future. Natural gas, hydrogen and biomethane can help to decarbonise heat, the biggest source of UK carbon emissions. Our business plans cover a period where developing options and understanding choices is key. We will focus on leading the development of options associated with gas transmission, specifically hydrogen, to facilitate the decarbonisation of heat, industry and transport.

In our ESO business, our business plans focus on facilitating the transition to net zero. For example, our business plans aim to deliver new architecture and systems in our control centres to be able to operate a zero carbon network by 2025, and new monitoring and control systems to ensure power system stability in a low-carbon world.

Across all our businesses our plans include targets and commitments to manage our own environmental impact, with £530 million of investment planned across Electricity and Gas Transmission. We have committed to reducing NO_x emissions from our gas compressors, and achieving net zero construction emissions by 2025/26. We are targeting investments to replace leaking SF_6 (an insulating gas and source of GHG emissions) equipment to reduce emissions by 50% by 2030, phasing out the procurement of new assets containing SF_6 and introducing SF_6 free technologies.

In the UK, there is uncertainty on what further measures will be needed to adapt to climate change and meet the UK goal of net zero by 2050. We welcome Ofgem's Decarbonisation Action Plan and the shift to a more flexible, adaptive regulatory price control regime with a system-wide net zero re-opening mechanism.

US Rate Cases
In the US, we have ongoing and upcoming regulatory rate case proceedings. In all proceedings, gas and electric, we are focused on including proposals to support our climate change strategy and enable the net zero transition of the states in which we operate.

In the US gas distribution businesses, we are focused on decarbonising our gas networks and the heating sector. We are doing this by reducing emissions related to natural gas through energy efficiency and demand response, continued investment in our leaking pipe replacement programmes and advancement of the future of heat. For example, we included a $90 million future of heat proposal in our April 2019 KEDNY/KEDLI filing which combined expanded energy efficiency and demand response programmes, renewable natural gas interconnection investments, geothermal investments, and a hydrogen blending study. We plan to include future of heat proposals and continued pipe replacement programmes in our next Niagara Mohawk and Massachusetts gas rate filings. This work aligns with the Rhode Island Heating Sector Transformation, launched by the Governor in July 2019 to identify how the heating sector needs to change to meet the state's climate objectives. This initiative concluded in April 2020 with recommendations provided to the Governor. Those recommendations included increased energy efficiency, electrification through air and ground source heat pumps, and fuel decarbonisation through renewable natural gas and renewable oil.

In the US electric distribution businesses, we are focused on climate change and the new energy landscape. For our next Niagara Mohawk rate case filing, we will submit a proposal that focuses on three key areas: grid modernisation, customer engagement and supporting the state to achieve its clean energy goals outlined in the Climate Leadership and Community Protection Act (CLCPA). We will also leverage these grid modernisation investments to enable customers to engage with their energy consumption in an informed and seamless manner. Enabling New York State's clean energy transition is a common theme across all the above-described proposals and will be further enabled by our work in the electrification of transportation. The Massachusetts rate filing, approved in October 2019, includes work to advance Massachusetts's climate objectives including a climate change mitigation and adaptation plan, an off-peak rebate programme for electric vehicle owners, approval to include up to $50 million in energy storage in our 2021 grid modernisation plan filing, and a path forward for a significant investment in electric vehicle charging infrastructure in 2021. In Rhode Island, we launched an electric vehicle infrastructure and off-peak rebate programme and will be filing a Grid Modernisation and Advanced Metering Functionality proposal in the second half of 2020/21.

Future Intent
We are in the process of updating our budgets and forecasts to reflect the detailed financial impacts of our net zero strategy.

How have we advanced our climate change scenario analysis?

This year, we have advanced our scenario analysis work that considered both the transition and physical risks to our business. This work is and will continue to inform our strategy and investment plans.

Transition Risk Analysis
To further understand the risk that climate change could have on our business, we have undertaken a high-level scenario analysis. We used two scenarios: the first assumes that the global response to the threat of climate change is enough to limit global average temperature increases to no more than 1.5ºC above pre-industrial levels (as set out in the Paris Agreement) by 2100 (**the 1.5ºC scenario**). The second scenario assumes that the 1.5ºC target is missed by some margin, comparable to a 4ºC global average temperature increase (**the 4ºC scenario**).

To facilitate business planning, we have considered scenarios out to 2030. In this analysis, we assessed the impacts of the scenarios without factoring in activities we might take to adapt to the threats of climate change, or the opportunities of decarbonisation.

We made the following simplifying assumptions:

- In the 1.5ºC scenario, rapid changes are made to progress decarbonisation goals: coordinated policy, regulation and customer behaviour favours bans on polluting technologies, and support for low-carbon solutions. We have assumed that transition impacts in this scenario would be focused around technological shifts to support decarbonisation.
- In the 4ºC scenario, changes are less rapid and less comprehensive, and emissions remain high, so that the physical ramifications of climate change are more apparent by 2030. In rationalising this slower global progress, our 4ºC scenario assumed fragmented and ad hoc policy (within the Group's operating territories and globally).

The main transition impacts of the 1.5ºC scenario were:

- **A trend towards more large-scale renewables in the generation mix:** this would be a positive development for the Group, but for our electric network businesses the rate of new connections could increase beyond today's levels: this could increase costs or, without investment ahead of need, lead to a backlog.
- **A trend towards electrification:** increases in electricity demand would likely trigger electricity network upgrades and investment. Although network costs are a very small proportion of the customer bill, spikes in spending would need to be managed in conjunction with our regulators to ensure that customers, especially lower-income customers, are not unduly adversely affected.
- **Public pressure on gas:** in line with the Committee on Climate Change and other external sources, we do not believe substitutes to methane gas for space heating can reach scale in our territories by 2030 (or even 2040, unless extensive new policy is rapidly deployed). However, in this scenario we anticipate that, without mitigating action to reduce and offset emissions, there is a risk of pushback against the use of gas by environmental groups or concerned citizens. We are already experiencing growing resistance to building new gas infrastructure in our US business from politicians, concerned citizens and environmental groups.

The main impacts of the 4ºC scenario were:

- **Physical ramifications of climate change:** in this scenario we expect extreme weather events of escalating severity and frequency, which could increase disruption to our assets and our customers. This would require investment to 'harden' assets and would heighten the safety risk to our field employees. Our approach to physical climate risk is discussed in more detail below.
- **Lower system visibility:** as this scenario sees less coordinated policy and regulation in pursuit of decarbonisation, we would anticipate a greater variety of solutions being deployed across our networks. This could increase overall system costs and reduce visibility over the network, potentially slowing our responsiveness to disruptive events. We do note, however, that a greater number of distributed assets would increase the potential for local balancing, which could mitigate this.
- **Inequality of access:** without carefully designed policy, we believe decarbonisation activities have the potential to leave some sectors of society behind: for example, heat pumps and the energy efficiency upgrades they typically require are currently cost-prohibitive for many. As well as the ethical implications of this, there is a risk to the Group, especially for our US businesses, that a proportion of our customers would struggle to pay their bills.

Analysis shows that, without action, both scenarios present risks to us. However, while these would need to be managed, we would not need to materially change our business model. We also note that for a group in our position, some of these changes represent material opportunities.

Physical Risk Scenario Analysis
We recognise that, due to the amount of carbon already in the atmosphere, some escalation of extreme weather events is likely in both the '1.5ºC' and '4ºC' scenarios, especially under a longer-term view. This year, we began Group-level work to assess our physical risks to ensure that any necessary measures to defend our assets are identified. We ran an initial workshop with the US, UK and NGV teams and the UK Meteorological Office (Met Office) consultancy team to define the key areas of focus (e.g. flooding, icing and hurricane frequency for the US and UK regions) and define how the climate science can answer the questions we have on the weather conditions our assets will have to operate in up until 2100. Using the output of this work, we will develop and progress a scope to analyse weather data specific to the regions we operate in and assist in developing an understanding of the vulnerability of our assets as well as the mitigating measures that will be needed to protect them. We are also undertaking work with a team from the Massachusetts Institute of Technology (MIT) to study the impacts of weather changes related to climate change in the northeastern US.

Task Force on Climate-related Financial Disclosures (TCFD) continued

What are the risks and opportunities from climate change?

The rapid changes in the energy market and demands to meet net zero emission targets present several challenges that are both a risk and opportunity for us. In addition, the changes in temperature and weather patterns have and continue to present challenges and risks. These risks and opportunities, along with a summary of the work we are doing to address them, are presented in the table below.

Risk/ opportunity type	Description	Our response
Transition		
Markets	The operating environment and regulatory framework are rapidly changing in line with the decarbonisation of the electricity and gas networks in the UK and US.	Facilitating the transition to a low-carbon economy is central to our purpose as a business, and certain key actions we are taking in relation to decarbonisation and decentralisation are set out on pages 12 – 15.
Markets	Commercial opportunities from the transition towards net zero (short/medium and long-term).	Development of a strategy to enable the building of charging stations across our US jurisdictions and UK highways and to meet demand for **electric vehicles**. We have developed a dedicated programme to understand what is required to incorporate **hydrogen and renewable natural gas** into the gas supply. Acquisition of Geronimo, a leading developer of wind and solar generation assets based in Minneapolis, Minnesota, to help position us to develop and **grow a large-scale renewable business** in the US. Our **interconnectors** form an important part of the UK decarbonisation, by allowing us to exchange surplus renewable electricity with neighbouring countries. We are leading the development of **Carbon Capture Utilisation and Storage (CCUS)** technology in the Humber, UK, to support this area to become the first zero carbon region in the world. **Our continuing energy-efficiency** programmes across Massachusetts, Rhode Island and New York have reduced CO_2 emissions by more than 725,000 metric tonnes over the past year which is equivalent to the GHG emissions from over 156,000 passenger vehicles driven for one year.
Markets	Changes in supply and demand for existing and new technologies.	Our analysis, underpinned by the ESO Future Energy Scenarios (FES) shows that, even with increased decentralisation of electricity, there is a key role for Electricity Transmission in the UK under a range of scenarios that meet the UK's 2050 climate change goals. As the transition to renewable generation continues, we will work with the Long Island Power Authority (LIPA) to transform our generation fleet by responding to future RFPs. Under our existing contracts which extend through 2028, LIPA determines their reliability and sustainability needs and which units are operated, retired or transformed. Our FES will be aligned to not meeting, meeting or exceeding the 2050 net zero target.
Security and reliability	Electricity grid reliability and peak capacity.	Our principal focus is around ensuring that our electricity network is able to actively support and contribute to a future where demand for and supply of electricity are ever changing. With growth in renewables increasing intermittency on the network, and electrification of transport and heat likely, we are working with our stakeholders to ensure that grid reliability is understood, managed and planned at appropriate levels.
Security and reliability	Facilitating zero carbon operation of the Great Britain electricity system.	In April 2019, the ESO announced its ambition to transform the operation of the electricity system by 2025. Our goal is to be able to operate the system safely and securely at zero carbon whenever there is sufficient renewable generation online and available to meet the total national load. To facilitate this, the ESO has agreed contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system.
Physical risks		
Extreme weather	Physical impacts from extreme weather events such as storms and flooding.	We continue to address the physical risks from extreme weather-related events, with a focus on flooding events (in both the UK and US) and storm hardening (in the US). See case study on page 61. As this work continues, it will be informed by not only the weather patterns we are experiencing, but also the results of the ongoing scenario testing.
Changing weather conditions	Increased frequency of weather incidents leading to asset damage/compromise and operational risks.	We will undertake a review of resilience from weather impacts to date. Work is ongoing to update standards with updated information. As an example, our US engineering team is updating standards for new and rebuilt substations to address changes in inland and coastal flooding projections. The ongoing scenario testing will consider whether our design standards are still appropriate under different scenarios, for example, a wider temperature range.
Changing weather conditions	Changes in supply of and demand for gas and electricity as a result of changing weather conditions.	The ESO is undertaking a project, Mapping Impacts and Visualisation of Risks of extreme weather on system operation (MIVOR), to evaluate the impacts of extreme weather events on system operation up to 2050.

Future intent

We will continue our physical risk analysis in 2020/21, including a review of the effectiveness of adaptation measures to date, identification of future areas of vulnerability, and assessment of these against future weather conditions and the likelihood of that happening. We will complete the scenario testing and determine any further adaptation measures that need to be undertaken. While financial provision has been made in the UK business plans for flood measures based on 2019 climate science data, additional adaptation measures can only be determined after this exercise has been completed and will be considered under the uncertainty mechanism provisions in the RIIO-2 business plans. The US business plans also include actions to harden our networks against expected weather conditions in the nearer term, but this work will help us better plan for future conditions.

What is the process for identifying and managing climate-related risks?

Our approach to identifying and managing the risks in our business is set out on page 22. During the year, a Group-level bespoke climate change principal risk was developed and added to our Group risk register, as described in the case study on page 23. The newly added climate change principal risk is underpinned by a series of Group controls and actions to mitigate the risk (this is further described on page 24). Several of the Group-level controls have been implemented while others are in progress. Ongoing work includes establishing programmes to develop the skills in our current and future workforce. Our recent report, Building the Net Zero Energy Workforce, looks at the skills and expertise the energy sector will need to help the UK reach its emissions target. It also identifies the need to recruit for 400,000 jobs in the sector between 2020 and 2050 to meet the target. Supported by the #jobthatcantwait campaign, we will be recruiting new talent who can help deliver the transition to net zero and adapt our networks accordingly. We have seen a marked increase in applicants in response to this campaign.

Following the adoption of the Group-level climate change principal risk, the US and UK businesses developed bespoke climate change risks on their respective risk profiles. These risks are being cascaded to the underlying operating business units to develop to ensure their risks and control actions are specific to them.

Future intent

The Executive Committee will review the results as part of the regular semi-annual review of Group risks in early 2020/21 and as part of that discussion will specifically consider whether changes need to be made to the Group climate change risk.

Case study: extreme weather-related planning

Ensuring network reliability is core to our business and we are constantly undertaking actions, often referred to as storm hardening, to improve our networks' resilience to the increasing frequency of strong weather events, given the significant impact this can have on our customers. These activities have focused on both our electric and gas businesses. As noted in the financial review (see page 30), this year we incurred $98 million of major storm costs, the majority of which are recoverable under our rate plans. Examples of ongoing efforts in 2020/21 include hardening efforts for our gas assets in Long Island and New York City. We worked with a collaboration of New York State and New York City representatives and other key stakeholders, to develop recommendations for future storm hardening and resiliency projects for our gas network, strategies for addressing climate risk factors, and guidelines for incorporating climate change projections in long-term capital planning. Another example is our annual investment in our electric distribution infrastructure to improve resilience and grid modernisation work to increase speed in knowing outage locations and improving our ability to restore supply.

In the UK, flood defence has been a keen focus for the business. Our target is resilience to 1 in 1000-year flooding events in the UK or a 0.1% chance in any given year. This resilience level was developed through consultation with Ofgem and BEIS via the ENA Flood Working Group and recognised in the National Flood Resilience Review 2016 as being best practice for critical local and national infrastructure. As of 31 March 2020, we had invested £71 million in flood defences with work completed or in progress at 37 sites and expected to be completed at a further 12 sites in 2020 and 2021. Our RIIO-2 (2021 – 2026) plans aim to protect a further 100 sites from surface-level flooding and recommend further investments to manage the risks posed from the secondary impacts of flooding, such as erosion and subsidence to our tower and cable routes.

Task Force on Climate-related Financial Disclosures (TCFD) continued


Image: Newtown Creek, a renewable gas project

Case study: the future of heat

The transition to a low-carbon economy is and will continue to change the sources of energy used (e.g. heat pumps and hybrid solutions), and the way energy is supplied and consumed (e.g. building retrofits to improve energy efficiency). Gas distribution in the US and gas transmission in the UK and US remain core to our business strategy, and we believe it will remain central to the energy mix in both countries. There is likely to be a mosaic of solutions, including reducing emissions from the natural gas transmission and distribution networks, as well as conversions to both electric and lower carbon gas heating (renewable natural gas or gas blended with hydrogen), focusing on cost-effective solutions and meeting different consumer needs.

In conjunction with government agencies, other utilities and key stakeholders and other gas networks, we have developed a programme of work to gather evidence and help us understand what is required to incorporate hydrogen and renewable natural gas into the gas supply. We are also working with industry to consider what improvements and changes are needed to maintain well-functioning, liquid gas markets throughout the transition, and ensure security of supply and delivery of natural gas, renewable natural gas and hydrogen.

Refer to page 13 for further details on the future of heat.

What metrics are used to assess these risks and opportunities?

We have continued to advance our environmental sustainability strategy, focusing on three key areas: climate change, responsible use of natural resources and caring for the natural environment. We have metrics and targets that allow us to measure our impact on the environment, demonstrate our commitment and monitor our performance. As previously discussed, the cornerstone of our suite of metrics is our commitment to reducing our impact by achieving net zero for our Scope 1 and 2 emissions by 2050, with interim targets of an 80% reduction by 2030 and a 90% reduction by 2040. Numerous underlying metrics support this goal and our broader sustainability ambition, including reducing the carbon footprint of our operating facilities, enhancing the natural value of our properties, recycling and/or reusing our recovered assets and reducing our office waste. These are discussed in more detail on pages 50 and 51.

We have also included enhanced disclosures in the financial statements prepared under IFRS to explain how we have considered the financial impacts of climate change, in particular evaluating the impact of new net zero commitments in our territories, and the effect this has had on judgements and estimates such as the useful economic life of our assets. See notes 1 and 13 to the financial statements for details. This remains a recurring area of focus for the Audit Committee.

Future intent

We continually review our metrics and targets, as needed, to ensure that the data we are measuring is meaningful, aligns with our strategy, and is providing the information the business and our stakeholders need to effectively monitor our performance and demonstrate our progress. In 2020/21, we will be laying out our pathway to achieve our net zero by 2050 emission reductions and setting targets to align our ambitions and provide better visibility to our progress.

We are also evaluating development of a meaningful Scope 3 target that enables us to align to Science Based Targets Initiative (SBTI) criteria, specifically focusing on our customers.

2.
Corporate Governance

Letter from the Chairman

Sir Peter Gershon
Chairman

Dear shareholders,

I am pleased to present to you our Corporate Governance Report for 2019/20. The report provides an insight into the activities of the Board and its Committees over the year including how it has evaluated its effectiveness and how it provides appropriate and effective stewardship to the Company to ensure it achieves its strategic priorities. It also discusses how we create value for shareholders and wider stakeholders during an ongoing period of external economic, regulatory and political uncertainty.

Towards the end of the year we have seen the acceleration of the COVID-19 pandemic. This is having a profound effect on how companies around the world operate during these unprecedented times and we recognise the increased importance of good governance at a time when effective engagement and collaboration with our stakeholders has never been more important. As a Board we are closely monitoring the developments of COVID-19 and the impact of this on all areas of the Company. Please see overleaf for information on our response to COVID-19.

Over the year there have been a number of other key events such as the brief power outage experienced on 9 August 2019 in the UK and the gas connection supply challenges in downstate New York in the US. Other external factors which have influenced the Board agenda include: the regulatory environment in the UK and the RIIO-2 business plan submissions; the increased gas regulation in the US, in particular New England; the increased political uncertainty leading up to the December 2019 UK General Election; Brexit; and the impact of the legal separation of the ESO. All of which have had, and some will continue to have, an impact on the way we work and operate.

UK Corporate Governance Code 2018 and stakeholder engagement

We are pleased to report that we are fully compliant with the requirements of the new UK Corporate Governance Code (the Code); see page 86 for information on how we have adapted our practices to ensure compliance and transparent reporting against the Code.

Our stakeholders are very important to us and we remain committed to maintaining regular open dialogue and effective communication with them. With the global restrictions in place due to COVID-19 this is requiring us to consider alternative methods to ensure we maintain the same level of engagement.

During the year, our discussions around RIIO-2, gas supply contingency planning in the US, the brief power outage on 9 August 2019 in the UK and payment of the final dividend are examples of how the Board has had regard to section 172 of the Companies Act 2006. We have considered the broader implications of our decisions, not just for shareholders but for a wider group of stakeholders and the likely consequences of our decisions in the longer term. On page 44 we set out our key stakeholders and how we have engaged with them to ensure that their views are being captured in the boardroom, to assist us in maintaining focus on creating the right culture for the Company. We continue to provide details throughout the Directors' Report of the stakeholder matters that are considered in our decision-making. We will continue to engage with our stakeholders in a way that is guided by our purpose to Bring Energy to Life, our vision and values and the Company's culture.

This year the Board has continued with its chosen approach to workforce engagement under the Code: to build on and enhance the extensive existing range of engagement activities and employee communication channels to properly consider workforce views in relevant decision-making processes; see page 73 for further information. Following the success of our employee engagement sessions with Non-executive Directors in 2018/19, we have continued to utilise and evolve these sessions throughout the year to ensure key topics, discussions and potential areas of concern amongst the workforce are considered. The Board has been able to identify key trends and topical issues, such as gender pay, culture, and safety. Where trends have been identified and Board action taken, employees have been kept informed through internal communications. Our chosen approach allows for the sharing of responsibility, and interaction amongst all Board members, which we believe ultimately drives a greater focus on the 'true employee voice' in Board decisions. We will continue to review and adapt our approach to ensure that we are utilising this vital engagement both in and out of the boardroom including considering the facilitation of virtual engagement sessions to enable the Board to continue with this despite COVID-19 restrictions.

Culture and the internal Board evaluation

Promoting a culture of openness and debate in the boardroom is one of my key responsibilities as Chairman, and as a Board we play an important leadership role in promoting the desired culture throughout the organisation. The Company has spent considerable time over the last few years getting the culture right for the Company and it continues on its journey; you can read more about this on page 72 where we explain how culture formed part of this year's Board evaluation.

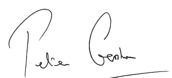
During the year, we undertook a formal and rigorous internal evaluation of our Board and Committees which included some follow-up areas from our external evaluation last year. The evaluation focused on three areas: Board effectiveness; Board decision-making; and organisational culture and the individual style of leaders. During the evaluation process the Board gained insight into the different aspects of culture and the alignment of cultures around the Company. A facilitated session was arranged to discuss the comparisons of the Board evaluation results with the culture survey results of the Company's senior management. Unfortunately, due to the COVID-19 pandemic, this session has been postponed as it would not have been effective to do this when Board members were not physically in the same location. The evaluation process and associated outcomes can be found on page 74.

Board succession and diversity

In November 2019 Dean Seavers, US Executive Director stepped down and in May 2019 and January 2020 we appointed Jonathan Silver and Liz Hewitt as Non-executive Directors respectively. On appointment Jonathan joined the Finance Committee, Remuneration Committee and Nominations Committee and his US regulatory experience alongside his strong financial background has provided valuable insight into Board and Committee discussions. Liz became a member of the Audit Committee, Safety, Environment and Health (SEH) Committee and Nominations Committee on appointment. Liz's diverse and extensive experience has served to strengthen the Code's requirement in relation to the Audit Committee's competence, as a whole, to be relevant to the sector in which the Company operates. Her input to Board and Committee discussions is already very helpful. The Nominations Committee oversaw the rigorous selection process for these appointments. See page 84 for more information.

Last year Mark Williamson, the Board's Senior Independent Director, reported that in order to lead the Company through the completion of the RIIO-2 regulatory process it would be in the Company's best interests for me to stay beyond the nine-year term identified in the Code. Following on from this, in January 2020 I formally notified my intention to step down as Chairman of the Board following the identification of a suitable successor. Mark has been leading this process and we plan to have my designated successor in place in time for me to step down at the 2021 Annual General Meeting (AGM) at the latest. I will be standing for re-election at the Company's AGM in July 2020 and, in order to facilitate an effective succession, it is intended I remain as Chairman until my successor has been successfully onboarded. This crucial succession process will be set out further in next year's Nominations Committee Report.

Ensuring a diverse culture on the Board is crucial to improving effectiveness, encouraging constructive debate, delivering superior performance and enhancing the success of the Company. With the recent appointment of Liz Hewitt I am pleased to report that we are again meeting our diversity target of 33.3% of the Board being women. We also currently meet the Parker Review target for ethnic diversity on FTSE 100 boards. You can read more on how we strive towards our objectives in our Board Diversity Policy on page 85.



Sir Peter Gershon
Chairman

Our response to COVID-19

In order for us, as a Board, to be able to effectively monitor the Company's crisis management we met on a weekly basis throughout April 2020 to monitor the impact of the current COVID-19 pandemic on the Company's operations and how the Company was responding to the latest developments. These meetings were moved to a fortnightly basis from May 2020 and we will assess the need and frequency of these regular briefings as the pandemic continues.

How we have considered our stakeholders during COVID-19

Our commitment to being a responsible business is central to the way in which we operate. This has been the governing principle behind our response to the COVID-19 pandemic as Directors. We have had to think through and debate on the choices and actions we need to consider over the coming months to position us best for success in the medium- to long-term taking account of the impact on our key stakeholders. The Board has continued to monitor its responsibilities to the Company's different stakeholder groups. Good engagement has been crucial in understanding the views of our stakeholders in order to make informed decisions during this period of crisis. For example, the Company has been seeking feedback from employees that has helped to shape its response to the COVID-19 pandemic.

Our colleagues

Our colleagues have been critical in making sure that we keep the lights on. The Board considered both the physical and mental wellbeing of our employees and are regularly briefed on the actions that would be taken to keep them safe and also to equip them to work from home efficiently. The Board has been in support of these initiatives, including: sequestering critical operations staff on-site in the UK and US to ensure service continuity; senior leaders communicating regularly via virtual online group calls; webchats and video messages; rolling out mental health training courses; and understanding colleague sentiment to the crisis and the COVID-19 recovery strategy through a pulse survey in the UK and US. The Company has not implemented pay reductions, furlough or compulsory redundancy schemes. We continue to monitor progress of how the Company can accommodate employees to return safely in the field, and how we can build on some of the positive changes in our culture and ways of working as the restrictions are lifted.

Communities

Our employees have also been supporting our communities by volunteering and providing their time and expertise to support charities and the most vulnerable. In the UK for example, as well as monetary support to various charities, the Company is operating a food bank and has helped the University Hospitals Birmingham (UHB) Charity to purchase almost 400 tablet computers that will be used by patients to help them speak to their loved ones while in isolation, see page 15 for a case study. In the US, the Company approved cessation of service disconnections for non-payment of outstanding bills. This reflects our commitment to support the communities in which we operate. Looking beyond the short-term, the Board will be kept informed of work to support getting people back into employment and into crucial roles, as well as helping support small- and medium-sized businesses (SMEs) to drive the local economies we operate in.

Investors

The Board recognises it is imperative to promote the success of the Company on behalf of its members. The Finance Committee has held two ad hoc meetings to consider the short- and longer-term liquidity of the Company in a range of different COVID-19 related scenarios. The Board approved the recommendation to pay a final dividend in August 2020 following stress testing of the financials in various adverse scenarios.

Customers, regulators and suppliers

We are very conscious that many of our customers are currently experiencing additional financial challenges and have therefore willingly agreed to moratoriums on debt collection activities in our US regulated businesses.

Furthermore, US Niagara Mohawk sought and received permissions from regulators to defer for three months, scheduled rate changes that would have increased customer bills as of 1 April 2020. In addition, we decided to postpone the filing of the US Niagara Mohawk rate case which could have resulted in bill increases in 2021.

The Board also supported the active and constructive engagement with Ofgem to protect customers by supporting the proposal for the relaxation of network charge payment terms for those suppliers and shippers who are facing cash flow challenges as a result of COVID-19. Additionally, the Board noted the request made to modify the collection of forecast additional balancing costs by the ESO for a further year. These costs, estimated at up to £500 million, are required to safely and securely manage and balance the system given the unprecedented reduction in demand levels caused by COVID-19. We recognise that the increase is significant and is a material issue for ESO customers. The Board notes that the ESO is working with Ofgem and the industry with a view to ensuring that any scheme put in place is in the interests of end consumers and our customers. We have also continued the development and tender of future work for our suppliers, giving longer term visibility and greater certainty of income and the Board has been kept informed of any impacts on our suppliers and supply chain.

We will continue to work closely with our stakeholders across both sides of the Atlantic in the current environment. The Board continues to be kept updated regularly on our COVID-19 response and on learnings that can be sustained to improve our ways of working and Company culture.

For information on how we have considered our stakeholders through the year see pages 44 – 47.

Our Board

Committee membership key

- A Audit Committee
- F Finance Committee
- N Nominations Committee
- R Remuneration Committee
- S Safety, Environment and Health Committee
- E Executive Committee
- Chair of the Committee

Biographies as at 17 June 2020

Other Board members during the year were:

- Dean Seavers – stepped down on 5 November 2019
- Nora Mead Brownell – stepped down on 8 April 2019

N

Sir Peter Gershon CBE FREng (73)
Chairman

Appointed: 1 August 2011 as Deputy Chairman and Chairman with effect from 1 January 2012

Tenure: 8 years

Skills and competencies: Sir Peter is an experienced leader, having held senior board-level positions in the computer, defence and telecommunications industries. He has served as a Managing Director in several high-profile organisations and was previously Chairman of Tate and Lyle plc. Sir Peter is committed to engaging with employees, for example, through site visits in the UK and US. He annually hosts the Chairman's Awards, an excellent opportunity to appreciate employees at National Grid; and further engages through the recent employee engagement sessions. Sir Peter brings external insight, understanding of diverse issues and the strong corporate governance expertise required to create and lead an effective Board.

External appointments:

- Chairman of the Dreadnought Alliance Leadership Board;
- Trustee of the Sutton Trust;
- Trustee of the Education Endowment Foundation;
- Chairman of Join Dementia Research (JDR) Partnership Board; and
- Board member of the Investor Forum.

E F

John Pettigrew FEI FIET (51)
Chief Executive

Appointed: 1 April 2014 and Chief Executive with effect from 1 April 2016

Tenure: 6 years

Skills and competencies: John joined the Group as a graduate in 1991 and has progressed through many senior management roles. Together with his extensive operational experience of the Group, John brings significant know-how and commerciality to his leadership of the executive team and management of the Group's business.

John continues to lead the implementation and development of the Group's strategy, creating new opportunities for the continued future growth of our core businesses. He maintains a productive dialogue with institutional investors on Group strategy and performance.

External appointments:

- Member of the UK government's Inclusive Economy Partnership;
- Member of the CBI's President's Committee;
- Member of the Edison Electric Institute Executive Committee; and
- Non-executive Director and Senior Independent Director of Rentokil Initial plc.

E F

Andy Agg (50)
Chief Financial Officer (CFO)

Appointed: 1 January 2019

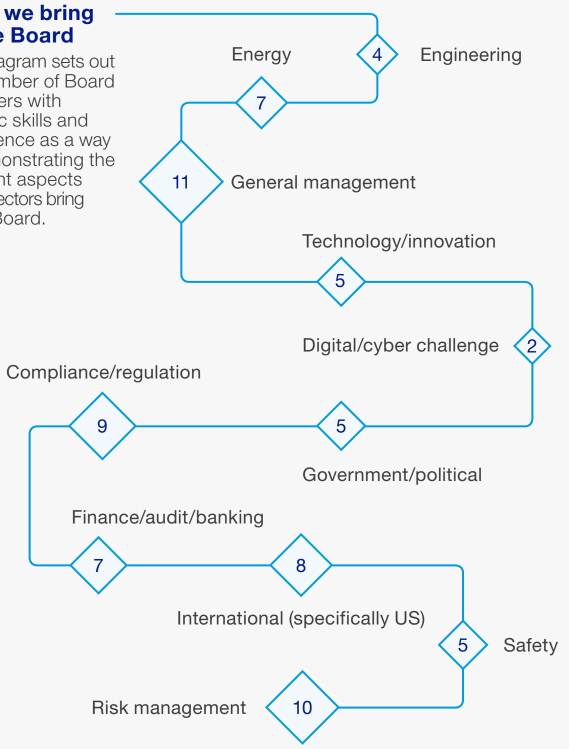
Tenure: 1 year

Skills and competencies: Andy trained and qualified as a chartered accountant with PricewaterhouseCoopers and is a member of the ICAEW. He has significant financial experience, having held a number of senior finance leadership roles across the Group, including Group Financial Controller, UK CFO and Group Tax and Treasury Director. Andy brings in-depth knowledge of National Grid, both in the UK and US, and his broad experience across operational and corporate finance roles led to a smooth transition into his role. He contributes broadly on a wide range of topics at Board, Finance and Audit Committee meetings.

External appointments: None.

What we bring to the Board

This diagram sets out the number of Board members with specific skills and experience as a way of demonstrating the different aspects the Directors bring to the Board.



E

Nicola Shaw CBE (51)
Executive Director, UK

Appointed: 1 July 2016

Tenure: 3 years

Skills and competencies: Nicola's career, in the UK and overseas, has included several senior operational and commercial roles in regulated businesses. She has a strong leadership track record, which has included Chief Executive Officer of HS1 and Managing Director of the UK Business Division at FirstGroup plc.

Her broad range of experience working with the UK government, the European Commission and Parliament and industry regulators, as well as leading large regulated businesses, enables Nicola to implement Board decisions and lead our UK business with the requisite experience, knowledge and leadership expertise.

External appointments:

- Non-executive Director of International Consolidated Airlines Group, S.A.;
- Director of Major Projects Association;
- Director of Energy Networks Association Limited; and
- Director of Energy UK.

E

Alison Kay (56)
Group General Counsel and Company Secretary

Appointed: 24 January 2013

Skills and competencies: Alison has responsibility for the legal, compliance and governance framework of the Group. She is an experienced commercial lawyer and brings advice and guidance to her current role as Group General Counsel and Company Secretary.

Alison provides support and advice to the Directors, the Board and its Committees. She brings rigour to corporate governance and ensures that Board procedures are fit for purpose and adhered to. She also has expertise in regulatory and contractual law and legal risk management from her previous experience at National Grid.

External appointments:

- Member and Vice-Chair of the GC100 Group; and
- Member of the Marie Curie West Midlands Development Board.

R F N

Jonathan Dawson (68)
Non-executive Director; Independent

Appointed: 4 March 2013

Tenure: 7 years

Skills and competencies: Jonathan, through his broad range of expertise within the finance and pensions sector, brings significant in-depth understanding in remuneration and financial matters to his role as Chair of the Remuneration Committee. Jonathan previously held positions as Chairman of the Remuneration Committee and Senior Independent Director of Next plc and Senior Independent Director and Chairman of the Audit & Risk Committee at Jardine Lloyd Thompson Group plc.

As a Non-executive Director, Jonathan brings an innovative perspective, scrutiny, constructive challenge and independent oversight to the Board.

External appointments:

- Chairman of River and Mercantile Group PLC; and
- Chairman and a founding partner of Penfida Ltd.

F A N

Therese Esperdy (59)
Non-executive Director; Independent

Appointed: 18 March 2014. Appointed to the Board of National Grid USA from 1 May 2015

Tenure: 6 years

Skills and competencies: Therese has significant international investment banking experience, having held a variety of leadership roles spanning 27 years. Her career began at Lehman Brothers and in 1997 she joined Chase Securities and subsequently JPMorgan Chase & Co., where she held a number of senior positions. With a distinguished career in the investment banking sector, Therese brings significant banking, strategic and international financial management expertise and knowledge of financial markets to the Board and to her role as Chair of the Finance Committee.

Therese's specialist knowledge combined with her sharp and incisive thinking enables her to contribute and constructively challenge on a wide range of Board debates.

External appointments:

- Chairman of Imperial Brands PLC; and
- Non-executive Director of Moody's Corporation.

S A N

Dr Paul Golby CBE FREng, FIET, FIMechE, FEI, FCGI (69)
Non-executive Director; Independent

Appointed: 1 February 2012

Tenure: 8 years

Skills and competencies: Paul is a Chartered Engineer and has a lifelong passion for engineering and innovation, having spent his career in the energy and regulatory sectors. He brings a valuable engineering and industry perspective to the Board as well as the attributes of an experienced Chairman and Chief Executive to his role as a Non-executive Director. Paul's deep understanding and specialised experience in safety and risk management combined with his deep insight into regulatory issues faced by the Group, particularly in the UK, is crucial to his role as Chair of the Safety, Environment and Health Committee.

External appointments:

- Chairman of Costain Group PLC; and
- Chairman of NATS Holdings Limited.

A N S

Liz Hewitt (63)
Non-executive Director; Independent

Appointed: 1 January 2020

Tenure: Less than 1 year

Skills and competencies: Liz qualified as a chartered accountant with Arthur Andersen & Co. and has held a variety of executive positions in private equity companies including 3i Group plc, Gartmore Investment Management Limited and Citicorp Venture Capital Ltd. Liz was also Director of Corporate Affairs at Smith & Nephew plc. Liz brings significant business, financial and investment knowledge to the Board, and has wide experience of being a chair and a member of audit, remuneration, nominations, disclosure, risk and corporate social responsibility committees. Liz's diverse knowledge and broad range of financial expertise is a great addition to the boardroom bringing a fresh, logical perspective to Board discussions and decision-making.

External appointments:

- Senior Independent Director and chair of the Audit Committee at Melrose Industries plc;
- Non-executive Director and chair of the Audit Committee at Novo Nordisk A/S; and
- External member of the House of Lords Commission and chair of its Audit Committee.

A N S

Amanda Mesler (56)
Non-executive Director; Independent

Appointed: 17 May 2018

Tenure: 2 years

Skills and competencies: Amanda brings to the Group extensive international leadership and general management experience from the technology and fintech sectors. She has over 26 years of experience at senior management and Board level at large international companies. She led a $1 billion global practice at Electronic Data Services and has experience sitting on audit, risk and remuneration committees. Amanda provides an entrepreneurial perspective to the Board and valuable insight into the Company's increasingly important technical evolution.

External appointments:

- Chief Executive Officer of CashFlows Europe Limited; and
- Non-executive Director of Insect Technology Group Holdings Limited.

N R S

Earl Shipp (62)
Non-executive Director; Independent

Appointed: 1 January 2019

Tenure: 1 year

Skills and competencies: With an extensive career in the chemicals industry and having held a senior leadership role in a safety-critical process environment, Earl brings significant safety, project management, environmental, sustainability and strategic expertise to the Board and Committees. This, along with his innovative way of thinking, enables Earl to contribute on a wide range of issues to Board and Committee debates, particularly in relation to safety management.

External appointments:

- Non-executive Director of Olin Corporation;
- Non-executive Director of CHI St. Luke's Health System of Texas; and
- Commissioner of Brazoria-Fort Bend Rail District (Texas).

F N R

Jonathan Silver (62)
Non-executive Director; Independent

Appointed: 16 May 2019

Tenure: 1 year

Skills and competencies: Jonathan has considerable knowledge of the US-regulated energy environment, experience and understanding of integrating public policy and technology into a utility as well as a strong background in finance. Previously, Jonathan was the head of the US government's $40 billion clean energy investment fund. He is currently the Managing Partner of Tax Equity Advisors LLC, which manages investment in large-scale renewable projects and was recognised as one of the 'Top 10 Green Tech Influencers' in the US. Jonathan's strong background in finance and government policy along with his long career at the intersection of policy, technology, finance, and energy brings innovative and positive insight to the Board's policy discussions and to its interaction with management.

External appointments:

- Managing Partner of Tax Equity Advisors LLC;
- Director of Plug Power, Inc; and
- Director of Intellihot Inc.

A N R

Mark Williamson (62)
Non-executive Director and Senior Independent Director

Appointed: 3 September 2012

Tenure: 7 years

Skills and competencies: As a qualified chartered accountant, Mark brings considerable financial and general managerial experience to the Company. His previous roles as Chief Financial Officer of International Power plc, Non-executive Director and Senior Independent Director of Alent plc and Chairman of Imperial Brands PLC cement his extensive financial experience and give him a deep understanding of the utilities sector. This allows him to bring a financial and strategic outlook on diverse subjects in support of the Board and its Committees. Mark acts as an effective board evaluator, provides a logical eye, and makes impartial judgements weighing up options for the Board in a dispassionate way. In his role as Senior Independent Director, Mark brings an excellent understanding of investor expectations as well as providing significant insight into managing relationships with investor and financial communities.

External appointment:

- Chairman of Spectris plc.

Corporate Governance overview

Your Board remains committed to the highest standards of Corporate Governance and in 2019/20 continued to embed the new UK Corporate Governance Code into the work that we do.

Board

Our Board is responsible collectively for the effective oversight of the Company and its businesses. It determines the Company's strategic direction and objectives, business plan, dividend policy, viability and governance structure to help achieve long-term success and deliver sustainable shareholder value. The Board also plays a major role in setting and leading the Company's culture and wider sustainability goals. It considers key stakeholders in its decision-making and, in doing so, ensures that Directors comply with their duty under section 172 of the Companies Act 2006.

To operate efficiently and give the right level of attention and consideration to relevant matters, the Board delegates authority to its Board Committees. Each Committee Chair reports to the Board on their Committee's activities after each meeting.

Key matters considered by the Board include:

- the Company's strategy and long-term strategic objectives;
- risk appetite and determination of principal risks;
- overall corporate governance arrangements, systems of internal control and risk management;
- annual business plan and budget;
- significant changes in capital structure;
- succession planning for Board and senior management;
- half-year and full-year results statements, Annual Report and Accounts and other statutory announcements;
- oversight of the Company's response to major crises and other significant challenges; and
- determination of the framework or policy for the remuneration of the Chairman, Chief Executive, Executive Directors, Group General Counsel and Company Secretary, and direct reports to the Chief Executive, following recommendation from the Remuneration Committee.

Board Committees

Audit Committee:
- Financial reporting.
- Internal controls.
- Processes for risk management.
- Internal audit.
- External auditor.

Nominations Committee:
- Board and Committee composition.
- Succession planning.
- Board appointments.

Remuneration Committee:
- Policy.
- Consideration of exercise of discretion.
- Implementation of policy.
- Incentive design and setting of targets.

Finance Committee:
- Financing policies and decisions.
- Credit exposure.
- Hedging.
- Foreign exchange transactions.
- Tax strategy and policy.
- Guarantees and indemnities.

Safety, Environment and Health (SEH) Committee:
- SEH strategy and policies.
- Performance targets.
- Sustainability.

Executive Committee

Led by the Chief Executive, the Committee oversees the safety, operational and financial performance of the Company. It is responsible for making the day-to-day management and operational decisions it considers necessary to safeguard the interests of the Company and to further the strategy, business objectives and targets established by the Board.

The Committee members have a broad range of skills and expertise that are updated through training and development. Some members also hold external non-executive directorships, giving them valuable board experience. Those members of the Committee who are not Directors regularly attend Board and Committee meetings for specific agenda items.

Other management committees

Disclosure Committee; Investment Committee; Share Schemes Sub-Committee.

Our Executive Committee

Three Executive Directors are members of the Executive Committee, as well as being on the Board. The Group General Counsel and Company Secretary is also a member of the Executive Committee. See their biographies on page 66.

John Pettigrew – Chief Executive and Committee Chair
Andy Agg – Chief Financial Officer
Nicola Shaw – Executive Director, UK
Alison Kay – Group General Counsel and Company Secretary

Governance structure

The schedule of matters reserved for the Board and terms of reference for each Board Committee are available in our Board Governance Document at: www.nationalgrid.com

Reports from each of the Board Committees, together with details of their activities, are set out on pages 76 – 87.

Full biographies for the Executive Committee are available at: www.nationalgrid.com

Andy Doyle
Chief Human Resources Officer

Badar Khan
President, National Grid US

Barney Wyld
Group Corporate Affairs Director

Adriana Karaboutis
Chief Information and Digital Officer

Jon Butterworth
Managing Director, National Grid Ventures

Badar was previously President of the National Grid Ventures business before stepping into the role of Interim President of the US Business, following Dean Seavers stepping down in November 2019, and was appointed to the role permanently on 2 April 2020. Jon Butterworth was appointed Managing Director of National Grid Ventures and a member of the Executive Committee after fulfilling this role on an interim basis since November 2019.

Matters considered by the Board

Board and Committee membership and attendance

The table below sets out the Board and Committee attendance during the year to 31 March 2020. Attendance is shown as the number of meetings attended out of the total number of meetings possible for the individual Director during the year.

Director	Board	Audit	Finance	Nominations	Remuneration	Safety, Environment and Health
Sir Peter Gershon	◆ 12 of 12	–	–	◆ 7 of 7	–	–
John Pettigrew	12 of 12	–	4 of 4	–	–	–
Andy Agg	12 of 12	–	4 of 4	–	–	–
Nicola Shaw	12 of 12	–	–	–	–	–
Jonathan Dawson	12 of 12	–	4 of 4	7 of 7	◆ 5 of 5	–
Therese Esperdy	11 of 12[1]	4 of 4	◆ 4 of 4	7 of 7	–	–
Paul Golby	11 of 12[1]	4 of 4	–	7 of 7	–	◆ 6 of 6
Liz Hewitt – Appointed on 1 January 2020	2 of 2	1 of 1	–	2 of 2	–	1 of 1
Amanda Mesler	12 of 12	4 of 4	1 of 1	7 of 7	–	5 of 5
Earl Shipp	12 of 12	–	–	6 of 7[2]	4 of 5[2]	6 of 6
Jonathan Silver – Appointed on 16 May 2019	9 of 9	–	3 of 3	6 of 6	2 of 3[3]	–
Mark Williamson	11 of 12[1]	◆ 4 of 4	–	7 of 7	5 of 5	–
Former Directors who served for part of the year						
Dean Seavers – Stepped down from position of Executive Director, US on 5 November 2019	6 of 8[4]	–	–	–	–	–
Nora Mead Brownell – Stepped down from position of Non-executive Director on 8 April 2019	–	–	–	–	–	–

1. Four ad hoc Board meetings were held during the year and all non-attendance was due to short notice.
2. Earl Shipp did not attend the April Nominations and Remuneration Committee meetings due to personal circumstances.
3. A Remuneration Committee meeting was held at short notice in November 2019 and Jonathan Silver was unable to attend.
4. Dean Seavers was unable to attend the October and November 2019 Board meetings.

All Board/Committee members who were unable to attend a meeting provided comments in advance.

◆ Board/Committee Chair

Examples of Board focus during the year include:

Key areas of activity	Matters considered	Key decisions made/link to purpose	Views of key stakeholder groups considered
Strategy and performance	Strategy remained a key focus throughout the year. The Board participated in two interactive strategy sessions in addition to the time allocated during Board meetings this year. The offsite sessions in September 2019 and January 2020 provided the Board with an opportunity to scrutinise business performance against the strategic plan and review the key strategic objectives for the year. In the year, the Board focused on: • developing a Business Plan that meets the Group's requirements, aligned to the Company's purpose, vision and values and underpinned by a robust financial strategy; • reviewing and scrutinising Group trading performance, budget and consideration of share price; • shareholders' interests if the Labour Party had won the 2019 UK General Election and implemented its manifesto commitment to nationalise National Grid UK regulated business and interconnectors; • growth strategies for NGV, including renewable generation strategy; • performance updates from the UK and US businesses; • the key milestones and progress made by the Company on the energy transition; • climate change and our strategy to further reduce our emissions, to achieve net zero by 2050 and make a wider contribution to the decarbonisation of the economies in which we operate; • innovation and technology – see separate section below; • the increasingly strong performance of the UK and US commercial property portfolio; and • the sequence of events that took place on Friday 9 August 2019 cumulatively resulted in a widespread electricity power outage across the country.	• Board approval of the Company's Business Plan and strategy; • the direction of travel for our digital strategy; • following consideration of the external energy landscape, endorsed the strategic priority areas for management focus for 2020/21; • reviewed and endorsed the ambition of net zero by 2050 and the interim targets for the Company as a whole; • received updates on cyber security activities and the progress being made in this area. The Board agreed it was acting in accordance with its risk appetite in this area; and • commissioned an internal investigation report, along with an ESO technical report to establish the factors that had led to, and the lessons that could be learned from, the power outage which had occurred on Friday 9 August 2019.	All: Investors Suppliers Customers Regulators Communities and governments Our colleagues

Corporate Governance overview continued

Matters considered by the Board continued

Key areas of activity	Matters considered	Key decisions made/link to purpose	Views of key stakeholder groups considered
Business plan and dividend	Discussed the ongoing financial strategy and business plan for the year. Regular updates were received on emerging themes and key external challenges, and particular consideration was given to these and the current political environment. The Group's financial capacity under the Business Plan was stress tested using the current approach to fund the dividend until Financial Year 2026, in the context of current market expectations. The Board also reviewed the suitability of the Group's dividend policy wording considering the key regulatory processes in the UK and US. In light of the COVID-19 pandemic, the Board discussed the issues that had been considered and analysis undertaken in relation to the payment of a dividend, which had included financial scenarios and resilience testing, and consideration of stakeholders including investors such as pension funds.	• Approval of the initial five-year plan and the viability and going concern statements; • Confirmation that the Group had a financially sustainable business model for the foreseeable future, defined for this purpose only as the five years from March 2019 to March 2024; • The Board considers a range of factors when annually reviewing and setting the dividend, including expected performance and regulatory developments. No dividend policy changes were recommended and the current policy was reaffirmed; and • Approved the payment of the final dividend at its additional June 2020 Board meeting.	Investors Customers Communities and governments Our colleagues
Employee engagement and culture	This year the Board received biannual updates on the implementation of employee voice on Board activity and culture. The Board reviewed the existing employee engagement implementation plan and commented on the overview of activity for the next half of the year. Focus has continued on improving communication channels between the Board and employees to ensure feedback and updates on actions are shared. Discussed the importance of a diverse and engaged workforce to deliver our Group strategy and the continued need to ensure an open culture where dialogue between the Board, senior management and the workforce is encouraged. Our workforce continued to be a key focus as we navigated the impact of the COVID-19 pandemic. The health and safety of our employees remained paramount and discussions centred on keeping critical employees safe whilst their work continued. The Board received weekly updates on employee wellbeing and absenteeism.	• Board input on the approach taken to workforce engagement activities and the topics discussed based on employee feedback; and • The Board believes that existing approaches and mechanisms enable comprehensive two-way engagement opportunities with the workforce and is satisfied that the approach taken is an effective alternative to the proposed methods set out in the Code. Please see pages 72 and 73 for more information.	Our colleagues
Political and regulatory environment	The Board has continued to focus on how to promote the success of the Company during further developments to the external environment in the UK and US. In the UK, regular updates were received on risks and opportunities posed by Brexit proposals and the potential for state ownership, and continued engagement activities with our stakeholders on the issue. In the US, the Board received regular updates on the gas supply constraint in downstate New York. Once an agreement has been reached with the Governor of New York, the focus for the US Business will be on executing the longer-term supply strategy and undertaking a major change in the way it engages with external stakeholders in New York.	• Board input on, support for and monitoring of the UK and US regulatory strategies; • Political sub-group of the Executive Committee continued to take a more hands-on approach to the evolving political and regulatory landscape and its implications for the Company; and • The Board agreed that a lessons learned exercise would be undertaken which would include an assessment of the Company stakeholder management at the US state political level. The reviews were conducted by external consultants. The Board received a comprehensive assessment of the lessons learned at the March 2020 meeting and the action plan to implement the reviews' recommendations was approved at the April 2020 meeting.	All: Investors Suppliers Customers Regulators Communities and governments Our colleagues

Key areas of activity	Matters considered	Key decisions made/link to purpose	Views of key stakeholder groups considered
RIIO-2 price control	The Board scrutinised and challenged the Company's UK regulatory strategy throughout the year, providing feedback, guidance and support for its ongoing development. The Board reviewed the financials of the business plans, noting that the majority of spend was associated with asset health and increased cyber security requirements. A strong stakeholder engagement strategy was adopted by the Transmission and System Operator Boards. This commitment was demonstrated by signing engagement charters to be stakeholder led and to be part of the User Group process. Our final business plans were submitted to Ofgem in December 2019 following extensive stakeholder engagement panels, challenge groups, and consideration against the 2050 net zero target.	• Draft business plans were reviewed, and the Board approved the creation of a sub-committee of the Board, chaired by the Chairman, to confirm the content for the business plans and accompanying assurance statements prior to the final submission to Ofgem; • the sub-committee considered how the comments from the Finance Committee on the Financeability Assurance Statements had been taken into account; and • stakeholder engagement consisting of 2,800 individuals, representing the full cross-section of our stakeholder segments, and 13,000+ consumers, shaped the plans to deliver a safe and reliable network while enabling the transition to a low carbon network. The Board reiterated that the plans had inbuilt mechanisms to cope with potential changes to the energy landscape without increasing consumer bills in real terms.	Investors Customers Regulators
Technology and innovation	The Board reviewed the performance and success of National Grid Partners against the Business Plan and heard about a number of proposed investments. The business continued to perform well and focus remained on disruptive innovation capabilities.	• The Board reviewed the overview of investment strategies and endorsed the growing portfolio noting the establishment of a positive reputation in the external market.	Our colleagues
Total societal impact	Focus has been on navigating expectations of various stakeholder groups as societal expectations have changed. National Grid is at the centre of the energy system in the UK and US, and we are uniquely positioned to drive societal impact in the energy sector and enable a clean, green energy system.	• The Board recommended the development and implementation of a new Responsible Business framework for the Company.	All: Investors Suppliers Customers Regulators Communities and governments Our colleagues

Looking forward, the Board's focus for next year is expected to include:

- management of threats and opportunities posed by the next phase of the COVID-19 pandemic;
- ensuring an acceptable outcome for RIIO-2;
- strategy, including the future of gas;
- organisation, culture, bench strength and talent;
- US reputation recovery;
- New York rate case filings; and
- net zero.

Corporate Governance overview continued

Our culture journey

We recognise that how we do things is as important as what we do.

The Board is responsible for influencing and monitoring culture throughout the organisation to ensure we are emulating desired beliefs and behaviours both in and outside the boardroom, and identifying areas where culture is embedded strongly and areas where shifts in culture are required. Our culture determines how we behave, how we make decisions and our attitude towards risk aligned with the Group's purpose, vision and values.

The Board has spent considerable time reviewing and determining the right culture for the organisation and recognises that there is still work to be done; the journey so far is outlined below.

2016/17

Culture-themed internal Board and Committee evaluation assessed how the Board set the 'tone from the top' and how effectively this was cascaded throughout the Company.

The Board agreed culture-specific actions and a culture scorecard to be reported to the Board at least annually.

2017/18

Re-established clear purpose, vision and values and agreed a common definition of culture as 'Our values, beliefs and behaviours that characterise our Company and guide our practice.'

Agreed areas for increased Board focus including visible leadership and agreed the approach to engaging most effectively with employees.

Approved format for culture scorecard to aid the Board in monitoring culture at Group level.

2018/19

Annual employee survey results were considered, and areas of improvement augmented into the Board's behaviours including local engagement sessions in the UK and US.

The 2018 Corporate Governance Code was considered in depth by the Board, and key stakeholders were mapped out and discussed. The Board discussed its chosen approach to workforce engagement and an implementation plan was agreed.

A revised culture scorecard was considered against an overall status for each of the Company's values, bringing together data from teams including safety, ethics, compliance, supply chain management and customers. The Company committed to review how to evolve its approach to monitoring and measuring culture, along with how it could align the activity taking place to have a greater combined impact and make change happen at a faster pace.

2019/20

Board culture evaluation

During the year the Board considered culture throughout its decision-making and the internal Board evaluation incorporated a review of culture. For more information see page 74.

Board review of culture scorecard

A new set of vision and values was agreed for the Company and the Board agreed to evolve its approach to measuring and monitoring culture across the Company with the aim of having a simplified approach. This would be based on the Company's externally benchmarked annual safety survey, external customer feedback and the modification of the Company's annual engagement survey to align around a more useful cultural diagnostic.

Culture diagnostic work throughout the year showed that the current culture was highly consistent across the Company, promoting a common identity across the organisation; areas of focus and change were also identified as part of the exercise and these have been considered.

Looking ahead

Over the next year the Board will focus on the following culture-related activities:

- monitor the implementation of the Company's purpose, vision and values and the link to the Company's culture;
- review and monitor the culture actions of the internal Board evaluation to ensure that the 'tone from the top' is correct and the Board has a clear view of culture both at Board level and within the organisation;
- facilitate a culture session with the Chief Human Resources Officer and the Board to consider the results of the 2019/20 Board evaluation; and
- review and monitor the change in culture and ways of working in the Company during the COVID-19 pandemic.

Workforce engagement

Employee engagement sessions

In response to the Code we have implemented a range of Employee Voice on Board (EVOB) activities to ensure that there is appropriate meaningful engagement between the Board and our workforce. Activities seek to expose Board members to a broad cross section of employees and employee experiences across the Company and our locations. Using the employee input through the EVOB activity to feed Board decision-making is a core part of the Code and a discussion topic and action log has been maintained following each of the relevant activities.

During the year, the Non-executive Directors (NEDs) held three employee voice engagement sessions, in Boston, New York and London. Unfortunately the session scheduled for March 2020 in California was cancelled due to COVID-19. The employee engagement sessions provided an opportunity for employees and all NEDs to discuss topical subjects, including how successful employees felt the Company had been in embedding its values, beliefs and behaviours throughout the organisation, and shared their views on the gender pay gap. The two-way conversations were strongly encouraged and provided a great opportunity for the Directors and employees to engage more widely in a more informal environment. The Board allocates time directly after the sessions to discuss key outcomes and takeaways. Communications this year have increased to ensure our employees are kept informed about what was being heard in these sessions as well as progress against the actions taken from the meetings. The Board continues to receive updates on the actions taken from these sessions.

Eight non-exec board members hosted:

44 **face-to-face** sessions

across **27** **different sites**

meeting with over **240** **colleagues**

resulting in **27** **actions** captured

Colleagues' feedback has influenced the board's thinking in the following areas and actions are currently in progress:

Inclusion and diversity | Safety | Company brand | Onboarding | Change management | Silos | Line management | Culture | IT | Talent attraction and retention | Decision making | Communication

Employee Voice engagement sessions with NEDs

April 2019, Boston, US

Employees took the opportunity to discuss our corporate culture. The Board were pleased with the unanimous agreement of how important our safety culture was across the Company and the open discussions on wide-ranging topics which followed. Discussions focused on the requirement to positively reinforce the desired culture across all areas of the business and to ensure that communication channels and transparency of actions increased. Topics of concern were raised around the limitations of the existing processes and systems and the Board noted these challenges as areas for improvement.

September 2019, New York, US

These sessions focused on the ongoing communication strategy being implemented throughout the Company. Discussions centred on sharing information across jurisdictions and individual business areas to help 'find a better way' and to promote project successes and learn from any programme failures. The Board listened to concerns around technology and provided an update on the plan going forward.

December 2019, London, UK

The Board praised the active engagement at these sessions with topics focused on corporate identity, culture, diversity and the gender pay gap. Conversations highlighted the need to increase ethnic and gender diversity in senior roles and the NEDs informed the attendees of the latest initiatives (see table below). Positive conversations around reducing the gender pay gap also took place, which started with understanding the reasoning behind the difficulty experienced in recruiting women for some specific roles within the business. The Board encouraged discussions on ideas for programmes aimed at encouraging and enabling women to return from maternity leave.

Employee Resource Group (ERG) Non-executive Director Dinner

November 2019, London, UK

In November, a dinner was held to provide the opportunity for 16 UK ERG Chairs and leads to hold informal discussion with NEDs on the importance and impact of the ERG they support and lead. NEDs were able to discuss and gain feedback on inclusion and diversity related engagement topics. Following the positive feedback received from this session we have planned an equivalent US dinner for 2020.

What have we heard?	What have we done?
During the employee engagement sessions, some of the areas that we heard about were:	
• more needs to be done to create ethnic and gender diversity within the Company and to ensure that senior roles are representative	• appreciating cultural differences is valued by our ethnically diverse colleagues, so we have refreshed and simplified our Reverse Monitoring process to build on cultural awareness by 'walking in our shoes'; and • a new category for Inclusion has been created for the Chairman's Awards, which can be awarded to any individual or group that has contributed positively towards inclusion at National Grid. Examples include involvement in our employee resource groups and evidence of working towards our Group inclusion and diversity strategy.
• more visible support of and advocacy for the employee resource groups by the Board and Executive Committee	• the Executive Committee has joined the Board in supporting and advocating the work of the employee resource groups on a regular basis, including attendance at the twice-yearly Inclusion Forums. The full calendar of events has also been circulated.
• communication and cascading issues combined with process and system changes have caused problems	• a communications strategy has been developed to ensure stronger alignment between the Group narrative and local communications to create a clear line of sight from Group messages to regional entities.
• improvements needed in two-way communications to ensure priorities and focus areas are aligned and that all departments are working towards the overarching National Grid goal	• the UK business has implemented a comprehensive leadership communications programme which includes Q&A sessions, breakfast and lunches with Executive Directors and increased frequency of Town Halls to engage in conversations about the Company's direction, priorities and to give the Directors more opportunities to listen to issues and ideas from across the business.
• frustrations that there are no obvious changes following the annual employee engagement survey	• the US business is developing a communications plan to address any employee concerns more effectively and to ensure updates are communicated and cascaded successfully.
• conversations around gender pay and suggestions that more needs to be done to engage and enable women returning from maternity leave	• in response to gender pay gap concerns and that women require encouragement from the Company to return from maternity leave, we have compiled a list of leading senior examples who flex their work pattern. They have been interviewed by our communications team and their 'work story' will feature in our internal email bulletin every six weeks.
• concerns around technology and cyber threats	• a key focus for 2020/21 is to implement our updated information technology strategy in response to concerns raised by employees throughout the Group.

Corporate Governance overview continued

Performance evaluation

2019/20 Internal Board evaluation

Following the external Board evaluation which was undertaken last year, this year, we undertook an internally facilitated Board and Committee evaluation.

The evaluation focused on Board development and the purpose of this review was to gain:

- insights into how Directors viewed the culture of the Company;
- an understanding of what constituted effective decisions made during the year and why; and
- a deeper understanding about our culture and how it aligned with the Company's ambitions.

The effectiveness of each of the Board Committees was taken into account in the evaluation. The results confirmed that there were minor areas for improvement in relation to Board effectiveness.

The process of the evaluation and the areas identified for further development are noted below.

Our internal evaluation process

January

Board received the Board and Committee Effectiveness Surveys – including questions on the effectiveness of the Board and its decision-making during the year.

Board completed a tailored Russell Reynolds Survey on organisational culture diagnostic and how Board members perceived the culture in the Company.

Completed Myers-Briggs type indicators (if not known).

February/ March

Results received from surveys. These were reviewed and analysed to create an aggregated report in relation to organisational culture.

Comments from the effectiveness survey were discussed in the individual Director performance evaluations.

Later in 2020

Effectiveness action plans created and discussed with the Board and its Committees.

Facilitated session with Chief Human Resources Officer analysing results of the organisational culture survey, including a comparison of the findings of the same survey completed by the Company's senior management.

Actions to enhance the Board's effectiveness for 2020/21

The Board discussed the results of the evaluation in April 2020 and in May 2020 the following actions were agreed:

Action	Responsibility
More effective discussion and decision-making through streamlined and targeted papers to the Board and its Committees.	Chief Executive and Group General Counsel and Company Secretary
External perspectives to be brought forward to the Board to bolster management expertise including in the areas of cyber, climate change, customer and developments in energy policy and energy technology.	Chief Executive and Group General Counsel and Company Secretary
Continue with and enhance the effectiveness of employee engagement sessions to ensure a clearer alignment between these sessions and discussions/decisions made by the Board and its Committees.	Chief Executive, Group General Counsel and Company Secretary and Chief Human Resources Officer
Devote more time to the discussion of strategic priorities at Board meetings.	Chairman, Group General Counsel and Company Secretary and Chief Human Resources Officer

Progress against actions for the Board agreed in 2018/19 external evaluation

Action	Progress made
Invite our customers into the boardroom to understand and directly hear their perspectives.	The Chairs of both our RIIO-2 Transmission and ESO Stakeholder Panels met with the Board in May and July 2019 respectively. This brought a valuable insight into how our RIIO teams were focusing on the needs of our customers during the regulatory review. We will keep the current situation under review and aim to invite additional customer groups into the boardroom later this year.
Continue to invite external speakers to Board meetings/ dinners on topical issues.	The Governor of Massachusetts and a member of the Governor's office met with the Board in March 2019. The Chair, CEO and incoming CEO of Ofgem met with the Board in November 2019. We had invited Pacific Gas and Electric to meet with the Board in March 2020; however, this has now been postponed due to COVID-19. We continue to monitor the topical issues and will keep under review prospective external attendees who could meet with the Board later in the year.
Use market research agencies to bring the voice of the customer and other stakeholders into the boardroom.	This has been undertaken this year through regular reports from the businesses who use these agencies to inform their views.
Facilitated session to be held to consider how to enhance the collective strengths of the Board in light of the individual strengths evidenced as part of the evaluation.	An all-inclusive facilitated session was due to take place in March 2020 in California which would have covered culture and the results of this year's internal Board evaluation. Due to COVID-19 this has been postponed.
Sponsor of each paper to consider why the Board is being asked to consider a particular paper. On strategic papers, the Chairman to ask the sponsor at the beginning of the meeting what they are hoping to achieve in the meeting.	We have continued to develop our Board and strategic papers with the assistance of a third party to ensure Board meeting effectiveness. The amendments to our paper templates have been made to encourage and guide the sponsor and the paper author to consider the end aim or action they require from the Board. A focus for this year is to ensure the strategic aim is re-communicated at the beginning of each item before Board discussion and input commences.
Add a Corporate Social Responsibility session annually to the Board agenda.	A deep dive into Corporate Social Responsibility took place at the January 2020 Board strategy session and will be discussed again later in the year.

Directors' induction and training

Directors' induction programme

Following appointment to the National Grid Board, each new Director receives a comprehensive induction programme tailored to their experience, background and the requirements of the role. Consideration is also given to Committee appointments, and the Group General Counsel and Company Secretary assists the Chairman in designing and facilitating the individual programmes. They are primarily designed with the purpose of onboarding and familiarising the new Directors with our business, vision, values, governance and people.

Both Earl Shipp and Jonathan Silver were provided with a formal, tailored induction programme upon joining the Board last year. A detailed summary can be found below.

The Board has also welcomed Liz Hewitt this year and we will report on progress against her induction plan next year.

Non-executive Director induction examples

Earl and Jonathan both underwent a tailored induction programme covering a range of areas of the business including governance, remuneration and stakeholder matters. Throughout the year they have both met with senior management from key business areas and functions as well as employees across the UK, US and NGV businesses. They also both separately received a briefing from our legal advisors which included: company law and directors' duties; corporate governance; the Market Abuse Regulation; and listing and disclosure obligations.

Both directors met key employees in our Reward team to understand our reward strategy, remuneration policy and current market practice necessary to assist with their appointment to the Remuneration Committee.

Earl Shipp

Focus was given to matters pertinent to his role on the Safety, Environment and Health Committee.

- Earl met with a number of employees throughout the business and in key safety roles including Paul Golby, the Committee Chair, to discuss National Grid's Safety Framework, including carbon reduction and climate change, wellbeing, sustainability and our 2050 net zero ambition.
- He undertook numerous site visits in both the UK and the US and attended a thorough and engaging safety roadshow in May 2019. This included a visit to our gas, electric and customer business units in New York and New Jersey where he was provided with a detailed end-to-end view of our smart grid approach and our Grid Modernisation Strategy. He also visited control rooms and contact centres in Boston and learnt more about our approach to personalisation and tailoring our customer experience journeys towards the electrification of vehicles and the clean energy future.

Jonathan Silver

Focus for Jonathan's induction was given to matters pertinent to his role on the Finance Committee.

- Jonathan met with the Group Treasurer and the Group Head of Tax who provided a summary of the financing strategy and an overview of the current financial risks faced by the Group, including the current risk appetite and management framework in relation to those risks. Discussions also included: treasury controls; processes and systems; National Grid's tax strategy; the impact of US tax reform; and an overview of pension schemes and pension strategy. He also met key employees throughout the business to discuss financial accounting and control issues, the statutory audit, the annual business planning process and other substantive topics involving pensions and insurance.
- Jonathan undertook a number of site visits across Rhode Island and Massachusetts. This included a tour of a liquefied natural gas facility, as well as visits to renewable energy projects across Rhode Island. He also received in-depth information briefings and undertook control centre tours across the customer, gas distribution and gas transmission functions.

Director development and training

The Chairman has overall responsibility for ensuring that our Non-executive Directors receive suitable ongoing training to enable them to remain an effective Board member. Individual training requirements are reviewed and agreed annually on a one-on-one basis. As our internal and external business environment continues to change, it is important to ensure that Directors' skills and knowledge are refreshed and updated regularly. In addition to individual tailored training, updates on corporate governance, legal and regulatory matters are also provided by way of briefing papers and presentations at Board meetings. Non-executive Directors receive details of training and development opportunities offered by external advisors on various topics including cyber security, operational resilience, climate change and technical updates on a regular basis and we encourage and monitor attendance. In light of COVID-19, training opportunities have continued virtually via webinars. Additionally, the Non-executive Directors are expected to visit at least one operational site annually, a target which is regularly exceeded. Examples of site visits undertaken this year include a visit to the Feeder 9 Project at Goxhill in the UK and South Street Substation Project in Providence, Rhode Island in the US.

Audit Committee

Mark Williamson
Committee Chair

Key areas of focus in 2019/20:

- Assessing and responding to the impact of COVID-19 on year-end financial reporting and internal controls;
- Internal controls;
- Overall framework for risk assurance;
- Cyber security and cyber audit;
- New UK system of financial record (Phase 1);
- Climate change related financial disclosures; and
- Finance leadership changes.

Key areas of focus in 2020/21:

- Ongoing review of the impact of COVID-19;
- Cyber security and cyber audit;
- Overall framework for risk assurance;
- New UK system of financial record (Phase 2);
- Climate change related financial disclosures and Responsible Business reporting; and
- The UK regulatory developments and impact on the Committee.

Composition of the Audit Committee

The Committee is made up of five independent Non-executive Directors:

- Mark Williamson (Committee Chair);
- Therese Esperdy;
- Paul Golby;
- Liz Hewitt; and
- Amanda Mesler.

The Board is satisfied that all members of the Committee have recent and relevant financial experience and that the Chair, as a chartered accountant, and with significant board level financial and audit experience, is suitably qualified. The Committee is deemed to have competence relevant to the sector in which the Company operates.

The Committee members' biographies are on pages 66 and 67 and contain details of each member's skills and experience.

Review of the year

The Committee met four times during the year to undertake its role in providing oversight and monitoring the integrity of financial reporting, the effectiveness of internal risk management, control and assurance processes, the Company's governance framework and the external audit. Following the decision to defer the Group's results announcement by a month in light of the COVID-19 pandemic, the Committee met in May 2020 with an additional meeting convened in June 2020.

A substantial proportion of the Committee's time from late March 2020 onwards was devoted to focusing on the year-end financial reporting, internal controls and related impacts arising from the COVID-19 pandemic in the UK and US.

Assessing and responding to the impact of COVID-19 on year-end financial reporting and internal controls

The Committee met as scheduled on 25 March, in the week following the stay at home notices being issued in both the UK and US. The Committee discussed management's evolving risk assessment relating to the impact of the pandemic on the year-end reporting and close process, as well as contingency plans. The Committee sought regular updates from management throughout the year-end close process as continuity plans were implemented.

As discussed on page 78, the key accounting, financial reporting and internal control related matters were discussed in the May 2020 and June 2020 meetings, and throughout this period I remained in close contact with the Chief Financial Officer, receiving regular updates as the situation evolved. I am pleased to report that the Group's close processes and Sarbanes-Oxley Act 2002 (SOX) controls operated as intended without significant deviation.

In light of the rapidly changing regulatory and economic circumstances throughout late March and early April 2020, a decision was taken to defer the Company's results announcement by one month to June 2020. This decision was consistent with those taken by many other companies, and in keeping with advice from the Financial Reporting Council (FRC), Financial Conduct Authority (FCA) and SEC to afford management and the Board more time to better understand the evolving situation. This has also allowed us to appropriately address the key disclosure requirements in this Annual Report, in a number of key areas including:

- accounting matters – and in particular the impact of the moratoriums on collections in the US on bad debt reserves and cash collection forecasts;
- going concern – focused on the appropriateness of the Group's analysis as regards reasonable downside scenarios;
- long-term viability statement – concerning the key assumptions and reassessment of viability from additional perspectives given the uncertainty and dynamic external factors and their cumulative effect in the medium and long term; and
- the consideration and assessment of a specific COVID-19 risk scenario or cluster scenario.

Continued focus on internal control over financial reporting and IT

The Committee considers these matters at each meeting as a matter of routine. The focus in the early part of the year was on monitoring progress reported by management to address IT control deficiencies highlighted in previous years, and in May 2020 we concluded that sufficient additional control activity had been implemented to allow us to judge the 'significant deficiency' previously reported in respect of US IT infrastructure controls to be remediated and closed.

During the second half of the year, time was spent understanding management's progress on enhancing control environments across all locations. In particular, in March and May 2020, the Committee considered management updates on the lessons learnt from the initial implementation of SAP S/4 HANA (as part of the MyFinance programme) for the ESO prior to the planned deployment of the technology as the financial system of record across the UK regulated business in mid-2021.

As we do annually, we considered the impact of these matters on the year-end attestation relating to the effectiveness of internal controls over financial reporting required under SOX.

Overall framework for risk assurance

During the year, we discussed the Company's control framework and its maturity and it was agreed that management would come back to the Committee regularly with updates on a number of improvements and enhancements to the Company's risk, control and assurance framework that was consistent across the Group. I was pleased to see the appointment of a new Chief Risk and Compliance Officer and the establishment of a central team to drive a more common approach to second line of assurance. In May 2020, we were updated on the number of actions that had already been executed and the plans that had been developed, including the appointment of respective leads in all businesses and functions and the creation of implementation plans to push the improvements forward.

Cyber security and cyber audit update

In September 2019, the Group Chief Information and Digital Officer and Chief Information and Security Officer joined for the delivery of the cyber-risk-related audit update to the Committee. The Committee noted the significant work being undertaken to remediate control weaknesses and that it was proceeding in line with expectations. Following this meeting, an update on digital was presented to the Board in December 2019 to provide a consistent view of risk within the Company's security framework. The Board confirmed it was comfortable with the Company's current cyber priorities and stressed the importance of engagement with regulators for future cyber upgrades. The Committee will consider cyber assurance again later in the year.

Climate change related financial disclosures

The Company has continued to make good progress towards providing disclosures consistent with the recommendations set out by the Task Force on Climate-related Financial Disclosures (TCFD). In the year, the Committee was presented with a roadmap to progress towards full compliance of TCFD and the current gap analysis. The Committee noted progress made in the year, including the identification of a principal risk relating to the threats and opportunities around climate change and the Company's first set of disclosures concerning longer-term scenario analysis.

In the context of the financial statements, the Committee also considered the impact of climate change on management's key judgements and estimates, in particular regarding gas asset lives as set out on page 78.

New UK system of financial record (MyFinance) – Phase 1

MyFinance became the financial system of record for the ESO at the point of legal separation on 1 April 2019.

The Committee received updates from management on a regular basis throughout the year, in anticipation of the planned technology roll out across the UK business in early 2021/22 (Phase 2).

The Committee discussed the programme leadership, governance and assurance model, and lessons learnt from Phase 1 that will be applicable to Phase 2.

Governance and regulatory changes

During the year, we received a detailed report on the outcomes and recommendations of the audit reforms in the UK following the publication of Sir Donald Brydon's review into the quality and effectiveness of audit in the UK, as well as those of the UK Competition and Markets Authority and the Kingman review concerning the UK regulatory landscape. We also received a number of updates from Internal Audit in relation to the new Chartered Institute of Internal Auditors (IIA) Code of Practice and later in the year we will review this and make the appropriate changes to the Internal Audit Charter and the Committee's Terms of Reference.

Finance leadership changes

The Committee also met privately with the Chief Financial Officer towards the end of his first full year in the role, to discuss succession planning within the Finance function during the coming year. We will continue these conversations in 2020/21.

Looking forward

Impact of COVID-19

The Committee expects a significant proportion of its time will remain focused on the impact of the pandemic for the foreseeable future – across accounting, financial reporting and internal control related matters. The Committee will continue to monitor developments and adapt its approach to best support the Group's stakeholders.

Other matters

Cyber and internal control matters will remain high-priority areas as the Company seeks to embed improvements and efficiencies over the coming months.

In addition, the Committee will continue to take a close interest in the Company's evolving ESG-related reporting activities. It will also continue to monitor UK regulatory developments carefully, as the UK government responds to the findings of the Kingman and Brydon reports later in 2020.

Audit Committee Chair transition

Liz Hewitt was appointed as Non-executive Director and joined the Audit Committee as a member in January 2020. During 2019, Liz was identified as the right candidate to take over from me as Audit Committee Chair. Over the course of 2020/21 I will be working closely with the Nominations Committee and Board, as well as Liz, to ensure there is a seamless transition plan in place. As part of Liz's tailored induction she has had meetings with myself, Deloitte, the Global Head of Audit and other senior members of the Company's finance team and she will continue to work alongside me this year to ensure a smooth transition.

Mark Williamson
Committee Chair

Further reading
You can view the Committee's Terms of Reference here: www.nationalgrid.com

Statement of compliance with the Competition and Markets Authority (CMA) Order – the Company confirms that it has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 (Article 7.1), including with respect to the Audit Committee's responsibilities for agreeing the audit scope and fees and authorising non-audit services.

Audit Committee continued

Significant issues/judgements relating to the financial statements

In considering the financial results announcements and the financial results contained in the Annual Report and Accounts, the Committee reviewed the significant issues and judgements made by management in determining those results.

The significant issues and judgements considered for the year ending 31 March 2020 are set out in the following table.

In addition, the Committee and the external auditor discussed the significant issues addressed by the Committee during the year. You can read more in the Independent Auditor's Report on pages 110 – 120.

Matter considered	Factors and reasons considered, including financial outcomes
COVID-19 related matters	• The Committee considered the accounting, reporting and internal control implications of the COVID-19 pandemic extensively throughout the period from late March through to June 2020. • The Committee satisfied itself that management had adequately identified and considered all potentially significant accounting and disclosure matters in May 2020. Particular attention was devoted to understanding the implications of the moratoriums on collections of customer receivables issued by regulators in New York, Massachusetts and Rhode Island in March 2020. These events significantly impacted the business with immediate effect and contributed to a total bad debt charge of £234 million for the year, of which £117 million ($150 million) was considered incremental and due to the moratoriums. • The Committee also noted the other significant matters identified by management, being the additional uncertainty relating to determining the fair value of unquoted assets held by the Company's pension and other post-employment benefit schemes. The Committee accepted management's approach to delay finalising the financial statements until early June 2020 to allow for additional asset valuation data to be received and appropriate adjustments reflected over residual elements of specific asset classes. • Concerning internal control, in March 2020, the Committee discussed management's evolving risk assessment and contingency planning activities. The Committee noted, amongst other things, management's process to have a back-up individual identified in order to plan for an unforeseen absence by someone involved in a key part of the year-end, close and reporting process. The Committee received regular updates throughout the year-end and close process, and acknowledged that in the vast majority of cases, control-related activities took place on time and by the individual originally assigned. • In May and June 2020, the Committee was kept informed of the impacts of COVID-19 on the Company, including accounting matters, going concern and viability considerations, in light of continuing business developments as well as regulatory pronouncements, including from the UK FRC on the rapidly evolving corporate reporting landscape. • Details of the Committee's conclusions in relation to going concern and the long-term viability statement are set out on page 80.
Application of the Group's Exceptional Items Framework	• The Committee considered papers from management over the course of the year setting out how the exceptional items framework has been applied to certain events and transactions over the period, as set out in note 5 to the financial statements. • For each item, the Committee has considered the judgements made by management, considering both, each item in isolation, and the aggregate view of the impact on adjusted profit and adjusted earnings per share. • The Committee reached the conclusion that additional US environmental provisions, the impact of a 0.5% reduction in the discount rate applied to the Group's environmental provisions and the reversal of the change in the UK tax rate should all be treated as exceptional. • The Committee concluded in line with management's view that it was not appropriate to treat the incremental $150 million bad debt charge as an exceptional item this year. In addition, having considered the quantum and nature of the settlement in relation to the downstate New York gas moratorium and the additional COVID-19 related costs, it was deemed appropriate to include the impact of these items within adjusted profit.
Gas Transmission and Gas Distribution asset lives in the context of climate change	• Consideration was given to whether the developments in the UK and US towards binding carbon reduction targets should trigger any changes to our estimates, judgements or disclosures, especially regarding our gas asset lives. The Committee received various papers from management setting out an overview of the legislative changes in the period, analysis of the future pathways for the energy transition in the UK and US, and evaluation of the possible future use for our networks in these circumstances. • The Committee accepted management's view that on balance we believe there will be a role for our gas networks post 2050 under a range of possible scenarios, and there is nothing at present to suggest that the asset lives should be shortened at this point. The Committee also accepted management's view that in light of the evolving legislative developments and increasing investor attention, disclosure of a key judgement in relation to the impact of changes of legislation, disclosure of our gas asset lives as a key estimate, and appropriate sensitivity analysis were appropriate as set out in note 13 to this year's financial statements.
Going Concern	• The Committee evaluated papers prepared by management in May and June 2020, setting out management's analysis under a reasonable but severe 'worst-case' scenario, principally reflecting potential outcomes as regards the length and severity of lockdown conditions, US customer moratoriums and a significant level of employee absenteeism. The Committee evaluated management's analysis of the mitigating actions available to it to manage through such a situation, including the degree to which plans already existed and the likely challenges associated with implementing them. • The Committee considered the assumptions made by management regarding availability of debt financing, noting recent debt issuances but also contingency plans in the event that debt markets could close. Having considered the available evidence, the Committee considered that the analysis presented, in conjunction with the disclosures included in note 1 to the financial statements, was appropriate to the Company's circumstances.

Key matters considered by the Committee

The key matters considered by the Committee during the course of the year ended 31 March 2020 are set out below:

Matter considered	Factors and reasons considered, including financial outcomes
Financial reporting	• On an ongoing basis the Committee considered current IFRS financial reporting issues. In addition to the matters highlighted above assessed against the Group Exceptional Items Framework, we also considered the accounting as regards to the acquisition of Geronimo in accordance with IFRS 3 'Business Combinations', the position at Western Link as regards to liquidated damage claims, and the impact of the 9 August 2019 UK power outage. • Monitored and reviewed the integrity of the Group's financial information and other formal documents relating to its financial performance, including the appropriateness of accounting policies, going concern and viability. • Recommended to the Board the key accounting judgements and key sources of estimation uncertainty related to pensions and environmental provisions, made by management for the 2019/20 half and full-year financial statements, going concern and other reports filed with the SEC containing financial information.
Internal controls	• The Committee received regular updates on progress towards the Company's annual SOX attestation. • In March 2020, the Committee considered management's progress against its wider financial controls action plan, and further process improvements introduced ahead of the year-end, including relating to governance process and formalisation of documentation around non-IFRS performance measures.
Risk and viability statement	• In addition to its regular work monitoring internal control processes, and reviewing and challenging the draft viability statement, the Committee specifically focused its attention this year on how the Company had factored the COVID-19 pandemic into its annual risk assessment process and long-term viability testing.
External auditor	• Received an update report at each meeting, including updates on the status of, and results from the annual audit process. • Considered the external auditor's report on the 2019/20 half and full-year results. • Received and reviewed the management recommendations letter. • Ongoing consideration of the external audit plan, including monitoring the approach, scope and risk assessments contained therein. • Assessment of the effectiveness and independence of Deloitte, as well as review and update to the Group's policy on the provision of non-audit services from Deloitte following updated FRC guidance in the year. • Review and approval of all audit fees proposed by management and for non-audit services in the year. • Recommended to the Board the re-appointment of Deloitte at the upcoming AGM. • Received an update from Deloitte on workflows in relation to COVID-19 and received confirmation that the external audit team had been working well in new circumstances. • Discussed the results of the client survey assessment, noting results were broadly consistent with the prior year. Key themes were highlighted and it was ensured that any actions would be incorporated into the 2020 audit. • Continued to hold private meetings with Deloitte and maintained dialogue throughout the year.
Corporate audit	• The Committee received a review of the Corporate Audit Charter. Minor changes were made to reflect the SOX control testing transition and the Committee approved the updated Corporate Audit Charter. • Received an update on the 2019/20 audit plan and the significant findings, and reviewed the plan for 2020/21. • Received an update on cyber assurance and updates to the IT Risk Framework. • Reviewed PwC's key messages in the external quality assessment (EQA) of Corporate Audit, noting the improvements made since the last EQA. • Updated the Committee on the new IIA Code of Practice and confirmed a recommendation would be brought back to the Committee later in the year, which would also be reflected in the Corporate Audit Charter and the Committee's terms of reference.
Compliance, governance and disclosure matters	• Welcomed Liz Hewitt to her first Audit Committee meeting in March 2020. • Reviewed and approved the updated terms of reference for the Committee. • Received a detailed report on the outcomes and recommendations of the Brydon Review and other UK regulatory changes. • Considered the progress towards implementing the Financial Stability Board's TCFD recommendations. • Received updates on ethics and business conduct, including whistleblowing to help monitor the management and mitigation of business conduct issues as part of the wider controls framework. The Committee noted that there had not been any significant breaches of the Company's Code of Ethical Business Conduct; however, noted that some cases had highlighted opportunities for improved controls. The Committee was also pleased to hear that the whistleblowing procedures in place and internal procedures remained effective and a number of employee communications would take place in 2020 to improve the understanding of these procedures. • Received a bi-annual update of compliance with external laws and regulations, including updates on any non-compliance issues and steps being taken to improve compliance across the Company. The Committee discussed the controls and mitigating actions employed to reduce such instances of fraud and compliance breaches in support of the Group's overall strategy and culture. The Committee noted that the review of enhancements to the Company's risk, control and assurance framework would incorporate the improvement of assurance activities through culture, technology, organisation and reporting.

Audit Committee continued

Financial Reporting

Going Concern and Viability Statement

The Committee, in conjunction with the Finance Committee, reviewed the Group's going concern and viability statements (as set out on pages 26 and 27) and the supporting assessment reports prepared by management.

The Finance Committee met in May 2020 to discuss the implications of COVID-19 to the Group's going concern and viability statements.

The current COVID-19 situation has highlighted the interconnectivity between risks and the speed at which risks may materialise and during this uncertainty, significant work was undertaken to consider the Company's viability statement from additional perspectives. In May and June 2020, the Committee reviewed and challenged the viability statement and considered the period of assessment used, taking into account the COVID-19 events and other external factors in the fast-changing situation including benchmarking the approach adopted by other companies. It also considered individual risk testing, cluster testing and the impact of the Company's response to COVID-19 on business plans and financial models. After due consideration, these were recommended to the Board in June 2020. The financial statements are prepared on a going concern basis such that the Company and the Group have adequate resources to remain in operation as per National Grid's Group Treasury policy.

Statutory reporting framework policy

The Board has ultimate responsibility for effective management of risk for the Group including determining its risk appetite, identifying key strategic and emerging risks, and reviewing the risk management and internal control framework. The Committee, in supporting the Board to assess the effectiveness of risk management and internal control processes, relies on a number of Company-specific internal control mechanisms to support the preparation of the Annual Report and Accounts and the financial reporting process. This includes both the Board and Committees receiving regular management reports to include analysis of results, forecasts and comparisons against last year's results, and assurance from the external auditor. Members of the Executive Committee attend quarterly performance reviews to supplement this.

The Committee is kept fully informed of all new legislation, FRC advice and best practice and the requirements of the Code and Disclosure and Transparency Rules. Regular reviews in the drafting process support the development of an annual report and accounts that meets all requirements.

The Board receives, in advance of the full-year results, a periodic SOX report on management's opinion on the effectiveness of internal control over financial reporting. This report concerns the Group-wide programme to comply with the requirements of SOX and is received directly from the Group SOX and Controls Team and through the Audit Committee.

In relation to the financial statements, the Company has specific internal mechanisms that govern the financial reporting process and the preparation of the Annual Report and Accounts. The Committee ensures that the Company provides accurate, timely financial results and implements accounting standards and judgements effectively, including in relation to going concern and viability. Our financial processes include a range of system, transactional and management oversight controls. Also, our businesses prepare detailed monthly management reports that include analysis of their results, along with comparisons to relevant budgets, forecasts and the previous year's results. Quarterly performance reviews, attended by the Chief Executive and Chief Financial Officer, supplement these reviews. Each month, the Chief Financial Officer presents a consolidated financial report to the Board.

Fair, balanced and understandable

The Committee undertook a full and formal review of the content in the 2019/20 Annual Report and Accounts and recommended the approval of the half and full-year financial statements and the Annual Report and Accounts to the Board. The review is a well-established and documented process involving senior management and the core reporting team. To enable the Committee to make this recommendation, the Committee considered whether, taken as a whole, the Annual Report and Accounts is fair, balanced and understandable. The Committee also considered the Company's compliance with relevant regulatory frameworks and the validation of management's representations to Deloitte. Further, it provided oversight of the quality and integrity of the Group's financial reporting and accounting policies and practices.

As part of its review of the financial statements, the Committee considered, and challenged as appropriate, the accounting policies and significant judgements and estimates underpinning the financial statements.

This work enabled the Committee to be satisfied that the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the necessary information for shareholders to assess the Company's position and performance, business model and strategy. This was reported to the Board at its meeting in June 2020.

Risk management and internal control

Risk management

The Committee has delegated responsibility from the Board for the oversight of the Group's system of internal control and risk management systems. This includes policies, compliance, legislation including compliance with SOX and the UK Bribery Act 2010, appropriateness of financial disclosures, procedures, business conduct and internal audit. As part of the framework across the Group, National Grid's values – "do the right thing", "find a better way" and "make it happen" – continue to communicate and promote a culture of integrity across the business.

During the year, the Board reviewed the principal risks facing the Group (as set out on pages 22 – 25). The Committee provided assurance and review of the risk management process to ensure that processes are in place to manage risk appropriately.

Internal Control and Risk Management effectiveness

We continually monitor the effectiveness of our internal controls and risk management processes to make sure they continue to be effective and assess them to make sure they remain fit for purpose. Following the review over the year the Committee confirmed that the processes had the correct authority, expertise and independence and provided sufficient assurance to the Company. As the business continues to evolve, systems and processes continue to be implemented to support this such as the recent deployment of new systems across finance, supported by the cyber team. The Committee was satisfied that the systems and processes are functioning effectively.

The effectiveness of internal controls and risk management processes is regularly monitored and assessed by the Committee and management to make sure they remain robust. This review includes financial, operational and compliance controls. The Committee also monitors and addresses any business conduct issues or compliance issues. The Certificate of Assurance (CoA) process operates via a cascade system and takes place annually in support of the Company's full-year results.

Corporate Audit supports the Group's risk management and internal controls processes. They deliver an independent and objective approach to evaluate and push forward processes. The Global Head of Audit has responsibility for the internal audit function and attends all Committee meetings, and has access to the Committee Chair when necessary.

At each of the Committee's meetings progress is reviewed including significant findings and how previous actions have been completed. The Committee notes timelines and where actions are overdue, these are challenged by the members. Corporate Audit is responsible for developing the Audit Plan including engaging in major change programmes across the business. The Committee approved the review of the Corporate Audit Charter in November 2019 following agreement from the Safety, Environment and Health Committee.

This year, the Committee continued to keep IT controls at the top of its agenda and focus, following the appointment of a new Chief Information Security Officer. In May 2020, the Committee was informed that the prior year significant deficiency in respect of IT controls was closed, following work to fully remediate the IT infrastructure environment in the US.

Audit Committee Chair Transition

As outlined in the report on page 84, the Nominations Committee discussed in 2019 the plan to recruit a Non-executive Director with suitable capabilities to replace Mark Williamson as Audit Committee Chair when he retires. Following a thorough process, Liz Hewitt was appointed to the Board and joined as a member of the Audit Committee.

Liz is a Chartered Accountant with significant experience in dealing with complex and challenging audit issues. She has extensive experience as chair of an audit committee previously holding the role with Synergy Health plc and Savills plc. Liz currently chairs the Audit Committees of Melrose Industries plc, Novo Nordisk A/S and the House of Lords. Further details on Liz's career experience and skills can be found on page 67.

External audit

The Committee is responsible for overseeing the relationship with the external auditor. Mark Williamson meets with the external auditor prior to each meeting and outside the meeting cycle on a regular basis.

- Deloitte is the external auditor to the Company.
- Appointed in 2017 following a formal tender process.
- Reappointed at the 2019 AGM for the year ended 31 March 2020.
- Audit Committee was authorised by shareholders to set Deloitte's remuneration at the 2019 AGM.
- Current lead Audit Partner is Doug King and 2019/20 was the third year of his term.

Following consideration of the auditor's independence and objectivity, the audit quality, and the auditor's performance, the Committee was satisfied with the effectiveness, independence and objectivity of Deloitte and recommended to the Board its reappointment for the year ended 31 March 2021.

A resolution to reappoint Deloitte and give authority to the Audit Committee to determine their remuneration will be submitted to shareholders at the 2020 AGM.

Effectiveness and performance

As part of the Committee's responsibilities, a review during the year was undertaken to consider the effectiveness of the external auditor and ensure that the quality, challenge and output of the external audit process is sufficient.

National Grid's management take an active engagement in the external audit process and recognise the importance of the process. The Committee also regularly receives the views of senior management and members of the finance team in forming conclusions on effectiveness.

During the year, the Committee:

- reviewed the quality of audit planning including approach, scope, progress and level of fees;
- reviewed the outcome of recommendations from the Deloitte Management Letter in 2018/19;
- received the Deloitte Management Letter for 2019/20;
- held private meetings with Deloitte where management was not present; and
- confirmed that the external audit process by Deloitte had been delivered effectively.

Auditor independence and objectivity

In addition to the review of effectiveness, the Committee is responsible for considering the independence and objectivity of Deloitte. The Committee has full oversight of the non-audit services policy and fees paid and enforces checks to ensure that employees of Deloitte are not appointed to roles in the financial reporting scope within the Company.

The Committee considered the safeguards in place, including the annual review by Corporate Audit, to protect the external auditor's independence. The external auditor reported to the Committee in June 2020 that it had considered its independence in relation to the audit and confirmed that it complies with UK regulatory and professional requirements, SEC regulations and Public Company Accounting Oversight Board (PCAOB) standards and that its objectivity is not compromised. The Committee took this into account when considering the external auditor's independence and concluded that Deloitte continued to be independent for the purposes of the external audit and confirmed that this recommendation was free from third-party influence and restrictive contractual clauses.

The independence of the external auditor is essential to the provision of an objective opinion on the true and fair view presented in the financial statements.

Audit quality

Regularly throughout the year, the Committee looks at the quality of the auditor's reports and considers its response to accounting, financial control and audit issues as they arise. To maintain audit quality, the Committee reviews and challenges the proposed external audit plan, including its scope and materiality, before approval, to satisfy itself that Deloitte has identified all key risks and has developed robust audit procedures and communication plans.

The Committee also meets with Deloitte twice a year without management present, providing the external auditor with the opportunity to raise any matters in confidence and have an opportunity for open dialogue. This meeting also gives the Committee a chance to monitor the performance of the lead Audit Partner both inside and outside Committee meetings.

Non-audit services

In line with the FRC's Ethical Standard and to help protect the external auditor's objectivity and independence, we have a policy governing Deloitte's provision of non-audit services. In March 2020, the Committee approved amendments to the policy in line with the mandatory FRC changes outlined in the Revised Ethical Standards, published in December 2019.

The cap on the total fees that may be paid to the external auditor for non-audit services in any given year is 70% of the average audit fees paid in the last three financial years. Following Deloitte's appointment in 2017 this is the first year that this is effective on the Company.

To help protect auditor objectivity and independence, the provision of any non-audit service by the external auditor requires prior approval. The policy allows for certain specified services to be undertaken under 'pre-approval' by the Audit Committee where we believe there is no threat to the auditor's independence and objectivity, the service has been reviewed by the CFO, and where fees do not exceed £50,000. These services are limited to:

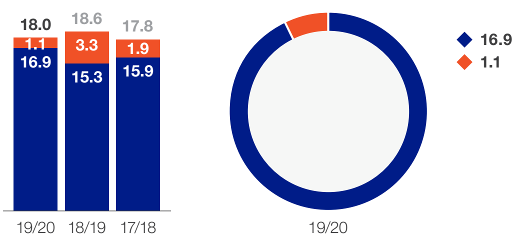
- audit, review or attest services. These are services that generally only the external auditor can provide, in connection with statutory and regulatory filings. They include comfort letters, statutory audits, attest services, consents and assistance with review of filing documents; and
- other areas, such as provision of access to technical publications.

Our policy requires management to present a list of all non-audit work requests to the Committee at each official meeting to ensure the Committee is monitoring all non-audit services provided. Non-audit service approvals during 2019/20 principally related to comfort letters associated with debt offerings. Work performed by Deloitte during the year (which necessarily also includes engagements approved by the Committee in 2018/19) included pre-implementation governance reviews associated with the new UK financial record system (MyFinance) and a final element of market-related advisory work with the UK property division.

External auditor fees

The amounts payable to the external auditor, Deloitte, in each of the past two years were:

Audit and non-audit services (£m)



◆ Audit services
◆ Non-audit services

Total billed non-audit services provided by Deloitte during the year ended 31 March 2020 were £1.1 million, representing 7% of total audit and audit-related fees. In 2018/19, non-audit services totalled £3.3 million (22% of total audit and audit-related fees).

Further information on the fees paid to Deloitte for audit, audit-related and other services is provided in Note 4 to the financial statements on page 136.

Total audit and audit-related fees include the statutory fee and fees paid to Deloitte for other services that the external auditor are required to perform, such as regulatory audits and SOX attestation. Non-audit fees represent all other services provided by Deloitte not included in the above.

Finance Committee

Therese Esperdy
Committee Chair

Key areas of focus in 2019/20:

- UK and US pension and investment strategy;
- Financial risk appetite;
- Treasury-related activities for the ESO separation;
- Bond issuance and hybrid bond refinancing;
- Financial implications of RIIO-2;
- Review of external regulatory and political environments and potential impact on credit ratings and any associated financial risk; and
- Green Financing Framework and first green bond issuances.

Key areas of focus in 2020/21:

- COVID-19 potential market, financial and balance sheet impact;
- Going Concern and Viability Statement;
- Financial implications of RIIO-2;
- Review of management of financial risk against the Company's financial risk appetite; and
- Continued oversight around Brexit-related financial risks and market reaction.

Review of the year and COVID-19

The Committee met on four scheduled occasions during the year to undertake its responsibility of monitoring the financial risk of the Group, focusing on key areas such as treasury, tax, pensions, insurance, investments and commodities. The Committee also convened for an additional presentation in May 2019 which focused on the financial impacts of the RIIO-2 business plans.

Towards the end of the year the impact to global markets of the COVID-19 pandemic became clearer and the Committee held additional COVID-19 focused meetings in April and May 2020. Significant consideration was given to the financial implications of the global pandemic on the Company. This included financial scenario planning and risk mitigation. At its May meeting the Committee considered the Going Concern assumption of the Company, considering the uncertainties posed by COVID-19 and the additional focus by regulators. This consideration included a range of cash flow outcomes, the Company's ability to access existing undrawn facilities alongside its ability to access long-term debt markets and short-term cash positioning.

The Committee will continue to receive regular updates on implications as the pandemic continues to progress.

Prior to the emergence of COVID-19 other key focuses for the Committee included the external regulatory and political environments, and significant time was spent considering the implications of Brexit and the resulting market impact following the UK's exit from the European Union on 31 January 2020.

In January 2020, the Committee members hosted an informal question and answer session with employees from the Tax, Pensions and Insurance teams in the UK, to further increase workforce engagement and to encourage a dialogue between the Committee and employees whom the Committee would not normally have the opportunity to engage with at meetings. Following the success of the January session, similar engagement sessions are planned to take place in 2020 and thought is being given as to how these can take place around COVID-19 restrictions.

Treasury

RIIO-2 was a key focus for the Committee over the year and regular updates on the financial implications of RIIO-2 were received including an additional presentation focused on the financial aspects of the RIIO-2 business plan. Discussions took place on the assumptions and parameters set by Ofgem and proposed financial frameworks, ahead of the RIIO-2 business plan submission in November 2019.

The Committee provided continued oversight over management decision-making and execution of financial risk. The Company reviewed the management of the Group's financial risk appetite; as a result, the Committee approved minor policy changes to funding risk, liquidity risk, counterparty credit risk, credit rating risk and foreign exchange translation risk.

Management provided regular updates on strategy formulation for the future, including investment requirements for the business, credit ratings, dividend policy and LIBOR transition. The Committee was pleased to receive details on the execution of new bonds during the year, approving the year's financing strategy and receiving regular updates as financing is executed. Approval was also given to a hybrid refinancing strategy with hybrid bonds issued across two tranches in NGG Finance plc.

A Green Financing Committee chaired by the Group Treasurer was established in December 2019 to support the Company's sustainability strategy and Green Financing Framework detailed on page 58 as the Group works towards its net zero ambition. In January 2020 the Company launched its first green bond, which was well received by the market.

In November, the Committee invited a credit rating agency to the Committee to provide an insight into methodologies used for ratings, the credit landscape in the UK and US for regulated utilities and the potential impact of Brexit.

Insurance

The Committee received regular insurance updates which considered the current shape of the insurance market and how the Company was benchmarked against other organisations in relation to the Company's approach to insurance renewals in April 2020.

The Committee monitored the evolution and efficiency of cyber insurance as part of our cyber insurance programme. This continues to be a fast-growing area of the global insurance market and external advisors are due to present to the Committee in July 2020 to provide additional external insight.

At its meeting in April, the Committee discussed the impact of COVID-19 on the insurance market and will be monitoring the insurance risk appetite closely throughout the year.

Tax

The Committee has continued to monitor the potential tax impacts of Brexit and received a focused update on implications from a tax perspective throughout the year. An update was also received concerning the UK Finance Bill 2019/20 and the potential impact on the Company, particularly around the impact of the changes to the IR35 rules. The Committee will continue to monitor developments in this area. In January 2020, external advisors presented to the Committee on the evolving Tax Transparency debate.

The Company also continues to give focus to the changing tax landscape, particularly in relation to the effect of digitisation, in line with the business-wide digitalisation ambition. The Tax team continue to inform the Committee of external developments in relation to tax authorities to enable continued best practice and how technology can be leveraged in this area.

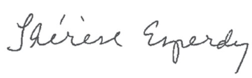
Pensions

In 2018/19 the Committee commenced plans to consider de-risking the UK pension plans, to more closely match the assets and liabilities. Throughout this year, the Committee considered these plans further and approved appropriate solutions to de-risk the Company's pension arrangements, enabling the National Grid UK Pensions Scheme to enter into buy-in arrangements with both Legal & General and Rothesay, supporting the Company's long-term strategy to reduce the level of risk within its pension arrangements.

In July 2019, external advisors presented to the Committee on the UK pension landscape and trends in the market, including the increased decline in the defined benefit schemes across the market and the increase in utilisation of defined contribution schemes. The Committee received a further presentation from external advisors in April 2020 focusing on the US pension landscape and trends in the market alongside the impact of COVID-19 on the pensions market.

Looking forward

The Committee will remain focused on ensuring the Company is effectively managing financial risk, working closely with the Audit Committee with particular focus on impacts due to the COVID-19 pandemic as it continues to progress globally.



Therese Esperdy
Committee Chair

Safety, Environment and Health Committee

Paul Golby
Committee Chair

Key areas of focus in 2019/20:

- Post-Massachusetts labour dispute and workforce re-integration;
- US regulatory safety changes;
- Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG);
- Monitoring the action plan to achieve long-term carbon reduction targets;
- Deep dive into employee wellbeing; and
- Continued focus on process safety improvements.

Key areas of focus in 2020/21:

- COVID-19 impact on our customers, employees and contractors;
- Gas safety and reliability;
- Group safety performance and safety culture;
- Sustainability and climate change;
- Business deep dives and process improvements;
- SEH risks and mitigation; and
- Mental health and wellbeing.

Further reading
For more information on the Company's work around Task Force on Climate-related Financial Disclosures (TCFD) requirements (see pages 57 – 62).

Review of the year and COVID-19

During the year, the Committee met six times to undertake its oversight responsibilities for reviewing the strategies, policies, initiatives, risk exposure, targets and performance of the Company in relation to safety, environment, health and wellbeing. Two of these meetings were scheduled specifically to monitor the potential safety issues surrounding the lifting of the downstate New York gas moratorium. The Committee considered the Company's contingency proposals to maintain security of supply throughout the winter, including the potential to add new CNG sites to meet demand, and challenged the associated risks.

Towards the end of the year we have seen the acceleration of the global COVID-19 pandemic; the health and wellbeing of all employees and contractors has been of paramount importance during these challenging and unprecedented times. The Committee has and will continue to focus on ensuring the strategies and policies being implemented across the business adequately protect the health, safety and wellbeing of everyone.

Committee member induction

Since joining the Committee in 2019, both Amanda Mesler and Earl Shipp have undertaken site visits in the UK and US as part of their induction. These site visits provided a useful insight into the Company and the opportunity to gain a wider perspective of National Grid and to meet and engage with a variety of employees to discuss their views on safety, environment and health on site and throughout the Company. The site visits are an important way of demonstrating Company safety, health and environment leadership and are a way to build Committee knowledge, skills and strengthen discussion around issues.

The Committee also welcomed Liz Hewitt as a member in January 2020. Liz brings excellent experience to the Committee and her wealth of knowledge in wide areas of business will add diversity and value to our discussions.

Safety

In line with the Company's key values, safety remains a top priority for the Company and the Committee. We have seen improvement in the Injury Frequency Rate in the UK, which remains world class; however, we must never become complacent and improvements still need to be made. The Committee was deeply saddened when in July 2019 a National Grid employee in the US was involved in a fatal traffic accident while working on behalf of the Company. The Committee has been kept up to date on the investigations surrounding this tragic incident and has strongly endorsed the Company's commitment to ensuring that key lessons learned have been communicated to all our workforce. As a result, the Company rolled out a Group-wide safety intervention to remind our workforce of the Company's Safety Ambition. The feedback from the intervention has been positive and has encouraged our workforce to continue the important conversation around safety by discussing within teams recent safety incidents and ways to prevent future occurrences. The Committee will continue to monitor the implementation of these lessons learned.

Further to my update last year about the employee safety culture survey, this year the Committee received an update on the results of the survey including the new plans built from the actions identified, which will help the Company to continue on its journey from a calculative safety culture to a more proactive safety culture.

Gas safety and reliability

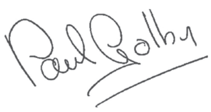
A significant amount of the Committee's time this year has been spent on gas safety and reliability in the US. The post-work stoppage initiatives following the Massachusetts labour dispute were reviewed, including monitoring the closure of open work actions and the implementation of new processes to ensure regulatory compliance. Regular updates were provided which identified areas of focus and improvement and the Committee discussed and considered risks around these. The Committee also reviewed and challenged the proposed plan to improve the safety of US LNG plants. The Committee will continue to monitor progress of the gas safety and reliability initiatives over the coming year.

National Grid's net zero commitment

Sustainability is a key focus and the Committee has been pleased to see the increasing prominence of this issue internally and externally. The Company recognises it has a critical role to play in the decarbonisation of the energy system and the importance of setting a net zero ambition for the Company's own emissions, which aligns with its strategy of a cleaner future. In November 2019, the Committee endorsed the Company's new target to reduce its own direct greenhouse gas emissions to net zero by 2050. The Committee reviewed the Company's high-level plan to achieve this and in January 2020 approved ambitious interim targets to reduce its direct emissions by 80% by 2030 and 90% by 2040. The Committee will continue to closely monitor and challenge the Company's progress against the action plan and the implementation of the Company's wider strategy around sustainability to achieve long-term carbon reduction targets.

Employee health and wellbeing

In January 2020, the Committee received an update in relation to the Company's progress on its health and wellbeing strategy. It was noted that a transition had been made by the Company in its strategy from a disease-based campaign towards a more holistic approach, with a wider range of health and wellbeing factors facing the workforce being considered. As part of the strategy, the Committee has continued to track the impact of musculoskeletal injuries (MSK) and its effect on employees. The Committee was pleased to see that as a result of physiotherapy services being available to UK employees as well as holding 20 MSK workshops across 11 locations, the sickness absence risk, in relation to MSK, had dropped from the third to fifth highest days lost over the past calendar year. Progress continues to be made in relation to mental health awareness and prevention activities. With the ongoing COVID-19 pandemic the Committee will monitor the implementation of wellbeing policies and the impact on our workforce; this will be kept under review over the coming year to ensure that appropriate health and wellbeing campaigns and procedures are implemented.



Paul Golby
Committee Chair

Nominations Committee

Sir Peter Gershon
Chairman and Committee Chair

Key areas of focus in 2019/20:
- Board and Committee composition;
- Chairman succession; and
- Senior leadership succession.

Key areas of focus in 2020/21:
- Chairman succession and onboarding;
- Review of senior leadership succession policy; and
- Board and Committee composition.

Review of the year

The Committee met seven times during the year to undertake its responsibilities in reviewing the leadership needs of the Company, based on the structure, size and composition of the Board and its Committees. In addition, the Committee reviews and oversees succession planning for Directors and senior management and makes recommendations, as appropriate, to the Board.

Succession planning and Board composition

A key focus for the Committee this year has been succession planning. The Committee is responsible for ensuring that the Company is headed by a high-quality Board and senior management team and recognises that the process of building a strong and effective Board and senior management team requires a good balance of continuity and refreshment. During the year, Board members assessed the skills and areas of expertise that they brought to the boardroom to ensure effectiveness in providing good corporate governance and strategic oversight. This assessment will further aid in identifying gaps and areas of strengthening needed when appointing members in the future. The Committee has also borne the Code in mind in its deliberations throughout the year to ensure that we have in place a strong Board and senior management team with the breadth of skills, experience and perspectives necessary to reflect the changing demands of the business and Company strategy. The Committee will continue to monitor the skills and capabilities, and length of tenure of Board members to ensure that broad and relevant expertise is evident and will recommend further appointments if necessary. Further information on our individual Directors' skills and capabilities can be found on pages 66 and 67.

Senior leadership

Following Dean Seavers stepping down from his role as Executive Director in November 2019, Badar Khan (previously Group Director, Corporate Development and National Grid Ventures) stepped in as Interim President of the US business. Jon Butterworth (previously COO of National Grid Ventures) stepped in as Interim Managing Director of National Grid Ventures. Following success in their interim positions, the Committee approved the permanent appointment of Badar Khan as President of the US business and Jon Butterworth as permanent Managing Director of National Grid Ventures on 2 April 2020.

Non-executive Director – Jonathan Silver

The appointment of Jonathan Silver began in 2018 with the appointment of Korn Ferry, a search consultancy firm that does not have any other connection with the Company or individual directors. The Committee reviewed and agreed the Non-executive Director candidate profile which was formulated taking into account the current skills of the Board members and data analysis received from the 2018 external Board evaluation process. This highlighted the additional need to strengthen the Board's US regulatory, equity and financial experience. Having conducted an initial search, a list of potential candidates were selected for the first interview with the Chairman. It was agreed that a sub-group of the Committee (Nora Mead Brownell, Therese Esperdy and Mark Williamson), and John Pettigrew would interview the final candidates from the short list recommended by the Chairman. The Committee agreed the preferred candidate and made a recommendation to the Board in April 2019. On 16 May 2019, following a thorough and rigorous process, the Board welcomed Jonathan Silver as a Non-executive Director to the Board and as a member of the Finance, Remuneration and Nominations Committees.

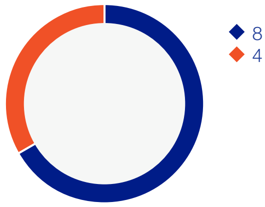
Non-executive Director – Liz Hewitt

In April 2019, the Committee discussed recruiting a further Non-executive Director with capabilities to succeed Mark Williamson as Audit Committee Chair once he retired. The Inzito Partnership, who do not have any other connection with the Company or individual directors, was appointed to support the recruitment of this role. The Committee agreed the Non-executive Director candidate profile and a short list of potential candidates was then drawn up. First-stage interviews were conducted by the Chairman and final interviews were conducted by a sub-group of the Committee (Therese Esperdy, Paul Golby and Mark Williamson), John Pettigrew and Andy Agg. In November 2019, the Committee agreed that Liz Hewitt was the preferred candidate and made a recommendation to the Board. Liz has a strong background in dealing with complex and challenging audit issues. The Board welcomed Liz Hewitt as a Non-executive Director and member of the Audit, Safety, Environment and Health, and Nominations Committees on 1 January 2020.

When considering the recruitment of new Directors, the Committee adopts a formal and transparent procedure which takes into account the skills, knowledge and level of experience required as well as diversity. For both appointments the candidate pool was as diverse as possible ensuring the Committee had options to balance the diversity on the Board. The effectiveness of the Board is also reviewed through the annual Board evaluation; see page 74 for further information.

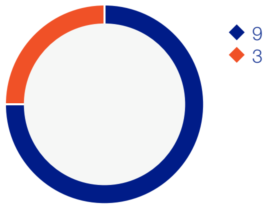
Our Board diversity

Board gender



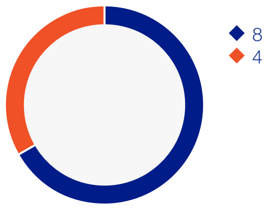
◆ Men
◆ Women

Executive and Non-executive Directors



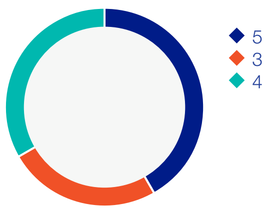
◆ Executive
◆ Non-executive (inc. Chairman)

Board members by nationality



◆ British
◆ American

Tenure



◆ < 3 years
◆ 3-6 years
◆ > 6 years

Charts as at 17 June 2020

Board diversity objectives

Objectives	Progress
The Board aspires to meet the target of 33% of Board and Executive Committee positions, and direct reports to the Executive Committee, to be held by women in 2020.	**Objective met:** there are currently 33.3% women on the Board, 33.3% women on the Executive Committee and 33.8% women direct reports to the Executive Committee. We continually aspire to exceed this target and we take gender diversity into consideration in all our Executive and Non-executive Directors searches. All appointments are however made on merit.
The Board aspires to meet the Parker Review target for FTSE 100 boards to have at least one director from a non-white ethnic minority by 2021.	**Objective met:** we currently have one Director from a non-white ethnic minority on the Board. Additionally, our mandatory requirement for a diverse candidate pool should facilitate the opportunity to recruit further from non-white ethnic minorities.

Director tenure

The Committee believes that Non-executive Directors should generally stay in role no longer than nine years, in line with the Code; however, the Committee may determine that on occasion it is in the Company's best interest for a Director with particular skills, knowledge and experience to stay beyond the nine-year term. It is proposed that Paul Golby stay for a limited extension beyond 1 February 2021 in order for the Board to maintain the knowledge and experience required to conclude the RIIO-2 process.

Talent pipeline – Senior leadership succession

The Board and Nominations Committee support and encourage initiatives that strengthen the talent pipeline within the Company. Over the last 12 months we have seen several changes within the Executive and senior leadership team as we refresh the skills and capabilities needed to achieve our long-term strategy. The Committee has considered whether the talent pipeline and the collective strength of the current leadership and senior management bench in the business is strong enough in its key positions, specifically in relation to handling crises and ensuring the business is fit for the future. It is an area of focus for the Committee to ensure that the required pace of change facilitates strong and effective succession across the Board and the wider business.

The Executive Committee continues to meet regularly to discuss the succession pipeline and health of the talent pool further down the organisation; as a result, a number of individuals have been identified as potential successors to key positions. Our senior leaders below the Board were invited to participate in the 'Energise Our Business' programme this year which combines flexible online development and peer learning with more traditional development activity. The Committee has developed a strong understanding of executive talent requirements and the capabilities we need for the future to fit with our purpose, vision and values. This has been evidenced by the appointment of Badar Khan as President of the US Business and Jon Butterworth as Managing Director of National Grid Ventures. The Committee regularly reviews the development plans of the high potential senior leaders below the Board. The Board has also met with high-potential employees both in the UK and the US on several occasions during the year.

Terms of reference

Following the introduction of the Code, the Committee terms of reference have been revised to align with the new requirements. These reflect the broadening of the Committee's responsibility for overseeing the development of a diverse pipeline of high-performing potential successors to senior management and keeping under review the leadership and succession needs of the Company.

Diversity and Board diversity policy

National Grid supports the creation of an inclusive and diverse culture which we believe supports the attraction and retention of talented people, improves effectiveness, delivers superior performance and enhances the success of the Company.

Our Board diversity policy (Policy) reflects our continued commitment to promote an inclusive and diverse culture and we value diversity of thought, skills, experience, knowledge and expertise including of educational and professional backgrounds, alongside diversity criteria such as gender, ethnicity and age.

The Policy applies to the Board, Executive Committee and direct reports to the Executive Committee.

As set out in the Policy:

- all Board appointments and succession plans are made on merit and objective criteria, in the context of the skills and experience that are needed for the Board to be effective and to guard against 'group think';
- we will only engage executive search firms who have signed up to the UK Voluntary Code of Conduct on Gender Diversity; and
- we will continue to make key diversity data, both about the Board and our wider employee population, available in the Annual Report and Accounts.

Chairman's succession

Mark Williamson
Senior Independent Director

Throughout the year I have chaired the Nominations Committee, without Sir Peter Gershon present, to discuss the Chairman's performance, tenure and succession. In last year's report I reported that Sir Peter's tenure may be extended beyond the recommended nine-year term in order to conclude the RIIO-2 process. This was agreed following discussion with 18 of our largest shareholders, who unanimously supported the extension. In January 2020, Sir Peter Gershon formally announced his intention to step down as Chairman and retire from the Board following the appointment of a suitable successor. To manage a smooth transition, we intend to appoint a Chairman designate to the Board. A search process for the next Chairman is currently underway, supported by Russell Reynolds, and the Committee considered a long-list of potential candidates at the January 2020 meeting. Over the next few months, the Committee will agree a shortlist of preferred candidates and a full explanation of the search and appointment process will be reported in next year's report.

We will continue to review our progress against the Policy and report on our objectives (set out above) annually in the Annual Report and Accounts. The Committee will be reviewing this Policy throughout the year to ensure it remains up to date and relevant.

Examples of the initiatives to promote and support inclusion and diversity throughout our Company are set out on page 53.

Sir Peter Gershon
Chairman and Committee Chair

Statement of application of and compliance with the UK Corporate Governance Code 2018

The statement below, together with the rest of the Corporate Governance report, explains the main aspects of the Company's governance structure to give a greater understanding of how the Company has applied the principles in the UK Corporate Governance Code 2018 (the Code). For the year ended 31 March 2020, the Board considers that it has complied in full with the provisions of the Code, available at www.frc.org.uk. The Corporate Governance report also explains compliance with the Disclosure Guidance and Transparency Sourcebook. The index on page 87 sets out where to find each of the disclosures required in the Directors' Report in respect of Listing Rule 9.8.4 R.

1. Board Leadership and Company Purpose

Our Board is collectively responsible for the effective oversight and long-term success of the Company and champions our purpose, vision, values and desired culture, ensuring consistency with our workforce policies and practices. It also determines the strategic direction, business plan, objectives, principal risks and viability of the Company and sets the governance structure that will help achieve the long-term success of the Company and deliver sustainable shareholder and stakeholder value.

The Board sets the risk appetite and principal risks for the Company and takes the lead in areas such as safeguarding the reputation of the Company and its financial policy, as well as making sure we maintain a sound and prudent system of internal control and risk management. Since the onset of the COVID-19 pandemic, we have received updates on the impact on our UK networks that are managing the rapid and unprecedented decrease in energy demand across all UK networks and in May 2020 it was agreed to add COVID-19 as a principal risk. The Board also agreed to add a new climate change principal risk in March 2020.

There is a clear schedule of matters reserved for the Board and schedule of delegation, which were both reviewed and updated in January 2020. The schedule of matters reserved for the Board is available on our website, together with other governance documentation.

The Board actively engages with shareholders and stakeholders, including employees, on a regular basis. Further information on how the Board has effectively discharged this responsibility can be found on pages 44 – 47.

2. Division of Responsibilities

The Chairman, who was independent on appointment, is responsible for the leadership and management of the Board and its governance. He makes sure the Board is effective in its role by promoting a culture of openness and debate, facilitating the effective contribution of all Directors and helping to maintain constructive relations between Executive and Non-executive Directors. The Chairman sets the Board's agenda making sure consideration is given to the main challenges and opportunities facing the Company, and adequate time is available to discuss all agenda items, including strategic issues. This particular area was reviewed as part of the internal Board evaluation. For further information on the Chairman's independence and tenure, please see page 85.

The annual evaluation of our Board considers the composition, including the combination of Executive and independent Non-executive Directors, to ensure there is no dominant decision-making. The Board supports the separation of the roles of the Chairman and Chief Executive. The key responsibilities are clearly documented and reviewed when appropriate. See our website for more details.

Non-executive Directors are advised of the time commitment and travel expected from them on appointment. External commitments, which may impact existing time commitments, must be agreed with the Chairman prior to appointment and during their time on the Board. As part of the Chairman's succession, potential candidates are notified of the expected time commitment at the beginning of the process. Details of external appointments are set out in the biographies on pages 66 and 67 and on our website. Independent of management, our Non-executive Directors bring diverse skills and experience vital to providing strategic guidance, constructive challenge and debate. See our website for the matters reserved for the Board schedule.

The Group General Counsel and Company Secretary makes sure that the Board has access to the necessary policies, processes and resources required to operate effectively and efficiently. She is also responsible for ensuring that timely information is provided and advises and supports the Chairman and the Board on all governance matters.

3. Composition, Succession and Evaluation

Composition

The Board believes it operates effectively with an appropriate balance of independent Non-executive and Executive Directors who have the right balance of skills, experience, independence and knowledge of the Company. Details of our Board, their biographies and Committee membership are set out on pages 66 and 67 and fuller biographies are available on our website. Board and Committee attendance during the year to 31 March 2020 is set out on page 69. The size and composition of the Board and its Committees is kept under review by the Nominations Committee to ensure the appropriate balance of skills, experience, independence and knowledge. The Committee also monitors the expertise of the Board and will recommend further appointments if desirable. The appointment of Liz Hewitt in January 2020 ensures the Board has a Non-executive Director with the required capabilities and expertise to succeed as Audit Committee Chair. The independence of the Non-executive Directors is considered at least annually along with their character, judgement, commitment and performance on the Board and Board Committees. The Board took into consideration the Code and indicators of potential non-independence, including length of service. Following due consideration, the Board determined that all Non-executive Directors were independent in character and judgement.

Succession

The Nominations Committee, which comprises the Chairman and Non-executive Directors, leads the process for Board appointments and makes recommendations to the Board. The Nominations Committee also has responsibility for ensuring that plans are in place for orderly succession to both the Board and senior management positions as well as overseeing the development of the talent pipeline to ensure that the future leadership needs of the Company are considered and these fit the culture and forward-looking strategy of the Company.

Each Director is subject to election at the first AGM following their appointment, and re-election at each subsequent AGM. Following recommendations from the Nominations Committee, the Board considers whether all Directors continue to be effective, committed to their roles and have sufficient time available to perform their duties. In April 2020 the Nominations Committee confirmed to the Board that all Directors continued to perform their duties in accordance with the principles above. Succession planning is ongoing for those members of the Board who are approaching the nine-year tenure recommendation.

Evaluation

The 2019/20 performance evaluations of the Board, Board Committees and individual Directors were carried out internally with consideration given to composition, diversity, how effectively members work together to achieve objectives and effectiveness of decision-making. You can read more about this on page 74.

Chairman's Performance

As part of our annual evaluation process, Mark Williamson, as Senior Independent Director, led a review of the Chairman's performance. At a private meeting, the Non-executive Directors, with input from the Executive Directors, assessed his ability to fulfil his role as Chairman and considered the arrangements he has in place to fulfil his role. They concluded that the Chairman showed effective leadership of the Board and his actions continued to influence the Board and wider organisation positively. They also confirmed it would be in the Company's best interest for Sir Peter Gershon to continue in his role as Chairman during the conclusion of the RIIO-2 regulatory process.

At the end of the year, the Chairman held performance meetings with each Board member to discuss their contribution and performance over the prior year, including how effectively they worked together to achieve objectives and any training and development needs. Following these meetings, the Chairman confirmed to the Nominations Committee that he considered each Director to have demonstrated a commitment to the role and that their contribution continued to be effective.

4. Audit, Risk and Internal Control

Under the Disclosure and Transparency Rules and the Code, the composition and competence of the Audit Committee was considered by the Nominations Committee at its April meeting. The Board confirmed the recommendations of the Nominations Committee: that all members of the Committee are independent (including the Chair of the Committee), that Mark Williamson, as a chartered accountant, is considered to have competence in accounting, and that the Committee, as a whole, has competence relevant to the sector in which it operates.

The requirement for Directors to state that they consider the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable remains a key consideration in the drafting and review process. The coordination and review of the Annual Report and Accounts is conducted in parallel with the formal audit process undertaken by the external auditors and the review by the Board and its Committees. The Board is satisfied that the current policies and procedures in place ensure the independence and effectiveness of the internal and external audit functions. Further details can be found on page 81.

The drafting and assurance process support the Audit Committee's and Board's assessment of the overall fairness, balance and clarity of the Company's position and prospects as detailed in the Annual Report and Accounts, and the statement of Directors' responsibilities as set out on page 109.

The Board has carried out a robust assessment of the nature and extent of the principal and emerging risks facing the Company in achieving its long-term strategic objectives, including those that would threaten the business model, future performance, solvency or liquidity. Further details can be found on pages 22 – 27.

The Board also sets the Company's risk appetite, internal controls and risk management processes. The Board monitors the Company's risk management, internal control systems and framework and undertakes a review of their effectiveness annually. The activities of the Audit Committee, which assists the Board with its responsibilities relating to risk and assurance, are set out on pages 76 – 81.

5. Remuneration

The Remuneration Committee, comprised entirely of Independent Non-executive Directors, is responsible for recommending to the Board the remuneration policy for Executive Directors, the Chairman and senior management, and the implementation of this policy. The aim is to align the remuneration policy to the long-term Company strategy and key business objectives that will promote long-term sustainable success. Our policy is reviewed against workforce remuneration and performance, and is designed to reflect our shareholders', customers' and regulators' interests.

The Directors' Remuneration Report on pages 88 – 107, sets out the work of the Remuneration Committee, its activities during the year and further details on how our Remuneration Policy is implemented including the remuneration of Non-executive Directors. Executive Remuneration, including alignment to broader workforce pay policies has been discussed at employee voice engagement sessions, along with gender pay reporting. These topics will remain key areas for discussion as we continue our programme of engagement into 2020/21.

For more information regarding our policy on the Executive Directors pension contribution/allowance and the alignment to the workforce, please see page 89 of the Directors' Remuneration Report.

Index to Directors' Report and other disclosures

Directors’ Remuneration Report

Annual statement from the Remuneration Committee Chair

Jonathan Dawson
Committee Chair

Key areas of focus in 2019/20:
- Items relating to the appointment of new Executive Committee members and leaving arrangements for former Executive Director, US; and
- Reviewed impact of evolving corporate governance standards, including pension arrangement for UK-based new hires.

Key areas of focus in 2020/21:
- COVID-19 related remuneration decisions;
- RIIO-2 impact on future LTPP awards; and
- Directors’ Remuneration Policy review and shareholder consultation.

Introduction

Last year, our shareholders approved the new Directors’ Remuneration Policy for the period from 2019, with 97.03% votes in favour. At the same time, the Directors’ Remuneration Report received 96.53% votes in favour. The Remuneration Committee and the whole Board are grateful to shareholders for their support for our Policy and our implementation of it. As a company, our aim is to ensure transparency with our shareholders and all stakeholders in what we do, particularly with regard to governance and remuneration. The Committee fully recognises the central importance of these areas for National Grid’s reputation, and the strong interest of shareholders in our standards and performance. Last year’s vote followed extensive consultation with our major institutional shareholders in light of which we put forward proposals that were approved at the AGM. This year we are not seeking approval of a new Policy, although through the annual advisory vote we are seeking your support for our implementation of the Policy during 2019/20. We are planning to seek your approval of a new Policy next year in light of decisions to be made by Ofgem during the year regarding the next regulatory period (RIIO-2) commencing April 2021. As we have done previously, we will consult with major institutional shareholders before putting forward our proposals.

Review of decisions made during the year

Annual Performance Plan (APP)

National Grid again delivered good financial performance for the year, with Group underlying Profit before Tax of £2,493 million, Underlying Earnings per Share of 58.2 pence and Group Return on Equity of 11.70%; and the Directors have recommended an increase in the final dividend in line with our stated policy. Against this background, the Group financial metrics for the APP (impacting the CEO and CFO) represented 79.4%, a little over half way between target and stretch performance. The financial outcome for the Executive Director, UK was 58.3%, just ahead of target performance, reflecting lower UK-specific financials versus Group particularly on RoE. The financial performance metrics for the APP are based on financial results, with technical adjustments made in line with past practice in respect of currency adjustments, unbudgeted pension costs, scrip dividend dilution and storm damage repair costs.

The final APP outcomes (which incorporate assessments against individual objectives and financial performance) have, however, had one adjustment affecting all staff eligible for APP awards. With the bulk of colleagues working remotely due to COVID-19 restrictions, and heavily focused on maintaining continuity of service and supply to our customers, it would have been difficult for in-depth annual personal performance reviews to be undertaken in the normal way. The Committee therefore agreed with senior management that, across the Group, the individual component under the APP would be capped at the lower of actual and target, which is equal to 50% of maximum. The Committee has also applied this principle to the Executive Directors and other senior executives; the unadjusted individual scores for the Executive Directors are shown on pages 98 and 99, from which it can be seen that the outturn for the individual objectives of all current Executive Directors has been reduced in light of this approach.

Coupled with the financial measures for the APP, the overall outcome for the CEO and CFO is 88.3% of salary, and for the Executive Director, UK 69.8% of salary, in each case out of a maximum potential of 125% of salary. In its assessment of the overall performance of John Pettigrew and the level of APP outcome for him for the year, the Committee gave careful consideration to the issues arising from the decision to impose a moratorium on new gas supply connections in National Grid’s service territory in downstate New York (KEDNY/KEDLI). Although this was an operational decision taken by the Group’s US leadership in response to a potential shortfall in gas supplies coming into the region, the Committee and John agreed that, as CEO, he was ultimately accountable for the adverse financial and reputational consequences suffered by the Company. The Committee also recognised the subsequent outstanding leadership that John had given in reaching a settlement with the New York authorities and in actions taken to address the situation. Accordingly, the Committee and John agreed that it would be appropriate for John to donate 20% of his APP award (net of tax) when it is paid in July to a charity involved in the emergency COVID-19 response in our US service territories.

In reaching its overall decisions on the APP, the Committee took account of Environmental, Social and Governance (ESG) considerations, including those related to COVID-19, noting in particular that no employees have been furloughed, no compulsory redundancies or pay reductions have been made, and trade union agreements have been honoured.

Annual statement from the Remuneration Committee Chair continued

Long Term Performance Plan (LTPP)

The performance period for the 2017 LTPP ended on 31 March 2020, with a vesting outcome of 84.9% of the maximum potential (350% for the CEO and 300% for other Executive Directors). This outturn was based on our performance measures of Group Return on Equity and Group Value Growth, with adjustments in respect of inclusion of the value created from the sale of the residual interest in the UK Gas Distribution business and revised timing of UK tax payments. More details on the performance measures are set out on page 100. The Committee reviewed whether there were any factors which might cause it to reduce the vesting levels, including compliance with the dividend policy, but concluded after careful consideration that the vesting levels fairly reflected performance over the performance period, and that the additional two-year holding period and significant shareholding requirements appropriately align interests with shareholders, particularly through COVID-19 uncertainty.

Annual salary review

Against the background of the pandemic and its impact on wider society and the economies of the territories where National Grid operates, the Committee agreed that, whilst most managers and all those covered by trade union agreements would receive increases, it would exercise restraint and not award annual salary increases to the Group Executive Committee members at this time. The Committee however felt that an exception should be made in respect of Andy Agg, the CFO. Andy was appointed to his role in January 2019 and, as we have done for other appointments, his starting salary was set significantly below the assessed market rate for the job with the publicly stated intention to increase his salary, subject to his performance and progression in the role, toward the assessed market rate. In line with this plan Andy would have received a salary increase of 9% from 1 June 2020. However, in the context of the other senior executives not receiving a salary increase this year, the Committee decided to restrict Andy's increase to 6.5%. In approving this increase, the Committee considered that Andy had made a very good contribution to the Group in his first full year as CFO, with a particular focus on strengthening his senior financial team as well as focusing on the financial preparations for RIIO-2. The Committee will again review Andy's salary next year and may, as previously, award him an increase in excess of other senior executives, subject to continuing good performance, to bring his salary in line with the market rate.

The Remuneration Committee will continue to consider the current and potential impact of COVID-19 on the Company and its stakeholders in determining if and when any salary increases are awarded. Consistent with this decision, there will be no increases in fees for the Board Chairman or other Non-executive Directors at this time.

I would also like to note and thank John Pettigrew and Andy Agg for their generous donations of £50,000 and £20,000, respectively, to the Prince's Trust to support the Trust's work with young people giving them a lifeline and increased social mobility despite the challenges created by the COVID-19 pandemic. The £20,000 donation from Andy Agg represents some 50% of the salary increase he will receive for 2020.

Leaving arrangements for Dean Seavers

Dean Seavers, Executive Director, US, stepped down for personal reasons from the Board on 5 November 2019. His employment with National Grid subsequently terminated on 31 December 2019, following a handover period with his successor as President of National Grid's US business. The Committee concluded that 'good leaver' remuneration provisions should apply under our Directors' Remuneration Policy. Details of his leaving arrangements are provided on page 102.

The Board decided that this position will no longer sit on the Main Board. Badar Khan was appointed Interim President of the US Business and then was made permanent in this role from 1 April 2020.

Pension

Under the new Policy approved last year, any new UK-based Executive Directors will receive a pension contribution/allowance of up to 20% of base salary (reduced from 30% previously). To further align with the evolving shareholder expectations and market practice, the Committee decided that, from November 2019 onwards, any new UK-based Executive Directors will receive a pension contribution/allowance of up to 12% of base salary, which is in line with the defined contribution rate available to the majority of the UK-based wider workforce. The Company has also cascaded this change so that it applies to all new UK hires regardless of level. The current average pension contribution across the various pension schemes for the wider UK workforce has decreased from 18% last year to 17% this year due to natural attrition.

I noted last year that our recently appointed CFO's pension allowance was already set at 20% of base salary at the time of his appointment. Also, as reported last year, our previously appointed UK-based Executive Directors agreed to reduce their pension allowance from 30% of base salary to 20% by the end of 2022, without compensation.

We recognise recent governance and remuneration statements from major institutions to the effect that companies are expected to develop a credible plan to align incumbent directors' pension contribution rates with the majority of the wider UK workforce by the end of 2022. The Committee has been thinking carefully about this issue, particularly in the context of the variety of legacy pension plans in operation and the tiered structure of pension contributions throughout the Company which I described last year. This matter is under active review, and we shall incorporate our longer-term pension proposals as part of our consultation for the Directors' Remuneration Policy binding vote in 2021.

What is our remuneration policy seeking to achieve?

Although we have regularly stated our remuneration policy objectives, it is important to set out again what we are seeking to achieve in the way we structure senior executives' remuneration. Our policy aim is to ensure that how we structure remuneration and how we make decisions on annual and long-term reward plans are compatible with and fully support:

- attracting, motivating and retaining senior executives while not over-paying;
- ensuring we pay our senior executives in a way that incentivises stretching financial and operational performance, within the risk appetite set by the Board;
- being fully aligned to the way National Grid earns its returns for shareholders; and
- actively supporting our strategy, ethics, values and contribution to society in the territories where we operate.

In addition, in order to ensure internal alignment and common purpose, we apply the same broad architecture to the remuneration of our senior management team below the Executive Directors.

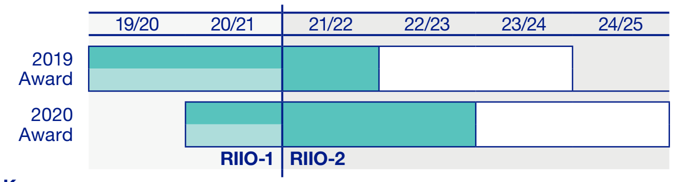
The key components of our approach are:

1. Significant weighting towards long-term value creation and alignment with shareholder interests

Nearly three quarters of John Pettigrew's variable pay opportunity is represented by the LTPP. We continue to put a much higher weight on this element compared with the APP because National Grid is a long-term business with long-life assets. We want to make sure investment decisions are made, and operating efficiencies achieved, against this background. Moreover, for Executive Directors, some 85% of their variable pay opportunity (both annual and long-term) is delivered in National Grid's shares. Consistent with our approach for aligning executive interests to the long term, LTPP awards have a three-year performance period and a further two-year post-vesting holding period. Our LTPP measures for 2020 will continue to be fully aligned with long-term value creation and shareholder interests. Figure 1 below illustrates how performance measures are structured for 2019 and 2020 LTPP awards, taking account of the impact of the transition from RIIO-1 to RIIO-2.

Impact of RIIO-2 on our Long Term Performance Plan

Figure 1: LTPP measures



Key:
◆ Group Value Growth ◇ Group RoE ◇ Holding period

2. We require senior executives to maintain very high shareholdings in National Grid

As CEO, John Pettigrew has to hold at least five times his pre-tax salary in National Grid's shares, which is equivalent to around nine times his post-tax salary. Other UK-based Executive Directors must hold at least four times their pre-tax salary in National Grid's shares (equivalent to around seven times their post-tax salary). This requirement ensures that

Directors' Remuneration Report continued

executives necessarily have a longer-term view in their decision-making, are rewarded for achieving success progressively over the long term, and have interests aligned to our private and institutional shareholders – gaining if the share price increases, and sharing in the consequences of share price falls. Moreover, we believe our senior management, not just Executive Directors, should view the dividends paid on shares they earn as part of their overall remuneration arising from National Grid, rather than focusing on the annual capital value. An important characteristic of our high shareholding requirement is that a newly appointed Executive Director who owns no National Grid shares should expect to take some six to seven years (assuming target payout levels) to have earned the minimum shareholding requirement and will be unable to sell shares (other than to pay income tax arising on vesting) prior to that point. Our post-employment shareholding requirement further enhances the alignment of interests between executives and shareholders. Our current post-employment shareholding policy requires Executive Directors to hold 200% of salary for two years. We have noted recent governance developments and shareholder expectations that the post-employment shareholding requirement should be at the same level as the in-employment shareholding requirement, although balanced against that our in-employment shareholding requirement is at the top end of market practice. We will review this matter as part of our consultation for the Directors' Remuneration Policy vote in 2021.

3. Achievement of short-term (APP) and long-term (LTPP) incentive opportunities is linked to National Grid's performance

A key principle of our remuneration policy, and how it operates, is that reward should be aligned to the financial and operational performance of the Company and to shareholder interests. As set out in the Strategic Report, a number of our financial KPIs directly align to our APP and LTPP rewards. In addition, non-financial KPIs and wider business performance (for example, safety and environmental performance) are also taken into account, and discretion applied if appropriate, when determining an executive's performance against their individual objectives and in confirming the overall final payouts (APP) and/or vesting outcomes (LTPP). Our approach, illustrating how variable pay is linked to performance, is illustrated below in Figure 2.

4. Discretion and independent judgement is applied. Achievement of short-term (APP) and long-term (LTPP) incentive opportunities is linked to National Grid's performance

As I stated last year, as a committee we consider whether to apply discretion when assessing remuneration outcomes for Executive Directors. Before approving any payments under either the APP or LTPP, we reflect with great care first on both the underlying financial and wider business performance of the Company; we then assess the wider performance of the Company in terms of its societal contribution, its relations with regulators, and its overall reputational standing with stakeholders. We also undertake a careful appraisal of the performance of each Executive Director and members of the Executive Committee against their individual objectives set for them at the start of the year and their demonstration of leadership qualities and our values. Whilst the underlying financial performance of the Company is a material factor in our assessments, the Committee has shown and will continue to demonstrate a willingness to apply discretion to adjust final payments in light of all factors considered relevant by the Committee.

In addition to applying discretion to final payment levels, the Committee considers whether there might be any basis for applying malus and/or clawback to awards made and/or payments already received by an individual where subsequent events or factors justify taking such steps.

Figure 2: How our variable pay is determined and linked to performance

	Financial measures	+	Individual objectives	+	Committee discretion	+	Malus/clawback
APP 1-year performance period (up to 125% of salary)	Group/Business Return on Equity Business Value Added Business Underlying Profit Earnings per Share		Objectives are set on an individual basis, dependent on role, remit and requirements. Includes wider business measures as appropriate		Committee considers wider financial and business performance as well as individual demonstration of leadership qualities and values, and will adjust as appropriate		Committee has discretion to apply malus/clawback in exceptional circumstances
LTPP 3-year performance period (up to 350% of salary for CEO, 300% for other Executive Directors)	Group Return on Equity Group Value Growth		n/a				

Fair and Appropriate

When making remuneration decisions for the Executive Directors and other senior leaders, the Remuneration Committee takes account of the remuneration arrangements and outcomes for the wider workforce, statistical information, such as the CEO pay ratio and gender pay gap data, employee views on executive pay as part of our employee voice process, and our Company values. Last year, we voluntarily reported our CEO pay ratio one year early, with a median ratio of 76:1 for UK-based employees. This year, the median ratio for UK-based employees is 86:1. Our Group-wide median ratio was 48:1 last year and 53:1 this year. The increases in both ratios are largely due to the increase in LTPP vesting. The lower Group-wide ratio reflects the higher general level of wages in the US compared with the UK, and especially in the regions of the US where the Company operates. It is also important to recognise that around three quarters of our employees are in the US. In terms of UK gender pay gap, there has been an improvement from the median of 4.4% last year to 2.6% this year.

Changes to the Committee membership

Nora Mead Brownell resigned from the Board on 8 April 2019. Jonathan Silver joined the Board and was appointed to the Committee on 16 May 2019.

Developments for 2020/21

Looking ahead, and as already mentioned, the Committee's work will be dominated by considering the impact of RIIO-2 on our remuneration structure. In addition, we will also be mindful of the evolving practice on executive pension levels (where we have already taken steps to align different employee levels). We will also be considering how best to build into our remuneration arrangements consideration of key non-financial objectives, such as environmental issues and the Company's performance in reducing emissions and enabling the wider societal evolution towards new and renewable energy sources and networks. In our review of policy for 2021, we will consult on all of these matters during the year ahead.

Conclusion

The Committee has carefully reviewed the performance of the senior executive team during the year and the prior three years to assess whether the level of APP and LTPP payments/vesting were aligned with the Company's performance over the period and concluded that the arrangements set out in this Remuneration Report were a fair reflection of their individual and collective performance. Accordingly, on behalf of the Committee, I commend this Directors' Remuneration Report to you and ask for your support at the Annual General Meeting.

Jonathan Dawson

Jonathan Dawson
Remuneration Committee Chair

At a glance – 2019/20

Our 'At a glance' highlights the performance and remuneration outcomes for our Executive Directors for the year ended 31 March 2020. Further detail is provided in the Statement of implementation of remuneration policy in 2019/20.

Annual Report on Remuneration

A comparison of the 2019/20 single total figure of remuneration, with the maximum remuneration if variable pay had vested in full, is set out below for the Executive Directors. Andy Agg, John Pettigrew and Nicola Shaw were each in office for the full year. Dean Seavers was in office for part of the year.

Total remuneration

Executive Director	Maximum if variable pay vested in full £'000	2019/20 total single figure of remuneration £'000	Split by component (%): Fixed	APP	2017 LTPP – face value	2017 LTPP – share appreciation/depreciation and dividend equivalent values
Andy Agg	2,015	1,716	43.0%	30.6%	23.2%	3.2%
John Pettigrew	6,227	5,322	27.0%	16.9%	50.2%	5.9%
Dean Seavers	2,905	2,502	24.4%		69.3%	6.3%
Nicola Shaw	3,074	2,520	29.3%	15.3%	49.6%	5.8%

Key: ◆ Fixed ◆ APP ◆ 2017 LTPP – face value ◆ 2017 LTPP – share appreciation/depreciation and dividend equivalent values

Notes:

1. Dean Seavers stepped down from the Board for personal reasons on 5 November 2019 and left the Company on 31 December 2019. In the above table, the maximum if variable pay vested in full relates to the period 1 April to 31 December 2019 and includes base salary, benefits in kind, pension, 2019/20 APP and 2017 LTPP vesting.
2. For each UK-based Executive Director the share price has increased between grant date of the LTPP awards in 2017 and the estimated share price value at vesting, being the three months' average preceding 31 March 2020. Comparing the share price at grant of 973.80p for Andy Agg, John Pettigrew and Nicola Shaw versus the estimated average share price for the period 1 January 2020 to 31 March 2020 (978.75p), there is an increase of 4.95p (0.5%) per share. Andy Agg received a second 2017 LTPP tranche and comparing the share price at grant of 941.50 versus the estimated average share price for the period 1 January 2020 to 31 March 2020 (978.75p), there is an increase of 37.25p (4.0%) per share. This results in an estimated increase in value (net of dividend equivalents) of £10,554 in total for Andy Agg, £15,107 for John Pettigrew, and £7,063 for Nicola Shaw. For the former US-based Executive Director, Dean Seavers, the ADS price has decreased between grant date and the estimated average ADS price for the period 1 January 2020 to 31 March 2020 ($62.48). Comparing the ADS price at grant of $63.94 versus the estimated ADS price of $62.48 there is a reduction of $1.46 (2.0%) per ADS. This results in an estimated reduction in value (net of dividend equivalents) of $56,810 for Dean Seavers. Overall, the percentage growth in value over the three-year period due to dividend income per share/ADS is at least 11%, and this will increase further subject to a final dividend to be included on the vesting date.

	Key features of remuneration policy (adopted 2019)	Implementation of policy in 2019/20
Salary	• Target broadly mid-market against FTSE 11-40 for UK-based Executive Directors and general industry and energy services companies with similar revenue for US-based Executive Directors.	• Salary increases of 8.0% (comprising the UK budget of 2.9% and a further 5.1%) for each of John Pettigrew and Nicola Shaw (June 2019). These increases were awarded in line with remuneration policy and given their strong individual performance and to align their pay to the appropriate market levels for their roles; • Salary increase of 3.1% for Dean Seavers (June 2019). This increase was in line with the budget for US managerial employees; and • Andy Agg was not eligible for a June 2019 salary increase because he was internally promoted on 1 January 2019.
Annual Performance Plan (APP)	• Maximum opportunity is 125% of salary; • 50% paid in cash, 50% paid in shares which must be retained until the later of two years and meeting the shareholding requirement; and • Subject to both malus and clawback.	• 70% based on financial measures and 30% based on individual objectives; • Financial measures for CEO and CFO comprise 35% underlying EPS and 35% Group RoE; • Financial measures for Executive Director, US, and Executive Director, UK, comprise 23.3% US/UK Value Added respectively, 23.3% US/UK RoE respectively and 23.3% US/UK Underlying Operating Profit respectively; and • Individual objectives cover driving efficiency, delivering value for investors, stakeholder engagement including regulatory and government, our workforce/talent and culture agenda, corporate social responsibility and customer. • 2019/20 APP payouts as a percentage of maximum opportunity: 71% for each of Andy Agg and John Pettigrew, 0% for Dean Seavers and 56% for Nicola Shaw.
Long Term Performance Plan (LTPP)	• Maximum award level is 350% of salary for CEO and 300% for other Executive Directors; • Vesting is subject to long-term performance conditions over a three-year performance period; • Shares must be retained until the later of two years from vesting and meeting the shareholding requirement; and • Subject to both malus and clawback.	• 2019 LTPP award: 33.33% Group RoE and 66.67% Group Value Growth; and • Overall the 2017 LTPP vested at 84.9% of the maximum and is based on the performance of two equally weighted measures of Group RoE and Group Value Growth achieving 69.8% and 100.0% respectively.
Pension and other benefits	• Eligible to participate in a defined contribution plan (or defined benefit if already a member); • Pensionable pay is salary only in UK and salary and APP in US in alignment with market; and • Other benefits as appropriate.	• UK cash allowance for John Pettigrew and Nicola Shaw, 30% of pensionable pay (reducing to 26.7% at 1 April 2020, 23.4% at 1 April 2021 and 20% at 1 April 2022) and for Andy Agg, 20% of pensionable pay; • US-defined contribution for Dean Seavers, 9% of pensionable pay with additional match of up to 4%; and • Other benefits include private medical insurance, life assurance, and for UK-based Executive Directors either a fully expensed car or a cash alternative, and a car and driver when required. • The Committee agreed in November 2019 that newly appointed UK-based Executive Directors will receive pension contributions of up to 12% of base salary for the DC plan (or cash supplement in lieu); this is in line with the level for new joiners across the rest of the UK-based workforce.
Shareholding requirement	• 500% of salary for CEO; • 400% of salary for other Executive Directors; and • Post-employment shareholding requirement, 200% of salary for two years.	• Shareholdings for Andy Agg, John Pettigrew and Nicola Shaw are 195%, 609% and 175% respectively and for Dean Seavers (at 5 November 2019) 423%; and • John Pettigrew has met his shareholding requirement. Andy Agg and Nicola Shaw have not yet met their shareholding requirements due to relatively shorter tenure in role and in company, respectively. • Andrew Bonfield and Dean Seavers have each met their post-employment shareholding requirement as at 31 March 2020.

Directors' Remuneration Report continued

Directors' remuneration policy – approved by shareholders in 2019

Key aspects of the current Director's remuneration policy, along with elements particularly applicable to the 2019/20 financial year, are shown on pages 92 – 95 for ease of reference only. The current policy was approved for three years from the date of the 2019 AGM, held on 29 July 2019. A shareholder vote on the remuneration policy is not required in 2020. A copy of the full remuneration policy is available within the 2018/19 Annual Report and Accounts on the Company's investor website (investors.nationalgrid.com).

From time to time, the Committee may consider it appropriate to apply some judgement and discretion in respect of the approved policy. This is highlighted where relevant in the policy, and the use of discretion will always be in the spirit of the approved policy.

Our peer group

The Committee reviews its remuneration policy against appropriate peer groups annually to make sure we remain competitive in the relevant markets. The primary focus for reward market comparisons is the FTSE 11-40 for UK-based Executive Directors and general industry and energy services companies with similar levels of revenue for US-based Executive Directors. These peer groups are considered appropriate for a large, complex, international and predominantly regulated business.

The Committee reviews annually the overall appropriateness and relevance of the remuneration policy and whether any changes should be put to shareholders. Decisions on the levels of measures and targets for performance related pay (APP and LTPP) and payouts are made taking account of overall financial and business performance. A member of the Audit Committee is required to be a member of the Committee and this ensures the Committee receives knowledgeable input on setting financial measures and assessing outturns including any adjustments and judgements considered by the Audit Committee. The Committee also works closely with the Nominations Committee in respect of pay and conditions of newly appointed executives to ensure their remuneration is within policy. The Committee will interface with the Share Schemes Sub-Committee as required. Consistent with the UK Corporate Governance Code, members of the Remuneration Committee are independent Non-executive Directors who do not receive any variable remuneration and do not participate in decisions about their own remuneration.

Approved policy tables – Executive Directors

Salary

Purpose and link to business strategy: to attract, motivate and retain high-calibre individuals, while not overpaying.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Salaries are generally reviewed annually and are targeted broadly at mid-market of our peer group. However a number of other factors are also taken into account: • business performance and individual contribution; • the individual's skills and experience; • scope of the role, including any changes in responsibility; and • market data, including base pay and total remuneration opportunity in the relevant comparator group.	No prescribed maximum annual increase, although increases are generally aligned to salary increases received by other Company employees and to market movement. Increases in excess of this may be made at the Committee's discretion in circumstances such as a significant change in responsibility, progression if more recently appointed in the role and broad alignment to mid-market.	Not applicable.

Benefits

Purpose and link to business strategy: to provide competitive and cost-effective benefits to attract and retain high-calibre individuals.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Benefits provided include: • company car or a cash alternative (UK only); • use of a car and driver when required; • private medical insurance; • life assurance; • personal accident insurance (UK only); • opportunity to purchase additional benefits (including personal accident insurance for US) under flexible benefit schemes available to all employees; and • opportunity to participate in HMRC (UK) or Internal Revenue Service (US) tax-advantaged all-employee share plans, currently: Sharesave: UK employees may make monthly contributions from net salary for a period of three or five years. The savings can be used to purchase shares at a discounted price, set at the launch of each plan period. Share Incentive Plan (SIP): UK employees may use their gross salary to purchase shares. These shares are placed in trust. Employee Stock Purchase Plan (ESPP) (423(b) plan): eligible US employees may purchase ADSs on a monthly basis at a discounted price. Other benefits may be offered at the discretion of the Committee.	The cost of providing benefits will vary from year to year in line with market. Participation in tax-approved all-employee share plans is subject to limits set by the relevant tax authorities from time to time.	Not applicable.

Directors' remuneration policy – approved by shareholders in 2019 continued

Pension

Purpose and link to business strategy: to reward sustained contribution and assist attraction and retention.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Externally hired Executive Directors will participate in a Defined Contribution (DC) arrangement. UK-based Executive Directors may alternatively choose to receive cash in lieu. In cases of internal promotion to the Board, the Company will recognise legacy Defined Benefit (DB) pension arrangements of existing employees in both the UK and US where these have been provided under an existing arrangement. In line with market practice, pensionable pay for UK-based Executive Directors includes basic salary only and for US-based Executive Directors it includes basic salary and APP award.	UK DC: annual contributions for new appointments of up to 20% of basic salary. Existing Executive Directors may receive annual contributions of up to 30% of basic salary. Executive Directors may take a full or partial cash supplement in lieu. Life assurance of four times basic salary and a dependant's pension of one third of basic salary is provided. Executives with HMRC pension protection may be offered lump sum life assurance only, equal to four times basic salary. UK DB: a pension generally payable from age 60 or 63. DB benefits are subject to capped increases in pensionable salary. No enhancement is provided on promotion to the Board. Funded DB benefits are subject to HMRC maximum allowances and limits. On death in service, a lump sum of four times pensionable salary and dependant's pension of two-thirds of the Executive Directors' pension is provided. DB pension plans were closed to new members by April 2006. US DC: annual contributions of up to 9% of basic salary plus APP award with additional 401(k) plan match of up to 4%. US DB: an Executive Supplemental Retirement Plan provides for an unreduced pension benefit at age 62 (this plan is closed to new participants from 1 January 2015). For retirements at age 62 with 35 years of service, the pension benefit would be approximately two thirds of pensionable salary. DB final average pay plan is subject to capped increases in pensionable pay. Upon death in service, the spouse would receive 50% of the pension benefit (100% if the participant died while an active employee after the age of 55).	Not applicable. None of the current Executive Directors are active members of a DB plan.

Pension footnote: The Remuneration Committee agreed in November 2019 (i.e. after the July 2019 AGM Policy vote) that newly appointed Executive Directors will receive annual contributions of up to 12% of basic salary for the DC pension scheme, or cash supplement in lieu.

Annual Performance Plan (APP)

Purpose and link to business strategy: to incentivise and reward the achievement of annual financial measures and strategic non-financial measures including the delivery of annual individual objectives and demonstration of our Company leadership qualities and values.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
The APP comprises reward for achievement against financial measures and achievement against individual objectives. Financial performance measures and targets are normally agreed at the start of each financial year and are aligned with strategic business priorities. Targets are set with reference to the budget. Individual objectives and associated targets are normally agreed also at the start of the year. APP awards are paid in June. 50% of the APP award is paid in shares, which (after any sales to pay-associated income tax) must be retained until the shareholding requirement is met, and in any event for two years after receipt. Awards are subject to malus and clawback provisions as set out in the paragraph overleaf.	The maximum award is 125% of basic salary in respect of a financial year.	At least 50% of the APP is based on performance against financial measures. The Committee may use its discretion to set financial measures that it considers appropriate in each financial year and has the flexibility to modify the amount payable, to reflect wider financial and business performance, demonstration of leadership qualities and our values, or to take account of a significant event. The payout levels at threshold, target and stretch performance levels are 0%, 50% and 100%, respectively.

Directors' Remuneration Report continued

Long Term Performance Plan

Purpose and link to business strategy: to drive long-term business performance, aligning Executive Director incentives to key strategic objectives and shareholder interests over the longer term.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Awards of shares may be granted each year, with vesting subject to long-term performance conditions. The performance measures have been chosen as the Committee believes they reflect the Executive Directors' creation of long-term value within the business. Targets are set for each award with reference to the business plan. Participants may receive ordinary dividend equivalent shares on vested shares, from the time the award was made, at the discretion of the Committee. Participants must retain vested shares (after any sales to pay tax) until the shareholding requirement is met, and in any event for a further two years after vesting. Awards are subject to malus and clawback provisions as set out in the paragraph below.	The maximum award for the CEO is 350% of salary and it is 300% of salary for the other Executive Directors based on salary at the time of the award.	The performance measures are Group Value Growth and Group RoE for all Executive Directors. For awards made in financial year 2019/20: Group Value Growth measured over three years (2019/20, 2020/21 and 2021/22) and Group RoE measured over two years (2019/20 and 2020/21) such that Group Value Growth represents two thirds and Group RoE represents one third of the total vesting outcome. For awards made in financial year 2020/21: Group Value Growth measured over three years (2020/21, 2021/22 and 2022/23) and Group RoE measured over one year (2020/21) such that Group Value Growth represents five sixths and Group RoE represents one sixth of the total vesting outcome. For awards made in 2016 which will vest in 2019, the performance measures and percentage weightings are: Group Value Growth (50%) and Group RoE (50%) for the CEO and CFO; Group Value Growth (50%), Group RoE (25%) and UK or US RoE (25%) for the UK and US Executive Directors respectively. For awards made in 2017 and 2018 which will vest in 2020 and 2021 respectively, the performance measures were Group Value Growth and Group RoE, equally weighted, for all Executive Directors. All awards have a three-year performance period. For each performance measure, threshold performance will trigger only 20% of the award to vest; 100% will vest if maximum performance is attained. Notwithstanding the level of award achieved against the performance conditions, the Committee may use its discretion to modify the amount vesting to reflect wider financial and business performance and take account of a significant event and/or compliance with the dividend policy.

Malus and clawback

The Committee has discretion to determine whether exceptional circumstances exist which justify whether any or all of an award should be forfeited, even if already paid. Examples of exceptional circumstances include, but are not limited to, material misstatement, misconduct of the participant, a significant environmental, health and safety or customer issue or failure of risk management, and if certain other facts emerge after termination of employment. The Committee also has a prescribed process to follow when determining whether and how to apply this discretion.

Approved policy table – Non-executive Directors (NEDs)

Fees for NEDs

Purpose and link to business strategy: to attract NEDs who have a broad range of experience and skills to oversee the implementation of our strategy.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
NED fees (excluding those of the Chairman) are set by the Executive Committee in conjunction with the Chairman. The Chairman's fees are set by the Committee. **Fee structure:** • Chairman fee (all inclusive); • basic fee, which differs for UK- and US-based NEDs; • Committee chair fee; • Committee membership fee; and • Senior Independent Director fee. No additional fees are paid for membership/chair of the Nominations Committee. Fees are reviewed every year taking into account those in companies of similar scale and complexity. The Chairman is covered by the Company's private medical and personal accident insurance plans, and has the use of a car and driver, when required. NEDs do not participate in incentives, pension or any other benefits. However, they are eligible for reimbursement for all Company-related travel expenses. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC. NEDs who also sit on National Grid subsidiary boards may receive additional fees related to service on those boards.	There are no prescribed maximum fee levels although fees are generally aligned to salary increases received by other Company employees and market movement for NEDs of companies of similar scale and complexity. The cost of benefits provided to the Chairman is not subject to a predetermined maximum since the purchase cost will vary from year to year.	Not applicable.

Directors' remuneration policy – approved by shareholders in 2019 continued

Shareholding requirement – in employment

The requirement of Executive Directors to build up and hold a significant value of National Grid shares ensures they share a significant level of risk with shareholders and aims to align their interests. Executive Directors are required to build up and retain shares in the Company. The level of holding required is 500% of salary for the CEO and 400% of salary for the other Executive Directors. Unless the shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Remuneration Committee.

Shareholding requirement – post employment

The requirement of Executive Directors to continue to hold National Grid shares after leaving ensures they continue to share a risk with shareholders and maintain alignment with shareholders' interests. Executive Directors will be required to hold 200% of base salary calculated at their leave date, or maintain their actual holding percentage if lower, expressed as a number of shares and held for a period of two years. This calculation excludes the value of any awards not yet vested for 'good leavers' that will vest according to the normal schedule and which in any event must be held for a two-year period. The calculation will include recently vested LTPP awards or APP awards paid as shares which are subject to respective two-year holding periods, even after employment. Unless the post-employment shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Remuneration Committee.

Consideration of remuneration policy elsewhere in the Company

Our remuneration policy is generally aligned to the policies for our non-unionised workforce. All employees are entitled to base salary, benefits and pension contributions. In setting the remuneration policy the Committee considers the remuneration packages offered to employees across the Company. As a point of principle, salaries, benefits, pensions and other elements of remuneration are assessed regularly to ensure they remain competitive in the markets in which we operate. In undertaking such assessment our aim is to be at mid-market for all job bands, including those subject to union negotiation. As would be expected, we have differences in pay and benefits across the business which reflect specific accountabilities and labour markets. There are elements of remuneration policy which apply to all, for example, flexible benefits and share plans.

When considering annual salary increases, the Committee reviews the proposals for salary increases for the employee population generally, as it does for any other changes to remuneration being considered.

All employees are eligible for an annual performance-based award. Eligibility and the maximum opportunity available is based on market practice for incentives for the employee's job band. In addition, around 400 senior management employees are awarded LTPPs annually, which include the same performance measures as those for Executive Directors.

The Company has a number of all-employee share plans that provide employees with the opportunity to become, and to think like, a shareholder. These plans include Sharesave and the Share Incentive Plan (SIP) in the UK and the 401(k) and 423(b) plans in the US. Further information is provided on page 92.

The Company issues an employee engagement survey each year, which includes remuneration as a topic. It does not specifically invite employees to comment on the Directors' remuneration policy but any comments made by employees are noted. The Board also regularly engages with employees on a variety of topics, including remuneration.

Policy on payment for loss of office

The contracts contain provisions for payment in lieu of notice, at the sole and absolute discretion of the Company. Such contractual payments are limited to payment of salary only for the remainder of the notice period. In the UK such payments would be phased on a monthly basis, over a period not greater than 12 months, and the Executive Director would be expected to mitigate any losses where employment is taken up during the notice period. In the US, for tax compliance purposes, the policy is to make any payment in lieu of notice as soon as reasonably practicable, and in any event within two and a half months of the later of 31 December and 31 March immediately following the notice date.

In the event of a UK Director's role becoming redundant, statutory compensation would apply and the relevant pension plan rules may result in the early payment of an unreduced pension.

On termination of employment, no APP award would generally be payable. However, the Committee has the discretion to deem an individual to be a 'good leaver', in which case a pro-rata discretionary payment could be paid, based on financial performance (as measured at the end of the financial year) and the achievement of individual objectives during the financial year up to termination. In the UK the discretionary payment would generally be paid at the normal time. In the US the payment would be made earlier if required for tax compliance purposes, in which case the Committee would apply discretion to determine an appropriate level of financial performance. Examples of circumstances, whilst not exhaustive, which could trigger 'good leaver' treatment include redundancy, retirement, illness, injury, disability and death. The Committee will apply discretion to determine if the pro-rata discretionary payment should be made sooner than it would normally be paid, for example, in the case of death.

On termination of employment, outstanding awards under the share plans will be treated in accordance with the relevant plan rules approved by shareholders. Unvested share awards would normally lapse. 'Good leaver' provisions apply at the Committee's discretion and in specified circumstances. Examples of circumstances, whilst not exhaustive, which could trigger 'good leaver', include: redundancy, retirement, illness, injury, disability and death, where awards will be released to the departing Executive Director or, in the case of death, to their estate. Long-term share plan awards held by 'good leavers' will normally vest subject to performance measured at the normal vesting date and will be reduced pro-rata for each completed month starting on the date of grant. Such awards would vest at the same time as for other participants, apart from circumstances in which the award recipient has died, in which case the awards vest as soon as practicable (based on a forecast of performance).

At the Committee's discretion, the Company may also agree other payments such as an agreed amount for legal fees associated with the departure of the Executive Director and outplacement support.

Service contracts/letters of appointment

In line with our policy, all Executive Directors have service contracts which are terminable by either party with 12 months' notice. Non-executive Directors are subject to letters of appointment. The Chairman's appointment is subject to six months' notice by either party; for other Non-executive Directors, notice is one month. Both Executive Directors and Non-executive Directors are required to be re-elected at each AGM.

Please refer to the full remuneration policy within the 2018/19 Annual Report and Accounts on the Company's investor website (http://investors.nationalgrid.com) for our remuneration policy on Directors' recruitment, external appointments, total remuneration opportunity and corporate and share capital events.

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2019/20

Key

AUDITED

Audited Information
Content contained within a blue box highlighted with an 'Audited' tab indicates that all the information in the panel is audited.

Role of Remuneration Committee

The Committee is responsible for recommending to the Board the remuneration policy for Executive Directors, the other members of the Executive Committee and the Chairman, and for implementing this policy. The aim is to align the remuneration policy to Company strategy and key business objectives, and ensure it reflects our shareholders', customers' and regulators' interests. The members of the Remuneration Committee in 2019/20 were Nora Mead Brownell (until 8 April 2019), Jonathan Dawson (Chair), Earl Shipp, Jonathan Silver (from 16 May 2019) and Mark Williamson.

The Committee's activities during the year – activities of the Committee during the year can be found at page 106.

AUDITED

Single Total Figure of Remuneration – Executive Directors

The following table shows a single total figure in respect of qualifying service for 2019/20, together with comparative figures for 2018/19:

		Salary £'000	Benefits in kind £'000	Pension	Total fixed pay	APP	LTPP	Total variable pay	Total remuneration
Andy Agg	**19/20**	**595**	**23**	**119**	**737**	**525**	**454**	**979**	**1,716**
	18/19	149	4	30	183	158	20	178	361
John Pettigrew	**19/20**	**1,017**	**116**	**305**	**1,438**	**897**	**2,987**	**3,884**	**5,322**
	18/19	944	94	283	1,321	994	2,336	3,330	4,651
Dean Seavers	**19/20**	**512**	**27**	**74**	**613**	**0**	**1,889**	**1,889**	**2,502**
	18/19	825	30	138	993	457	1,551	2,008	3,001
Nicola Shaw	**19/20**	**555**	**15**	**166**	**736**	**387**	**1,397**	**1,784**	**2,520**
	18/19	515	15	155	685	552	997	1,549	2,234

Notes:
Dean Seavers: 2019/20 fixed pay components in the table above are for the period he served as a Director during the year, from 1 April to 5 November 2019; 2019/20 variable pay components in the table above are for the period during which he was employed, from 1 April to 31 December 2019.
Andy Agg: 2018/19 figures in the table above are for the period he served as a Director during the year, from 1 January to 31 March 2019.
Salary: Base salaries were last increased on 1 June 2019 other than for Andy Agg, who was not eligible to receive a salary increase due to being appointed CFO on 1 January 2019.
Benefits in kind: Benefits in kind (BIK) include private medical insurance, life assurance and, for UK-based Executive Directors, either a fully expensed car or a cash alternative to a car and the use of a car and a driver when required and which, for John Pettigrew, amounted to approximately £86,000 for 2019/20 (and approximately £75,000 for 2018/19). A Sharesave option award was granted to John Pettigrew on 27 December 2019 and the benefit (approximately £8,000) of this award is included. There were no Sharesave options granted to any of the other Executive Directors during 2019/20.
APP: John Pettigrew will donate 20% of his 2019/20 APP (net of tax) to a charity involved in the emergency COVID-19 response in our US service territories. Dean Seavers received a nil payout for the individual portion of the APP. Consistent with Company policy for all colleagues not covered by a trade union agreement, this results in a nil payout overall. Information relating to amounts paid for the loss of office can be found on page 102.
LTPP: The 2017 LTPP is due to vest in July 2020. The average share price over the three months from 1 January 2020 to 31 March 2020 of 978.75p ($62.48 per ADS) has been applied and estimated dividend equivalents are included. The 2018/19 LTPP figures have been restated because last year they were estimated using the average share price (January–March 2019) and they now include the actual share price on vesting at 1 July 2019 and all dividend equivalent shares. Due to a higher share price at vesting of 842.10p versus the estimate of 837.34p (and the additional dividend equivalent shares added for the dividend with a record date of 31 May 2019 with a dividend rate of 31.26p per share), the actual value at vesting was £770, £89,005 and £37,991 higher than for the estimate last year for Andy Agg, John Pettigrew, and Nicola Shaw, respectively. Despite a lower ADS price at vesting of $52.736 versus the estimate of $54.73, the actual value at vesting was £539 higher than for the estimate last year for Dean Seavers. This is because the change in ADS price was offset by the additional dividend equivalent ADSs for the dividend with a record date of 31 May 2019 with a dividend rate of $2.0256 per ADS.
Impact of share price change: The impact of share price appreciation/depreciation, comparing share/ADS prices at grant versus the estimated share/ADS prices upon vesting is set out in the notes to the 2017 LTPP (vesting) table on page 101.
Exchange rate: $1.2868:£1.

AUDITED

Total pension benefits

Andy Agg, John Pettigrew and Nicola Shaw received a cash allowance in lieu of participation in a pension arrangement. Dean Seavers participated in a defined contribution pension arrangement in the US until he left the business at 31 December 2019. There are no additional benefits on early retirement. The values of these benefits, received during this year, are shown in the single total figure of remuneration table.

John Pettigrew has, in addition, accrued defined benefit (DB) entitlements. He opted out of the DB scheme on 31 March 2016 with a deferred pension and lump sum payable at his normal retirement date of 26 October 2031. At 31 March 2020, John Pettigrew's accrued DB pension was £165,031 per annum and his accrued lump sum was £495,092. No additional DB entitlements have been earned over the financial year, other than an increase for price inflation due under the pension scheme rules and legislation. Under the terms of the pension scheme, if he satisfies the ill health requirements, or he is made redundant, a pension may be payable earlier than his normal retirement date. A lump sum death in service benefit is also provided in respect of these DB entitlements.

Statement of implementation of remuneration policy in 2019/20 continued

AUDITED

Annual Performance Plan (APP)

Performance against targets for APP 2019/20

APP awards are earned by reference to the financial year and this year will be paid in July 2020. Financial measures determine 70% of the APP, and individual objectives determine 30% of the APP.

Payment of the APP award is made in shares (50% of the award) and cash (50%). Shares (after any sales to pay income tax) must be retained until the shareholding requirement is met, and in any event for two years after receipt.

For financial measures, threshold, target and stretch performance levels are predetermined by the Committee and pay out at 0%, 50% and 100% of the maximum potential for each part and on a straight-line basis in between threshold and stretch performance.

Target and stretch performance levels for the individual objectives are also predetermined by the Committee, and an assessment of the performance relative to the target and stretch performance levels is made at the end of the performance year on each objective.

The outcomes of APP awards earned for financial performance are summarised in the table immediately below. Performance against individual objectives is set out in the tables which follow.

Performance measure	Proportion of max opportunity	Threshold	Target	Stretch	Actual	Proportion of max achieved
CEO and CFO						
Underlying EPS (p/share) Ⓐ	35%	54.0	57.5	61.0	58.2	60.0%
Group RoE (%) Ⓐ	35%	10.91	11.31	11.71	11.70	98.8%
Executive Director, UK						
UK Value Added (£m)	23.3%	1,655	1,715	1,775	1,734	65.8%
UK RoE (%) Ⓐ (Percentage points above average allowed regulatory return)	23.3%	2.01	2.26	2.51	2.34	66.0%
Underlying UK Operating Profit (£m) Ⓐ	23.3%	1,533	1,583	1,633	1,576	43.0%
Executive Director, US						
US Value Added (£m)	23.3%	1,276	1,327	1,387	1,344	64.2%
US RoE (%) Ⓐ	23.3%	8.96	9.16	9.36	9.25	72.5%
Underlying US Operating Profit (£m) Ⓐ	23.3%	1,725	1,785	1,845	1,645	0.0%
All Executive Directors						
Individual objectives (%)	30%	Detail expanded in tables below				60–65%

Notes:
Underlying EPS: Technical adjustments have been made reducing the target by 2.5p to reflect the net effect of currency adjustments, the impact of deferrable storm costs, certain actuarial assumptions on pensions and scrip dividend uptake.
Group RoE: A technical adjustment has been made reducing the target by 0.33% to reflect the true-up of opening equity.
UK financial measures: Technical adjustments have been made reducing the underlying UK Operating Profit target to reflect the net effect of certain actuarial assumptions on pensions (£5m reduction) and normalisation to reflect the impact of RPI (£11m reduction) and reducing the UK Value Added target by £14m to ensure consistency of accounting treatment.
US financial measures: Technical adjustments have been made reducing the underlying US Operating Profit target by £70m to reflect the net effect of currency adjustments, deferrable storm costs and certain actuarial assumptions on pensions. Technical adjustments have been made reducing the US Value Added target by £33m to reflect the net effect of currency adjustments and the impact of deferred tax movements.
Individual Objectives: For 2019/20 the Committee has applied discretion to cap the payout for overall individual achievement against individual objectives at the lower of target and actual achievement to reflect restraint in the context of COVID-19 and to be consistent with decisions made for the wider managerial population. This discretion is not incorporated above.

Directors' Remuneration Report continued

Individual Objectives

The individual objectives of the Executive Directors when taken together were designed to deliver against each of our 2019/20 business priorities. The Committee adopts a two-stage process to agree individual objectives. First it reviews and provides feedback on the objectives including consideration of the weighting based on business criticality of the objective and then, at a second meeting, it completes a final review and approves the objectives. At the end of the year an overall assessment is made which takes account of the weighting and achievement of the respective individual objectives for each Director and the degree to which each element of the objective was met against specific target and stretch targets. As with the financial measures, the achievement of 'stretch' performance and 'target' performance overall results in 100% and 50% respectively of the maximum payout.

For 2019/20 the Committee has applied discretion to cap the payout for overall achievement against individual objectives at the lower of target and actual achievement to reflect restraint in the context of COVID-19 and to be consistent with decisions made for the wider managerial population. This discretion is not incorporated in the percentage outcomes below.

Andy Agg

Individual objective & performance commentary	Weighting	Outcome
Drive operating efficiency of the business and finance function • Delivered targeted UK cost efficiencies of £50 million and on track to deliver a further £100 million in 2020/21 • Delivered US cost efficiencies, but was short of target • Made good progress on the digital transformation of the Finance function, including the successful implementation of SAP improvements and strong leadership of a Finance transformation programme, with more work to be done to crystallise cost reductions	25%	64%
Support financial aspects of regulatory negotiations • Provided effective support on the Hinkley-Seabank agreements and in continuing RIIO-2 discussions with Ofgem in the UK, enabling financial parameters that are viewed as positive by shareholders • Enabled positive outcome on Massachusetts Electric (MECO) rate case • Maximum not awarded due to regulatory outcomes not fully at stretch levels	25%	80%
Support in updated investor proposition review and Total Societal Impact initiative • Established and gained agreement from the Board for an appropriate investor proposition • Completed sale of minority stake in Cadent in line with agreed timing • More opportunities remain in identifying additional financeable growth opportunities for sustained outperformance	25%	80%
Drive the talent agenda • Made positive progress on development and succession planning deeper in the Finance function • Increased the Colleague Enablement score and workforce diversity in the Finance function, though fell short of targeted aspirations	25%	36%
Summary		
Andy had a good year and has firmly established himself in the CFO role. He provided good leadership on the investment proposition, started to transform the Finance function and strengthened talent capabilities. Outside of his core objectives he has also made strong contributions in articulating National Grid's contributions as a corporate entity in the State Ownership debate, introducing GAAP reporting. More work is needed in driving the talent agenda in the US and progressing additional risk and control measures.	100%	65%

John Pettigrew

Individual objective & performance commentary	Weighting	Outcome
Optimise regulatory/government agreements and relationships • Led a successful response to the near simultaneous tripping of two large power stations in August 2019 leading to power outages in various parts of England and Wales, including re-establishing power within the timeframes required by Ofgem, and engaging with Ofgem in the investigation and learnings reviews which confirmed that the outage was not caused by National Grid infrastructure • Continued dialogue with Ofgem and stakeholders on the proposed parameters for RIIO-2 although there remain differences on certain issues • Achieved a successful outcome for the Hinkley-Seabank project in the UK and the MECO rate case in Massachusetts • Continued positive engagement with key regulatory and government stakeholders, including a new UK government, and administrations in Massachusetts and Rhode Island, though there is more work to be done in New York to rebuild our reputation following the issues arising from the downstate New York Gas moratorium	40%	50%
Develop external National Grid value proposition • Established and gained agreement from the Board for an appropriate investor proposition • Additionally, established and gained agreement from the Board for a new framework for defining National Grid's Total Societal Impact to support our aspirations as we continue to emphasise the importance of being a purpose-led organisation	20%	100%
Continue work to ensure National Grid is well placed for growth and innovation • Continued to build an effective platform for growth through National Grid Ventures, particularly with the purchase of renewables developer Geronimo Energy • Delivered the digital strategy in both the UK and US • Responded appropriately to innovation and disruptive technologies, particularly through National Grid Partners, though there remains more work to be done to achieve our ambitions	20%	75%

Statement of implementation of remuneration policy in 2019/20 continued

John Pettigrew continued

Individual objective & performance commentary continued	Weighting	Outcome
Drive the talent and culture agenda • Increased the colleague engagement score by 6% and articulated clear aspirations on culture, which now need to be embedded in the organisation • Demonstrated enhancements in the capabilities and strength of succession of the National Grid leadership team, including the successful appointments of a President of the US business, and Managing Director, National Grid Ventures; there remains more work to be done on succession planning and further investment in leadership capability • Made strides in inclusion and diversity, though success of I&D initiatives still needs to be evidenced with increased proportion of women and minorities in leadership and managerial positions	20%	50%
Summary		
John Pettigrew's performance in his role as CEO continues to be strong, with particular highlights in the areas of the value proposition for our investors and communities, stakeholder engagement and outcomes in the UK and Massachusetts, and growth and innovation. More work is to be done on completing agreements on downstate NY and in the succession planning and diversity of our workforce.	100%	65%

Nicola Shaw

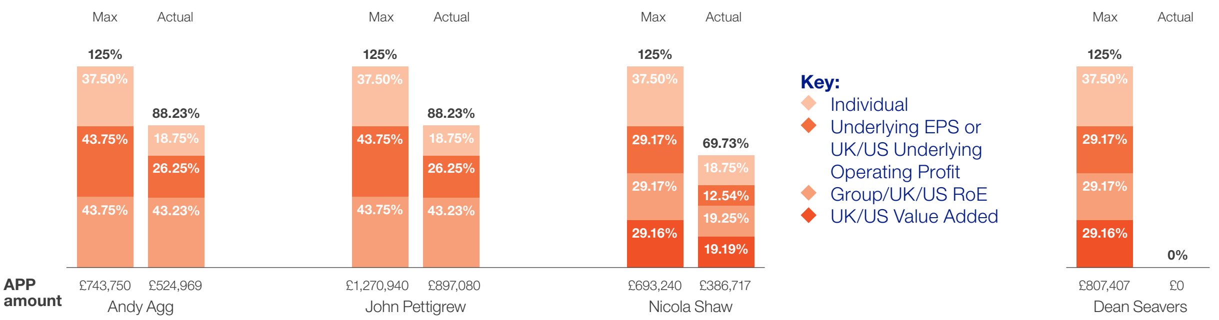
Individual objective & performance commentary	Weighting	Outcome
Deliver a step change improvement in the performance of customer service as measured by Net Promoter Score and Customer Satisfaction (CSAT) • Met Net Promoter Score stretch target • Met Customer Satisfaction score target, and was very close to stretch target • Demonstrated strong focus on customer service during the year, including positive personal engagement with customers	25%	80%
Deliver a step change in Operational Performance • Delivered cost reductions as part of the UK transformation programme whilst successfully managing all key risks • Successfully managed implications of Brexit, with no interruption to business • Made progress on digital transformation, with some further implementation work to be done • More work to be done on risk and control measures	25%	45%
Deliver successful regulatory outcomes • Delivered RIIO-2 business plans with stakeholder support, with some items posed by independent challenge group to be addressed, although there remain differences on certain issues • Positive engagement with UK regulator, including on Hinkley-Seabank activities which led to a positive outcome • Led a successful response to the August 2019 power outage, although external communications response times could have been better	25%	55%
Drive the talent agenda • Made positive progress on succession planning but more work to be done • Increased the Colleague Enablement and Engagement scores in the Core UK business • Improved workforce diversity in the Core UK business	25%	60%
Summary		
Overall Nicola Shaw has had a good year with delivering on cost reduction commitments, strong progress in improving customer service, positive engagement with our stakeholders, particularly with RIIO-2 and Hinkley-Seabank, and excellent Colleague Enablement and Engagement scores. There remains work to be done on risk and control measures and certain issues regarding RIIO-2.	100%	60%

Directors' Remuneration Report continued

2019/20 APP as a proportion of base salary

The overall APP award and its composition based on financial performance and individual performance for each Executive Director is shown as a proportion of salary.

Executive Directors at 31 March 2020 **Former Executive Director, US**



Notes:
1. Underlying EPS and Group RoE pertain to Andy Agg, CFO and John Pettigrew, CEO.
2. Underlying UK Operating Profit, UK RoE and UK Value Added pertain to Nicola Shaw, Executive Director, UK.
3. Underlying US Operating Profit, US RoE and US Value Added pertain to Dean Seavers, Executive Director, US. The APP maximum opportunity and actual award for Dean Seavers are for the period during which he was employed, from 1 April to 31 December 2019.
4. For 2019/20 the Committee has applied discretion to cap the payout for overall achievement against individual objectives for Andy Agg, John Pettigrew and Nicola Shaw, at the lower of target and actual achievement to reflect restraint in the context of COVID-19 and to be consistent with decisions made for the wider managerial population. This discretion is incorporated in the actual payouts above.
5. John Pettigrew will donate 20% of his 2019/20 APP (net of tax) to a charity involved in the emergency COVID-19 response in our US service territories.

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LTPP performance

The LTPP value included in the 2019/20 single total figure relates to anticipated vesting in July 2020 of the conditional LTPP awards granted in 2017.

2017 LTPP

The 2017 award is determined by performance over the three years ended 31 March 2020 of Group RoE (50% weighting) and Group Value Growth (50% weighting), which is expected to vest on 27 July 2020. The financial components and weightings for this year's vesting, i.e., the 2017 LTPP awards, are the same for all Executive Directors. The Group Value Growth outturn includes an amount to reflect the value added from the sale of the residual interest in the UK Gas Distribution business and to adjust for revised timing of UK tax payments in 2019/20.

The Committee has decided not to apply any discretion following consideration of wider financial performance during the 3-year performance period.

Performance measure	Threshold – 20% vesting	Maximum – 100% vesting	Actual/expected vesting	Actual/expected proportion of maximum achieved
Group RoE (50% weighting) Ⓐ	11.0%	12.5% or more	11.9%	69.8%
Group Value Growth (50% weighting)	10.0%	12.0% or more	12.8%	100.0%

Statement of implementation of remuneration policy in 2019/20 continued

AUDITED

2017 LTPP (vesting)

The 2017 LTPP is expected to vest on 27 July 2020. The amounts expected to vest under the 2017 LTPP for the performance period ended on 31 March 2020 and included in the 2019/20 single total figure are shown in the table below. The share price valuation is an estimate based on the average share price over the three months from 1 January 2020 to 31 March 2020 of 978.75p ($62.48 per ADS); the final dividend to be paid in August 2020 is excluded.

	Original number of share awards in 2017 LTPP	Overall vesting percentage (as % of max.)	Number of awards vesting	Number of dividend equivalent shares	Total value of awards vesting and dividend equivalent shares (£'000)
Andy Agg	49,080	84.9%	41,668	4,675	454
John Pettigrew	323,205	84.9%	274,401	30,794	2,987
Dean Seavers (ADSs) (prorated)	41,078	84.9%	34,875	4,036	1,889
Nicola Shaw	151,109	84.9%	128,291	14,397	1,397

Notes:
The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period.
Andy Agg: Andy Agg's award of 49,080 shares was granted in two tranches. The first tranche of 21,996 shares was granted on 28 June 2017 followed by a second tranche of 27,084 shares granted on 24 July 2017. Both awards are subject to the same performance conditions, performance period and vesting percentage/dividend equivalents estimates.
Dean Seavers: Dean Seavers' original award of 49,294 ADSs has been prorated to 41,078 ADSs on the basis of completed months employed between the grant date and 31 December 2019.
Impact of share price change: The impact of share price change for the 2017 LTPP, comparing share price at grant versus the average share price for the period 1 January 2020 to 31 March 2020 of 978.75p ($62.48 per ADS), for each Executive Director: for John Pettigrew and Nicola Shaw the share price at grant was 973.80p resulting in an increase per share of 4.95p (0.5%) and this results in an estimated increase in value (including dividend equivalents) of £15,107 for John Pettigrew and £7,063 for Nicola Shaw; Andy Agg received his 2017 LTPP award in two tranches and the share prices at grant for his awards were 973.80p and 941.50p resulting in increases per share of 4.95p (0.5%) and 37.25p (4%) respectively and this results in estimated increases in value (including dividend equivalents) of £1,028 and £9,526 respectively; for Dean Seavers the ADS price at grant was $63.94 resulting in a decrease per ADS of $1.46 (2%) and this results in an estimated reduction in value (including dividend equivalents) of $56,810. The impact of share price change is not included in the expected amounts to vest shown in the above table.

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Single total figure of remuneration – Non-executive Directors

The following table shows a single total figure in respect of qualifying service for 2019/20, together with comparative figures for 2018/19:

	Fees £'000		Other emoluments £'000		Total £'000	
	2019/20	2018/19	2019/20	2018/19	2019/20	2018/19
Nora Mead Brownell	**2**	100	–	8	**2**	108
Jonathan Dawson	**111**	108	**0**	2	**111**	110
Therese Esperdy	**141**	138	**19**	15	**160**	153
Sir Peter Gershon	**538**	523	**86**	83	**624**	606
Paul Golby	**104**	101	**5**	5	**109**	106
Liz Hewitt	**23**	n/a	**1**	n/a	**24**	n/a
Amanda Mesler	**91**	77	**2**	–	**93**	77
Earl Shipp	**103**	25	**17**	3	**120**	28
Jonathan Silver	**91**	n/a	**11**	n/a	**102**	n/a
Mark Williamson	**134**	130	**6**	6	**140**	136
Total	**1,338**	1,202	**147**	122	**1,485**	1,324

Notes:
Receiving the US-based Board fee: Nora Mead Brownell, Therese Esperdy, Earl Shipp and Jonathan Silver.
Receiving the UK-based Board fee: Jonathan Dawson, Paul Golby, Liz Hewitt, Amanda Mesler and Mark Williamson.
Nora Mead Brownell: Nora Mead Brownell stepped down from the Board on 8 April 2019.
Therese Esperdy: Fees for 2019/20 include £25,000 in fees for serving on the National Grid USA Board.
Sir Peter Gershon: Other emoluments comprise private medical insurance and the use of a car and driver when required and this amounted to approximately £85,000 for 2019/20 (and approximately £81,000 for 2018/19).
Jonathan Silver: Jonathan Silver joined the Board on 16 May 2019.
Other emoluments: In accordance with the Company's expenses policies, Non-executive Directors receive reimbursement for their reasonable expenses for attending Board meetings. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC and these costs are included in the table above.

The total emoluments paid to Executive and Non-executive Directors in the year was £13.5 million (2018/19: £11.6 million).

Directors' Remuneration Report continued

AUDITED

Other Remuneration Disclosures

2019 LTPP (conditional award) granted during the financial year

The face values of the awards are calculated using the volume weighted average share price at the date of grant (28 June 2019) (£8.341132 per share and $53.0487 per ADS) and are used to determine the value of the awards granted.

	Basis of award	Face value '000	Proportion vesting at threshold performance	Number of shares	Performance period end date
Andy Agg	300% of salary	£1,785	20%	213,999	31 March 2022
John Pettigrew	350% of salary	£3,603	20%	431,969	31 March 2022
Dean Seavers (ADSs)	300% of salary	$3,347	20%	63,094 (ADSs)	31 March 2022
Nicola Shaw	300% of salary	£1,677	20%	201,059	31 March 2022

Notes:
The 2019 LTPP grant will vest on 1 July 2022. The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period.
Dean Seavers: Dean Seavers' 2019 LTPP award of 63,094 ADSs will be prorated to 10,515 ADSs to reflect the time served between the award date and 31 December 2019 when he left the Company.

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Performance conditions for 2019 LTPP awards granted during the financial year

	Conditional share awards granted – 2019		
Performance measure	Weighting for all Executive Directors	Threshold 20% vesting	Maximum 100% vesting
Group RoE Ⓐ	33.33%	11.0%	12.5% or more
Group Value Growth	66.67%	10.0%	12.0% or more

Notes:
Group RoE: Group RoE is measured during the first two years of the three-year performance period and will contribute one-third of the total vesting outcome (at the end of three years).
Group Value Growth: Group Value Growth is measured over the entire three-year performance period and will contribute two-thirds of the total vesting outcome.

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Payments for loss of office and payments to past Directors

Leaving arrangements for Dean Seavers

Dean Seavers stepped down from the Board for personal reasons on 5 November 2019 and remained employed by the Company until 31 December 2019 to support a smooth leadership transition and handover.

Mr Seavers' remuneration in relation to his fixed pay for the period 1 April 2019 to 5 November 2019, his 2019/20 APP and his 2017 LTPP is disclosed in the Single Total Figure of Remuneration table on page 96. For the period from 6 November 2019 to 31 March 2020, Mr Seavers received remuneration totalling £1.1 million which predominantly includes his fixed pay (salary, benefits and pension) until 31 December 2019, his pay in lieu of notice of approximately £732,000 and his accrued holiday of approximately £133,000. All payments are in accordance with his service agreement and the Directors' Remuneration Policy and subject to applicable tax withholdings. As part of Mr Seavers' agreed leaver arrangements the Company will fund limited costs for security arrangements until 31 December 2020. These costs are expected to be no more than $35,000.

The Committee agreed to grant good leaver treatment for Mr Seavers' outstanding LTPP awards given his overall long-term strong performance and contribution to the business. Mr Seavers' outstanding ADS awards under the 2018 and 2019 Long Term Performance Plan (LTPP) will be prorated for completed months held since the award date until 31 December 2019, as set out in the table below. These awards will vest at the same time as other participants, subject to performance measured at the vesting date and any discretion the Committee may decide to exercise at the time of vesting, in line with our Directors' Remuneration Policy. These shares will be subject to the two-year post-vesting holding requirement and post-employment shareholding requirement, if not already met.

LTPP Awards

Award	ADSs awarded	Pro-rata ADSs	Vesting Date
2018 LTPP	58,786	29,393	July 2021
2019 LTPP	63,094	10,515	July 2022
Total	**121,880**	**39,908**	

Mr Seavers is subject to the Company's post-employment shareholding requirement of 200% of base salary for two years after leaving the Company.

Statement of implementation of remuneration policy in 2019/20 continued

Payments to past Directors and post-employment shareholdings

There have been no payments to any other past Director during 2019/20. Past Directors are required to continue to hold their shares/ADSs with the Company's third-party share scheme administrator in order to audit compliance; at 31 March 2020 Andrew Bonfield and Dean Seavers have each continued to meet their post-employment share-holding requirements.

Shareholder dilution

Where shares may be issued or treasury shares reissued to satisfy incentives, the aggregate dilution resulting from executive share-based incentives will not exceed 5% in any 10-year period. Dilution resulting from all incentives, including all-employee incentives, will not exceed 10% in any 10-year period. The Committee reviews dilution against these limits regularly and under these limits the Company, as at 31 March 2020, had headroom of 3.89% and 7.86% respectively.

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Statement of Directors' shareholdings and share interests

The Executive Directors are required to build up and hold a shareholding from vested share plan awards. The following table shows how each Executive Director complies with the shareholding requirement and also the number of shares owned by the Non-executive Directors, including connected persons. The shareholding is as at 31 March 2020 and the salary used to calculate the value of the shareholding is the gross annual salary as at 31 March 2020.

John Pettigrew has met his shareholding requirement. As Andy Agg and Nicola Shaw are still relatively new in post and to the Company, respectively, they have not yet met their requirement, but each are expected to do so in 2023 assuming on-target performance/vesting outturns. They will not be allowed to sell shares, except for covering associated tax liabilities, until this requirement is met. Dean Seavers had met his shareholding requirement before he stepped down from the Board. Non-executive Directors do not have a shareholding requirement.

A further 50 shares have been purchased between April and June on behalf of each of Andy Agg, John Pettigrew and Nicola Shaw via the Share Incentive Plan (an HMRC tax-advantaged all-employee share plan), thereby increasing their beneficial interests. There have been no other changes in Directors' shareholdings between 1 April 2020 and 17 June 2020.

The normal vesting dates for the conditional share awards subject to performance conditions are 1 July 2020, 1 July 2021 and 1 July 2022 for the 2017 LTPP, 2018 LTPP and 2019 LTPP respectively.

Directors	Share ownership requirements (multiple of salary)	Number of shares owned outright (including connected persons)	Value of shares held as multiple of current salary	Number of options held under the Sharesave Plan	Conditional share awards subject to performance conditions (LTPP 2017, 2018 & 2019)
Executive Directors					
Andy Agg	400%	122,351	195%	4,045	372,965
John Pettigrew	500%	662,828	609%	7,253	1,153,572
Dean Seavers (ADSs) (at 5 November 2019)	400%	81,817	420%	–	80,986
Nicola Shaw	400%	103,897	175%	4,070	539,331
Non-executive Directors					
Nora Mead Brownell (ADSs) (at 8 April 2019)	–	4,583	–	–	–
Jonathan Dawson	–	41,077	–	–	–
Therese Esperdy (ADSs)	–	1,587	–	–	–
Sir Peter Gershon	–	107,215	–	–	–
Paul Golby	–	2,291	–	–	–
Liz Hewitt	–	0	–	–	–
Amanda Mesler	–	1,500	–	–	–
Earl Shipp (ADSs)	–	1,000	–	–	–
Jonathan Silver (ADSs)	–	0	–	–	–
Mark Williamson	–	47,460	–	–	–

Notes:
Andy Agg: On 31 March 2020 Andy Agg held 4,045 options granted under the Sharesave Plan. 4,045 options were granted with an exercise price of 749 pence and these have since been exercised at 749 pence per share in April 2020. The number of conditional share awards subject to performance conditions is as follows: 2017 LTPP: 49,080; 2018 LTPP: 109,886; 2019 LTPP: 213,999.
John Pettigrew: On 31 March 2020 John Pettigrew held 7,253 options granted under the Sharesave Plan. 3,034 options were granted with an exercise price of 749 pence per share and these have since been exercised at 749 pence per share in April 2020. 4,219 options were granted with an exercise price of 711 pence per share and they can, subject to their terms, be exercised at 711 pence per share between 1 April 2025 and 30 September 2025. The number of conditional share awards subject to performance conditions is as follows: 2017 LTPP: 323,205; 2018 LTPP: 398,398; 2019 LTPP: 431,969.
Dean Seavers: The number of conditional share awards (ADSs), subject to performance conditions, has been prorated (from 171,174 ADSs) for completed months served since the grant date until his last day of employment (31 December 2019) and is made up as follows: 2017 LTPP: 41,078 (the original award of 49,294 ADSs prorated for 30/36 months); 2018 LTPP: 29,393 (the original award of 58,786 ADSs prorated for 18/36 months); 2019 LTPP: 10,515 (the original award of 63,094 ADSs prorated for 6/36 months).
Nicola Shaw: On 31 March 2020 Nicola Shaw held 4,070 options granted under the Sharesave Plan. 4,070 options were granted with an exercise price of 737 pence per share and they can, subject to their terms, be exercised at 737 pence per share between 1 April 2022 and 30 September 2022. The number of conditional share awards subject to performance conditions is as follows: 2017 LTPP: 151,109; 2018 LTPP: 186,263; 2019 LTPP: 201,959.
Nora Mead Brownell: stepped down from the Board on 8 April 2019.
Dean Seavers, Therese Esperdy, Earl Shipp and Jonathan Silver: Holdings and awards are shown as ADSs and each ADS represents five ordinary shares.

Directors' Remuneration Report continued

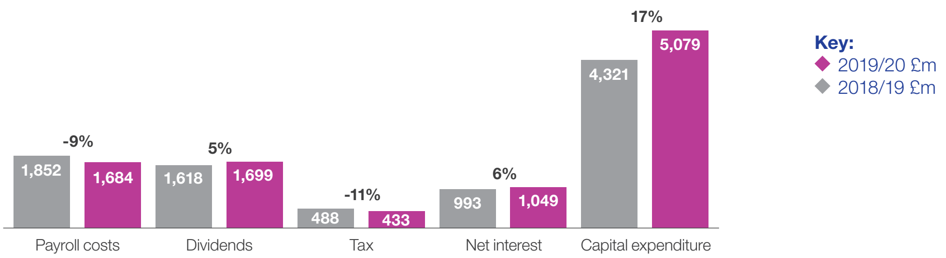
External appointments and retention of fees

Experience as a board member of another company is considered to be valuable personal development, which in turn is of benefit to the Company. The table below details the Executive Directors (at 31 March 2020) who served as Non-executive Directors in other companies during the year ended 31 March 2020:

	Company	Retained fees
John Pettigrew	Rentokil Initial plc	£68,986
Nicola Shaw	International Consolidated Airlines Group S.A.	£107,042 (€120,000)

Relative importance of spend on pay

The chart below shows the relative importance of spend on pay compared with other costs and disbursements (dividends, tax, net interest and capital expenditure). Given the capital-intensive nature of our business and the scale of our operations, these costs were chosen as the most relevant for comparison purposes. All amounts exclude exceptional items and remeasurements.

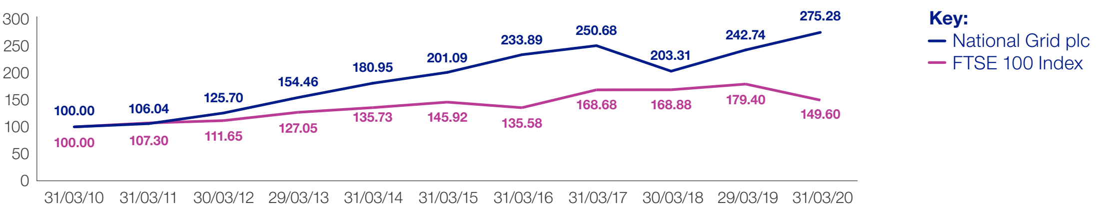


Notes:
1. The Dividends figure for 2018/19 has been restated at £1,618 million (from £1,610 million) to reflect the actual value of dividends paid.
2. Percentage increase/decrease of the costs between years is shown.

Performance graph

This chart shows National Grid plc's 10-year annual Total Shareholder Return (TSR) performance against the FTSE 100 Index since 31 March 2010 and illustrates the growth in value of a notional £100 holding invested in National Grid on 31 March 2010, compared with the same invested in the FTSE 100 index. The FTSE 100 Index has been chosen because it is the widely recognised performance benchmark for large companies in the UK. The TSR level shown at 31 March each year is the average of the closing daily TSR levels for the 30-day period up to and including that date. It assumes dividends are reinvested.

Total shareholder return



Data source: DataStream

Chief Executive's pay in the last ten financial years

Steve Holliday was CEO throughout the six-year period from 2010/11 to 2015/16. John Pettigrew became CEO on 1 April 2016.

	Steve Holliday						John Pettigrew			
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Single total figure of remuneration (£'000)	3,738	3,539	3,170	4,801	4,845	5,151	4,623	3,648	4,651	5,322
Single total figure of remuneration including only 2014 LTPP (£'000)							3,931			
APP (proportion of maximum awarded)	81.33%	68.67%	55.65%	77.94%	94.80%	94.60%	73.86%	82.90%	84.20%	70.58%
PSP/LTPP (proportion of maximum vesting)	65.15%	49.50%	25.15%	76.20%	55.81%	63.45%	90.41%	85.20%	84.20%	84.90%

Notes:
Single total figure 2019/20: The figure for 2019/20 for John Pettigrew is explained in the single total figure of remuneration table for Executive Directors.
Single total figure 2018/19: The figure for 2018/19 has been restated to reflect actual share price at 1 July 2019, consistent with comparative figures shown in this year's single total figure of remuneration table.
2014 LTPP: The 2016/17 single total figure of remuneration includes both the 2013 LTPP award and the 2014 LTPP award due to a change in the vesting period of three years to four years between the 2013 LTPP and 2014 LTPP.
PSP/LTPP plans: Prior to 2014, LTPP awards were made under a different LTI framework which incorporated a four-year performance period for the RoE element of the awards. The last award under this framework was made in 2013 and was fully vested in 2017. Awards made from 2014 are subject to a three-year performance period. The first of these awards vested in 2017.

Statement of implementation of remuneration policy in 2019/20 continued

Percentage change in CEO's remuneration

The table below shows how the percentage change in the CEO's salary, benefits and APP between 2018/19 and 2019/20 compares with the percentage change in the average of each of those components of remuneration for non-union employees in the UK and the US. The Committee views this group as the most appropriate comparator group, as this group excludes employees represented by trade unions whose pay and benefits are negotiated with each individual union, each with their own pay structure.

	Salary			Taxable benefits			APP		
	2019/20 £'000	2018/19 £'000	Change	2019/20 £'000	2018/19 £'000	Change	2019/20 £'000	2018/19 £'000	Change
John Pettigrew	1,017	944	7.7%	116	94	23.4%	897	994	-9.8%
Non-union employees (average increase/decrease)			3.6%			-1.3%			-5.9%

Notes:
Non-union employees: The population is not a constant comparator group due to external hires, promotions and attrition between years. Calculating the APP change comparing employees that were employed throughout the period results in a 0.35% change. The result is impacted also by the proportion of new employees that have not accrued a 'full year' of APP payout and changes in business results which this year drive in particular a lower APP payout for our US business versus last year.
Pay data for US employees have been converted at $1.2868:£1.

CEO pay ratio

We have disclosed our CEO pay ratios comparing the CEO single total figure of remuneration to the equivalent pay for the lower quartile, median and upper quartile UK employees (calculated on a full-time equivalent basis) in accordance with the Companies (Miscellaneous Reporting) Regulations 2018 (as amended), which formally apply to National Grid from this reporting year, 2019/20. We disclosed these ratios on a voluntary basis last year for 2018/19.

		UK			Group-wide
Year	**Method**	**25th percentile pay ratio**	**Median pay ratio**	**75th percentile pay ratio**	**Median pay ratio**
2018/19 – voluntary	Option A	96:1	76:1	58:1	48:1
2019/20	Option A	111:1	86:1	66:1	53:1

The comparison with UK employees is specified by the regulations. US employees represent approximately 73% of our total employees. Our median pay ratio on a Group-wide basis is 53:1, calculated on the same basis as the UK pay ratios and an exchange rate of $1.2868:£1.

Salaries at 31 March 2020 and estimated performance-based annual payments for 2019/20 have been annualised to reflect full-time equivalents. Performance payments have not been further adjusted to compensate where new employees have not completed a full performance year.

The CEO pay ratio has increased from 76:1 to 86:1 at the median. The CEO single total figure of remuneration has increased by approximately 17% versus last year and this increase is driven predominantly by an approximate 25% increase in estimated LTPP vesting value. Increases in salary, benefits in kind and pensions as a result of the increase to base salary are broadly offset by an approximate reduction of 11% in 2019/20 APP payout for the CEO. Excluding LTPP the total pay and benefits for the CEO has increased by 0.8% whilst the total pay and benefits for the reference employee at the median has increased by 2.4%, compared with last year.

Excluding estimated 2017 LTPP vesting, our UK median pay ratio is the same as last year at 38:1 and on a Group basis has marginally reduced to 23:1 this year compared with 24:1 last year. The lower Group median pay ratio versus the UK reflects the higher labour cost in the US versus the UK, which is further influenced by the US locations in which we operate which have even higher labour costs than the US on average. The ratio of the pay of our Executive Director, UK, to the median UK employee is 41:1 and excluding the estimated 2017 LTPP vesting is 18:1.

This year the 2017 LTPP vesting represents some 56% of the CEO's single total figure of remuneration. However, only 2% of UK-based employees will receive an estimated 2017 LTPP vest in our pay ratio calculations, and all of these employees are in the upper quartile of our ranked list and so are not selected as a 75th percentile (or below) reference employee. Removing the impact of 2017 LTPP vesting in our calculations results in lower ratios, for the reference employees of 49:1, 38:1 and 29:1 at the 25th, 50th and 75th percentiles respectively and these ratios are the same as last year. As employees advance through the Group, there will be the opportunity to receive higher rewards commensurate with increased accountability and market practice.

The regulations require the total pay and benefits and the salary component of total pay and benefits for this year to be set out as follows:

Pay data 2019/20	**Base salary**	**Total pay & benefits**
CEO remuneration	£1,016,752	£5,321,735
UK employee 25th percentile	£34,521	£47,849
UK employee 50th percentile	£51,149	£61,842
UK employee 75th percentile	£60,913	£80,614

Flexibility is provided to adopt one of three methods for calculating the ratios. We have chosen Option A, which is a calculation based on the pay of all UK employees on a full-time equivalent basis, as this option is considered to be more statistically robust. The ratios are based on total pay and benefits inclusive of short-term and long-term incentives applicable for the respective financial year 1 April – 31 March. The reference employees at the 25th, 50th and 75th percentile have been determined by reference to pay and benefits as at the last day of the respective financial year, 31 March, though estimates have been used for the respective APP payouts and performance outturns of the LTPP and dividend equivalents.

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2019/20 continued

All employees are eligible for a performance-based annual payment. Our principles for pay setting and progression in our wider workforce are the same as for our executives – mid-market approach to total reward, being sufficiently competitive to attract and retain high-calibre individuals without over-paying and providing the opportunity for individual development and career progression. The pay ratios reflect how remuneration arrangements differ, as accountability increases for more senior roles within the organisation, and in particular the ratios reflect the weighting towards long-term value creation and alignment with shareholder interests for the CEO.

We are satisfied that the median pay ratio reported this year is consistent with our wider pay, reward and progression policies for employees. The median reference employee falls within our collectively bargained employee population and has the opportunity for annual pay increases, annual performance payments and career progression and development opportunities.

The Committee's activities during the year

Meeting	Main areas of discussion
April	2018/19 individual objectives scoring for Executive Committee Approval of 2019/20 Objectives for Executive Committee Discussion on 2018/19 expected incentive plan outturns
May	2018/19 APP financial outturns and confirmation of awards for Executive Committee Discussion on expected 2016 LTPP outturns Annual salary review and LTPP proposals for Executive Committee Approval of 2019/20 APP financial metrics Review and approval of Chairman's fees
November (two meetings)	Performance update for outstanding LTPP awards Review of gender and ethnicity pay gaps Items related to Executive Committee appointments Leaving arrangements for Executive Director, US Debrief of AGM season and remuneration trends Review of pensions arrangements for Executive Committee
March	Market data review for Executive Committee remuneration and initial proposals for base salary increases First review of 2019/20 individual objectives of Executive Committee Item related to new Executive Committee appointment

Advisors to the Remuneration Committee

The Committee received advice during 2019/20 from independent consultants Willis Towers Watson. Willis Towers Watson was selected by the Committee to become its independent advisor from 23 October 2017 following a competitive tendering process. Willis Towers Watson is a member of the Remuneration Consultants Group and has signed up to that group's code of conduct. The Committee is satisfied that any potential conflicts were appropriately managed.

Work undertaken by Willis Towers Watson in its role as independent advisor to the Committee has included providing market information for the Executive Directors and other senior employees and for governance matters. This work has incurred fees of £57,488 incurred on the basis of time charged to perform services and deliverables. The Committee reviews the objectivity and independence of the advice it receives from its advisors each year. It is satisfied that Willis Towers Watson provided credible and professional advice. Willis Towers Watson also provided general and technical remuneration services in relation to employees below Board and Group Executive Committee level.

The Committee considers the views of the Chairman on the performance and remuneration of the CEO, and of the CEO on the performance and remuneration of the other members of the Executive Committee. The Committee is also supported by the Group General Counsel and Company Secretary, who acts as Secretary to the Committee, the Chief Human Resources Officer, the HR Director – Reward; and, as required, the Group Head of Pensions and Group Financial Controller. No other advisors have provided significant services to the Committee in the year.

Voting on Directors' Remuneration Policy adopted at the 2019 AGM

The voting figures shown refer to votes cast at the 2019 AGM and represent 63.86% of the issued share capital. In addition, shareholders holding 28.6 million shares abstained.

	For	Against
Number of votes	2,116,131,831	64,718,198
Proportion of votes	97.03%	2.97%

Voting on 2018/19 Directors' Remuneration Report at the 2019 AGM

The voting figures shown refer to votes cast at the 2019 AGM (in respect of the prior remuneration policy adopted in 2017) and represent 63.71% of the issued share capital. In addition, shareholders holding 33.8 million shares abstained.

	For	Against
Number of votes	2,100,158,370	75,482,807
Proportion of votes	96.53%	3.47%

How our remuneration policy will be implemented in 2020/21

The remuneration policy adopted at the 2019 AGM will be implemented during 2020/21 as described below.

Salary

Salary increases will normally be in line with the increase awarded to other employees in the UK and US, subject to performance. Higher salary increases may also be awarded for a change in responsibility. Additionally, in line with the policy on recruitment remuneration, salaries for new directors may be set below market level initially and aligned to market level over time (provided the increase is merited by the individual's contribution and performance).

As explained in the Remuneration Committee Chair's Statement, for 2020/21 a salary increase for Andy Agg will be awarded and this will be effective from July in line with the rest of the workforce. Salary increases for John Pettigrew and Nicola Shaw will not be awarded at this time.

	From 1 July 2020	From 1 June 2019	Increase
Andy Agg	£633,675	£595,000	6.5%
John Pettigrew	£1,029,461	£1,029,461	0%
Nicola Shaw	£561,524	£561,524	0%

Pensions

The remuneration policy approved at the July 2019 AGM stated that new appointments would receive contributions of up to 20% of base salary. In addition to this, John Pettigrew and Nicola Shaw agreed progressive reductions from 30% to 20% of base salary. Implementation of this agreement is now underway and effective 1 April 2020, cash in lieu of pension contributions for each of John Pettigrew and Nicola Shaw have reduced to 26.7% and further reductions to 23.4% and then 20.0% will take place at 1 April 2021 and 1 April 2022 respectively. Andy Agg already receives the approved policy maximum of 20%. Further to the 2019 AGM the Committee agreed in November 2019 that newly appointed Executive Directors will receive annual contributions of up to 12% of basic salary for the DC pension scheme, or cash supplement in lieu. Further discussions on pension contributions will be conducted as part of the 2021 Directors' Remuneration Policy review.

APP measures for 2020/21

Due to the uncertainty in the context of COVID-19, the Committee has opted not to finalise financial measures, associated weightings or targets at this time but intends to do so as soon as practicable. APP targets are considered commercially sensitive and consequently will be disclosed in the 2020/21 Directors' Remuneration Report.

Performance measures for LTPP to be awarded in 2020

Due to the uncertainty in the context of COVID-19, the Committee has opted not to finalise the targets for the 2020 LTPP financial measures. The weightings for these measure are Group RoE (16.67%) and Group Value Growth (83.33%). Group RoE will be measured over the first year of the three-year performance period and Group Value Growth will be measured over the entire three-year performance period, determining 1/6th and 5/6ths of the total vesting outcome for the 2020 LTPP, respectively. LTPP awards are expected to be made later in the year and will be based on 1 July 2020 salaries.

Fees for NEDs

Therese Esperdy was appointed as Non-executive Director to the National Grid USA Board in 2015 with an annual fee of £25,000 in addition to her current NED fees. We will not be increasing the Chairman's fee or other NED fees at this time. Fees effective from 1 June 2019 remain unchanged and are set out in the table below.

Role	From 1 June 2019 £'000
Chairman	540.2
Senior Independent Director	23.1
Board fee (UK-based)	69.5
Board fee (US-based)	82.1

Role	From 1 June 2019 £'000
Committee membership fee	10.8
Chair Audit Committee	31.2
Chair Remuneration Committee	31.2
Chair (other Board Committees)	23.9

The Directors' Remuneration Report has been approved by the Board and signed on its behalf by:

Jonathan Dawson

Jonathan Dawson
Committee Chairman
17 June 2020

3. Financial Statements

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and Accounts, including the Group financial statements and the Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors are required to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and Article 4 of the IAS Regulation and have elected to prepare the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 'Reduced Disclosure Framework'. Under company law, the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group and Parent Company for that period.

In preparing the Group financial statements, International Accounting Standard 1 requires that Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Group's ability to continue as a going concern.

In preparing the Parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Parent Company on a consolidated and individual basis, and to enable them to ensure that the Group financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Parent Company and its subsidiaries and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Having made the requisite enquiries, so far as the Directors in office at the date of the approval of this Report are aware, there is no relevant audit information of which the auditors are unaware and each Director has taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

Each of the Directors, whose names and functions are listed on pages 66 – 67, confirms that:

- to the best of their knowledge, the Group financial statements and the Parent Company financial statements, which have been prepared in accordance with IFRSs as issued by the IASB and IFRS as adopted by the European Union and UK GAAP FRS 101 respectively, give a true and fair view of the assets, liabilities, financial position and profit of the Company on a consolidated and individual basis;
- to the best of their knowledge, the Strategic Report contained in the Annual Report and Accounts includes a fair review of the development and performance of the business and the position of the Company on a consolidated and individual basis, together with a description of the principal risks and uncertainties that it faces; and
- they consider that the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

This Responsibilities Statement was approved by the Board and signed on its behalf.

Directors' Report

The Directors' Report, prepared in accordance with the requirements of the Companies Act 2006 and the UK Listing Authority's Listing Rules, and Disclosure Rules and Transparency Rules, comprising pages 1 – 107 and 216 – 252, was approved by the Board and signed on its behalf.

Strategic Report

The Strategic Report, comprising pages 1 – 62, was approved by the Board and signed on its behalf.

By order of the Board

Alison Kay
Group General Counsel
& Company Secretary

17 June 2020

Company number: 4031152

Independent auditor's report
to the members of National Grid plc

Report on the audit of the financial statements

1. Opinion

In our opinion:

- the financial statements of National Grid plc (the 'parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 March 2020 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and IFRSs as issued by the International Accounting Standards Board (IASB);
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements, which comprise:

Group:
- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated statement of changes in equity;
- the consolidated statement of financial position;
- the consolidated cash flow statement; and
- the related notes 1 to 39 to the consolidated financial statements.

Parent Company:
- the parent company accounting policies;
- the parent company balance sheet;
- the parent company statement of changes in equity; and
- the related notes 1 to 10 to the parent company financial statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law, IFRSs as adopted by the European Union and IFRSs as issued by the IASB. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group and parent company for the year are disclosed in note 4 to the financial statements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: • Impact of COVID-19; • Impact of climate change on property, plant and equipment; • Environmental provisions; • Classification of exceptional items; • Net pension obligations; • Treasury derivative transactions; and • IT user access controls.
Changes in our key audit matters since the prior year	These key audit matters are consistent with those we identified in the prior year except that: • As a consequence of the COVID-19 outbreak, which has severely affected the UK and US economies, there are financial reporting impacts particularly with respect to key judgments, estimates and disclosures within the financial statements. In addition, there are potential financial control impacts as a consequence of remote working. This caused us to perform an updated audit risk assessment. Accordingly we have identified this as a key audit matter; and • The impact of climate change on property, plant and equipment has been identified as a new key audit matter due to the increase in shareholder focus and legislation enacted during the year in relation to "net-zero" carbon by 2050 commitments by the UK government and certain US states (specifically New York and Massachusetts) in which the Group operates. This has a potentially significant impact on the Group's gas businesses and accordingly the estimated useful lives of its assets.
Materiality	The materiality that we used for the Group financial statements was £120 million, which represents 5.1% of adjusted profit before tax (profit before tax excluding the impact of reported exceptional items and remeasurements) and 6.8% of statutory profit before tax.
Scoping	Our scope covered six components of the Group in addition to procedures performed at the Group level. Of these, three were subjected to a full-scope audit whilst the remaining three were subject to specific procedures on certain account balances. Our scoping covered 99% of the Group's revenue; 97% of the Group's gross assets; and 99% of the Group's gross liabilities.

4. Conclusions relating to going concern, principal risks and viability statement

4.1. Going concern

We have reviewed the directors' statement in note 1A to the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's and company's ability to continue to operate as a going concern for a period of at least twelve months from the date of approval of the financial statements.

We considered as part of our risk assessment the nature of the Group, its business model and related risks including where relevant the impact of the COVID-19 pandemic and Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to the directors' statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

Going concern is the basis of preparation of the financial statements that assumes an entity will remain in operation for a period of at least twelve months from the date of approval of the financial statements.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

4.2. Principal risks and viability statement

Based solely on reading the directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the directors' assessment of the Group's and the company's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to:

- the disclosures on pages 23 – 25 that describe the principal risks, procedures to identify emerging risks, and an explanation of how these are being managed or mitigated;
- the directors' confirmation on page 26 that they have carried out a robust assessment of the principal and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
- the directors' explanation on page 26 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to report whether the directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

Viability means the ability of the Group to continue over the time horizon considered appropriate by the directors, which for National Grid is 5 years.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit and directing the efforts of the engagement team.

Throughout the course of our audit we identify risks of material misstatement ('risks'). We consider both the likelihood of a risk and the potential magnitude of a misstatement in making the assessment. Certain risks are classified as 'significant' or 'higher' depending on their severity. The category of the risk determines the level of evidence we seek in providing assurance that the associated financial statement item is not materially misstated.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1. Impact of COVID-19

Key audit matter description

Account balances: Trade and other receivables. Refer to note 19 to the financial statements. Pensions and other post-retirement benefits. Refer to note 25 to the financial statements.

The COVID-19 pandemic has had a significant impact on the UK and US economies with consequences to the judgements and estimates made by the Group, principally in relation to the recoverability of US customer receivables and the valuation of certain pension assets. Refer to note 1E to the financial statements and the Audit Committee's discussion on pages 76 – 78.

In March 2020 the COVID-19 pandemic resulted in the UK government and several US states in which the Group operates imposing lockdowns of their populations in order to stop the spread of the disease. This had a direct and severe impact on those economies as consumer spending decreased and unemployment rose at unprecedented rates, in turn severely impacting global demand and world financial markets. This has impacted the results of the Group for the 2020 financial year and is expected to continue to impact the Group for the remainder of FY21.

Management reassessed their controls framework, which encompassed a review of the ability to operate existing controls remotely and consideration of whether existing controls were suitable for addressing areas of new or increased risk. As a result of this assessment, a new COVID-19 entity-level control was implemented to assess the completeness of accounting considerations across the Group. Further, whilst there could be a potential impact upon a number of financial statement line items, management's assessment determined that the primary risks that arose from the COVID-19 pandemic related to the valuation of:

- provisions for bad and doubtful debts in the US due to the increased uncertainty over customers' ability to settle amounts when they fall due; and
- unquoted pension assets, particularly certain assets in the property and alternative investment portfolios which are subject to increased valuation uncertainties.

In calculating bad and doubtful debts, the key judgement relates to the requirement to incorporate 'expected credit losses' into the provision. This requires management to make forward-looking estimates of the expected level of losses which will be incurred on any outstanding trade receivables. In the US, unlike in the UK, the Group has retail customers. The regulatory moratorium in the US requiring the suspension of certain debt collection and customer termination activities has increased the level of estimation uncertainty related to the bad debt calculation in respect of US trade receivables. Management has considered relevant forward-looking macroeconomic data in the US, as well as the effect on incurred losses experienced in the aftermath of the financial crisis of 2008 and Superstorm Sandy in 2012 to inform their estimation. Accordingly, we have identified this as an area of 'higher' audit risk.

The key judgements related to the valuation of certain unquoted pension assets are discussed in the 'net pension obligations' key audit matter.

Independent auditor's report
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5. Key audit matters continued

5.1. Impact of COVID-19 continued	
Key audit matter description continued	A risk was also identified in relation to the impact of the pandemic on the Group's cash flows and liquidity and accordingly its going concern analysis. Management performed a detailed analysis of the potential impact of the COVID-19 pandemic on revenue, profit and cash flows, in particular the impact on US customer collections. Possible cost mitigations were also considered. This detailed analysis also included consideration of a number of downside scenarios as to the duration of the lockdown measures, and concluded that no reasonably possible downside scenario existed wherein the Group would be unable to continue as a going concern. Related disclosure of management's and the Board's assessment of the ability to continue as a going concern, inclusive of the impact of the pandemic as a principal risk has been made in the Annual Report on page 25, and has been included as a consideration in the viability statement on page 26.
How the scope of our audit responded to the key audit matter	We performed controls testing at year end on areas of heightened risk, including the incremental COVID-19 specific control, and assessed whether management appropriately considered the related impact on existing controls. Further, we held discussions within the Group and component engagement teams, with management, with our internal treasury, pensions and tax specialists and within the wider Deloitte network to identify the areas of risk to the financial statements as a result of the wider impacts of the pandemic. We used the outcome of these discussions to update our audit risk assessment and challenge management's impact assessment. Our responses in respect of specific areas identified as risks related to COVID-19 are outlined below. For these areas we also reviewed management's disclosures in relation to the key judgements and estimates made in assessing the impact of COVID-19, inclusive of sensitivity disclosures related to the areas of estimation uncertainty. **Provisions for bad and doubtful debts in the US:** In challenging management's assumptions related to the impact of the COVID-19 pandemic on the provision for bad and doubtful debts on US retail customers, we considered the extent to which the 2008 financial crisis and impact of Superstorm Sandy were reasonable data points to use in informing those estimates. We challenged management's judgement in respect of the point in the range of calculated possible outcomes which management determined to be their best estimate. **Valuation of unquoted pension assets:** We have described the procedures performed on the valuation of these pension assets in our 'net pension obligation' key audit matter. **Liquidity and ability to continue as a going concern:** We have assessed the going concern model prepared by management, which considered the impact of COVID-19. We assessed the underlying assumptions, inclusive of mitigating cost actions being taken based on our understanding of the business and knowledge of the industry in which the Group operates. Where impacts were significant, our component audit teams were also involved in a more granular challenge of local management's forecasts. Further, we assessed management's evaluation of liquidity and loan covenant compliance over the period of assessment to confirm no breaches are anticipated over this timeframe.
Key observations	Our testing confirmed the incremental COVID-19 specific control operated effectively. We concluded that management's judgements and estimates made in determining the incremental level of expected credit losses as a consequence of the COVID-19 pandemic are reasonable. Our conclusion on the valuation of certain pension assets is set out in our 'net pension obligation' key audit matter. Our conclusion on going concern is set out in the 'Conclusions relating to going concern, principal risks and viability statement' section of this report. We concluded that management's disclosures included in note 1E to the financial statements in respect of the key judgements and areas of estimation uncertainty are appropriate.

5.2. The impact of climate change on property, plant and equipment	
Key audit matter description	**Account balance: Property, plant and equipment. Refer to notes 1E and 13 to the financial statements and the Audit Committee's discussion on pages 76 – 78.** The UK government and certain of the US states in which the Group operates have enacted legislation and established targets in respect of net zero carbon emissions by 2050. Accordingly climate change represents a strategic challenge for the Group, which has also set targets for reducing direct greenhouse gas emissions by the same date. Natural gas, when burned, emits carbon dioxide and is considered a greenhouse gas. Therefore, the strategic challenge relates to the potential future use of the Group's assets used to facilitate gas transmission services in the UK and gas distribution services in the US in the period approaching 2050 and beyond. The remaining useful economic life of the Group's gas assets is up to 50 years in the UK and 80 in the US, extending well beyond the 2050 "net zero" commitment date. As described in note 13 to the financial statements, the impact of changing the useful economic lives of all of the Group's gas assets, such that they would be fully depreciated by 2050, would be an increase in the annual depreciation expense of £188 million, and such that they would be fully depreciated by 2060, would be an increase in the annual depreciation expense of £79 million. As the continued use of natural gas as a primary energy source beyond 2050 appears to be in conflict with net zero targets and the impact of shortening the useful lives of the gas assets to 2050 has a material impact on annual depreciation, we identified a 'higher' risk related to the financial statement impact of those commitments, specifically pinpointed to management's judgement in determining the useful lives of gas assets in the context of the net zero commitments. As described in note 13 to the financial statements and in the Audit Committee Report (page 78), management performed a detailed assessment of the potential uses for the Group's gas assets as part of their consideration around whether developments in the UK and US towards binding carbon reduction targets should trigger any changes to National Grid's estimates, judgements or disclosures, especially regarding gas asset lives. Management's assessment included an overview of the legislative changes in the UK and US, and an evaluation of the possible future use of National Grid's networks in a net zero energy system. Management's best estimate of the useful economic lives of US gas assets, across all states in which it operates, is based on the depreciable life identified through depreciation studies for each asset and are approved by the respective state regulator. Accordingly, in the US, the IFRS asset depreciable lives are identical to those agreed by the Group's regulators for regulatory purposes. Management concluded it is probable that there will be a role for its US gas networks post 2050 under a range of possible scenarios, and there is nothing at present to suggest that asset lives should be shortened at this point. In the UK, National Grid Gas Transmission (NGGT) owns and operates the UK gas transmission network (NTS). Pipelines represent the vast majority of the value that will be undepreciated by 2050. Having analysed the potential decarbonisation pathways, management has identified numerous potential uses for the Group's UK gas pipeline assets in a net zero energy system including for the continued transmission of natural gas as a back-up fuel or in order for blue hydrogen to be produced alongside carbon capture and storage; and the transmission of hydrogen or other low or zero carbon gases.

5.2. The impact of climate change on property, plant and equipment continued	
Key audit matter description continued	Management concluded that their best estimate for the useful economic life of the National Transmission System (NTS) pipeline assets in the UK is 50 years (or until 2070) as this best represents when the assets will continue to support business operations in the UK. Management and the Audit Committee determined that in light of the evolving legislative developments and increasing investor attention, disclosure of a key judgement in relation to the potential future use of the Group's gas assets post-2050 and disclosure of the gas asset lives as a key estimate (note 1E to the financial statements), with appropriate sensitivity analysis (note 13 to the financial statements) were appropriate.
How the scope of our audit responded to the key audit matter	We tested management's internal control over the accounting for and disclosure of the potential impacts associated with the energy transition and climate change. We challenged management's judgement that the useful lives of the Group's gas assets extend beyond 2050 in light of the different goals, commitments and legislation relating to net zero in the UK and the US states in which the Group operates by: • reviewing potential strategic pathways to achieve net zero targets; • obtaining and reviewing government plans in the US and UK for achieving net zero which we compared to the potential strategic pathways; • reviewing information from the Group's regulators, including price controls in the UK and rate cases in the US, to consider whether they presented any contradictory evidence; • performing an assessment of the likelihood of occurrence of alternative scenarios for achieving net zero targets; • considering the potential for re-purposing the Group's gas networks for alternative uses, and in particular for transporting hydrogen; and • reviewing a number of external reports including: *Hydrogen in a low-carbon economy and Net Zero – Technical report*, produced by the Committee on Climate Change; *the UK's draft integrated National Energy and Climate Plan (NECP)* produced by the Department for Business, Energy & Industrial Strategy; and searching for contradictory evidence in respect of management's judgements. We utilised our sustainability specialists to review management's key assumptions and to challenge the viability of some of the technological advances presented within the strategic pathways. We also consulted with Deloitte specialists in other countries regarding the suitability of existing gas infrastructure for transporting hydrogen. We also reviewed the disclosures set out in note 1 to the financial statements and the sensitivity analysis set out in note 13 to the financial statements regarding the carrying value of the useful economic lives of the Group's gas assets.
Key observations	Our testing confirmed that the relevant controls over management's assessment of the impact of the energy transition and climate change operated effectively. We observe that whilst some indicators do exist suggesting that the useful economic lives of the Group's gas assets may be limited to 2050, these are mitigated by other statements by governments and advisory bodies which suggest gas, and therefore gas transmission and distribution assets, will continue to have a role beyond 2050. Furthermore, the emergence of a substantial hydrogen infrastructure could introduce a longer term role for National Grid gas assets past 2050, if technological developments allow the utilisation of existing assets in this infrastructure. Whilst the targets, goals and ambitions in respect of net zero have now been formalised in legislation in the jurisdictions in which the Group operates, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways. We note that whilst state energy policy in the US states in which the Group operates is codified by the legislature, it is the regulators who are charged with implementing state energy policies. We concluded it was reasonable to assume that there will be a valuable use for the Group's US gas assets beyond 2050 and that in the absence of any determination by the Group's regulators, it continues to be reasonable to use the regulatory asset lives for the calculation of depreciation in accordance with IFRS. In the UK, we note that there is no alignment between the useful lives of the Group's gas assets for IFRS depreciation purposes, and the period of recovery of the regulatory asset value under regulation. Nevertheless, we conclude that it is reasonable to assume that there will be a valuable use for these assets until 2070. We consider the disclosures in note 1 to the financial statements and the sensitivity analysis in note 13 to the financial statements to be appropriate. We are satisfied that management's other disclosures in the Annual Report relating to the uncertainty surrounding the future use of the Group's gas assets are consistent with the financial statements and our understanding of the business.

5.3. Environmental provisions	
Key audit matter description	**Account balance: Provisions. Refer to notes 1E, 26 and 35 to the financial statements and the Audit Committee's discussion on pages 76 – 78.** At 31 March 2020 the Group has £2,071 million (2019: £1,639 million) of environmental provisions, of which £175 million (2019: £189 million) are in the UK and £1,896 million (2019: £1,450 million) in the US. The Group's environmental provisions relate to a number of sites owned and managed by the Group together with certain US sites which are no longer owned. In the US the provision is in respect of 257 sites which vary in the level of clean-up required. Of the total US environmental provisions of £1,896 million, more than half relates to three former sites which were identified by the Environmental Protection Agency (EPA) as sites of significant contamination (Superfund sites). The EPA has the authority to force the parties responsible for the contamination of these sites either to perform clean-ups or reimburse the government for work led by the EPA. There are a number of estimation uncertainties across all of the sites. We identified a 'higher' risk in relation to certain sites which are complicated because of their size, the number of parties involved and/or the stage of remediation the project is at. The uncertainties that exist in relation to these sites include: the impact of regulation; the form, timing, extent and associated cost of remediation needed; the methods and technologies used in remediation; the allocation of responsibility; and the discount rates applied to the forecast cash flows. There were significant increases in the provisions recorded for two US Superfund sites in the year and a small reduction at the third. We determined that the estimation of the undiscounted cash outflows specific to these sites was the most significant and sensitive to a change in reasonably possible outcomes. In respect of the US Superfund site with the most significant increase in provision, there were two reasons for management's reassessment of the estimated cash outflows. An updated design report was received in the year which indicated that the work required to remediate the site was more extensive than had previously been expected, resulting in a higher estimated total cost. In addition, following an EPA order management increased its estimate of the share of the costs the Group would bear amongst the Potentially Responsible Parties (PRPs).

Independent auditor's report
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5. Key audit matters continued

5.3. Environmental provisions continued

Key audit matter description continued	Regarding the other Superfund site with a significantly increased provision, an updated survey clarified the extent of remediation work which needs to be performed, leading to an increase in the Group's share of the expected costs. Management are required to make judgements in selecting an appropriate discount rate which reflects changes in UK gilt and US treasury rates as current market assessments of the time value of money. The Group decreased the real discount rates applied to the undiscounted cash flows from 1% in the prior year to 0.5% for both the UK and the US provisions.
How the scope of our audit responded to the key audit matter	We tested the controls over the compilation of forecast cash flows and the determination of the discount rate. We performed detailed risk assessments to categorise US sites based on size and the level of estimation uncertainty, determined by the stage of the remediation and the extent of work required. In respect of US sites other than the Superfund sites, we worked with our internal environmental specialists to assess cash flow estimates across a sample of sites. In order to assess the completeness of the year end liabilities we also completed public domain searches on Federal databases across all Group subsidiaries to determine whether any relevant costs or applicable sites were omitted. With respect to the US Superfund sites, we agreed underlying cost assumptions to third-party build information, approved engineering design reports and other benchmarks and utilised our internal environmental provision specialists to assist us in evaluating managements' key assumptions. We also considered information obtained from the Group's legal advisors and relevant EPA correspondence in our evaluation of the recorded provisions. We performed additional procedures on the site with the most significant increase in provision. Specifically relating to the judgement over the estimated allocation of total remediation costs, we made enquiries of the Group's internal legal counsel and obtained analysis directly from external legal counsel. With the assistance of our internal environmental specialists, we used this additional information to determine independently a range of potential outcomes and allocations of remediation costs at the site, and used this to assess management's estimate. We challenged the methodology that management has adopted for calculating the discount rate with the support of our internal valuation specialists. In addition, we independently calculated an appropriate discount rate range and used this to assess management's rate.
Key observations	Our testing confirmed that the relevant controls over the compilation of forecast cash flows and the determination of the discount rate were operating effectively. We found the total cost assumptions associated with all of the tested sites to be reasonable, including the US Superfund sites. In respect of the US Superfund sites we are satisfied that management's estimate of the proportion of costs expected to be allocated to the Group are within our independently calculated range. We consider the decrease in real discount rates from 1% to 0.5% applied in the UK and US to be reasonable based on the movement in gilts and treasury yields. We noted that the assumptions and judgments that are required to formulate the provisions mean that the range of possible outcomes is broad. In respect of the Superfund site with the most significant increase in provision, as a consequence of the developments in the year, the level of uncertainty regarding the Group's share of final costs has reduced. However, there continues to be a risk of further increases and we note that the remediation at the other two Superfund sites is less advanced and accordingly at risk of future increases. We are satisfied with the Group's disclosures of environmental provisions in light of the underlying assumptions and accounting judgments made.

5.4. Classification of exceptional items

Key audit matter description	**Account balance: Operating costs (included in the exceptional items and remeasurements column). Refer to notes 1E and 5 to the financial statements and the Audit Committee's discussion on pages 76 – 78.** The Consolidated Income Statement separately identifies exceptional items and certain remeasurements (the 'middle column'). This results in focus being placed on what management refer to as 'business performance' or 'adjusted profit'. Adjusted profit is a critical measure for stakeholders and is one of the principal measures which the Board uses to review the performance of the Group's segments. In addition, underlying profit, which is derived from adjusted profit, is another widely used measure and is used in determining aspects of executive remuneration. Accordingly, the classification of items in the middle column is important for users of the financial statements. Consistency in the identification and presentation of these items is also important to ensure comparability of year-on-year reporting in the Annual Report and Accounts. There is judgement in the classification and accuracy of the amounts determined to be exceptional in accordance the Group's exceptional items framework and any amounts so classified impact the adjusted profit of the Group. In the current year management classified the following items as exceptional charges in the middle column: • Environmental charges of £402 million – Relating to the re-evaluation of estimates of total remediation costs and cost sharing allocations borne by the Group for the three US Superfund sites, as well as the impact of the change in the real discount rate applied to the estimated undiscounted cash flows for all environmental provisions; and • Deferred tax arising on the reversal of the previously enacted reduction in the UK corporation tax rate of £192 million. The key judgements related to the calculation of the environmental charges have been discussed in the 'environmental provisions' key audit matter.

5.4. Classification of exceptional items continued

How the scope of our audit responded to the key audit matter	We have tested the controls over the classification and accuracy of the amounts presented as exceptional items in the middle column. We have obtained the Group's exceptional items framework and assessed the reasonableness of the framework for identifying items to be classified as exceptional. We assessed whether the classification of each of the items classified as exceptional complies with the approved framework and ESMA guidance and is reasonable. In making this assessment we also considered the consistency of application of the framework year on year. We substantiated the nature and quantum of significant individual items by examining appropriate evidence. We also considered other items which were not identified as exceptional in the context of management's exceptional items framework as part of our challenge of management's conclusions thereon, such as the provision for bad and doubtful debts in the US which was increased in the current year on account of the impact of COVID-19 and the related cessation of certain collection activities and disconnection of customers for non-payments.
Key observations	Our testing confirmed that the relevant controls over the classification and accuracy of the amounts presented as exceptional items in the middle column were found to be operating effectively. We determined that the amounts disclosed as exceptional were so classified in accordance with the Audit Committee approved exceptional items framework and that the framework has been applied consistently with prior years. Specifically, the classification of material increases in environmental provisions at the three Superfund sites and the impact on deferred tax balances of a change in tax rates have been classified as exceptional in prior years. We concur that the additional US bad debt charge should not be exceptional as it would represent just part of an amount calculated in accordance with IFRS.

5.5. Net pension obligations

Key audit matter description	**Account balance: Pensions and other post-retirement benefit obligations. Refer to notes 1E, 25 and 35 to the financial statements and the Audit Committee's discussion on pages 76 – 78.** Substantially all of the Group's employees are members of one of a number of pension schemes in either the UK or US. These pension schemes include both defined benefit and defined contribution schemes. Healthcare and life insurance benefits are also provided to eligible retired US employees. There are significant assumptions used in the valuations of the defined benefit obligations, which as at 31 March 2020 represent a liability of £24.6 billion (2019: £24.9 billion), and valuations of unquoted pension assets ('unquoted assets'), which as at 31 March 2020 make up £11.4 billion (2019: £8.4 billion) out of scheme assets of £23.7 billion (2019: £24.8 billion). The critical judgements relating to the pension obligations include inflation assumptions, discount rates, mortality assumptions and future salary changes applied to active members. The setting of these assumptions is complex and changes to them can have a material impact on the value of pension obligations. Management uses external actuaries to assist in determining these assumptions. Accordingly, we have identified certain of these assumptions to be 'higher' audit risks. Unlike the fair value of other assets that are readily observable and therefore more easily independently corroborated, the valuation of unquoted pension assets classified is inherently subjective. As such there is significant judgement in determining the fair value of these assets including the selection of the valuation methodology and other critical assumptions. The COVID-19 pandemic has resulted in the valuation of certain property assets being subject to increased uncertainty. In addition the valuation of certain unquoted investments including those held in private equity portfolios are subject to an unusually high level of uncertainty due to the most recent valuations on them being performed prior to the significant economic impacts of the COVID-19 pandemic. For these investments, management engaged external experts to assess the economic impact of COVID-19 on the asset valuations as at year end, including property specialists who assessed the value of the property portfolio held within pension assets. Accordingly, we have identified this as an area of 'higher' audit risk. In the UK, the Group entered into two buy-in policies in the year. The Section A policy was entered into in August 2019, with the Section B policy completing in November 2019. The transactions involve the transfer of certain pension assets in the form of gilts and cash, valued at £2.8 billion and £1.6 billion respectively, in return for bulk annuity policies, with the intention of mitigating longevity risk. The transactions represent part of the Group's long term de-risking strategy, of a similar nature to the longevity swap entered into in 2018. Under a buy-in transaction the ultimate obligation to pay the members remains with the scheme and is hence retained within the Group's pension obligations; the bulk annuity is considered a qualifying insurance policy and is recognised at the valuation of the obligation it covers as an asset to the scheme. At the time of the transactions, the member obligations to which the policies relate were valued at £2.4 billion for Section A and £1.3 billion for Section B resulting in the recognition of actuarial losses of £700 million being recognised in Other Comprehensive Income, as disclosed in note 25 to the financial statements.
How the scope of our audit responded to the key audit matter	We tested the controls over the valuation of unquoted pension assets and over the critical assumptions used in determining the valuation of the pension obligations. We engaged internal actuarial experts to assist in testing the discount rates used in calculating the pension obligations. We independently calculated appropriate discount rates and compared these to management's rates. Our actuarial experts also assisted us in benchmarking and challenging the other assumptions used by management in determining the value of pension obligations particularly focusing on inflation, salary growth and mortality rates; this included comparing the inputs and assumptions used in determining the valuation of the Group's schemes to those used in comparable pension plans and/or our internal benchmarks. Additionally, we considered the competence, capability and objectivity of the independent actuaries engaged by the Group to perform valuations of the relevant schemes and where applicable, of unquoted assets. We engaged internal specialists to challenge management's valuation of certain unquoted scheme assets. Our work included assessing the reasonableness of the valuation methodologies applied, reviewing publically available information on these assets, comparing the valuations to internal benchmarks and confirmation of inputs used by management to determine the asset values. Further, our actuarial experts assisted us with the assessment of management's assumptions and valuation methodology related to the buy-ins and we consulted with technical experts as to the correct accounting treatment.
Key observations	Our testing confirmed that the relevant controls over the valuation of unquoted pension assets and over the critical assumptions used in determining the valuation of the pension obligations operated effectively. We judge the discount rates and other key actuarial assumptions used by management to be within our internally developed reasonable range or consistent with our internally developed assumptions.

Independent auditor's report
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5. Key audit matters continued

5.5. Net pension obligations continued

Key observations continued	We note that the recognition of the actuarial loss on the buy-in transactions, representing the difference between the price paid and the value of the obligations covered by the buy-in policies is appropriately recognised in OCI as it is treated as a change in the fair value of plan assets. We assessed the appropriateness of the related disclosures in note 25 to the financial statements and consider them to be reasonable. We consider management's valuations of the unquoted investments to be reasonable and the disclosures in note 1E to the financial statements regarding the estimation uncertainty and in note 35 to the financial statements regarding the sensitivity of the pension assets balance to the valuation of unquoted assets to be appropriate.

5.6. Treasury derivative transactions

Key audit matter description	**Account balances: Derivative financial assets and derivative financial liabilities. Refer to notes 17 and 32 to the financial statements.** The Group mitigates the exposure to interest rate and foreign exchange rate risks with risk management activities including the use of derivatives such as cross-currency and interest rate swaps. The Group designates derivatives in hedge relationships where they judge this to meet the requirements of IFRS 9. Due to the technical nature of this assessment, we have identified it as a 'higher' audit risk. At 31 March 2020 the Group had derivative financial assets of £1,342 million (31 March 2019: £1,153 million) and derivative financial liabilities of £1,334 million (31 March 2019: £1,183 million). The valuation of the derivative portfolio requires management to make certain assumptions and judgements in particular around the valuation methodologies adopted and the discount rate to be applied to forecast cash flows. The portfolio also includes 'level 3' derivative financial liabilities of £245 million (31 March 2019: £216 million) for which unobservable inputs that are significant to the fair value measurement must be used in the valuation models. This results in management having to make estimates in relation to unobservable inputs, which increase the complexity and level of estimation uncertainty, and there is judgement involved in determining the methodology used to fair value these derivatives. Accordingly, we have identified this as an area of 'higher' audit risk.
How the scope of our audit responded to the key audit matter	We have tested the controls over the recording and valuation of derivative financial instruments. This has included testing of the review controls performed by management over the valuations and its challenge of the estimates made. In conjunction with our treasury specialists we have tested a sample of the valuation models used by management, including a challenge of the assumptions therein, to confirm the appropriateness of the valuation methodology adopted and the assumptions applied. We have obtained third party confirmations to test the completeness and accuracy of the information held within the Group's treasury management system. We have assessed the appropriateness of the hedge documentation, eligibility of designations and hedge effectiveness testing performed by management and tested the disclosures within the financial statements. We assessed whether the representation of items in the cash flow statement to reflect the change in accounting policy have been appropriately disclosed.
Key observations	Our testing confirmed that the relevant controls over the recording and valuation of derivative financial instruments were effective. We conclude that the valuation of derivatives and the Group's use of hedge accounting is appropriate. We are satisfied that the disclosures in respect of the cash flow statement accounting policy change, and the amounts represented in the prior year to reflect the updated policy, are appropriate.

5.7. IT user access controls

Key audit matter description	**IT systems fulfil a critical role in the Group's financial reporting and accordingly IT user access control deficiencies potentially impact all account balances. Refer additionally to the Audit Committee's discussion of significant issues on pages 76 – 78.** In the past two financial years (ended on 31 March 2019 and 31 March 2018), we identified deficiencies relating to segregation of duties, control over privileged access and user access management both within the Group and the Group's IT service organisations (together 'access deficiencies'). The deficiencies identified increased the risk that individuals within the Group and at service organisations had inappropriate access during the period. Management continued executing on their remediation programme commenced during the year ended 31 March 2018 in order to strengthen the IT control framework, and substantially completed the programme. The existence of deficiencies during the year results in an increased risk that data and reports from the affected systems are not reliable. The level of risk ascribed to our work in this area is dependent on the nature and complexity of the controls themselves and the balances within the financial statements the controls address.
How the scope of our audit responded to the key audit matter	In responding to the access deficiencies for in scope IT systems and the associated IT infrastructure, we have determined the impact that inappropriate levels of access throughout the year could feasibly have had on the affected systems and account balances including assessing the likelihood of inappropriate user access impacting the financial statements. Further, we tested controls implemented by management to identify instances of the use of inappropriate access, as well as mitigating controls included within management's remediation programme. Where no such controls existed, we extended the scope of our audit such that we have not placed reliance on controls for information produced or held in the impacted systems.
Key observations	A number of the deficiencies identified as unremediated in the prior year were remediated by year-end. We do not consider the remaining deficiencies to be significant and we found the mitigating controls implemented by management operated effectively. Due to the fact that the newly remediated controls did not operate for the entire year, we conducted a largely substantive audit in the areas impacted by the access deficiencies. We continued to rely on controls in certain areas where the IT systems were not impacted by the access deficiencies.

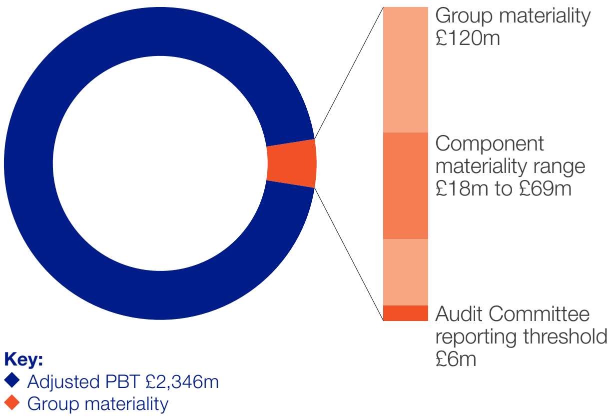
6. Our application of materiality

6.1. Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent company financial statements
Materiality	£120 million (2019: £124 million).	£100 million (2019: £100 million).
Basis for determining materiality	Our determined materiality represents 5.1% of adjusted profit before tax and 6.8% of statutory profit before tax. Adjusted profit before tax is profit before tax, exceptional items and remeasurements as disclosed in the consolidated income statement. Prior year materiality was determined on a similar basis.	1.2% of net assets.
Rationale for the benchmark applied	We consider adjusted profit before tax to be an important benchmark of the performance of the Group. We consider it appropriate to adjust for exceptional items and remeasurements as these items are volatile and not reflective of the underlying performance of the Group. We conducted an assessment of which line items we understand to be the most important to investors and analysts by reviewing analyst reports and National Grid's communications to shareholders and lenders, as well as the communications of peer companies. This assessment resulted in us considering the financial statement line items above. Profit before tax is the benchmark ordinarily considered by us when auditing listed entities. It provides comparability against other companies across all sectors, but has limitations when auditing companies whose earnings are impacted by items which can be volatile from one period to the next, and therefore may not be representative of the volume of transactions and the overall size of the business in a given year, or where the impact of volatility may result in the recognition of material income or charges in a particular year. Whilst not an IFRS measure, adjusted profit is one of the key metrics communicated by management in National Grid's results announcements. It excludes some of the volatility arising from changes in fair values of financial assets and liabilities as well as "exceptional items" and this was the key measure applied in the prior year.	As the Company is non-trading, operates primarily as a holding company for the Group's trading entities, and is not profit orientated, we believe the net asset position is the most appropriate benchmark to use.



6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at £92.0 million for the 2020 audit (2019: £86.8 million), or 77% of Group materiality (2019: 70%). In determining to increase performance materiality, we considered the following factors:

- our cumulative experience from prior year audits;
- the level of corrected and uncorrected misstatements identified;
- our risk assessment, including our understanding of the entity and its environment; and
- our assessment of the Group's overall control environment.

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6. Our application of materiality continued

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £6.0 million (2019: £6.2 million), as well as differences below that threshold which, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

The following significant components of the Group were identified in our audit planning: UK Electricity Transmission, UK Gas Transmission and US Regulated. Each of these components was subjected to a full-scope audit for Group reporting purposes, completed to the individual component materiality level discussed above.

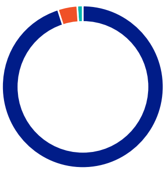
As each of the financially significant components maintains separate financial records we have engaged component auditors from the Deloitte member firms in the US or the UK to perform procedures at these components on our behalf. This approach allows us to engage local auditors who have appropriate knowledge of local regulations to perform this audit work. We issued detailed instructions to the component auditors and directed and supervised their work through a number of visits to the component auditors during the planning and performance stages of our audit alongside frequent remote communication and review of their work. In response to the COVID-19 pandemic which limited our ability to make component visits after the year end, frequent calls were held between the Group and component teams and remote access to relevant documents was provided.

Our oversight of component auditors focused on the planning of their audit work and key judgements made. In particular, our supervision and direction focused on the work performed in relation to key audit matters including internal controls (including general IT controls), environmental provisions, pensions, treasury derivative transactions and the classification of exceptional items. As part of our monitoring of component auditors we have also attended key local audit meetings.

Additionally our audit planning identified the following non-significant components where we consider there to be a reasonable possibility of material misstatement in specific items within the financial statements: UK Property, the Isle of Grain LNG terminal and the Metering business. Accordingly, we have directed component auditors to perform specific audit procedures in relation to material account balances and analytical procedures on the respective income statements and statements of financial position for these components. The work on these components is carried out by the same component audit team as for the UK Electricity Transmission and UK Gas Transmission components.

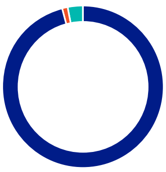
In addition to the work performed at a component level the Group audit team also performed audit procedures on the parent company financial statements, including but not limited to corporate activities such as treasury and pensions as well as on the consolidated financial statements themselves, including entity-level controls, litigation provisions, the consolidation, financial statement disclosures and risk assessment work on components not included elsewhere in the scope of our audit. The Group audit team also led the work in connection with the impact of climate change on the useful lives of the Group's gas assets and co-ordinated certain procedures performed on key areas, such as environmental provisions, where audit work is performed by both the Group and component audit teams as well as analytical reviews on out-of-scope components.

Revenue (%)



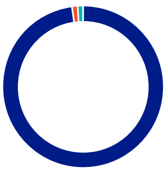
- Full audit scope 95%
- Specified audit procedures 4%
- Review at group level 1%

Gross assets (%)



- Full audit scope 96%
- Specified audit procedures 1%
- Review at group level 3%

Gross liabilities (%)



- Full audit scope 98%
- Specified audit procedures 1%
- Review at group level 1%

8. Other information

The directors are responsible for the other information. The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that:

- **Fair, balanced and understandable** – the statement given by the directors that they consider the Annual Report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit Committee reporting** – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; or
- **Directors' statement of compliance with the UK Corporate Governance Code** – the parts of the directors' statement required under the Listing Rules relating to the Company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

We have nothing to report in respect of these matters.

9. Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;
- results of our enquiries of management, internal audit and the Audit Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations;
- the matters discussed among the audit engagement team including significant component audit teams and involving relevant internal specialists, including tax, pensions, IT, and treasury specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. The engagement team includes audit partners and staff who have extensive experience of working with companies in the same sectors as National Grid operates, and this experience was relevant to the discussion about where fraud risks may arise. The discussion was also carried out across the engagement team specific to the potential fraud implications of COVID-19 in relation to added financial pressures as well as in relation to increases in remote working.

In common with all audits under ISAs (UK), we are also required to identify management override as a significant risk and to perform specific procedures to respond to that risk.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act 2006, the UK Listing Rules, pensions and tax legislation, US Securities Exchange Act 1934 and relevant SEC regulations, as well as laws and regulations prevailing in each country in which we identified a full scope component. In addition, compliance with terms of the Group's operating licence and environmental regulations were fundamental to the Group's operations.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Group's operating licences and environmental regulations.

11.2. Audit response to risks identified

As a result of performing the above, we did not identify any key audit matters related to the potential risk of fraud or non-compliance with laws and regulations.

Our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with relevant regulatory authorities;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Independent auditor's report
to the members of National Grid plc continued

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

13. Matters on which we are required to report by exception

13.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

13.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14. Other matters

14.1. Auditor tenure

We became independent and commenced our audit transition on 1 January 2017. Following the recommendation of the audit committee, we were appointed by the Shareholders at the Annual General Meeting on 31 July 2017 to audit the financial statements for the year ending 31 March 2018 and subsequent financial periods.

The period of total uninterrupted engagement including previous renewals and reappointments of the firm is three years, covering the years ending 31 March 2018 to 31 March 2020.

14.2. Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

15. Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Douglas King FCA (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
London, United Kingdom
17 June 2020

Consolidated income statement
for the years ended 31 March

2020	**Notes**	**Before exceptional items and remeasurements £m**	**Exceptional items and remeasurements (see note 5) £m**	**Total £m**
Continuing operations				
Revenue	2(a),3	**14,540**	**–**	**14,540**
Provision for bad and doubtful debts	4	**(234)**	**–**	**(234)**
Other operating costs	4,5	**(10,999)**	**(527)**	**(11,526)**
Operating profit/(loss)	2(b)	**3,307**	**(527)**	**2,780**
Finance income	5,6	**70**	**(16)**	**54**
Finance costs	5,6	**(1,119)**	**(48)**	**(1,167)**
Share of post-tax results of joint ventures and associates	5,16	**88**	**(1)**	**87**
Profit/(loss) before tax	2(b),5	**2,346**	**(592)**	**1,754**
Tax	5,7	**(433)**	**(47)**	**(480)**
Profit/(loss) after tax from continuing operations	5	**1,913**	**(639)**	**1,274**
Profit/(loss) after tax from discontinued operations	10	**5**	**(14)**	**(9)**
Total profit/(loss) for the year (continuing and discontinued)		**1,918**	**(653)**	**1,265**
Attributable to:				
Equity shareholders of the parent		**1,917**	**(653)**	**1,264**
Non-controlling interests from continuing operations		**1**	**–**	**1**
Earnings per share (pence)				
Basic earnings per share (continuing)	8			**36.8**
Diluted earnings per share (continuing)	8			**36.6**
Basic earnings per share (continuing and discontinued)	8			**36.5**
Diluted earnings per share (continuing and discontinued)	8			**36.3**

2019	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (see note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	14,933	–	14,933
Provision for bad and doubtful debts	4	(181)	–	(181)
Other operating costs	4,5	(11,310)	(572)	(11,882)
Operating profit/(loss)	2(b)	3,442	(572)	2,870
Finance income	5,6	73	15	88
Finance costs	5,6	(1,066)	(91)	(1,157)
Share of post-tax results of joint ventures and associates	10,16	40	–	40
Profit/(loss) before tax	2(b),5	2,489	(648)	1,841
Tax	5,7	(488)	149	(339)
Profit/(loss) after tax from continuing operations	5	2,001	(499)	1,502
Profit/(loss) after tax from discontinued operations	10	57	(45)	12
Total profit/(loss) for the year (continuing and discontinued)		2,058	(544)	1,514
Attributable to:				
Equity shareholders of the parent		2,055	(544)	1,511
Non-controlling interests from continuing operations		3	–	3
Earnings per share (pence)				
Basic earnings per share (continuing)	8			44.3
Diluted earnings per share (continuing)	8			44.1
Basic earnings per share (continuing and discontinued)	8			44.6
Diluted earnings per share (continuing and discontinued)	8			44.4

Consolidated income statement
for the years ended 31 March continued

2018	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (see note 5) £m	Total £m
Continuing operations				
Revenue	2(a)	15,250	–	15,250
Provision for bad and doubtful debts	4	(36)	–	(36)
Other operating costs	4,5	(11,757)	36	(11,721)
Operating profit	2(b)	3,457	36	3,493
Finance income	6	127	–	127
Finance costs	5,6	(1,128)	119	(1,009)
Share of post-tax results of joint ventures and associates	10	44	5	49
Profit before tax	2(b),5	2,500	160	2,660
Tax	5,7	(584)	1,473	889
Profit after tax from continuing operations	5	1,916	1,633	3,549
Profit/(loss) after tax from discontinued operations	10	145	(143)	2
Total profit for the year (continuing and discontinued)		2,061	1,490	3,551
Attributable to:				
Equity shareholders of the parent		2,060	1,490	3,550
Non-controlling interests from continuing operations		1	–	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			102.5
Diluted earnings per share (continuing)	8			102.1
Basic earnings per share (continuing and discontinued)	8			102.6
Diluted earnings per share (continuing and discontinued)	8			102.1

Consolidated statement of comprehensive income
for the years ended 31 March

	Notes	2020 £m	2019 £m	2018 £m
Profit after tax from continuing operations		**1,274**	1,502	3,549
Other comprehensive income from continuing operations				
Items from continuing operations that will never be reclassified to profit or loss:				
Remeasurement (losses)/gains on pension assets and post-retirement benefit obligations	25	**(724)**	68	1,313
Net losses on equity instruments designated at fair value through other comprehensive income		**(9)**	–	–
Net (losses)/gains on financial liability designated at fair value through profit and loss attributable to changes in own credit risk		**(3)**	7	–
Net losses in respect of cash flow hedging of capital expenditure		**(17)**	(13)	–
Tax on items that will never be reclassified to profit or loss	7	**212**	(15)	(530)
Total items from continuing operations that will never be reclassified to profit or loss		**(541)**	47	783
Items from continuing operations that may be reclassified subsequently to profit or loss:				
Exchange adjustments		**551**	347	(505)
Net (losses)/gains in respect of cash flow hedges		**(128)**	(40)	16
Net losses in respect of cost of hedging		**(78)**	(66)	–
Net losses on available-for-sale investments		**–**	–	(30)
Transferred to profit or loss on sale of available-for-sale investments		**–**	–	(73)
Net (losses)/gains on investment in debt instruments measured at fair value through other comprehensive income		**(15)**	2	–
Share of other comprehensive (losses)/income of associates, net of tax		**(5)**	1	–
Tax on items that may be reclassified subsequently to profit or loss	7	**35**	12	33
Total items from continuing operations that may be reclassified subsequently to profit or loss		**360**	256	(559)
Other comprehensive (loss)/income for the year, net of tax from continuing operations		**(181)**	303	224
Other comprehensive income for the year, net of tax from discontinued operations[1]	10	**6**	36	147
Other comprehensive (loss)/income for the year, net of tax		**(175)**	339	371
Total comprehensive income for the year from continuing operations		**1,093**	1,805	3,773
Total comprehensive (loss)/income for the year from discontinued operations	10	**(3)**	48	149
Total comprehensive income for the year		**1,090**	1,853	3,922
Attributable to:				
Equity shareholders of the parent				
From continuing operations		**1,091**	1,801	3,773
From discontinued operations		**(3)**	48	149
		1,088	1,849	3,922
Non-controlling interests				
From continuing operations		**2**	4	–

1. The other comprehensive income from discontinued operations relates to the items of other comprehensive income of Cadent (investment through Quadgas HoldCo Limited). Refer to note 10 for details.

Consolidated statement of changes in equity
for the years ended 31 March

	Share capital £m	Share premium account £m	Retained earnings £m	Other equity reserves[1] £m	Total shareholders' equity £m	Non-controlling interests £m	Total equity £m
At 31 March 2017	449	1,324	22,582	(3,987)	20,368	16	20,384
Profit for the year	–	–	3,550	–	3,550	1	3,551
Other comprehensive income/(loss) for the year	–	–	925	(553)	372	(1)	371
Total comprehensive income/(loss) for the year	–	–	4,475	(553)	3,922	–	3,922
Equity dividends	–	–	(4,487)	–	(4,487)	–	(4,487)
Scrip dividend-related share issue[2]	3	(3)	–	–	–	–	–
Purchase of treasury shares	–	–	(1,017)	–	(1,017)	–	(1,017)
Issue of treasury shares	–	–	33	–	33	–	33
Purchase of own shares	–	–	(5)	–	(5)	–	(5)
Share-based payments	–	–	16	–	16	–	16
Tax on share-based payments	–	–	2	–	2	–	2
At 31 March 2018 (as previously reported)	452	1,321	21,599	(4,540)	18,832	16	18,848
Impact of transition to IFRS 9 and IFRS 15	–	–	(268)	72	(196)	–	(196)
At 1 April 2018 (as restated)	452	1,321	21,331	(4,468)	18,636	16	18,652
Profit for the year	–	–	1,511	–	1,511	3	1,514
Other comprehensive income for the year	–	–	89	249	338	1	339
Total comprehensive income for the year	–	–	1,600	249	1,849	4	1,853
Equity dividends	–	–	(1,160)	–	(1,160)	–	(1,160)
Scrip dividend-related share issue[2]	6	(7)	–	–	(1)	–	(1)
Issue of treasury shares	–	–	18	–	18	–	18
Purchase of own shares	–	–	(2)	–	(2)	–	(2)
Share-based payments	–	–	27	–	27	–	27
Cash flow hedges transferred to the statement of financial position, net of tax	–	–	–	(18)	(18)	–	(18)
At 1 April 2019	458	1,314	21,814	(4,237)	19,349	20	19,369
Profit for the year	–	–	1,264	–	1,264	1	1,265
Other comprehensive (loss)/income for the year	–	–	(509)	333	(176)	1	(175)
Total comprehensive income for the year	–	–	755	333	1,088	2	1,090
Equity dividends	–	–	(892)	–	(892)	–	(892)
Scrip dividend-related share issue[2]	12	(13)	–	–	(1)	–	(1)
Issue of treasury shares	–	–	17	–	17	–	17
Purchase of own shares	–	–	(6)	–	(6)	–	(6)
Share-based payments	–	–	19	–	19	–	19
Tax on share-based payments	–	–	3	–	3	–	3
Cash flow hedges transferred to the statement of financial position, net of tax	–	–	–	(15)	(15)	–	(15)
At 31 March 2020	**470**	**1,301**	**21,710**	**(3,919)**	**19,562**	**22**	**19,584**

1. For further details of other equity reserves, see note 28.
2. Included within the share premium account are costs associated with scrip dividends.

Consolidated statement of financial position
as at 31 March

	Notes	2020 £m	2019 £m
Non-current assets			
Goodwill	11	**6,233**	5,869
Other intangible assets	12	**1,295**	1,084
Property, plant and equipment	13	**48,770**	43,913
Other non-current assets	14	**354**	264
Pension assets	25	**1,849**	1,567
Financial and other investments	15	**543**	667
Investments in joint ventures and associates	16	**995**	608
Derivative financial assets	17	**1,249**	1,045
Total non-current assets		**61,288**	55,017
Current assets			
Inventories and current intangible assets	18	**549**	370
Trade and other receivables	19	**2,986**	3,153
Current tax assets		**102**	126
Financial and other investments	15	**1,998**	1,981
Derivative financial assets	17	**93**	108
Cash and cash equivalents	20	**73**	252
Assets held for sale	10	**–**	1,956
Total current assets		**5,801**	7,946
Total assets		**67,089**	62,963
Current liabilities			
Borrowings	21	**(4,072)**	(4,472)
Derivative financial liabilities	17	**(380)**	(350)
Trade and other payables	22	**(3,602)**	(3,769)
Contract liabilities	23	**(76)**	(61)
Current tax liabilities		**(86)**	(161)
Provisions	26	**(348)**	(316)
Total current liabilities		**(8,564)**	(9,129)
Non-current liabilities			
Borrowings	21	**(26,722)**	(24,258)
Derivative financial liabilities	17	**(954)**	(833)
Other non-current liabilities	24	**(891)**	(808)
Contract liabilities	23	**(1,082)**	(933)
Deferred tax liabilities	7	**(4,184)**	(3,965)
Pensions and other post-retirement benefit obligations	25	**(2,802)**	(1,785)
Provisions	26	**(2,306)**	(1,883)
Total non-current liabilities		**(38,941)**	(34,465)
Total liabilities		**(47,505)**	(43,594)
Net assets		**19,584**	19,369
Equity			
Share capital	27	**470**	458
Share premium account		**1,301**	1,314
Retained earnings		**21,710**	21,814
Other equity reserves	28	**(3,919)**	(4,237)
Total shareholders' equity		**19,562**	19,349
Non-controlling interests		**22**	20
Total equity		**19,584**	19,369

The consolidated financial statements set out on pages 121 to 208 were approved by the Board of Directors on 17 June 2020 and were signed on its behalf by:

Sir Peter Gershon Chairman
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Consolidated cash flow statement
for the years ended 31 March

	Notes	2020 £m	2019 £m	2018 £m
Cash flows from operating activities				
Total operating profit from continuing operations	2(b)	**2,780**	2,870	3,493
Adjustments for:				
Exceptional items and remeasurements	5	**527**	572	(36)
Depreciation, amortisation and impairment		**1,640**	1,588	1,530
Share-based payments		**19**	27	16
Changes in working capital		**269**	40	118
Changes in provisions		**(169)**	(110)	(206)
Changes in pensions and other post-retirement benefit obligations		**(92)**	(123)	(239)
Cash flows relating to exceptional items		**(60)**	(400)	26
Cash generated from operations – continuing operations		**4,914**	4,464	4,702
Tax (paid)/recovered		**(199)**	(75)	8
Net cash inflow from operating activities – continuing operations		**4,715**	4,389	4,710
Net cash used in operating activities – discontinued operations	10	**(97)**	(71)	(207)
Cash flows from investing activities				
Acquisition of financial investments		**(108)**	(89)	(2)
Acquisition of Geronimo and Emerald	38	**(139)**	–	–
Investments in joint ventures and associates		**(82)**	(143)	(129)
Loans to joint ventures and associates		**–**	(31)	(68)
Disposal of financial investments		**63**	18	134
Disposal of 61% interest in UK Gas Distribution		**–**	–	(20)
Disposal of interests in Quadgas HoldCo Limited	10	**1,965**	–	–
Purchases of intangible assets		**(317)**	(306)	(173)
Purchases of property, plant and equipment		**(4,583)**	(3,635)	(3,738)
Disposals of property, plant and equipment		**68**	38	10
Dividends received from joint ventures and associates		**75**	68	69
Interest received		**73**	68	30
Net movements in short-term financial investments		**7**	822	5,953
Net movements in derivatives[1]		**(223)**	(412)	330
Net cash flow (used in)/from investing activities – continuing operations		**(3,201)**	(3,602)	2,396
Net cash flow used in investing activities – discontinued operations	10	**6**	156	171
Cash flows from financing activities				
Purchase of treasury shares		**–**	–	(1,017)
Proceeds from issue of treasury shares		**16**	17	33
Purchase of own shares		**(6)**	(2)	(5)
Proceeds received from loans	29(c)	**4,218**	2,932	1,941
Repayment of loans	29(c)	**(3,253)**	(1,969)	(2,156)
Payments of lease liabilities	29(c)	**(121)**	(70)	(71)
Net movements in short-term borrowings	29(c)	**(424)**	179	(764)
Net movements in derivatives[1]	29(c)	**(187)**	35	(267)
Interest paid	29(c)	**(957)**	(914)	(853)
Dividends paid to shareholders		**(892)**	(1,160)	(4,487)
Net cash flow used in financing activities – continuing operations		**(1,606)**	(952)	(7,646)
Net cash flow (used in)/from financing activities – discontinued operations	10	**–**	–	(231)
Net decrease in cash and cash equivalents	29(a)	**(183)**	(80)	(807)
Exchange movements		**4**	3	(3)
Cash and cash equivalents at start of year		**252**	329	1,139
Cash and cash equivalents at end of year	20	**73**	252	329

1. Certain derivative balances have been represented for all periods presented to reflect a reclassification from financing activities to investing activities to reflect a change in accounting policy (see note 1 for details).

Notes to the consolidated financial statements
– analysis of items in the primary statements

1. Basis of preparation and recent accounting developments

Accounting policies describe our approach to recognising and measuring transactions and balances in the year. The accounting policies applicable across the financial statements are shown below, whereas accounting policies that are specific to a component of the financial statements have been incorporated into the relevant note.

This section also shows areas of judgement and key sources of estimation uncertainty in these financial statements. In addition, we have summarised new International Accounting Standards Board (IASB) and EU endorsed accounting standards, amendments and interpretations and whether these are effective for this year end or in later years, explaining how significant changes are expected to affect our reported results.

National Grid's principal activities involve the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited liability company incorporated and domiciled in England and Wales, with its registered office at 1–3 Strand, London WC2N 5EH.

The Company, National Grid plc, which is the ultimate parent of the Group, has its primary listing on the London Stock Exchange and is also quoted on the New York Stock Exchange.

These consolidated financial statements were approved for issue by the Board on 17 June 2020.

These consolidated financial statements have been prepared in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) and related interpretations as issued by the IASB and IFRS as adopted by the EU. They are prepared on the basis of all IFRS accounting standards and interpretations that are mandatory for periods ended 31 March 2020 and in accordance with the Companies Act 2006 applicable to companies reporting under IFRS and Article 4 of the EU IAS Regulation. The comparative financial information has also been prepared on this basis.

The consolidated financial statements have been prepared on a historical cost basis, except for the recording of pension assets and liabilities, the revaluation of derivative financial instruments and certain commodity contracts and certain financial assets and liabilities measured at fair value.

These consolidated financial statements are presented in pounds sterling, which is also the functional currency of the Company.

The notes to the financial statements have been prepared on a continuing basis unless otherwise stated.

Our income statement and segmental analysis separately identify financial results before and after exceptional items and remeasurements. We continue to use a columnar presentation as we consider it improves the clarity of the presentation, and is consistent with the way that financial performance is measured by management and reported to the Board and Executive Committee, and assists users of the financial statements to understand the results. The inclusion of total profit for the period from continuing operations before exceptional items and remeasurements forms part of the incentive target set annually for remunerating certain Executive Directors and accordingly we believe it is important for users of the financial statements to understand how this compares to our results on a statutory basis and period on period.

A. Going concern

As at the date of approving these financial statements, the impact of COVID-19 on the Group's operations is continually being assessed and subject to rapid change. The Directors have assessed the principal risks discussed on pages 24 – 25, including by modelling both a base case and a reasonable worst case scenario. The reasonable worst-case scenario covers the cash flow impact associated with an extended lockdown for a period of 12 months across both the UK and US. The main cash flow impacts identified in the reasonable worst-case scenario are:

- a significant reduction in cash collections over an extended 12-month period driven by lower customer demand and increased bad debt in our US businesses;
- additional working capital required to fund payment term extensions and charge deferrals in the UK electricity market, intended to help customers and end-user consumers;
- one-off increases in other costs such as cleaning, safety equipment and IT; offset by
  - a reduction in non-essential capital expenditure across the Group driven by increased absenteeism, supply chain issues and difficulty in accessing sites; and
  - a reduction in discretionary spend across all areas (e.g. recruitment, travel and consultancy spend).

As part of their analysis, the Board also considered the following potential levers at their discretion to improve the position identified by the reasonable worst-case scenario in the event that the debt capital markets are not accessible:

- further significant changes in the phasing of the Group's capital programme with elements of non-essential works and programmes delayed beyond June 2021;
- a number of further reductions in operating expenditure across the Group primarily related to workforce cost reductions in both the UK and the US; and
- the payment of dividends to shareholders.

Having considered the reasonable worst-scenario and further levers at the Board's discretion, the Group continues to have headroom against the Group's committed facilities identified in note 33 to the financial statements.

In addition to the above, the ability to raise new financing was separately included in the analysis and the Directors noted the £0.9 billion debt issuances completed in April 2020 (disclosed in note 21 to the financial statements) as evidence of the Group's ability to continue to have access to the debt capital markets if needed. Other factors considered by the Board as part of their Going Concern assessment included the potential impact of Brexit trade talks, the Group's various ongoing rate case determinations in the UK and US alongside inherent uncertainties in cash flow forecasts (such as the impact of storms in our US business).

Based on the above, the Directors have concluded the Group is well placed to manage its financing and other business risks satisfactorily, and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least 12 months from the signing date of these consolidated financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

1. Basis of preparation and recent accounting developments continued

B. Basis of consolidation
The consolidated financial statements incorporate the results, assets and liabilities of the Company and its subsidiaries, together with a share of the results, assets and liabilities of joint operations.

A subsidiary is defined as an entity controlled by the Group. Control is achieved where the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the power to affect those returns through its power over the entity.

The Group accounts for joint ventures and associates using the equity method of accounting, where the investment is carried at cost plus post-acquisition changes in the share of net assets of the joint venture or associate, less any provision for impairment. Losses in excess of the consolidated interest in joint ventures and associates are not recognised, except where the Company or its subsidiaries have made a commitment to make good those losses.

Where necessary, adjustments are made to bring the accounting policies used in the individual financial statements of the Company, subsidiaries, joint operations, joint ventures and associates into line with those used by the Group in its consolidated financial statements under IFRS. Intercompany transactions are eliminated.

The results of subsidiaries, joint operations, joint ventures and associates acquired or disposed of during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Acquisitions are accounted for using the acquisition method, where the purchase price is allocated to the identifiable assets acquired and liabilities assumed on a fair value basis and the remainder recognised as goodwill.

C. Treatment of interests in Quadgas HoldCo Limited (Quadgas) – discontinued operations and held for sale
At the end of June 2019, we completed the disposal of our retained 39% interest in the UK Gas Distribution business (held through Quadgas) that was classified as held for sale. We have treated the results and cash flows of Quadgas as a discontinued operation in the consolidated income statement and consolidated cash flow statement. Refer to note 10 for further details.

D. Foreign currencies
Transactions in currencies other than the functional currency of the Company or subsidiary concerned are recorded at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Non-monetary assets are not retranslated unless they are carried at fair value.

Gains and losses arising on the retranslation of monetary assets and liabilities are included in the income statement, except where the application of hedge accounting requires inclusion in other comprehensive income (see note 32(e)).

On consolidation, the assets and liabilities of operations that have a functional currency different from the Company's functional currency of pounds sterling, principally our US operations that have a functional currency of US dollars, are translated at exchange rates prevailing at the reporting date. Income and expense items are translated at the average exchange rates for the period where these do not differ materially from rates at the date of the transaction. Exchange differences arising are recognised in other comprehensive income and transferred to the consolidated translation reserve within other equity reserves (see note 28).

E. Areas of judgement and key sources of estimation uncertainty
The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates. Information about such judgements and estimations is in the notes to the financial statements, and the key areas are summarised below.

Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are as follows:

- categorisation of certain items as exceptional items or remeasurements and the definition of adjusted earnings (see notes 5 and 8). In applying the Group's exceptional items framework, we have considered a number of key matters, as detailed in note 5;
- the judgement that notwithstanding legislation enacted and targets established during the year ended 31 March 2020 committing the UK, New York State and Massachusetts to achieving net zero greenhouse gas emissions by 2050, these do not trigger a reassessment of the remaining useful economic lives of our gas network assets (see estimate below and note 13); and
- following the legal separation of the Electricity System Operator on 1 April 2019, we concluded that the Electricity System Operator acts as an agent in respect of certain Transmission Network Use of Service revenues, principally those collected on behalf of the Scottish and Offshore transmission operators, as detailed in note 3.

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are as follows:

- the valuation of liabilities for pensions and other post-retirement benefits (see note 25); and
- the cash flows applied in determining the environmental provisions, in particular relating to three US Superfund sites (see note 26).

In light of the current ongoing impact of the COVID-19 pandemic, valuations of certain assets and liabilities are necessarily more subjective. In particular, two further areas of estimation uncertainty impacting the Group's position as at 31 March 2020 have been identified:

- the valuation of certain pension assets, in particular unquoted equities, properties and diversified alternatives, in light of the volatile economic markets (see note 25); and
- the recoverability of customer receivables, particularly in relation to US retail customers, in light of the suspension of debt collection activities and customer termination activities (see note 19).

In addition, we also highlight the estimates made regarding the useful economic lives of our gas network assets due to the length over which they are being depreciated, the potential for new and evolving technologies over that period, and the range of potential pathways for meeting net zero targets (see note 13 for details and sensitivity analysis).

In order to illustrate the impact that changes in assumptions for the valuation of pension assets and liabilities and cash flows for environmental provisions could have on our results and financial position, we have included sensitivity analyses in note 35. Information on what we believe a reasonably possible range of outcomes to be on recoverability of customer receivables are included in note 19.

1. Basis of preparation and recent accounting developments continued

F. Accounting policy choices
IFRS provides certain options available within accounting standards. Choices we have made, and continue to make, include the following:

- Presentational formats: we use the nature of expense method for our income statement and aggregate our statement of financial position to net assets and total equity. In the income statement, we present subtotals of total operating profit, profit before tax and profit after tax from continuing operations, together with additional subtotals excluding exceptional items and remeasurements as a result of the three columnar presentation described earlier. Exceptional items and remeasurements are presented in a separate column on the face of the income statement.
- Financial instruments: we normally opt to apply hedge accounting in most circumstances where this is permitted (see note 32(e)).
- Cash flow statement: Following a review in the year, we have changed our accounting policy in relation to the presentation of derivatives in the cash flow statement, which has resulted in £412 million of cash outflows for 2019 and £330 million of cash inflows from 2018 to be presented as investing activities rather than financing activities. The reclassified cash flows are in relation to derivatives associated with our net investment hedges, and given they are designated in a hedge relationship, the Group has decided to present them together with the underlying hedged item rather than as part of our overall financing activities.

G. New IFRS accounting standards and interpretations effective for the year ended 31 March 2020
The Group adopted IFRS 16 'Leases' with effect from 1 April 2019. We have applied the modified retrospective approach permitted in the standard whereby prior year comparatives have not been restated on adoption. Instead, any cumulative transition adjustments are reflected through reserves. Refer to note 37 for full details of the impact and transition adjustments arising on adoption.

The UK's Financial Conduct Authority announced that LIBOR will cease to exist by the end of 2021, and will be replaced by alternative reference rates. In September 2019, the IASB amended IFRS 9 and IFRS 7 by issuing Interest Rate Benchmark Reform, which provides exceptions to specific hedge accounting requirements to ensure that hedging relationships are not considered to be modified as a result of the change in the reference rate. The amendments were endorsed in January 2020 for adoption in the EU. The Group early-adopted these changes to IFRS 9 and IFRS 7 with effect from 1 April 2019. There were no transition adjustments on adoption. Refer to note 32(e) for further details of the impact in the current period.

The Group has also adopted the following amendments to standards, which have had no material impact on the Group's results or financial statement disclosure:

- IFRIC 23 'Uncertainty over Income Tax Treatments';
- Amendments to IAS 28 'Investments in Associates – Long-term Interests in Associates and Joint Ventures';
- Annual Improvements to IFRS Standards 2015–2017 Cycle; and
- Amendments to IAS 19 'Employee Benefits'.

H. New IFRS accounting standards and interpretations not yet adopted
The following new accounting standards and amendments to existing standards have been issued but are not yet effective or have not yet been endorsed by the EU:

- IFRS 17 'Insurance Contracts';
- Amendments to IFRS 3 'Business Combinations';
- Amendments to the References to the Conceptual Framework;
- Amendments to IAS 1 and IAS 8: Definition of material; and
- Amendments to IAS 1 'Presentation of Financial Statements'.

Effective dates remain subject to the EU endorsement process.

The Group is currently assessing the impact of the above standards, but they are not expected to have a material impact. The Group has not adopted any other standard, amendment or interpretation that has been issued but is not yet effective.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

2. Segmental analysis

This note sets out the financial performance for the year split into the different parts of the business (operating segments). The performance of these operating segments is monitored and managed on a day-to-day basis. Revenue and the results of the business are analysed by operating segment, based on the information the Board of Directors uses internally for the purposes of evaluating the performance of each operating segment and determining resource allocation between them. The Board is National Grid's chief operating decision maker (as defined by IFRS 8 'Operating Segments') and assesses the profitability of operations principally on the basis of operating profit before exceptional items and remeasurements (see note 5). As a matter of course, the Board also considers profitability by segment, excluding the effect of timing. However, the measure of profit disclosed in this note is operating profit before exceptional items and remeasurements as this is the measure that is most consistent with the IFRS results reported within these financial statements.

The results of our three principal businesses are reported to the Board of Directors and are treated as reportable operating segments. The following table describes the main activities for each reportable operating segment:

UK Electricity Transmission	The high-voltage electricity transmission networks in England and Wales and independent Great Britain system operator.
UK Gas Transmission	The high-pressure gas transmission networks in Great Britain and system operator in Great Britain.
US Regulated	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New York and New England and electricity generation facilities in New York.

The UK Electricity Transmission segment also includes the independent Electricity System Operator (ESO). Although there is a separate governance structure (including a separate Executive Committee), the Board receives financial information on an aggregated UK Electricity Transmission basis, which includes the results of the ESO, and accordingly the ESO is included within the reportable segment.

National Grid Ventures (NGV) is our only other operating segment. It does not currently meet the thresholds set out in IFRS 8 to be identified as a separate reportable segment and therefore its results are not required to be separately presented. Instead, NGV's results are reported alongside the results of all other operating businesses on an aggregated basis as "NGV and Other", with certain additional disclosure included in footnotes.

NGV represents our key strategic growth area outside our regulated core business in competitive markets across the US and the UK. The business comprises all commercial operations in metering, LNG at the Isle of Grain in the UK, electricity interconnectors and our new investments in Geronimo Energy LLC (Geronimo) and Emerald Energy Venture LLC (Emerald). Geronimo is a developer of wind and solar generation based in Minneapolis in the US. The acquisition is National Grid's first ownership stake in wind generation and an expansion of our activities in solar generation.

Other activities that do not form part of any of the segments in the above table or NGV primarily relate to our UK property business together with insurance and corporate activities in the UK and US and the Group's investments in technology and innovation companies through National Grid Partners.

The segmental information is presented in relation to continuing operations only and therefore does not include the profits and losses relating to our interest in Quadgas for any period presented (see note 10).

(a) Revenue
Revenue primarily represents the sales value derived from the generation, transmission and distribution of energy, together with the sales value derived from the provision of other services to customers. Refer to note 3 for further details.

Sales between operating segments are priced considering the regulatory and legal requirements to which the businesses are subject. The analysis of revenue by geographical area is on the basis of destination. There are no material sales between the UK and US geographical areas.

	2020			2019			2018		
	Total sales £m	**Sales between segments £m**	**Sales to third parties £m**	Total sales £m	Sales between segments £m	Sales to third parties £m	Total sales £m	Sales between segments £m	Sales to third parties £m
Operating segments – continuing operations:									
UK Electricity Transmission	**3,702**	**(8)**	**3,694**	3,351	(20)	3,331	4,154	(28)	4,126
UK Gas Transmission	**927**	**(16)**	**911**	896	(12)	884	1,091	(9)	1,082
US Regulated	**9,205**	**–**	**9,205**	9,846	–	9,846	9,272	–	9,272
NGV and Other[1]	**736**	**(6)**	**730**	876	(4)	872	776	(6)	770
Total revenue from continuing operations	**14,570**	**(30)**	**14,540**	14,969	(36)	14,933	15,293	(43)	15,250
Split by geographical areas – continuing operations:									
UK			**5,282**			5,045			5,938
US			**9,258**			9,888			9,312
			14,540			14,933			15,250

1. Included within NGV and Other is £608 million (2019: £597 million; 2018: £593 million) of revenue relating to NGV.

2. Segmental analysis continued

(b) Operating profit

A reconciliation of the operating segments' measure of profit to profit before tax from continuing operations is provided below. Further details of the exceptional items and remeasurements are provided in note 5.

	Before exceptional items and remeasurements			After exceptional items and remeasurements		
	2020 £m	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m
Operating segments – continuing operations:						
UK Electricity Transmission	**1,320**	1,015	1,041	**1,316**	778	1,041
UK Gas Transmission	**348**	303	487	**347**	267	487
US Regulated	**1,397**	1,724	1,698	**880**	1,425	1,734
NGV and Other[1,2]	**242**	400	231	**237**	400	231
Total operating profit from continuing operations	**3,307**	3,442	3,457	**2,780**	2,870	3,493
Split by geographical area – continuing operations:						
UK	**1,925**	1,695	1,840	**1,915**	1,422	1,840
US	**1,382**	1,747	1,617	**865**	1,448	1,653
	3,307	3,442	3,457	**2,780**	2,870	3,493

Below we reconcile total operating profit from continuing operations to profit before tax from continuing operations. Total operating exceptional items and remeasurements of £527 million charge (2019: £572 million charge; 2018: £36 million gain) are detailed in note 5. This is comprised of a £4 million charge (2019: £237 million charge; 2018: £nil) attributable to UK Electricity Transmission; £1 million charge (2019: £36 million charge; 2018: £nil) to UK Gas Transmission; £517 million charge (2019: £299 million charge; 2018: £36 million gain) to US Regulated; and £5 million charge (2019: £nil; 2018: £nil) to NGV and Other.

	2020	2019	2018	**2020**	2019	2018
Reconciliation to profit before tax:						
Operating profit from continuing operations	**3,307**	3,442	3,457	**2,780**	2,870	3,493
Finance income	**70**	73	127	**54**	88	127
Finance costs	**(1,119)**	(1,066)	(1,128)	**(1,167)**	(1,157)	(1,009)
Share of post-tax results of joint ventures and associates	**88**	40	44	**87**	40	49
Profit before tax from continuing operations	**2,346**	2,489	2,500	**1,754**	1,841	2,660

1. Included within NGV and Other is £269 million (2019: £263 million; 2018: £234 million) of operating profit before exceptional items and remeasurements and £268 million of operating profit after exceptional items and remeasurements (2019: £263 million; 2018: £234 million), relating to NGV.
2. In 2019, NGV and Other included gains of £95 million in relation to cash received in respect of two legal settlements.

(c) Capital expenditure

Capital expenditure represents additions to property, plant and equipment and non-current intangibles but excludes additional investments in and loans to joint ventures and associates. In 2020, we transferred certain software assets and properties which are held outside the US rate base and operate for the benefit of our US Regulated businesses, that were previously included within the NGV and Other segment, to the US Regulated segment. See footnote 2.

	Net book value of property, plant and equipment and other intangible assets			Capital expenditure			Depreciation, amortisation and impairment		
	2020 £m	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m
Operating segments:									
UK Electricity Transmission	**13,788**	13,288	13,028	**1,043**	925	999	**(469)**	(628)	(475)
UK Gas Transmission	**4,513**	4,412	4,280	**249**	308	310	**(171)**	(181)	(194)
US Regulated[2]	**29,623**	24,542	20,953	**3,228**	2,650	2,424	**(855)**	(700)	(635)
NGV and Other[1,2]	**2,141**	2,755	2,491	**559**	438	341	**(145)**	(226)	(226)
Total from continuing operations	**50,065**	44,997	40,752	**5,079**	4,321	4,074	**(1,640)**	(1,735)	(1,530)
Split by geographical area – continuing operations:									
UK	**20,427**	19,343	18,772	**1,847**	1,584	1,527	**(784)**	(931)	(804)
US	**29,638**	25,654	21,980	**3,232**	2,737	2,547	**(856)**	(804)	(726)
	50,065	44,997	40,752	**5,079**	4,321	4,074	**(1,640)**	(1,735)	(1,530)
Asset type:									
Property, plant and equipment	**48,770**	43,913	39,853	**4,727**	4,015	3,901	**(1,464)**	(1,560)	(1,392)
Non-current intangible assets	**1,295**	1,084	899	**352**	306	173	**(176)**	(175)	(138)
Total from continuing operations	**50,065**	44,997	40,752	**5,079**	4,321	4,074	**(1,640)**	(1,735)	(1,530)

1. Included within NGV and Other are assets with a net book value of £2,080 million (2019: £1,635 million; 2018: £1,454 million), capital expenditure of £550 million (2019: £317 million; 2018: £186 million) and depreciation, amortisation and impairment of £124 million (2019: £114 million; 2018: £143 million) relating to NGV.
2. In 2020, US Regulated includes certain software assets and properties in the US which are outside the US rate base and operate for the benefit of our US regulated businesses. These assets were included within NGV and Other in 2019 and 2018. The assets had a net book value of £1,062 million in 2019 and £998 million in 2018, capital expenditure of £87 million in 2019 and £161 million in 2018 and depreciation, amortisation and impairment of £102 million in 2019 and £80 million in 2018.

Total non-current assets other than financial instruments and pension assets located in the UK and US were £31,780 million and £25,867 million respectively as at 31 March 2020 (31 March 2019: UK £30,072 million, US £21,787 million; 31 March 2018: UK £20,816 million, US £27,663 million).

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

3. Revenue

Revenue arises in the course of ordinary activities and principally comprises:
- transmission services;
- distribution services; and
- generation services.

Transmission services, distribution services and certain other services (excluding rental income but including metering) fall within the scope of IFRS 15 'Revenue from Contracts with Customers', whereas generation services (which solely relate to the contract with the Long Island Power Authority (LIPA) in the US) are accounted for under the leasing standard as rental income, also presented within revenue. Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties and value added tax. The Group recognises revenue when it transfers control over a product or service to a customer.

IFRS 15 was adopted in the prior year and applied prospectively from 1 April 2018. Therefore, the analysis below is only provided for the current period and the immediate comparative period. Below, we include a description of principal activities, by reportable segment, from which the Group generates its revenue. For more detailed information about our segments, see note 2.

(a) UK Electricity Transmission
The UK Electricity Transmission segment principally generates revenue by providing electricity transmission services (both as transmission owner in England and Wales and system operator in Great Britain). Our business operates as a monopoly regulated by Ofgem, which has established price control mechanisms that set the amount of annual allowed returns our business can earn (along with the Scottish and Offshore transmission operators amongst others). The IFRS revenues we record are principally a function of volumes and price. Price is determined prior to our financial year-end with reference to the regulated allowed returns and estimated annual volumes. Where revenue received or receivable exceeds the maximum amount permitted by regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery. As part of our regulatory agreements we are entitled to recover certain costs directly from customers (pass-through costs). These amounts are included in the overall calculation of allowed revenue as stipulated by regulatory agreements.

The System Operator earns revenue for balancing supply and demand of electricity on the transmission system, where it acts as principal. Revenue is recognised as the service is provided. The System Operator also collects revenues on behalf of transmission operators, principally NGET and the Scottish and Offshore transmission operators, from users who connect to or use the transmission system. However, these amounts are paid to the transmission operators before the System Operator has collected payment from the users (electricity suppliers) and therefore the System Operator does hold some exposure to credit losses with electricity suppliers. The System Operator must set the charges paid by electricity suppliers by reference to the price control mechanism described above. That mechanism does not grant the System Operator with discretion to deviate from that mechanism. The transmission operators own and maintain the electricity network and receive direct feedback from electricity suppliers on the quality of the network they provide. There is a judgement about whether the System Operator acts as a principal or agent in respect of the transmission network revenues collected on behalf of the Scottish and Offshore transmission operators (as set out in note 1). We have concluded that it acts as an agent in respect of these transmission revenues and therefore records the attributable revenue net of operating costs.

The transmission of high-voltage electricity encompasses the following principal services:

- the supply of high-voltage electricity (including both transmission and system operator charges); and
- construction work (principally for connections).

For the supply of high-voltage electricity, revenue is recognised based on capacity and volumes. Our performance obligation is satisfied over time as our customers make use of our network. We bill monthly in arrears and our payment terms are up to 60 days.

For construction work relating to connections, customers can either pay over the useful life of the connection or upfront. Revenue is recognised over time, as we provide access to our network, and where the customer pays upfront, revenues are deferred and released over the life of the connection.

For other construction where there is no consideration for any future services, for example diversions (being the re-routing of network assets at our customers' request), revenues are recognised as the construction work is completed.

(b) UK Gas Transmission
The UK Gas Transmission segment of the Group principally generates revenue by providing gas transmission services to our customers (both as transmission owner and as system operator) in Great Britain. Similar to our UK Electricity Transmission business, our business operates as a monopoly regulated by Ofgem. The price control mechanism in place that determines our annual allowances is also similar, as is the way in which revenue is recorded.

The transmission of gas encompasses the following principal services:

- the supply of high-pressure gas (including both transmission and system operator charges); and
- construction work (principally for connections).

For the supply of high-pressure gas, revenue is recognised based on capacity and volumes. Our performance obligation is satisfied over time as our customers make use of our network, and we bill monthly in arrears with payment terms of up to 45 days.

For construction work relating to connections, customers pay for the connection upfront. Revenue is recognised over time, as we provide access to our network. Where revenues are received upfront, they are deferred and released over the life of the connection.

For other construction where there is no consideration for any future services (such as diversions), revenues are recognised when the construction work is completed.

3. Revenue continued

(c) US Regulated

The US Regulated segment of the Group principally generates revenue by providing gas and electricity distribution services in New York and New England, high voltage electricity transmission services in New York and New England, and electricity generation in New York.

Distribution services

Provision of gas and electricity distribution services in New York and New England. This comprises the following principal services:

- Gas and electricity distribution: revenue is recognised based on usage by customers (over time) and billed monthly. Payment terms are 30 days; and
- Connections: revenue is recognised over time, as we provide access to our network. Where payments are made upfront, they are deferred over the life of the asset.

Transmission services

Provision of electricity transmission services to customers and operation of electricity transmission facilities. Our principal services are:

- Electricity transmission: revenue is recognised based on usage by customers (over time) and billed monthly. Payment terms are 30 days; and
- Connections: revenue is recognised over time, as we provide access to our network. Where payments are made upfront, they are deferred over the life of the asset.

Electricity generation

Provision of energy services and supply capacity to produce energy for the use of customers of the Long Island Power Authority (LIPA) through a power supply agreement. This falls within the scope of the leasing standard, where we act as lessor with rental income being recorded as other income, which forms part of total revenue.

(d) NGV and Other

NGV and Other includes electricity interconnectors, LNG at the Isle of Grain, Geronimo, metering, sales from our UK property business, rental income and insurance.

The Group recognises revenue from transmission services through interconnectors and LNG at the Isle of Grain by means of customers' use of capacity and volumes. Revenue is recognised over time and is billed monthly. Payment terms are up to 30 days.

Other revenue in the scope of IFRS 15 principally includes revenues from our UK metering business and sales of renewables projects from Geronimo to Emerald (see note 38). Revenue is recognised as it is earned. In the case of the UK metering business, revenue is billed monthly and payment terms are up to 30 days.

Other revenue, recognised in accordance with standards other than IFRS 15, includes property sales by our UK commercial property business (including sales to our St William joint venture) and rental income. Property sales are recorded at a point in time (when the sale is legally completed) and rental income is recorded over time.

(e) Disaggregation of revenue

In the following tables, revenue is disaggregated by primary geographical market and major service lines. The table reconciles disaggregated revenue with the Group's reportable segments (see note 2).

Revenue for the year ended 31 March 2020	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
Transmission	1,992	649	425	309	3,375
Distribution	–	–	8,319	–	8,319
System Operator	1,610	214	–	–	1,824
Other	69	15	12	296	392
Total IFRS 15 revenue	3,671	878	8,756	605	13,910
Other revenue					
Generation	–	–	369	–	369
Other	23	33	80	125	261
Total other revenue	23	33	449	125	630
Total revenue from continuing operations	3,694	911	9,205	730	14,540

Geographical split for the year ended 31 March 2020	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
UK	3,671	878	–	567	5,116
US	–	–	8,756	38	8,794
Total IFRS 15 revenue	3,671	878	8,756	605	13,910
Other revenue					
UK	23	33	–	110	166
US	–	–	449	15	464
Total other revenue	23	33	449	125	630
Total revenue from continuing operations	3,694	911	9,205	730	14,540

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

3. Revenue continued
(e) Disaggregation of revenue continued

Revenue for the year ended 31 March 2019	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
Transmission	1,909	661	370	313	3,253
Distribution	–	–	8,941	–	8,941
System Operator	1,416	172	–	–	1,588
Other	–	–	–	284	284
Total IFRS 15 revenue	3,325	833	9,311	597	14,066
Other revenue					
Generation	–	–	367	–	367
Other	6	51	168	275	500
Total other revenue	6	51	535	275	867
Total revenue from continuing operations	3,331	884	9,846	872	14,933

Geographical split for the year ended 31 March 2019	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
UK	3,325	833	–	585	4,743
US	–	–	9,311	12	9,323
Total IFRS 15 revenue	3,325	833	9,311	597	14,066
Other revenue					
UK	6	51	–	245	302
US	–	–	535	30	565
Total other revenue	6	51	535	275	867
Total revenue from continuing operations	3,331	884	9,846	872	14,933

Revenue to be recognised in future periods, presented as contract liabilities of £1,158 million (2019: £994 million) (see note 23), relates to contributions in aid of construction. Revenue is recognised over the life of the asset. The asset lives for connections in UK Electricity Transmission, UK Gas Transmission, NGV and US Regulated are 40 years, 36 years (to 2055), 15 years and up to 51 years respectively. The weighted average amortisation period is 18 years.

Future revenues in relation to unfulfilled performance obligations not yet received in cash amount to £3.1 billion (2019: £3.5 billion). £1.5 billion (2019: £1.6 billion) relates to connection contracts in UK Electricity Transmission which will be recognised as revenue over 29 years and £1.5 billion (2019: £1.8 billion) relates to revenues to be earned under Grain LNG contracts until 2029. The remaining amount will be recognised as revenue over 5 years.

The amount of revenue recognised for the year ended 31 March 2020 from performance obligations satisfied (or partially satisfied) in previous periods, mainly due to the changes in the estimate of the stage of completion, is £nil (2019: £nil).

4. Operating costs

Below we have presented separately certain items included in our operating costs from continuing operations. These include a breakdown of payroll costs (including disclosure of amounts paid to key management personnel) and fees paid to our auditors.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2020 £m	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m
Depreciation, amortisation and impairment	**1,640**	1,588	1,530	**–**	147	–	**1,640**	1,735	1,530
Payroll costs	**1,684**	1,703	1,648	**–**	149	–	**1,684**	1,852	1,648
Provision for bad and doubtful debts	**234**	181	36	**–**	–	–	**234**	181	36
Purchases of electricity	**1,318**	1,504	1,299	**85**	(50)	(14)	**1,403**	1,454	1,285
Purchases of gas	**1,276**	1,644	1,539	**40**	(2)	4	**1,316**	1,642	1,543
Property and other taxes	**1,191**	1,108	1,057	**–**	–	–	**1,191**	1,108	1,057
Balancing Services Incentive Scheme	**1,317**	1,196	1,012	**–**	–	–	**1,317**	1,196	1,012
Payments to other UK network owners[1]	**–**	–	1,043	**–**	–	–	**–**	–	1,043
Other	**2,573**	2,567	2,629	**402**	328	(26)	**2,975**	2,895	2,603
	11,233	11,491	11,793	**527**	572	(36)	**11,760**	12,063	11,757
Operating costs include:									
Inventory consumed							**328**	415	367
Research and development expenditure							**14**	19	13

1. Under IFRS 15, with effect from 1 April 2018, revenue and associated payments to other UK network owners are presented on a net basis.

(a) Payroll costs

	2020 £m	2019 £m	2018 £m
Wages and salaries[1]	**2,188**	2,084	1,998
Social security costs	**168**	156	157
Defined contribution scheme costs	**75**	72	65
Defined benefit pension costs	**135**	232	156
Share-based payments	**19**	27	16
Severance costs (excluding pension costs)	**1**	76	7
	2,586	2,647	2,399
Less: payroll costs capitalised	**(902)**	(795)	(751)
Total payroll costs	**1,684**	1,852	1,648

1. Included within wages and salaries are US other post-retirement benefit costs of £45 million (2019: £48 million; 2018: £46 million). For further information refer to note 25.

(b) Number of employees

	31 March 2020	**Monthly average 2020**	31 March 2019	Monthly average 2019	31 March 2018	Monthly average 2018
UK	**6,321**	**6,151**	5,962	6,227	6,517	6,431
US	**16,748**	**16,679**	16,614	16,669	16,506	16,274
Total number of employees	**23,069**	**22,830**	22,576	22,896	23,023	22,705

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

4. Operating costs continued
(c) Key management compensation

	2020 £m	2019 £m	2018 £m
Short-term employee benefits	7	7	8
Compensation for loss of office	1	–	–
Post-employment benefits	1	1	1
Share-based payments	3	3	3
Total key management compensation	12	11	12

Key management compensation relates to the Board, including the Executive Directors and Non-executive Directors for the years presented.

(d) Directors' emoluments
Details of Executive Directors' emoluments are contained in the Remuneration Report on page 96 and those of Non-executive Directors on page 101.

(e) Auditors' remuneration
Auditors' remuneration is presented below in accordance with the requirements of the Companies Act 2006 and the principal accountant fees and services disclosure requirements of Item 16C of Form 20-F:

	2020 £m	2019 £m	2018 £m
Audit fees payable to the parent Company's auditors and their associates in respect of:			
Audit of the parent Company's individual and consolidated financial statements[1]	1.9	1.6	2.7
The auditing of accounts of any associate of the Company[2]	8.7	8.5	9.3
Other services supplied[3]	6.3	5.2	3.9
	16.9	15.3	15.9
Total other services[4]			
Tax fees:			
Tax compliance services	–	–	0.3
Tax advisory services	–	–	–
All other fees:			
Other assurance services[5]	0.6	1.1	0.7
Services relating to corporate finance transactions not covered above	–	–	–
Other non-audit services not covered above[6]	0.5	2.2	0.9
	1.1	3.3	1.9
Total auditors' remuneration	18.0	18.6	17.8

1. Audit fees in each year represent fees for the audit of the Company's financial statements and regulatory reporting for the years ended 31 March 2020, 2019 and 2018.
2. The 2019 comparative has been updated following finalisation of the 2019 audit fee with the Audit Committee.
3. Other services supplied represent fees payable for services in relation to other statutory filings or engagements that are required to be carried out by the auditors. In particular, this includes fees for reports under section 404 of the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley), audit reports on regulatory returns and the review of interim financial statements for the six-month periods ended 30 September 2019, 2018 and 2017 respectively.
4. There were no audit related fees as described in Item 16C(b) of Form 20-F.
5. Principally amounts relating to assurance services provided in relation to comfort letters for debt issuances.
6. In 2020, non-audit services include auction monitor work on Contracts for Difference, IT project assurance and a review of controls over our data on New York customers. In 2019 and 2018, non-audit services primarily related to the UK Property business in respect of the evaluation of possible options for the use of property assets.

The Audit Committee considers and makes recommendations to the Board, to be put to shareholders for approval at each AGM, in relation to the appointment, re-appointment, removal and oversight of the Company's independent auditors. The Committee also considers and approves the audit fees on behalf of the Board in accordance with the Competition and Market Authority Audit Order 2014. The auditors' remuneration is then put to shareholders at each AGM. Details of our policies and procedures in relation to non-audit services to be provided by the independent auditors are set out on page 81 of the Corporate Governance Report.

Certain services are prohibited from being performed by the external auditors under the Sarbanes-Oxley Act. Of the above services, none were prohibited.

5. Exceptional items and remeasurements

To monitor our financial performance, we use a profit measure that excludes certain income and expenses. We call that measure 'business performance' or 'adjusted profit'. Business performance (which excludes exceptional items and remeasurements as defined below) is used by management to monitor financial performance as it is considered that it aids the comparability of our reported financial performance from year to year. We exclude items from business performance because, if included, these items could distort understanding of our performance for the year and the comparability between periods. This note analyses these items, which are included in our results for the year but are excluded from business performance.

Exceptional items and remeasurements from continuing operations

	2020 £m	2019 £m	2018 £m
Included within operating profit			
Exceptional items:			
Environmental charges	**(402)**	–	–
Cost efficiency and restructuring programmes	**–**	(204)	–
Massachusetts Gas labour dispute	**–**	(283)	–
Impairment of nuclear connection development costs	**–**	(137)	–
Final settlement of LIPA MSA Transition	**–**	–	26
	(402)	(624)	26
Remeasurements – commodity contract derivatives	**(125)**	52	10
	(527)	(572)	36
Included within finance income and costs			
Remeasurements:			
Net gains/(losses) on financing derivatives	**1**	(40)	119
Net (losses)/gains on financial assets at fair value through profit and loss	**(16)**	15	–
Net losses on financial liabilities at fair value through profit and loss	**(49)**	(51)	–
	(64)	(76)	119
Included within share of post-tax results of joint ventures and associates			
Exceptional items:			
Deferred tax arising on the reduction in US corporation tax rate	**–**	–	5
Remeasurements:			
Net losses on financial instruments	**(1)**	–	–
Total included within profit before tax	**(592)**	(648)	160
Included within tax			
Exceptional items – credits/(debits) arising on items not included in profit before tax:			
Deferred tax arising on the reduction in the US corporation tax rate	**–**	–	1,510
Deferred tax arising on the reversal of the reduction in UK corporation tax rate	**(192)**	–	–
Tax on exceptional items	**103**	144	(9)
Tax on remeasurements	**42**	5	(28)
	(47)	149	1,473
Total exceptional items and remeasurements after tax	**(639)**	(499)	1,633
Analysis of total exceptional items and remeasurements after tax			
Exceptional items after tax	**(491)**	(480)	1,532
Remeasurements after tax	**(148)**	(19)	101
Total exceptional items and remeasurements after tax	**(639)**	(499)	1,633

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

5. Exceptional items and remeasurements continued

Exceptional items

Management uses an exceptional items framework that has been discussed and approved by the Audit Committee. This follows a three-step process which considers the nature of the event, the financial materiality involved and any particular facts and circumstances. In considering the nature of the event, management focuses on whether the event is within the Group's control and how frequently such an event typically occurs. In determining the facts and circumstances, management considers factors such as ensuring consistent treatment between favourable and unfavourable transactions, the precedent for similar items, the number of periods over which costs will be spread or gains earned, and the commercial context for the particular transaction.

Items of income or expense that are considered by management for designation as exceptional items include significant restructurings, write-downs or impairments of non-current assets, significant changes in environmental or decommissioning provisions, integration of acquired businesses, gains or losses on disposals of businesses or investments and significant debt redemption costs as a consequence of transactions such as significant disposals or issues of equity, and the related tax, as well as deferred tax arising on changes to corporation tax rates.

Costs arising from restructuring programmes include redundancy costs. Redundancy costs are charged to the consolidated income statement in the year in which a commitment is made to incur the costs and the main features of the restructuring plan have been announced to affected employees.

Set out below are details of the transactions against which we have considered the application of our exceptional items framework in each of the years for which results are presented.

2020

We concluded that the increase in costs associated with the changes in our environmental provisions (£402 million) and the additional deferred tax charge reflecting the impact of the remeasurement of the Group's deferred tax liabilities as a result of a change in the substantively enacted UK corporation tax rate (£192 million) meet the criteria to be classified as exceptional.

A further £10 million of COVID-19 related costs incurred in the year have similarly not been classified as exceptional in view of the quantum involved and all costs associated with the settlement reached with the State of New York in respect of the Downstate New York Gas Moratorium have also been treated as part of adjusted profit.

Environmental charges: In the US, the most significant component of our £1.9 billion environmental provision relates to several Superfund sites, and arose from former manufacturing gas plant facilities, formerly owned or operated by the Group or its predecessor companies.

The sites are subject to both State and Federal law in the US. Under Federal and State Superfund laws, potential liability for the historical contamination may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred. The provisions and the Group's share of estimated costs are re-evaluated at each reporting period. As a result of notices issued by governmental authorities and newly developed cost estimates prepared by third-party engineers, we have re-evaluated our estimates of total costs and cost sharing allocations borne by the Company, and accordingly have increased our provision by £326 million. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers, but under IFRS no asset can be recognised for this recovery.

Also included in the total environmental charge is the £76 million impact of the change in the real discount rate applied to the environmental provisions across the Group, of which £66 million relates to the US and £10 million to the UK. Given the substantial and sustained change in gilts and corporate bond yields, we concluded it was appropriate to reduce the real discount rate from 1% to 0.5%. The weighted average remaining duration of our cash flows is now around 10 years.

2019

In assessing certain items of income and expenditure against our exceptional items framework, we concluded that the costs associated with the Massachusetts Gas labour dispute (£283 million), our cost efficiency and restructuring programme (£204 million) and impairments relating to two nuclear connection cancellations (£137 million) should be treated as exceptional (as described further below).

We also considered whether the £95 million income from two legal settlements received in the period should be classified as exceptional. However, we concluded it was appropriate to recognise the income in earnings before exceptional items (within NGV and Other), in line with the treatment of the original costs.

Cost efficiency and restructuring programmes: Our UK and US businesses incurred restructuring charges as we reviewed organisational structures, operational activities and relevant roles and responsibilities to ensure we are able to operate more efficiently and to continue to drive outperformance for customers and shareholders. The cash outflow for the year was £93 million.

Massachusetts Gas labour dispute: Between June 2018 and January 2019, National Grid implemented a workforce contingency plan across its Massachusetts Gas business following the expiration of contracts for the 1,250 members of the existing workforce. The net incremental cost of the experienced contractors working alongside supervisors and workers from other areas of the business was £283 million, reflecting the financial performance of the US regulated business had the workforce contingency plan not been implemented. The total cash outflow related to the labour dispute was £320 million for the year.

Impairment of nuclear connection development costs: In 2018, Toshiba announced the cancellation of its NuGen project to build a new nuclear power station at Moorside in Cumbria, and NuGen terminated its connection agreement with UK Electricity Transmission. In February 2019, Hitachi terminated its connection agreements in respect of its Horizon projects at Wylfa and Oldbury. As there was no realistic prospect of these schemes continuing in their present form, we concluded that it was appropriate to impair the assets we had been developing for over 10 years. After deducting cash inflows relating to termination fees received of £13 million, the net impairment charge was £137 million.

2018

Final settlement of LIPA MSA transition: During the year, the Group reached an agreement with LIPA on an amount in final settlement of receivables and payables that arose following the cessation of the Management Services Agreement with LIPA in December 2013. The settlement resulted in a gain of £26 million, which was recorded as exceptional, consistent with the treatment of gains and losses on the original transaction.

5. Exceptional items and remeasurements continued

Remeasurements

Remeasurements comprise unrealised gains or losses recorded in the consolidated income statement arising from changes in the fair value of certain of our financial assets and liabilities accounted for at fair value through profit and loss (FVTPL). These assets and liabilities include commodity contract derivatives and financing derivatives to the extent that hedge accounting is not achieved or is not effective.

The unrealised gains or losses reported in profit and loss on certain additional assets and liabilities now treated at FVTPL are also classified within remeasurements. These relate to financial assets (which fail the 'solely payments of principal and interest test' under IFRS 9), the money market fund investments used by Group Treasury for cash management purposes and certain financial liabilities which we elected to designate at FVTPL. In all cases, these fair values increase or decrease because of changes in foreign exchange, commodity or other financial indices over which we have no control.

We report unrealised gains or losses relating to certain discrete classes of financial assets accounted for at FVTPL within business performance. These comprise our portfolio of investments made by National Grid Partners, our investment in Sunrun Neptune 2016 LLC and the contingent consideration arising on the acquisition of Geronimo (all within NGV and Other). The performance of these assets (including changes in fair value) are included in our assessment of business performance for the relevant business units.

Remeasurements excluded from business performance are made up of the following categories:

i. Net gains/(losses) on commodity contract derivatives represent mark-to-market movements on certain physical and financial commodity contract obligations in the US. These contracts primarily relate to the forward purchase of energy for supply to customers, or to the economic hedging thereof, that are required to be measured at fair value and that do not qualify for hedge accounting. Under the existing rate plans in the US, commodity costs are recoverable from customers although the timing of recovery may differ from the pattern of costs incurred;
ii. Net gains/(losses) on financing derivative financial instruments comprise gains and losses arising on derivative financial instruments reported in the consolidated income statement in relation to risk management of interest rate and foreign exchange exposures. These exclude gains and losses for which hedge accounting has been effective, and have been recognised directly in the consolidated statement of other comprehensive income or are offset by adjustments to the carrying value of debt (see notes 17 and 32);
iii. Net gains/(losses) on financial assets measured at FVTPL comprise gains and losses on the investment funds held by our insurance captives which are categorised as FVTPL (see note 15);
iv. Net gains/(losses) on financial liabilities measured at FVTPL comprises the change in the fair value (excluding changes due to own credit risk) of a financial liability that was designated at FVTPL on transition to IFRS 9 to reduce a measurement mismatch (see note 21); and
v. Unrealised net gains/(losses) on derivatives and other financial instruments within our joint ventures and associates.

Items included within tax

2020

The Finance Act 2016, which was enacted on 15 September 2016, reduced the main UK corporation tax rate to 17% with effect from 1 April 2020. Deferred tax balances were calculated at this rate for the years ended 31 March 2017 to 2019. On 17 March 2020, the UK Government utilised the Provisional Collection of Taxes Act 1968 to substantively enact a reversal of the reduction in the main UK corporation tax rate to 17% with effect from 1 April 2020, resulting in the rate remaining at 19%. Deferred taxes at the reporting date have been measured using enacted tax rates and reflected in these financial statements, resulting in a £192 million deferred tax charge, principally due to the remeasurement of deferred tax liabilities. The treatment of this charge as exceptional is consistent with the treatment for the year ended 31 March 2017 when the original reduction in the tax rate was substantively enacted, resulting in the recognition of an exceptional tax credit of £94 million.

2018

The Tax Cuts and Jobs Act (Tax Reform), which was enacted on 22 December 2017, reduced the US corporate tax rate from 35% to 21% with effect from 1 January 2018. Deferred taxes at the reporting date have been measured using these enacted tax rates. This resulted in a one-off deferred tax credit in the year ended 31 March 2018. However, as described in note 11, we expect the overall impact of Tax Reform to be economically neutral for the Group.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

6. Finance income and costs

This note details the interest income generated by our financial assets and interest expense incurred on our financial liabilities, primarily our financing portfolio (including our financing derivatives). It also includes the net interest on our pensions and other post-retirement assets. In reporting business performance, we adjust net financing costs to exclude any net gains or losses on financial instruments included in remeasurements (see note 5). In addition, where debt redemptions relate to exceptional transactions they are typically treated as exceptional.

The Group adopted IFRS 9 with effect from 1 April 2018. The comparatives for 2018 were not required to be restated and were accounted for in accordance with IAS 39. Following the adoption of IFRS 9, finance income and costs remeasurements include unrealised gains and losses on certain assets and liabilities now treated at FVTPL. The interest income, dividends and interest expense on these items are included in finance income and finance costs before remeasurements, respectively.

	Notes	**2020 £m**	2019 £m	2018 £m
Finance income				
Interest income on financial instruments:				
Bank deposits and other financial assets		**48**	54	54
Dividends received on equities held at fair value through other comprehensive income		**2**	2	–
Gains on disposal of available-for-sale investments		**–**	–	73
Other income		**20**	17	–
		70	73	127
Finance costs				
Net interest on pensions and other post-retirement benefit obligations	25	**(23)**	(22)	(65)
Interest expense on financial liabilities held at amortised cost:				
Bank loans and overdrafts		**(73)**	(72)	(87)
Other borrowings[1]		**(997)**	(970)	(1,030)
Interest expense on financial liabilities held at fair value through profit and loss		**(22)**	(20)	–
Derivatives		**(39)**	(43)	12
Unwinding of discount on provisions	26	**(77)**	(74)	(75)
Other interest		**(10)**	–	(11)
Less: interest capitalised[2]		**122**	135	128
		(1,119)	(1,066)	(1,128)
Remeasurements – Finance income				
Net (losses)/gains on financial assets held at fair value through profit and loss		**(16)**	15	–
		(16)	15	–
Remeasurements – Finance costs				
Net losses on financial liabilities held at fair value through profit and loss		**(49)**	(51)	–
Net (losses)/gains on financing derivatives[3]:				
Derivatives designated as hedges for hedge accounting		**(13)**	(37)	49
Derivatives not designated as hedges for hedge accounting		**14**	(3)	70
		(48)	(91)	119
Total remeasurements – Finance income and costs		**(64)**	(76)	119
Finance income		**54**	88	127
Finance costs		**(1,167)**	(1,157)	(1,009)
Net finance costs from continuing operations		**(1,113)**	(1,069)	(882)

1. Includes interest expense on lease liabilities (see note 13 for details).
2. Interest on funding attributable to assets in the course of construction in the current year was capitalised at a rate of 3.6% (2019: 3.9%; 2018: 4.1%). In the UK, capitalised interest qualifies for a current year tax deduction with tax relief claimed of £15 million (2019: £19 million; 2018: £20 million). In the US, capitalised interest is added to the cost of plant and qualifies for tax depreciation allowances.
3. Includes a net foreign exchange gain on financing activities of £66 million (2019: £264 million gain; 2018: £314 million loss) offset by foreign exchange losses and gains on financing derivatives measured at fair value.

7. Tax

Tax is payable in the territories where we operate, mainly the UK and the US. This note gives further details of the total tax charge and tax liabilities, including current and deferred tax. The current tax charge is the tax payable on this year's taxable profits. Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future due to differences in the accounting and tax bases.

The tax charge for the period is recognised in the income statement, the statement of comprehensive income or directly in equity, according to the accounting treatment of the related transaction. The tax charge comprises both current and deferred tax.

Current tax assets and liabilities are measured at the amounts expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amounts are those that have been enacted or substantively enacted by the reporting date.

The Group operates internationally in territories with different and complex tax codes. Management exercises judgement in relation to the level of provision required for uncertain tax outcomes. There are a number of tax positions not yet agreed with the tax authorities where different interpretations of legislation could lead to a range of outcomes. Judgements are made for each position having regard to particular circumstances and advice obtained.

Deferred tax is provided for using the balance sheet liability method, and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases.

Deferred tax liabilities are generally recognised on all taxable temporary differences, and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences arise from the initial recognition of goodwill or from the initial recognition of other assets and liabilities in a transaction (other than a business combination) that affects neither the accounting nor the taxable profit or loss.

Deferred tax liabilities are recognised on taxable temporary differences arising on investments in subsidiaries and joint arrangements except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same tax authority and the Company and its subsidiaries intend to settle their current tax assets and liabilities on a net basis.

Tax charged/(credited) to the consolidated income statement – continuing operations

	2020 £m	2019 £m	2018 £m
Tax before exceptional items and remeasurements	**433**	488	584
Exceptional tax on items not included in profit before tax (see note 5)	**192**	–	(1,510)
Tax on other exceptional items and remeasurements	**(145)**	(149)	37
Total tax reported within exceptional items and remeasurements	**47**	(149)	(1,473)
Total tax charge/(credit) from continuing operations	**480**	339	(889)

Tax as a percentage of profit before tax

	2020 %	2019 %	2018 %
Before exceptional items and remeasurements – continuing operations	**18.5**	19.6	23.4
After exceptional items and remeasurements – continuing operations	**27.4**	18.4	(33.4)

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

7. Tax continued

The tax charge/(credit) for the year can be analysed as follows:

	2020 £m	2019 £m	2018 £m
Current tax:			
UK corporation tax at 19% (2019: 19%; 2018: 19%)	**179**	132	200
UK corporation tax adjustment in respect of prior years	**(4)**	(12)	(18)
	175	120	182
Overseas corporation tax	**(2)**	8	15
Overseas corporation tax adjustment in respect of prior years	**(41)**	(40)	(4)
	(43)	(32)	11
Total current tax from continuing operations	**132**	88	193
Deferred tax:			
UK deferred tax	**269**	27	65
UK deferred tax adjustment in respect of prior years	**6**	2	(2)
	275	29	63
Overseas deferred tax	**64**	208	(1,155)
Overseas deferred tax adjustment in respect of prior years	**9**	14	10
	73	222	(1,145)
Total deferred tax from continuing operations	**348**	251	(1,082)
Total tax charge/(credit) from continuing operations	**480**	339	(889)

Tax charged/(credited) to the consolidated statement of comprehensive income and equity

	2020 £m	2019 £m	2018 £m
Current tax:			
Available-for-sale investments	**–**	–	(11)
Cash flow hedges, cost of hedging and own credit reserve	**–**	3	–
Share-based payments	**–**	–	(3)
Deferred tax:			
Available-for-sale investments	**–**	–	(18)
Investments at fair value through other comprehensive income	**(1)**	–	–
Cash flow hedges, cost of hedging and own credit reserve	**(40)**	(12)	(4)
Remeasurements of pension assets and post-retirement benefit obligations[1]	**(206)**	12	530
Share-based payments	**(3)**	–	1
	(250)	3	495
Total tax recognised in the statements of comprehensive income from continuing operations	**(247)**	3	497
Total tax relating to share-based payments recognised directly in equity from continuing operations	**(3)**	–	(2)
	(250)	3	495

1. Remeasurements of gains on pension assets and post-retirement benefit obligations for the year ended 31 March 2018 includes a deferred tax charge of £281 million arising on the reduction in the US corporation tax rate.

7. Tax continued

The tax charge/(credit) for the year after exceptional items and remeasurements, for the continuing business, is higher (2019: lower tax charge; 2018: lower tax charge) than the standard rate of corporation tax in the UK of 19% (2019: 19%; 2018: 19%):

	Before exceptional items and remeasurements 2020 £m	**After exceptional items and remeasurements 2020 £m**	Before exceptional items and remeasurements 2019 £m	After exceptional items and remeasurements 2019 £m	Before exceptional items and remeasurements 2018 £m	After exceptional items and remeasurements 2018 £m
Profit before tax from continuing operations						
Before exceptional items and remeasurements	**2,346**	**2,346**	2,489	2,489	2,500	2,500
Exceptional items and remeasurements	**–**	**(592)**	–	(648)	–	160
Profit before tax from continuing operations	**2,346**	**1,754**	2,489	1,841	2,500	2,660
Profit before tax from continuing operations multiplied by UK corporation tax rate of 19% (2019: 19%; 2018: 19%)	**446**	**334**	473	350	475	506
Effect of:						
Adjustments in respect of prior years[1]	**(30)**	**(30)**	(36)	(36)	(22)	(14)
Expenses not deductible for tax purposes	**26**	**29**	22	28	20	21
Non-taxable income[2]	**(18)**	**(18)**	(36)	(36)	(16)	(26)
Adjustment in respect of foreign tax rates	**53**	**18**	78	56	153	157
Deferred tax impact of change in UK tax rate	**–**	**192**	(3)	(3)	(7)	(7)
Deferred tax impact of change in US tax rate due to Tax Reform	**–**	**–**	–	–	–	(1,510)
Adjustment in respect of post-tax profits of joint ventures and associates included within profit before tax	**(17)**	**(17)**	(8)	(8)	(8)	(9)
Other[3]	**(27)**	**(28)**	(2)	(12)	(11)	(7)
Total tax charge/(credit) from continuing operations	**433**	**480**	488	339	584	(889)

	%	**%**	%	%	%	%
Effective tax rate – continuing operations	**18.5**	**27.4**	19.6	18.4	23.4	(33.4)

1. Prior year adjustment is primarily due to agreement of prior period tax returns.
2. Includes gains on chargeable disposals which are offset by previously unrecognised capital losses.
3. Other primarily comprises a recognition of deferred tax on previously unrecognised capital losses and claims for land remediation relief.

Factors that may affect future tax charges

On 17 March 2020, the UK government utilised the Provisional Collection of Taxes Act 1968 to substantively enact a reversal of the reduction in the main UK corporation tax rate to 17% with effect from 1 April 2020. The main UK corporation tax rate therefore remains at 19%. Deferred tax balances have been calculated at this rate.

We will continue to monitor the developments driven by Brexit, the OECD's Base Erosion and Profit Shifting (BEPS) project and European Commission initiatives including fiscal aid investigations. At this time, we do not expect this to have any material impact on our future tax charges. Governments across the world including the UK and the US have introduced various stimulus/reliefs for businesses to cope with the impact of the COVID-19 pandemic. We will monitor as the details become available for any that may materially impact our future tax charges.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

7. Tax continued

Tax included within the statement of financial position

The following are the major deferred tax assets and liabilities recognised, and the movements thereon, during the current and prior reporting periods:

	Accelerated tax depreciation £m	Share-based payments £m	Pensions and other post-retirement benefits £m	Financial instruments £m	Other net temporary differences[1] £m	Total £m
Deferred tax liabilities/(assets)						
At 31 March 2018 (as previously reported)	4,874	(9)	(203)	21	(1,047)	3,636
Impact of transition to IFRS 9 and IFRS 15	19	–	–	(5)	(93)	(79)
At 1 April 2018 (as restated)	4,893	(9)	(203)	16	(1,140)	3,557
Exchange adjustments and other[2]	275	–	(31)	(3)	(76)	165
(Credited)/charged to income statement	309	–	52	6	(124)	243
Charged/(credited) to other comprehensive income and equity	–	–	12	(12)	–	–
At 1 April 2019	5,477	(9)	(170)	7	(1,340)	3,965
Exchange adjustments and other[2]	210	(30)	(28)	(3)	(27)	122
(Credited)/charged to income statement	613	(7)	44	(13)	(287)	350
Charged/(credited) to other comprehensive income and equity	–	(2)	(206)	(46)	1	(253)
At 31 March 2020	**6,300**	**(48)**	**(360)**	**(55)**	**(1,653)**	**4,184**

1. The deferred tax asset of £1,653 million as at 31 March 2020 (2019: £1,340 million) in respect of other net temporary differences primarily relates to net operating losses of £547 million (2019: £423 million) and US environmental provisions of £529 million (2019: £409 million).
2. Exchange adjustments and other comprises foreign exchange arising on translation of the US dollar deferred tax balances. It also includes reclassification of £29 million from other temporary differences to share-based payments.

Deferred tax assets and liabilities are only offset where there is a legally enforceable right of offset and there is an intention to settle the balances net. The deferred tax balances (after offset) for statement of financial position purposes consist solely of deferred tax liabilities of £4,184 million (2019: £3,965 million). This balance is after offset of a deferred tax asset of £547 million (2019: £423 million) which has been recognised in respect of net operating losses (£535 million) and capital losses (£12 million).

Deferred tax assets in respect of some capital losses as well as trading losses and non-trade deficits have not been recognised as their future recovery is uncertain or not currently anticipated. The deferred tax asset not recognised relating to capital losses has increased due to remeasurement of opening deferred tax asset as a result of change in substantively enacted UK corporation tax rate from 17% to 19%. Hence the total deferred tax assets not recognised are as follows:

	2020 £m	2019 £m
Capital losses	**1,626**	1,470
Non-trade deficits	**1**	4
Trading losses	**6**	5

The capital losses arose in the UK on disposal of certain businesses or assets. They are available to carry forward indefinitely but can only be offset against future capital gains. The UK non-trade deficits arose prior to 1 April 2017 and therefore can only be offset against future non-trade profits.

At 31 March 2020 and 31 March 2019, there were no recognised deferred tax liabilities for taxes that would be payable on the unremitted earnings of the Group's subsidiaries or its associates as there are no significant corporation tax consequences of the Group's UK, US or overseas subsidiaries or associates paying dividends to their parent companies. There are also no significant income tax consequences for the Group from the payment of dividends by the Group to its shareholders.

8. Earnings per share (EPS)

EPS is the amount of post-tax profit attributable to each ordinary share. Basic EPS is calculated on profit for the year attributable to equity shareholders divided by the weighted average number of shares in issue during the year. Diluted EPS shows what the impact would be if all outstanding share options were exercised and treated as ordinary shares at year end. The weighted average number of shares is increased by additional shares issued as scrip dividends and reduced by shares repurchased by the Company during the year. The earnings per share calculations are based on profit after tax attributable to equity shareholders of the Company which excludes non-controlling interests.

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the business performance sub-totals used by the Company. We have included reconciliations from this additional EPS measure to earnings for both basic and diluted EPS to provide additional detail for these items. For further details of exceptional items and remeasurements, see note 5.

Following the sale of the UK Gas Distribution business on 31 March 2017, National Grid plc returned £3,171 million of proceeds to shareholders through a special dividend, paid on 2 June 2017. In order to maintain the comparability of the Company's share price before and after the special dividend, this was preceded by a share consolidation undertaken on 22 May 2017, replacing every 12 existing ordinary shares with 11 new ordinary shares. The weighted average number of ordinary shares outstanding for the year ended 31 March 2018 includes the effect of both the share consolidation and the special dividend from the date that the special dividend was paid. The associated share buyback programme which began on 2 June 2017 completed in March 2018. Purchased shares are held as treasury shares.

(a) Basic EPS

	Earnings 2020 £m	EPS 2020 pence	Earnings 2019 £m	EPS 2019 pence	Earnings 2018 £m	EPS 2018 pence
Adjusted earnings from continuing operations	**1,912**	**55.2**	1,998	59.0	1,915	55.3
Exceptional items and remeasurements after tax from continuing operations	**(639)**	**(18.4)**	(499)	(14.7)	1,633	47.2
Earnings from continuing operations	**1,273**	**36.8**	1,499	44.3	3,548	102.5
Adjusted earnings from discontinued operations	**5**	**0.2**	57	1.7	145	4.2
Exceptional items and remeasurements after tax from discontinued operations	**(14)**	**(0.5)**	(45)	(1.4)	(143)	(4.1)
Earnings from discontinued operations	**(9)**	**(0.3)**	12	0.3	2	0.1
Total adjusted earnings	**1,917**	**55.4**	2,055	60.7	2,060	59.5
Total exceptional items and remeasurements after tax (including discontinued operations)	**(653)**	**(18.9)**	(544)	(16.1)	1,490	43.1
Total earnings	**1,264**	**36.5**	1,511	44.6	3,550	102.6

	2020 millions	2019 millions	2018 millions
Weighted average number of ordinary shares – basic	**3,461**	3,386	3,461

(b) Diluted EPS

	Earnings 2020 £m	EPS 2020 pence	Earnings 2019 £m	EPS 2019 pence	Earnings 2018 £m	EPS 2018 pence
Adjusted earnings from continuing operations	**1,912**	**55.0**	1,998	58.8	1,915	55.1
Exceptional items and remeasurements after tax from continuing operations	**(639)**	**(18.4)**	(499)	(14.7)	1,633	47.0
Earnings from continuing operations	**1,273**	**36.6**	1,499	44.1	3,548	102.1
Adjusted earnings from discontinued operations	**5**	**0.1**	57	1.7	145	4.2
Exceptional items and remeasurements after tax from discontinued operations	**(14)**	**(0.4)**	(45)	(1.4)	(143)	(4.2)
Earnings from discontinued operations	**(9)**	**(0.3)**	12	0.3	2	–
Total adjusted earnings	**1,917**	**55.1**	2,055	60.5	2,060	59.3
Total exceptional items and remeasurements after tax (including discontinued operations)	**(653)**	**(18.8)**	(544)	(16.1)	1,490	42.8
Total earnings	**1,264**	**36.3**	1,511	44.4	3,550	102.1

	2020 millions	2019 millions	2018 millions
Weighted average number of ordinary shares – diluted	**3,478**	3,401	3,476

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

8. Earnings per share (EPS) continued
(c) Reconciliation of basic to diluted average number of shares

	2020 millions	2019 millions	2018 millions
Weighted average number of ordinary shares – basic	3,461	3,386	3,461
Effect of dilutive potential ordinary shares – employee share plans	17	15	15
Weighted average number of ordinary shares – diluted	3,478	3,401	3,476

9. Dividends
Interim dividends are recognised when they become payable to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

	2020			2019			2018		
	Pence per share	Cash dividend paid £m	Scrip dividend £m	Pence per share	Cash dividend paid £m	Scrip dividend £m	Pence per share	Cash dividend paid £m	Scrip dividend £m
Interim dividend in respect of the current year	16.57	335	241	16.08	450	94	15.49	346	176
Special dividend	–	–	–	–	–	–	84.375	3,171	–
Final dividend in respect of the prior year	31.26	557	517	30.44	710	319	29.10	970	33
	47.83	892	758	46.52	1,160	413	128.965	4,487	209

The Directors are proposing a final dividend for the year ended 31 March 2020 of 32.0p per share that will absorb approximately £1,123 million of shareholders' equity (assuming all amounts are settled in cash). It will be paid on 19 August 2020 to shareholders who are on the register of members at 3 July 2020 (subject to shareholders' approval at the AGM). A scrip dividend will be offered as an alternative.

Following completion of the sale of the majority interest in UK Gas Distribution, the Company paid a special dividend on 2 June 2017 of 84.375p per existing ordinary share ($5.4224 per existing American Depositary Share). This returned £3,171 million to shareholders. No scrip dividend was offered as an alternative.

10. Discontinued operations and assets held for sale

The results and cash flows of significant assets or businesses sold during the year are shown separately from our continuing operations, and presented within discontinued operations in the income statement and cash flow statement. Assets and businesses are classified as held for sale when their carrying amounts are recovered through sale rather than through continuing use. They only meet the held for sale condition when the assets are ready for immediate sale in their present condition, management is committed to the sale and it is highly probable that the sale will complete within one year. Depreciation ceases on assets and businesses when they are classified as held for sale and the assets and businesses are impaired if the proceeds less sale costs fall short of the carrying value.

In June 2019, the Group sold its remaining 39% interest in Cadent (held through its holding in Quadgas HoldCo Limited (Quadgas)). This interest had been classified as held for sale from 30 June 2018 until the date of disposal, as detailed in the Annual Report and Accounts for the year ended 31 March 2019.

The aggregate carrying value of our investment in Quadgas at the disposal date was £1,956 million. This was comprised of the carrying value of the Group's equity interest in Quadgas of £1,494 million, a shareholder loan to Quadgas of £352 million and a derivative financial asset with a fair value of £110 million. The total sales proceeds were £1,965 million. The gain on disposal was £9 million.

10. Discontinued operations and assets held for sale continued

We considered the disposal of our 39% investment in Quadgas as the final stage of the plan to dispose of our interest in the UK Gas Distribution business first announced in 2015, and accordingly treated the results and cash flows arising from Quadgas as a discontinued operation on the basis that the sale formed the final part of a 'single coordinated plan' to dispose of UK Gas Distribution. As a consequence, we have classified the various elements of income, expense and cash flows within discontinued operations as set out below. Once the assets are treated as 'held for sale', equity accounting ceases for our investment in our associate. We therefore ceased to record our share of profits from 30 June 2018.

The summary income statement for discontinued operations is as follows:

	2020 £m	2019 £m	2018 £m
Revenue	**–**	–	–
Operating costs[1]	**(23)**	(1)	(41)
Operating loss	**(23)**	(1)	(41)
Net finance income	**6**	23	137
Share of post-tax results of joint ventures and associates[2]	**–**	(5)	(89)
(Loss)/profit before tax from discontinued operations	**(17)**	17	7
Tax from discontinued operations	**(1)**	(5)	(5)
(Loss)/profit after tax from discontinued operations	**(18)**	12	2
Gain on disposal	**9**	–	–
Total (loss)/profit after tax from discontinued operations[3]	**(9)**	12	2

1. Operating costs for the year ended 31 March 2020 relate to final transaction costs and other expenses in relation to Quadgas. Operating costs of £41 million for the year ended 31 March 2018 related to amounts in respect of the disposal of the UK Gas Distribution business, primarily relating to the completion accounts settlement in November 2017.
2. For the year ended 31 March 2019, the amount presented is the net of £43 million impairment charge against the investment in Quadgas (see note 16) and £38 million share of Quadgas post-tax profits recognised prior to classification as held for sale.
3. Of the total profit after tax from discontinued operations, the £23 million of operating expenses and the £9 million gain on disposal are treated as exceptional. For the year ended 31 March 2019, the £43 million impairment charge against the investment in Quadgas, net operating costs of £1 million and the tax thereon are classified as exceptional items.

The summary statement of comprehensive income for discontinued operations is as follows:

	2020 £m	2019 £m	2018 £m
(Loss)/profit after tax from discontinued operations	**(9)**	12	2
Other comprehensive income			
Items that will never be reclassified to profit or loss:			
Share of other comprehensive income of associate, net of tax	**–**	36	142
Total items from discontinued operations that will never be reclassified to profit or loss	**–**	36	142
Items that may be reclassified subsequently to profit or loss:			
Net gains in respect of cash flow hedges	**6**	–	–
Share of other comprehensive income of associate, net of tax	**–**	–	5
Total items from discontinued operations that may be reclassified subsequently to profit or loss	**6**	–	5
Other comprehensive income for the year, net of tax from discontinued operations	**6**	36	147
Total comprehensive (loss)/income for the year from discontinued operations	**(3)**	48	149

The summary cash flows for discontinued operations are as follows:

Cash flows used in operating activities of £97 million (2019: £71 million; 2018: £207 million) primarily related to cash outflows in respect of voluntary contributions totalling £66 million paid to the Warm Homes Fund, the utilisation of provisions and the payment of the final transaction fees incurred in the period. The utilisation of provisions in 2018 mainly related to payments of professional fees in respect of the disposal of the UK Gas Distribution business.

Cash inflows from investing activities of £6 million (2019: £156 million; 2018: £171 million) were comprised of dividends received and interest received on the shareholder loan.

There were no cash flows for financing activities in 2020 or 2019. In 2018, net cash flows used in financing activities were £231 million for the settlement of RPI swaps relating to the final stages of the Group-wide liability management programme executed as part of sale process of the UK Gas Distribution business.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

11. Goodwill

Goodwill represents the excess of what we paid to acquire businesses over the fair value of their net assets at the acquisition date. We assess whether goodwill is recoverable each year by performing an impairment review.

Goodwill is recognised as an asset and is not amortised, but is tested for impairment annually or more frequently if events or changes in circumstances indicate a potential impairment. Any impairment is recognised immediately in the income statement and is not subsequently reversed.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rate.

Goodwill is allocated to cash-generating units and this allocation is made to those cash-generating units that are expected to benefit from the business combination in which the goodwill arose.

Impairment is recognised where there is a difference between the carrying value of the cash-generating unit and the estimated recoverable amount of the cash-generating unit to which that goodwill has been allocated. Any impairment loss is first allocated to the carrying value of the goodwill and then to the other assets within the cash-generating unit. Recoverable amount is defined as the higher of fair value less costs to sell and estimated value-in-use at the date the impairment review is undertaken.

Value-in-use represents the present value of expected future cash flows, discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

Impairments are recognised in the income statement and are disclosed separately.

	Total £m
Net book value at 1 April 2018	5,444
Exchange adjustments	425
Net book value at 31 March 2019	5,869
Additions	81
Exchange adjustments	283
Net book value at 31 March 2020	**6,233**

Additions in the period relate to the goodwill recognised on the acquisition of Geronimo. Refer to note 38 for details.

There is no significant accumulated impairment charge as at 31 March 2020 or 31 March 2019.

The amounts disclosed above as at 31 March 2020 relate to the following cash-generating units: New York £3,544 million (2019: £3,382 million); Massachusetts £1,325 million (2019: £1,264 million); Rhode Island £493 million (2019: £470 million); Federal £790 million (2019: £753 million); and Geronimo £81 million (2019: £nil).

Goodwill is reviewed annually for impairment and the recoverability of goodwill has been assessed by comparing the carrying amount of our operations described above (our cash-generating units) with the expected recoverable amount on a value-in-use basis. In each assessment, the value-in-use has been calculated based on five-year plan projections that incorporate our best estimates of future cash flows, customer rates, costs (including changes in commodity prices), future prices and growth. Such projections reflect our current regulatory rate plans taking into account regulatory arrangements to allow for future rate plan filings and recovery of investment. Our plans have proved to be reliable guides in the past and the Directors believe the estimates are appropriate.

The future economic growth rate used to extrapolate projections beyond five years is 2.1% (2019: 2.2%). The growth rate has been determined having regard to data on projected growth in US real gross domestic product (GDP). Based on the position of our business in the underlying US economy, it is appropriate for the terminal growth rate to be based upon the overall growth in real GDP and, given the nature of our operations, to extend over a long period of time. Cash flow projections have been discounted to reflect the time value of money, using a post-tax discount rate of 4.5% (2019: 5.3%). The equivalent pre-tax discount rate is 4.5% (2019: 5.3%) as tax is assumed to be a pass-through cost to our customers, recoverable under our rate plans. The discount rate represents the estimated weighted average cost of capital of these operations.

In reaching this conclusion, the Directors considered the manner in which Tax Reform has impacted the Group and its future cash flows. In our US business, we are subject to federal and state taxes; however, our regulatory arrangements require us to pass this cost back to our customers. The reduction in the corporation tax rate in 2018 from 35% to 21% is being reflected through lower bills to customers, reducing our revenues (and tax costs) in future periods. For the purposes of the goodwill impairment exercise, we have reflected the lower billing levels through lower revenue forecasts as well as lower tax charges.

Historically, as a result of tax losses arising from claiming accelerated depreciation allowances, we have not paid substantial amounts of tax in the US. Accordingly, for IFRS purposes, we have recognised significant deferred tax liabilities in respect of these accelerated allowances. In accounting terms, Tax Reform triggered the remeasurement of our deferred tax liabilities from 35% to 21% for the year ended 31 March 2018. However, the impact for our US business is that the amounts we have previously received from customers assuming a 35% federal tax rate instead of a 21% federal tax rate must now be returned to customers over a period of up to 50 years. Offsetting this change is the additional income we earn, since the rate base grows faster. (Our rate base is net of deferred tax liabilities, which, as a result of Tax Reform, is now smaller.) In overall terms, the outcome is economically neutral.

In assessing the carrying value of goodwill, we have sensitised our forecasts to factor in a reduction in revenues and lower tax costs into our cash flow forecasts, but we have not reflected the impact of additional rate base growth on future earnings. While it is possible that a key assumption in the calculation could change, the Directors believe that no reasonably foreseeable change would result in an impairment of goodwill, in view of the long-term nature of the key assumptions and the margin by which the estimated value-in-use exceeds the carrying amount. This remains the case even after taking into account the short-term effects of COVID-19, the most significant of which is an increase in bad debt charges in the short-term.

12. Other intangible assets

Other intangible assets include software which is written down (amortised) over the period we expect to receive a benefit from the asset.

Identifiable intangible assets are recorded at cost less accumulated amortisation and any provision for impairment. Other intangible assets are tested for impairment only if there is an indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the consolidated income statement and are disclosed separately. Any assets which suffered impairment in a previous period are reviewed for possible reversal of the impairment at each reporting date.

Internally generated intangible assets, such as software, are recognised only if: i) an asset is created that can be identified; ii) it is probable that the asset created will generate future economic benefits; and iii) the development cost of the asset can be measured reliably. Where no internally generated intangible asset can be recognised, development expenditure is recorded as an expense in the period in which it is incurred.

Other intangible assets are amortised on a straight-line basis over their estimated useful economic lives. Amortisation periods for intangible assets are:

	Years
Software	1 to 10

	Software £m
Cost at 1 April 2018	1,797
Exchange adjustments	70
Additions	306
Disposals	(15)
Reclassifications[1]	10
Cost at 31 March 2019	2,168
Exchange adjustments	63
Additions	352
Disposals	–
Reclassifications[1]	–
Cost at 31 March 2020	2,583
Accumulated amortisation at 1 April 2018	(898)
Exchange adjustments	(26)
Amortisation charge for the year	(175)
Accumulated amortisation of disposals	15
Accumulated amortisation at 31 March 2019	(1,084)
Exchange adjustments	(28)
Amortisation charge for the year	(176)
Accumulated amortisation of disposals	–
Accumulated amortisation at 31 March 2020	(1,288)
Net book value at 31 March 2020[2]	**1,295**
Net book value at 31 March 2019	1,084

1. Reclassifications includes amounts transferred from property, plant and equipment (see note 13).
2. Included in software is £69 million (2019: £116 million) relating to the US Enterprise Resource Planning system, which still has a remaining amortisation period of three years.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

13. Property, plant and equipment

The following note shows the physical assets controlled by us. The cost of these assets primarily represents the amount initially paid for them. This includes both their purchase price and the construction and other costs associated with getting them ready for operation. A depreciation expense is charged to the income statement to reflect annual wear and tear and the reduced value of the asset over time. Depreciation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

We operate an energy networks business and therefore have a significant physical asset base. We continue to invest in our networks to maintain reliability, create new customer connections and ensure our networks are flexible and resilient. Our business plan envisages these additional investments will be funded through a mixture of cash generated from operations and the issue of new debt.

Property, plant and equipment is recorded at cost, less accumulated depreciation and any impairment losses. Cost includes the purchase price of the asset; any payroll and finance costs incurred which are directly attributable to the construction of property, plant and equipment; and the cost of any associated asset retirement obligations.

Property, plant and equipment includes assets in which the Group's interest comprises legally protected statutory or contractual rights of use. Additions represent the purchase or construction of new assets, including capital expenditure for safety and environmental assets, and extensions to, enhancements to, or replacement of, existing assets. All costs associated with projects or activities which have not been fully commissioned at the period end are classified within assets in the course of construction. No depreciation is provided on freehold land or assets in the course of construction.

Other items of property, plant and equipment are depreciated, on a straight-line basis, at rates estimated to write off their book values over their estimated useful economic lives. In assessing estimated useful economic lives, consideration is given to any contractual arrangements and operational requirements relating to particular assets. The assessments of estimated useful economic lives and residual values of assets are performed annually.

Unless otherwise determined by operational requirements, the depreciation periods for the principal categories of property, plant and equipment are, in general, as shown in the table below split between the UK and US, along with the weighted average remaining UEL for each class of property, plant and equipment (which is calculated by applying the annual depreciation charge per class of asset by the net book value of that class of asset).

	Years		
	UK	US	Weighted average remaining UEL
Freehold and leasehold buildings	up to 60	up to 100	26
Plant and machinery:			
Electricity transmission plant and wires	10 to 100	45 to 80	40
Electricity distribution plant	n/a	35 to 85	37
Electricity generation plant	15 to 40	20 to 93	21
Interconnector plant and other	5 to 60	8 to 50	23
Gas plant – mains, services and regulating equipment	10 to 65	47 to 95	49
Gas plant – storage	5 to 40	12 to 65	13
Gas plant – meters	7 to 30	14 to 65	18
Motor vehicles and office equipment	up to 10	up to 26	5

Gas asset lives

The role that gas networks play in the pathway to achieving the greenhouse gas emissions reductions targets set in the jurisdictions in which we operate is currently uncertain. However, we believe the gas assets which we own and operate today will continue to have a crucial role in maintaining security, reliability and affordability of energy beyond 2050, although the scale and purpose for which the networks will be used is dependent on technological developments and policy choices of governments and regulators.

- In the UK, the gas mains, services and regulating assets relating to the National Transmission System (NTS) were subject to a detailed review in January 2019. The most material components of these are our pipeline assets, which are due to be fully depreciated by 2070, with other assets being depreciated over various periods between now and then. That review was undertaken prior to the UK enacting legislation committing to net zero by 2050, but considered scenarios which included an extension of the emissions reduction targets (80% emissions reduction target at the time of the report). The review concluded that the most likely outcome was for the NTS network assets to remain in use beyond 2050, including in those scenarios where the greenhouse gas emissions of gas networks were largely eliminated.

  We do not believe developments since January 2019 would change the conclusions of this review.
- With respect to our US gas distribution assets, asset lives are assessed as part of detailed depreciation studies completed as part of each separate rate proceeding. Depreciation studies consider the physical condition of assets and the expected operational life of an asset. We believe these assessments are our best estimate of the UEL of our gas network assets in the US.
- The weighted average remaining UEL for our US gas distribution fixed asset base is circa 50 years, however a sizeable proportion of our assets are assumed to have UELs which extend beyond 2080. We continue to believe the lives identified by rate proceedings are the best estimate of the assets' UELs, although we continue to keep this assumption under review as we learn more about possible future pathways towards net zero. Whilst the targets, goals and ambitions have now been formalised in legislation in the states in which we operate, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways.
- Asset depreciation lives feed directly into our regulatory recovery mechanisms, such that any shortening of asset recovery periods as agreed with regulators should be recoverable through future rates, subject to agreement, over future periods, as part of wider considerations around ensuring the continuing affordability of gas in our service territories.

13. Property, plant and equipment continued

Given the uncertainty described relating to the UELs of our gas assets, below we provide a sensitivity on the depreciation charge for our UK and US regulated segments were a shorter UEL presumed:

	Increase in depreciation expense	
	UK regulated £m	US regulated £m
UELs limited to 2050	37	151
UELs limited to 2060	13	66
UELs limited to 2070	–	26

Note that this sensitivity calculation excludes any assumptions regarding residual value for our asset base and the effect shortening asset depreciation lives would expect to have on our regulatory recovery mechanisms.

Items within property, plant and equipment are tested for impairment only if there is some indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the income statement and if immaterial are included within the depreciation charge for the year.

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction[1] £m	Motor vehicles and office equipment £m	Total £m
Cost at 1 April 2018	2,930	49,374	4,273	857	57,434
Exchange adjustments	114	2,001	70	47	2,232
Additions	34	391	3,533	57	4,015
Disposals	(35)	(357)	(159)	(44)	(595)
Reclassifications[2]	295	2,974	(3,292)	13	(10)
Cost at 1 April 2019 (as previously reported)	3,338	54,383	4,425	930	63,076
Right-of-use assets recognised on transition to IFRS 16[3]	381	67	–	20	468
Cost at 1 April 2019 (as restated)	3,719	54,450	4,425	950	63,544
Exchange adjustments	98	1,511	53	33	1,695
Additions	130	464	4,029	104	4,727
Disposals	(79)	(486)	(9)	(65)	(639)
Reclassifications[2,4]	29	4,303	(4,433)	14	(87)
Cost at 31 March 2020	3,897	60,242	4,065	1,036	69,240
Accumulated depreciation at 1 April 2018	(674)	(16,398)	–	(509)	(17,581)
Exchange adjustments	(19)	(501)	–	(25)	(545)
Depreciation charge for the year	(93)	(1,229)	(150)	(101)	(1,573)
Disposals	7	335	150	44	536
Reclassifications[2]	1	(1)	–	–	–
Accumulated depreciation at 1 April 2019	(778)	(17,794)	–	(591)	(19,163)
Exchange adjustments	(16)	(372)	–	(20)	(408)
Depreciation charge for the year	(92)	(1,252)	–	(120)	(1,464)
Disposals	36	464	–	58	558
Reclassifications[2]	3	(7)	–	11	7
Accumulated depreciation at 31 March 2020	(847)	(18,961)	–	(662)	(20,470)
Net book value at 31 March 2020	**3,050**	**41,281**	**4,065**	**374**	**48,770**
Net book value at 31 March 2019	2,560	36,589	4,425	339	43,913

1. In 2019, included within disposals are UK nuclear connections development costs of £150 million (before £13 million of termination income) which were written off. See note 5 for further details.
2. Represents amounts transferred between categories, (to)/from other intangible assets (see note 12), reclassifications from inventories and reclassifications between cost and accumulated depreciation.
3. £468 million of additional right-of-use assets were recognised on transition to IFRS 16 on 1 April 2019. See note 37 for details.
4. Comprises an £87 million reduction in gross cost of assets in the course of construction in our UK Electricity Transmission business for costs previously capitalised and accrued as due to a supplier that are no longer payable.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

13. Property, plant and equipment continued

Right-of-use assets

The Group leases various properties, land, equipment and cars. With effect from 1 April 2019, new lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group (see note 37). The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term, plus any other costs. The discount rate applied is the rate implicit in the lease or, if that is not available, then the incremental rate of borrowing for a similar term and similar security. The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

Included within the net book value of property, plant and equipment at 31 March 2020 are right-of-use assets, split as follows:

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Net book value at 31 March 2020	364	95	–	225	684
Additions	10	1	–	73	84
Depreciation charge for the year ended 31 March 2020	(29)	(16)	–	(72)	(117)

The following balances have been included in the income statement for the year ended 31 March 2020 in respect of right-of-use assets:

	Total £m
Included within net finance income and costs:	
Interest expense on lease liabilities	(26)
Included within revenue:	
Lease income	35
Included within operating expenses:	
Expenses relating to low-value leases	(12)

The associated lease liabilities are disclosed in note 21.

The total of future minimum sub lease payments expected to be received under non-cancellable sub leases is £94 million (2019: £86 million).

	2020 £m	2019 £m
Information in relation to property, plant and equipment		
Capitalised interest included within cost	**2,118**	1,995
Contributions to cost of property, plant and equipment included within:		
Trade and other payables	**84**	87
Non-current liabilities	**428**	372
Contract liabilities – current	**76**	61
Contract liabilities – non-current	**1,082**	933

14. Other non-current assets

Other non-current assets include assets that do not fall into any other non-current asset category (such as goodwill or property, plant and equipment) where the benefit to be received from the asset is not due to be received until after 31 March 2021.

	2020 £m	2019 £m
Other receivables	**35**	28
Non-current tax assets	**65**	56
Prepayments	**19**	7
Accrued income[1]	**235**	173
	354	264

1. Includes accrued income in relation to property sales to the St William joint venture.

15. Financial and other investments

The Group holds a range of financial and other investments. These investments include short-term money funds, quoted investments in equities or bonds of other companies, long-term loans to our joint ventures, investments in our venture capital portfolio (National Grid Partners), bank deposits with a maturity of greater than three months, and cash balances that cannot be readily used in operations, principally collateral pledged against derivative holdings.

The Group has reported four categories of financial investments, and the classification for each investment is dependent on its contractual cash flows and the business model it is held under and recognised on trade date.

Debt instruments that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is to collect contractual cash flows, are held at amortised cost. This category includes our long-term loans to joint ventures as well as receivables in relation to deposits and collateral.

Debt investments that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is both to collect the contractual cash flows and to sell the debt instruments, are measured at fair value through other comprehensive income. On disposal, any realised gains or losses are recycled to the income statement in investment income (see note 6). Other investments include insurance contracts, measured at fair value, and held to back the present value of unfunded obligations in note 25.

The Group has elected to measure equity instruments at fair value through other comprehensive income that are shares held as part of a portfolio of financial instruments which back some long-term employee liabilities. They are not held for trading and so recognising gains and losses on these investments in profit and loss would not be representative of performance in the year. On disposal, any realised gains and losses are transferred to retained profits (see note 28).

Other financial investments are subsequently measured at fair value through profit and loss. This primarily comprises our money market funds, insurance company fund investments and corporate venture capital investments held by National Grid Partners.

Financial and other investments are initially recognised on trade date. Subsequent to initial recognition, the fair values of financial assets that are quoted in active markets are based on bid prices. When independent prices are not available, fair values are determined using valuation techniques used by the relevant markets. The techniques use observable market data to the extent available.

	2020 £m	2019 £m
Non-current		
Debt and other investments at fair value through other comprehensive income	**352**	343
Equity investments at fair value through other comprehensive income	**83**	93
Investments at fair value through profit and loss	**108**	62
Loans to joint ventures[1]	**–**	169
	543	667
Current		
Investments at fair value through profit and loss	**1,278**	1,311
Financial assets at amortised cost	**720**	670
	1,998	1,981
	2,541	2,648
Financial and other investments include the following:		
Investments in short-term money funds[2]	**978**	969
Insurance company fund investments[3]	**300**	342
Equities[4]	**83**	93
Bonds[4]	**132**	122
Cash surrender value of life insurance policies[4]	**220**	221
Loans to joint ventures	**–**	169
National Grid Partners and other investments[5]	**108**	62
Restricted balances:		
Collateral[6]	**685**	637
Other	**35**	33
	2,541	2,648

1. As at 31 March 2019, this related to a loan to a joint venture, which was measured at amortised cost.
2. Includes £1 million (2019: £6 million) held as insurance company fund investments and £26 million (2019: £22 million) US non-qualified plan investments, and therefore restricted.
3. Includes restricted amounts of £300 million (2019: £342 million) held as insurance company fund investments.
4. Includes restricted amounts of £435 million (2019: £436 million) relating to US non-qualified plan investments.
5. This includes a series of small unquoted equity investments held by National Grid Partners of £97 million (2019: £51 million).
6. Refers to collateral placed with counterparties with whom we have entered into a credit support annex to the ISDA (International Swaps and Derivatives Association) Master Agreement.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

15. Financial and other investments continued

Fair value through profit and loss and fair value through other comprehensive income investments are recorded at fair value. The carrying value of current financial assets at amortised cost approximates their fair values, primarily due to short-dated maturities. The carrying value of the non-current loans to joint ventures approximates their fair values as at 31 March 2019. The exposure to credit risk at the reporting date is the fair value of the financial investments. For further information on our credit risk, refer to note 32(a).

For the purposes of impairment assessment, the investments in bonds are considered to be low risk as they are managed with an investment remit to hold investment grade securities; life insurance policies are held with regulated insurance companies; and deposits, collateral receivable and other financial assets at amortised cost are investment grade. All financial assets held at fair value through other comprehensive income or amortised cost are therefore considered to have low credit risk and have a loss allowance equal to 12-month expected credit losses.

In determining the expected credit losses for these assets, some or all of the following information has been considered: credit ratings, the financial position of counterparties, the future prospects of the relevant industries and general economic forecasts.

No fair value through other comprehensive income or amortised cost financial assets have had modified cash flows during the period. There has been no change in the estimation techniques or significant assumptions made during the year in assessing the loss allowance for these financial assets. There were no significant movements in the gross carrying value of financial assets during the year that contribute to changes in the loss allowance. No collateral is held in respect of any of the financial investments in the above table. No balances are more than 30 days past due, and no balances were written off during the year.

16. Investments in joint ventures and associates

Investments in joint ventures and associates represent businesses we do not control but over which we exercise joint control or significant influence. They are accounted for using the equity method. A joint venture is an arrangement established to engage in economic activity, which the Group jointly controls with other parties and has rights to the net assets of the arrangement. An associate is an entity which is neither a subsidiary nor a joint venture, but over which the Group has significant influence.

	2020			2019		
	Associates £m	**Joint ventures £m**	**Total £m**	Associates £m	Joint ventures £m	Total £m
Share of net assets at 1 April	**291**	**317**	**608**	1,807	361	2,168
Exchange adjustments	**20**	**12**	**32**	17	(6)	11
Additions	**16**	**156**	**172**	58	85	143
Capitalisation of shareholder loan to Nemo Link Limited	**–**	**176**	**176**	–	–	–
Impairment charge against investment in Quadgas	**–**	**–**	**–**	(43)	–	(43)
Transfer of interest in Quadgas to assets held for sale	**–**	**–**	**–**	(1,625)	–	(1,625)
Share of post-tax results for the year	**40**	**47**	**87**	67	11	78
Share of other comprehensive income of associates, net of tax	**1**	**–**	**1**	37	–	37
Dividends received	**(41)**	**(34)**	**(75)**	(38)	(30)	(68)
Other movements[1]	**14**	**(20)**	**(6)**	11	(104)	(93)
Share of net assets at 31 March	**341**	**654**	**995**	291	317	608

1. Other movements on joint ventures relate to reducing the carrying value of the investment in St William Homes LLP to reflect deferred income we expect to recognise over the next 10 years.

A list of joint ventures and associates including the name and proportion of ownership is provided in note 34. Transactions with and outstanding balances with joint ventures and associates are shown in note 31. The joint ventures and associates have no significant contingent liabilities to which the Group is exposed, and the Group has no significant contingent liabilities in relation to its interests in the joint ventures and associates. The Group has capital commitments of £240 million (2019: £18 million) in relation to joint ventures.

16. Investments in joint ventures and associates continued

At 31 March 2020, the Group had three material joint ventures, being its 50% equity stakes in BritNed and Nemo Link Limited (Nemo) and its 51% stake in Emerald Energy Venture LLC (Emerald). The Group has one material associate, being its 26.25% investment in Millennium Pipeline Company LLC. BritNed is a joint venture with the Dutch transmission system operator, TenneT, and operates the subsea electricity link between Great Britain and the Netherlands, commissioned in 2011. Nemo is a joint venture with the Belgian transmission operator, Elia, and is a subsea electricity interconnector between the UK and Belgium, which became operational on 31 January 2019. BritNed and Nemo have reporting periods ending on 31 December with monthly management reporting information provided to National Grid. Emerald is a joint venture with Washington State Investment Board and builds and operates wind and solar assets. Emerald was acquired on 11 July 2019. Millennium Pipeline Company LLC is an associate that owns a natural gas pipeline from southern New York to the Lower Hudson Valley. Summarised financial information as at 31 March, together with the carrying amount of the investments, is as follows:

	BritNed Development Limited		Millennium Pipeline Company LLC		Nemo Link Limited		Emerald Energy Venture LLC
	2020 £m	2019 £m	**2020 £m**	2019 £m	**2020 £m**	2019 £m	**2020 £m**
Statement of financial position							
Non-current assets	**399**	370	**971**	937	**582**	537	**435**
Cash and cash equivalents	**54**	59	**33**	35	**26**	47	**66**
All other current assets	**4**	2	**26**	22	**5**	3	**6**
Non-current liabilities	**(45)**	(11)	**(315)**	(326)	**(29)**	2	**(232)**
Current liabilities	**(16)**	(28)	**(43)**	(84)	**(10)**	(375)	**(2)**
Net assets	**396**	392	**672**	584	**574**	214	**273**
Group's ownership interest in joint venture/associate	**198**	196	**176**	153	**287**	107	**139**
Group adjustment: elimination of profits on sales to joint venture	**–**	–	**–**	–	**–**	–	**(10)**
Carrying amount of the Group's investment	**198**	196	**176**	153	**287**	107	**129**

	BritNed Development Limited		Millennium Pipeline Company LLC		Nemo Link Limited		Emerald Energy Venture LLC
	2020 £m	2019 £m	**2020 £m**	2019 £m	**2020 £m**	2019 £m	**2020 £m**
Income statement							
Revenue	**80**	87	**206**	166	**45**	12	**19**
Depreciation and amortisation	**(14)**	(13)	**(46)**	(34)	**(23)**	(4)	**(7)**
Other costs	**(10)**	(10)	**(20)**	(24)	**(8)**	(4)	**(10)**
Operating profit	**56**	64	**140**	108	**14**	4	**2**
Net interest expense	**–**	–	**(22)**	(11)	**–**	–	**(3)**
Profit before tax	**56**	64	**118**	97	**14**	4	**(1)**
Income tax expense	**(10)**	(10)	**–**	–	**(2)**	–	**–**
Profit for the year	**46**	54	**118**	97	**12**	4	**(1)**
Group's share of profit/(loss)	**23**	27	**31**	25	**6**	2	**(1)**
Group adjustment: Tax charge	**–**	–	**(9)**	–	**–**	–	**–**
Group's share of post-tax results for the year	**23**	27	**22**	25	**6**	2	**(1)**

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

17. Derivative financial instruments

Derivatives are financial instruments that derive their value from the price of an underlying item such as interest rates, foreign exchange rates, credit spreads, commodities, equities or other indices. In accordance with policies approved by the Board, derivatives are transacted generally to manage exposures to fluctuations in interest rates, foreign exchange rates and commodity prices. Our derivatives balances comprise two broad categories:

- financing derivatives managing our exposure to interest rates and foreign exchange rates. Specifically, we use these derivatives to manage our financing portfolio, holdings in foreign operations and contractual operational cash flows; and
- commodity contract derivatives managing our US customers' exposure to price and supply risks. Some forward contracts for the purchase of commodities meet the definition of derivatives and are included here. We also enter into derivative financial instruments linked to commodity prices, including index futures, options and swaps. These are used to manage market price volatility.

Derivatives are initially recognised at fair value and subsequently remeasured to fair value at each reporting date. Changes in fair values are recorded in the period they arise, in either the consolidated income statement or other comprehensive income as required by IFRS 9. Where the gains or losses recorded in the income statement arise from changes in the fair value of derivatives to the extent that hedge accounting is not applied or is not fully effective, these are recorded as remeasurements, detailed in notes 5 and 6. Where the fair value of a derivative is positive it is carried as a derivative asset, and where negative as a derivative liability.

We calculate the fair value of derivative financial instruments by taking the present value of future cash flows, primarily incorporating market observable inputs. The various inputs include foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate and inflation curves, the forward rate curves of underlying commodities, and for those positions that are not fully cash collateralised the credit quality of the counterparties.

Certain clauses embedded in non-derivative financial instruments or other contracts are presented as derivatives because they impact the risk profile of their host contracts and they are deemed to have risks or rewards not closely related to those host contracts.

Further information on how derivatives are valued and used for risk management purposes is presented in note 32.

Information on commodity contracts and other commitments not meeting the definition of derivatives is presented in note 30.

The fair values of derivatives by category are as follows:

	2020			2019		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Financing derivatives	**1,267**	**(1,134)**	**133**	1,052	(1,084)	(32)
Commodity contract derivatives	**75**	**(200)**	**(125)**	101	(99)	2
	1,342	**(1,334)**	**8**	1,153	(1,183)	(30)

(a) Financing derivatives
The fair values of financing derivatives by type are as follows:

	2020			2019		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Interest rate swaps	**556**	**(337)**	**219**	539	(384)	155
Cross-currency interest rate swaps	**643**	**(514)**	**129**	470	(443)	27
Foreign exchange forward contracts[1]	**58**	**(39)**	**19**	41	(41)	–
Inflation-linked swaps	**–**	**(234)**	**(234)**	–	(214)	(214)
Equity options	**10**	**(10)**	**–**	2	(2)	–
	1,267	**(1,134)**	**133**	1,052	(1,084)	(32)

1. Included within the foreign exchange forward contracts balance is £(3) million (2019: £32 million) of derivatives in relation to hedging of capital expenditure.

17. Derivative financial instruments continued

(a) Financing derivatives continued

The maturity profile of financing derivatives is as follows:

	2020 Assets £m	2020 Liabilities £m	2020 Total £m	2019 Assets £m	2019 Liabilities £m	2019 Total £m
Current						
Less than 1 year	**62**	**(254)**	**(192)**	56	(282)	(226)
	62	**(254)**	**(192)**	56	(282)	(226)
Non-current						
In 1 to 2 years	**480**	**(51)**	**429**	19	(193)	(174)
In 2 to 3 years	**13**	**(5)**	**8**	416	(1)	415
In 3 to 4 years	**20**	**(28)**	**(8)**	11	–	11
In 4 to 5 years	**31**	**(109)**	**(78)**	20	(14)	6
More than 5 years	**661**	**(687)**	**(26)**	530	(594)	(64)
	1,205	**(880)**	**325**	996	(802)	194
	1,267	**(1,134)**	**133**	1,052	(1,084)	(32)

The notional contract[1] amounts of financing derivatives by type are as follows:

	2020 £m	2019 £m
Interest rate swaps	**(3,101)**	(6,299)
Cross-currency interest rate swaps	**(8,097)**	(6,700)
Foreign exchange forward contracts	**(3,284)**	(2,937)
Inflation-linked swaps	**(500)**	(500)
Equity options	**(800)**	(800)
	(15,782)	(17,236)

1. The notional contract amounts of derivatives indicate the gross nominal value of transactions outstanding at the reporting date.

(b) Commodity contract derivatives

The fair values of commodity contract derivatives by type are as follows:

	2020 Assets £m	2020 Liabilities £m	2020 Total £m	2019 Assets £m	2019 Liabilities £m	2019 Total £m
Commodity purchase contracts accounted for as derivative contracts						
Forward purchases of gas	**64**	**(108)**	**(44)**	66	(78)	(12)
Derivative financial instruments linked to commodity prices						
Electricity swaps	**4**	**(83)**	**(79)**	29	(19)	10
Gas swaps	**7**	**(8)**	**(1)**	5	(1)	4
Gas options	**–**	**(1)**	**(1)**	1	(1)	–
	75	**(200)**	**(125)**	101	(99)	2

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

17. Derivative financial instruments continued
(b) Commodity contract derivatives continued
The maturity profile of commodity contract derivatives is as follows:

	2020			2019		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Current						
Less than one year	31	(126)	(95)	52	(68)	(16)
	31	(126)	(95)	52	(68)	(16)
Non-current						
In 1 to 2 years	8	(35)	(27)	14	(9)	5
In 2 to 3 years	9	(24)	(15)	9	(8)	1
In 3 to 4 years	8	(12)	(4)	6	(4)	2
In 4 to 5 years	7	(1)	6	6	(4)	2
More than 5 years	12	(2)	10	14	(6)	8
	44	(74)	(30)	49	(31)	18
	75	(200)	(125)	101	(99)	2

The notional quantities of commodity contract derivatives by type are as follows:

	2020	2019
Forward purchases of gas[1]	102m Dth	52m Dth
Electricity swaps	12,836 GWh	12,848 GWh
Electricity options	0 GWh	10,444 GWh
Gas swaps	89m Dth	87m Dth
Gas options	26m Dth	34m Dth

1. Forward gas purchases have terms up to four years (2019: two years). The contractual obligations under these contracts are £128 million (2019: £108 million).

18. Inventories and current intangible assets

Inventories represent assets that we intend to use in order to generate revenue in the short term, either by selling the asset itself (for example, fuel stocks) or by using it to fulfil a service to a customer or to maintain our network (consumables).

Inventories are stated at the lower of weighted average cost and net realisable value. Where applicable, cost comprises direct materials and direct labour costs as well as those overheads that have been incurred in bringing the inventories to their present location and condition.

Emission allowances, principally relating to the emissions of carbon dioxide in the UK and sulphur and nitrous oxides in the US, are recorded as intangible assets within current assets, and they are initially recorded at cost and subsequently at the lower of cost and net realisable value. A liability is recorded in respect of the obligation to deliver emission allowances, and emission charges are recognised in the income statement in the period in which emissions are made.

	2020 £m	2019 £m
Fuel stocks	151	99
Raw materials and consumables	265	184
Current intangible assets – emission allowances	133	87
	549	370

There is a provision for obsolescence of £21 million against inventories as at 31 March 2020 (2019: £20 million).

19. Trade and other receivables

Trade and other receivables are amounts which are due from our customers for services we have provided.

Trade and other receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate allowances for estimated irrecoverable amounts.

	2020 £m	2019 £m
Trade receivables	**1,551**	1,899
Accrued income	**869**	883
Prepayments	**408**	237
Other receivables	**158**	134
	2,986	3,153

Trade receivables are non-interest-bearing and generally have a 30 to 90 days term. Due to their short maturities, the fair value of trade and other receivables approximates their carrying value. The maximum exposure of trade receivables to credit risk is the gross carrying amount of £2,063 million (2019: £2,293 million).

Provision for impairment of receivables
A provision for credit losses is recognised at an amount equal to the expected credit losses that will arise over the lifetime of the trade receivables and accrued income.

	2020 £m	2019 £m
At 1 April	**394**	309
Exchange adjustments	**20**	24
Charge for the year, net of recoveries	**234**	181
Uncollectible amounts written off	**(136)**	(120)
At 31 March	**512**	394

The trade receivables balance, accrued income balance and provisions balance split by geography is as follows:

	As at 31 March 2020			As at 31 March 2019		
	UK £m	US £m	Total £m	UK £m	US £m	Total £m
Trade receivables	**227**	**1,836**	**2,063**	313	1,980	2,293
Accrued income	**461**	**408**	**869**	445	438	883
Provision for impairment of trade receivables	**(40)**	**(472)**	**(512)**	(40)	(354)	(394)

There are no retail customers in the UK businesses. A provision matrix is not used in the UK as an assessment of expected losses on individual debtors is performed, and the provision is not material.

In the US, £1,806 million (2019: £1,885 million) of the trade receivables and unbilled revenue balance is attributable to retail customers. For non-retail US customer receivables, a provision matrix is not used and expected losses are determined on individual debtors.

The provision for retail customer receivables in the US is calculated based on a series of provision matrices which are prepared by regulated entity and by customer type. The expected loss rates in each provision matrix are based on historical loss rates adjusted for current and forecasted economic conditions at the balance sheet date. The inclusion of forward-looking information in the provision matrix setting process under IFRS 9 resulted in loss rates that reflect expected future economic conditions and the recognition of an expected loss on all debtors even where no loss event has occurred.

In March 2020, the Group's US distribution businesses ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimise risk to the Group's employees. The Group has also ceased customer termination activities as requested by relevant local authorities. In addition, we have considered the macroeconomic data including unemployment levels and our previous experience regarding debtor recoverability during and in the aftermath of the 2008/09 financial crisis (which impacted all of our service territories) and that following Superstorm Sandy in 2012 which impacted our downstate New York gas business specifically.

Based on our review of these factors, we concluded that a reasonable range for the additional provision recognised in light of the cessation of customer terminations and collections following the moratoriums introduced would lie between £81 million and £161 million ($100 million and $200 million). We concluded an additional charge of £117 million represented our best estimate based on the information available, primarily as this represented an impact twice as severe as Superstorm Sandy, adjusted to incorporate all service territories impacted.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

19. Trade and other receivables continued

The average expected loss rates and gross balances for the retail customer receivables in our US operations are set out below:

	2020 %	2020 £m	2019 %	2019 £m
Unbilled revenue	**5**	**395**	–	420
0 – 30 days	**5**	**623**	3	736
30 – 60 days	**14**	**184**	12	194
60 – 90 days	**29**	**105**	20	89
3 – 6 months	**47**	**119**	30	109
6 – 12 months	**63**	**104**	39	99
Over 12 months	**79**	**276**	68	238
		1,806		1,885

The year-on-year movements in average expected loss rates are driven primarily as a result of the moratoriums on cash collection and termination activities outlined above.

US retail customer receivables are not collateralised. Trade receivables are written off when regulatory requirements are met. Write-off policies vary between jurisdictions as they are aligned with the local regulatory requirements, which differ between regulators. There were no significant amounts written off during the period that were still subject to enforcement action. Our internal definition of default is aligned with that of the individual regulators in each jurisdiction.

For further information on our wholesale and retail credit risk, refer to note 32(a).

20. Cash and cash equivalents

Cash and cash equivalents include cash balances, together with short-term investments with an original maturity of less than three months that are readily convertible to cash.

Net cash and cash equivalents reflected in the cash flow statement are net of bank overdrafts, which are reported in borrowings. The carrying amounts of cash and cash equivalents and bank overdrafts approximate their fair values.

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for periods varying between one day and three months, depending on the immediate cash requirements, and earn interest at the respective short-term deposit rates.

Net cash and cash equivalents held in currencies other than sterling have been converted into sterling at year-end exchange rates. For further information on currency exposures, refer to note 32(c).

	2020 £m	2019 £m
Cash at bank	**73**	177
Short-term deposits	**–**	75
Cash and cash equivalents	**73**	252

21. Borrowings

We borrow money primarily in the form of bonds and bank loans. These are for a fixed term and may have fixed or floating interest rates or are linked to RPI. We use derivatives to manage risks associated with interest rates and foreign exchange.

Our price controls and rate plans lead us to fund our networks within a certain ratio of debt to equity and, as a result, we have issued a significant amount of debt. As we continue to invest in our networks, the value of debt is expected to increase over time. To maintain a strong balance sheet and to allow us to access capital markets at commercially acceptable interest rates, we balance the amount of debt we issue with the value of our assets, and we take account of certain other metrics used by credit rating agencies.

All borrowings are accounted for at amortised cost, with the exception of one liability measured at fair value through profit and loss, in order to eliminate a measurement mismatch.

Borrowings, which include interest-bearing, zero-coupon and inflation-linked debt, overdrafts and collateral payable, are initially recorded at fair value. This normally reflects the proceeds received (net of direct issue costs for liabilities measured at amortised cost). Subsequently, borrowings are stated either: i) at amortised cost; or ii) at fair value though profit and loss. Where a borrowing is held at amortised cost, any difference between the proceeds after direct issue costs and the redemption value is recognised over the term of the borrowing in the income statement using the effective interest method. For the liability held at fair value through profit and loss, interest is calculated using the effective interest method.

Where a borrowing or liability is held at fair value, changes in the fair value of the borrowing due to changes in the issuer's credit risk are recorded in the own credit reserve (see note 28). All other changes in the fair value of the liability are recognised in the income statement within remeasurements (see notes 5 and 6).

	2020 £m	2019 £m
Current		
Bank loans	**1,244**	641
Bonds	**1,446**	1,973
Commercial paper	**1,269**	1,792
Lease liabilities	**112**	65
Other loans	**1**	1
	4,072	4,472
Non-current		
Bank loans	**2,819**	2,599
Bonds[1]	**23,094**	21,278
Lease liabilities	**623**	205
Other loans	**186**	176
	26,722	24,258
Total borrowings	**30,794**	28,730

1. Includes a liability held at fair value through profit and loss of £741 million (2019: £667 million).

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

21. Borrowings continued

Total borrowings are repayable as follows:

	2020 £m	2019 £m
Less than 1 year	**4,072**	4,472
In 1 to 2 years	**2,212**	2,393
In 2 to 3 years	**1,664**	1,990
In 3 to 4 years	**757**	1,553
In 4 to 5 years	**2,122**	714
More than 5 years:		
By instalments	**870**	959
Other than by instalments	**19,097**	16,649
	30,794	28,730

The fair value of borrowings at 31 March 2020 was £34,174 million (2019: £32,252 million). Where market values were available, fair value of borrowings (Level 1) was £14,059 million (2019: £14,356 million). Where market values were not available, fair value of borrowings (Level 2) was £20,115 million (2019: £17,896 million), calculated by discounting cash flows at prevailing interest rates. The notional amount outstanding of the debt portfolio at 31 March 2020 was £30,422 million (2019: £28,417 million).

In April 2020, National Grid Electricity Transmission plc issued a £0.4 billion fixed interest rate bond from the NGET EMTN programme with a 20-year tenor and The Narragansett Electric Company issued a $0.6 billion (£0.5 billion) fixed interest rate bond with a 10-year tenor. Both issuances are part of the continued Group funding arrangements.

During the year, the assets of the Colonial Gas Company were merged with the Boston Gas Company, and have been ringfenced post-merger, and certain gas distribution assets of The Narragansett Electric Company are subject to liens and other charges and are provided as collateral over borrowings totalling £84 million at 31 March 2020 (2019: £81 million).

Collateral is placed with or received from any derivative counterparty where we have entered into a credit support annex to the ISDA Master Agreement once the current mark-to-market valuation of the trades between the parties exceeds an agreed threshold. Included in current bank loans is £785 million (2019: £558 million) in respect of cash received under collateral agreements. For further details of our borrowing facilities, refer to note 33. For further details of our bonds in issue, please refer to the debt investor section of our website. Unless included herein, the information on our website is unaudited.

Financial liability at fair value through profit and loss

The financial liability designated at fair value through profit and loss is analysed as follows:

i. the fair value of the liability was £741 million (2019: £667 million), which includes cumulative change in fair value attributable to changes in credit risk recognised in other comprehensive income, post tax of £10 million (2019: £13 million);

ii. the amount repayable at maturity in November 2021 is £759 million (2019: £724 million); and

iii. the difference between carrying amount and contractual amount at maturity is £18 million (2019: £57 million).

This liability has been reclassified in order to eliminate a measurement mismatch with derivatives which provide an economic hedge. The associated derivatives are collateralised and do not contain significant exposure to our own credit risk. The presentation of credit risk in other comprehensive income does not, therefore, create or enlarge an accounting mismatch in profit or loss.

The change in the fair value attributable to a change in credit risk is calculated as the difference between the total change in the fair value of the liability and the change in the value of the liability due to changes in market risk factors alone. The change in the fair value due to market risk factors was calculated using benchmark yield curves as at the end of the reporting period holding the credit risk margin constant. The fair value of the liability was calculated using observed market prices.

21. Borrowings continued

Lease liabilities

The Group adopted IFRS 16 on 1 April 2019, which resulted in the recognition of £474 million of additional lease liabilities. As we applied the modified retrospective approach to transition, comparatives were not restated. Refer to note 37 for details.

Lease liabilities are initially measured at the present value of the lease payments expected over the lease term. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security. The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method.

	2020 £m	2019 £m
Gross lease liabilities are repayable as follows:		
Less than 1 year	132	65
1 to 5 years	361	183
More than 5 years	481	62
	974	310
Less: finance charges allocated to future periods	(239)	(40)
	735	270
The present value of lease liabilities are as follows:		
Less than 1 year	112	65
1 to 5 years	297	156
More than 5 years	326	49
	735	270

22. Trade and other payables

Trade and other payables include amounts owed to suppliers, tax authorities and other parties which are due to be settled within 12 months. The total also includes deferred amounts, some of which represent monies received from customers but for which we have not yet delivered the associated service. These amounts are recognised as revenue when the service is provided.

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost. Contingent consideration is measured at fair value.

	2020 £m	2019 £m
Trade payables	2,205	2,404
Deferred payables	137	217
Customer contributions[1]	84	87
Social security and other taxes	202	159
Contingent consideration[2]	30	–
Other payables	944	902
	3,602	3,769

1. From government-related entities.
2. Contingent consideration relates to the acquisition of Geronimo (see note 38).

Due to their short maturities, the fair value of trade payables approximates their carrying value.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

23. Contract liabilities

Contract liabilities primarily relate to the advance consideration received from customers for construction contracts, mainly in relation to connections, for which revenue is recognised over the life of the asset.

	2020 £m	2019 £m
Current	76	61
Non-current	1,082	933
	1,158	994

Significant changes in the contract liabilities balances during the period are as follows:

	2020 £m	2019 £m
As at 1 April	994	866
Exchange adjustments	39	29
Revenue recognised that was included in the contract liability balance at the beginning of the period	(60)	(51)
Increases due to cash received, excluding amounts recognised as revenue during the period	185	155
Changes due to amounts recognised as revenue	–	(5)
At 31 March	1,158	994

24. Other non-current liabilities

Other non-current liabilities include deferred income which will not be recognised as income until after 31 March 2021. It also includes payables that are not due until after that date.

Contingent consideration is measured at fair value. All other non-current liabilities are initially recognised at fair value and subsequently measured at amortised cost.

	2020 £m	2019 £m
Deferred income[1]	101	96
Customer contributions[2]	428	372
Contingent consideration[3]	44	–
Other payables	318	340
	891	808

1. Principally the deferral of profits relating to the sale of property, which we expect to recognise in future years.
2. From government-related entities.
3. Contingent consideration relates to the acquisition of Geronimo (see note 38).

There is no material difference between the fair value and the carrying value of other payables.

25. Pensions and other post-retirement benefits

All of our employees are eligible to participate in a pension plan. We have defined benefit (DB) and defined contribution (DC) pension plans in the UK and the US. In the US we also provide healthcare and life insurance benefits to eligible employees, post-retirement. The fair value of associated plan assets and present value of DB obligations are updated annually in accordance with IAS 19 (revised). We separately present our UK and US pension plans to show geographical split. Below we provide a more detailed analysis of the amounts recorded in the primary financial statements and the actuarial assumptions used to value the DB obligations.

National Grid's UK pension arrangements are held in separate Trustee administered funds. The arrangements are managed by Trustee companies with boards consisting of company- and member-appointed directors. In the US, the assets of the plans are held in trusts and administered by the Retirement Plans Committee comprised of appointed employees of the Company.

Defined contribution plans

These plans are designed to provide members with a pension pot for their retirement. The risks associated with these plans are assumed by the member.

Payments to these DC plans are charged as an expense as they fall due. There is no legal or constructive obligation on National Grid to pay additional contributions into a DC plan if the fund has insufficient assets to pay all employees' benefits relating to employee service in the current and prior periods.

The National Grid YouPlan

YouPlan is the qualifying UK pension plan that is used for automatic enrolment of new hires.

National Grid pays contributions into YouPlan to provide DC benefits on behalf of employees. National Grid provides a double match of member contributions, up to a maximum Company contribution of 12% of salary as well as the cost of administration and insured benefits.

Defined benefit plans

On retirement, members of DB plans receive benefits whose value is dependent on factors such as salary and length of pensionable service. National Grid's obligation in respect of DB pension plans is calculated separately for each DB plan by projecting the estimated amount of future benefit payments that employees have earned for their pensionable service in the current and prior periods. These future benefit payments are discounted to determine the present value of the liabilities. Current service cost and any unrecognised past service cost are recognised immediately. The discount rate used is the yield curve at the valuation date on high-quality corporate bonds.

Advice is taken from independent actuaries relating to the appropriateness of the key assumptions applied, including life expectancy, expected salary and pension increases, and inflation. Comparatively small changes in the assumptions used may have a significant effect on the amounts recognised in the consolidated income statement, the consolidated statement of other comprehensive income and the net liability recognised in the consolidated statement of financial position.

Remeasurements of pension assets and post-retirement benefit obligations are recognised in full in the period in which they occur in the consolidated statement of other comprehensive income.

The principal UK DB pensions plans are the National Grid UK Pension Scheme (NGUKPS) and the National Grid Electricity Group of the Electricity Supply Pension Scheme (NGEG of ESPS). In the US, we have four principal plans and various healthcare and life insurance plans.

The COVID-19 pandemic

The COVID-19 pandemic has had a global impact on economies, equity and bond markets. Market volatility during March has had an impact on the value of assets held by our DB and DC pension plans. Our UK DB plans have low-risk investment strategies with limited exposure to equities and other return seeking assets, whilst the US plans have a greater exposure to these asset classes.

UK Pensions plans

The arrangements are subject to independent actuarial funding valuations at least every three years, and following consultation and agreement with us, the qualified actuary certifies the employers' contributions, which, together with the specified contributions payable by the employees and proceeds from the plans' assets, are expected to be sufficient to fund the benefits payable.

The results of the most recent actuarial valuations are shown below. See page 167 for the assumptions used for IAS 19 (revised) purposes. The actuarial valuations for NGUKPS as at 31 March 2019 have recently been completed, while we expect the valuation for NGEG of ESPS to be finalised by 30 June 2020.

	Section A of NGUKPS	Section B of NGUKPS	NGEG of ESPS
Latest full actuarial valuation	31 March 2019	31 March 2019	31 March 2016
Actuary	Willis Towers Watson	Willis Towers Watson	Aon Hewitt
Market value of plan assets at latest valuation	£6,551 million	£5,765 million	£2,553 million
Actuarial value of benefits due to members	£6,502 million	£5,831 million	£3,053 million
Market value as percentage of benefits	101%	99%	84%
Funding surplus/(deficit)	£49 million	(£66 million)	(£500 million)
Funding surplus/(deficit) net of tax	£41 million	(£55 million)	(£415 million)

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

25. Pensions and other post-retirement benefits continued

National Grid UK Pension Scheme
NGUKPS consists of three sections, each legally and actuarially separate. Sections A and B are supported by companies within the Group, while Section C is supported by Cadent Gas Limited, now an unrelated third party. The plan closed to new hires on 1 April 2002.

Section A
Following the latest actuarial valuation at 31 March 2019, Section A remains in surplus, and so no deficit funding contributions are required. National Grid and the Trustees have agreed a schedule of contributions whereby the employers will continue to contribute 51.8% of pensionable salary, less member contributions, in respect of future benefit accrual.

As part of the sectionalisation of NGUKPS on 1 January 2017, a guarantee of £1 billion has been provided to Section A. This payment is contingent on insolvency or on failure to pay pension obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total).

Section B
The latest full actuarial valuation at 31 March 2019 determined that Section B was in deficit. In addition to a £34 million payment already made in September 2019, National Grid and the Trustees agreed that an additional payment of approximately £32 million will be made by September 2020 to eliminate the funding deficit. In addition, the employers contribute 51.4% of pensionable salary, less member contributions, in respect of future benefit accrual.

Pensions buy-ins
During the year, the Trustees of the NGUKPS entered into two buy-in arrangements in order to manage various risks. The policies provide bulk annuities in respect of some pensioner and dependant members of Sections A and B of NGUKPS and were funded by existing assets. In Section A, £2.8 billion of gilts were exchanged for a buy-in policy with Rothesay Life. In Section B, £1.6 billion of gilts were exchanged for a buy-in policy with Legal & General. Both policies are held by the Trustee. For both transactions, the pricing of the policies was highly competitive; however, under IAS 19 the methodology for calculating the value of the buy-ins (as an asset held by the pension plan) differs from the price paid. This resulted in the recognition of an actuarial loss of £0.7 billion on purchase, recorded within the consolidated statement of other comprehensive income.

National Grid Electricity Group of the Electricity Supply Pension Scheme
The last full actuarial valuation for the NGEG of the ESPS determined that the plan was in deficit. National Grid and the Trustees agreed on a schedule of contributions, whereby deficit funding of £48 million is payable each year from 2016 to 2027, which should lead to the elimination of the funding shortfall by March 2027. All deficit funding amounts due will be adjusted for changes in the RPI. In addition, National Grid contributes 40.7% of pensionable salary, less member contributions, in respect of the ongoing service cost. The plan closed to new hires from 1 April 2006.

The plan holds a longevity insurance contract which covers improvements in longevity, providing long-term protection to the scheme, should some pensioner and dependant members live longer than currently expected.

Administration costs
Up to 31 March 2020, National Grid was responsible for the costs of plan administration and the Pension Protection Fund (PPF) levies for both Sections A and B of NGUKPS, and NGEG of ESPS. However, from 1 April 2020 onwards this will only apply to Section B of NGUKPS and NGEG of ESPS, whilst Section A of NGUKPS will fund these costs from the Section's assets.

Security arrangements
National Grid has also established security arrangements with charges in favour of the Trustees.

	Section A of NGUKPS	Section B of NGUKPS	NGEG of ESPS
Value of security arrangements at 31 March 2020[1]	£315 million	£180 million	£239 million
Principal supporting employers	National Grid plc and National Grid UK Limited	National Grid Gas plc (NGG)	National Grid Electricity Transmission plc (NGET)
Additional amounts payable[2] at 31 March 2020	£72 million	A maximum of £280 million	A maximum of £500 million

1. Following the completion of the March 2019 valuations for Sections A and B of NGUKPS, these amounts have changed to £186 million for Section A and to £nil for Section B.
2. These amounts are payable if certain trigger events occur which have been individually agreed between the plans and their relevant supporting employers.

The majority of the security is provided in the form of surety bonds with the remainder in letters of credit. The assets held in security will be paid to the respective section or plan in the event that the relevant supporting employer is subject to an insolvency event or fails to make the required contributions; and applicable to NGEG of ESPS only, if NGET loses its licence to operate under relevant legislation. Counter indemnities have also been taken out to ensure the obligations will be fulfilled.

25. Pensions and other post-retirement benefits continued

US pension plans

National Grid has multiple DC pension plans which allow employee as well as Company contributions. Non-union employees hired after 1 January 2011, as well as new hire represented union employees, receive a core contribution into the DC plan, irrespective of the employee's contribution into the plan.

National Grid sponsors four non-contributory qualified DB pension plans, which provide vested union employees, and vested non-union employees hired before 1 January 2011 with retirement benefits within prescribed limits as defined by the US Internal Revenue Service. National Grid also provides non-qualified DB pension arrangements for a section of current and former employees, which are closed to new entrants. Benefits under the DB plans generally reflect age, years of service and compensation and are paid in the form of an annuity or lump sum. An independent actuary performs valuations annually. The Company funds the DB plans by contributing no less than the minimum amount required, but no more than the maximum tax-deductible amount allowed under US Internal Revenue Service regulations. The range of contributions determined under these regulations can vary significantly depending upon the funded status of the plans. At present, there is some flexibility in the amount that is contributed on an annual basis. In general, the Company's policy for funding the US pension plans is to contribute the amounts collected in rates and capitalised in the rate base during the year, to the extent that the funding is no less than the minimum amount required. For the current financial year, these contributions amounted to approximately £153 million (2019: £231 million).

US retiree healthcare and life insurance plans

National Grid provides healthcare and life insurance benefits to eligible employees, post-retirement. Eligibility is based on certain age and length of service requirements, and in most cases, retirees contribute to the cost of their healthcare coverage. In the US, there is no governmental requirement to pre-fund post-retirement healthcare and life insurance plans. However, in general, the Company's policy for funding the US retiree healthcare and life insurance plans is to contribute amounts collected in rates and capitalised in the rate base during the year. For the current financial year, these contributions amounted to £18 million (2019: £14 million).

For the last few years it has been the Company's policy to primarily direct contributions to the DB pension plans due to concerns over tax deductible limitations relating to the retiree and healthcare and life insurance plans.

Actuarial assumptions

The Company has applied the following financial assumptions in assessing DB liabilities:

	UK pensions		
	2020 %	2019 %	2018 %
Discount rate – past service	**2.35**	2.40	2.60
Discount rate – future service	**2.35**	2.45	2.65
Salary increases	**2.90**	3.50	3.40
Rate of increase in RPI – past service	**2.65**	3.25	3.15
Rate of increase in RPI – future service	**2.45**	3.20	3.10

At 31 March 2020, single equivalent financial assumptions are shown above for presentational purposes, although full yield curves have been used in our calculations. In 2018 and 2019, single equivalent financial assumptions were set which reflected the average duration for the aggregate past and future service obligations.

The discount rate is determined by reference to high-quality UK corporate bonds at the reporting date. The rate of increase in salaries has been set using a promotional scale where appropriate. The rates of increases stated are not indicative of historical increases awarded or a guarantee of future increase, but merely an appropriate assumption used in assessing DB liabilities. Retail Price Index (RPI) is the key assumption that determines assumed increases in pensions in payment and deferment in the UK only.

	US pensions			US other post-retirement benefits		
	2020 %	2019 %	2018 %	**2020 %**	2019 %	2018 %
Discount rate	**3.30**	3.95	4.00	**3.30**	3.95	4.00
Salary increases	**3.50**	3.50	3.50	**3.50**	3.50	3.50
Initial healthcare cost trend rate	**n/a**	n/a	n/a	**7.00**	7.25	7.50
Ultimate healthcare cost trend rate	**n/a**	n/a	n/a	**4.50**	4.50	4.50

Discount rates for US pension liabilities have been determined by reference to appropriate yields on high-quality US corporate bonds at the reporting date based on the duration of plan liabilities. The healthcare cost trend rate is expected to reach the ultimate trend rate by 2030 (2019: 2028).

	2020		2019		2018	
	UK years	**US years**	UK years	US years	UK years	US years
Assumed life expectations for a retiree age 65						
Males	**22.1**	**20.9**	22.0	22.1	22.3	22.0
Females	**23.8**	**23.4**	23.6	24.2	23.9	24.2
In 20 years:						
Males	**23.3**	**22.5**	23.3	23.7	23.7	23.6
Females	**25.3**	**25.1**	25.2	25.9	25.5	25.8

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

25. Pensions and other post-retirement benefits continued

Maturity profile of DB obligations

The weighted average duration of the DB obligation for each category of plan is 14 years for UK pension plans; 14 years for US pension plans and 16 years for US other post-retirement benefit plans.

As at the reporting date, the present value of the funded obligations split according to member status was approximately:

- UK pensions: 8% active members (2019: 10%; 2018: 10%); 14% deferred members (2019: 16%; 2018: 18%); 78% pensioner members (2019: 74%; 2018: 72%);
- US pensions: 36% active members (2019: 37%; 2018: 38%); 9% deferred members (2019: 9%; 2018: 8%); 55% pensioner members (2019: 54%; 2018: 54%); and
- US other post-retirement benefits: 35% active members (2019: 39%; 2018: 38%); 0% deferred members (2019: 0%; 2018: 0%); 65% pensioner members (2019: 61%; 2018: 62%).

For sensitivity analysis see note 35.

Amounts recognised in the consolidated statement of financial position

	2020 £m	2019 £m	2018 £m
Present value of funded obligations	**(24,281)**	(24,609)	(23,747)
Fair value of plan assets	**23,748**	24,793	23,858
	(533)	184	111
Present value of unfunded obligations	**(345)**	(330)	(307)
Other post-employment liabilities	**(75)**	(72)	(67)
Net defined benefit liability	**(953)**	(218)	(263)
Represented by:			
Liabilities	**(2,802)**	(1,785)	(1,672)
Assets	**1,849**	1,567	1,409
	(953)	(218)	(263)

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK Pensions			US Pensions			US other post-retirement benefits		
	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m
Present value of funded obligations	**(12,775)**	(14,200)	(14,152)	**(7,809)**	(6,901)	(6,349)	**(3,697)**	(3,508)	(3,246)
Fair value of plan assets	**14,364**	15,507	15,330	**6,972**	6,646	6,030	**2,412**	2,640	2,498
	1,589	1,307	1,178	**(837)**	(255)	(319)	**(1,285)**	(868)	(748)
Present value of unfunded obligations	**(69)**	(76)	(74)	**(276)**	(254)	(233)	**–**	–	–
Other post-employment liabilities	**–**	–	–	**–**	–	–	**(75)**	(72)	(67)
Net defined benefit asset/(liability)	**1,520**	1,231	1,104	**(1,113)**	(509)	(552)	**(1,360)**	(940)	(815)
Represented by:									
Liabilities	**(69)**	(76)	(74)	**(1,373)**	(769)	(783)	**(1,360)**	(940)	(815)
Assets	**1,589**	1,307	1,178	**260**	260	231	**–**	–	–
	1,520	1,231	1,104	**(1,113)**	(509)	(552)	**(1,360)**	(940)	(815)

The recognition of the pension assets in both the UK in relation to the NGUKPS, the NGEG of ESPS and the US in relation to Niagara Mohawk Plan reflects legal and actuarial advice that we have taken regarding recognition of surpluses under IFRIC 14. We have concluded that the Group has an unconditional right to a refund from the individual plans, including from each Section of the NGUKPS and the NGEG of ESPS, in the event of a winding up. In the UK, the Trustees must seek the agreement of the Company to any benefit augmentation beyond the provisions set out in the Scheme Rules. In the US, surplus assets may be used to pay benefits under other Plans, thereby allowing the Company to settle other liabilities under other Plans.

25. Pensions and other post-retirement benefits continued

Amounts recognised in the income statement and statement of other comprehensive income

	2020 £m	2019 £m	2018 £m
Included within operating costs			
Administration costs	**16**	14	16
Included within payroll costs			
Defined benefit plan costs:			
Current service cost	**178**	193	193
Past service cost – augmentations	**–**	5	1
Past service credit – redundancies	**–**	(7)	(1)
Special termination benefit cost – redundancies	**2**	55	9
Past service cost – plan amendments[1]	**–**	34	–
	180	280	202
Included within finance income and costs			
Net interest cost	**23**	22	65
Total included in income statement	**219**	316	283
Remeasurement (losses)/gains of pension assets and post-retirement benefit obligations[2]	**(724)**	68	1,313
Exchange adjustments	**(97)**	(101)	175
Total included in the statement of other comprehensive income	**(821)**	(33)	1,488

1. For the year ended 31 March 2019, the estimated cost of equalising for the impact of GMP under the most cost-effective permissible methodology (Section A of NGUKPS – £17 million; Section B of NGUKPS – £12 million; NGEG of ESPS – £5 million).
2. For the year ended 31 March 2020, this includes an actuarial loss from the purchase of buy-in policies of £0.7 billion.

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK Pensions			US Pensions			US other post-retirement benefits		
	2020 £m	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m	**2020 £m**	2019 £m	2018 £m
Included within operating costs									
Administration costs	**9**	6	6	**6**	7	9	**1**	1	1
Included within payroll costs									
Defined benefit plan costs:									
Current service cost	**33**	41	49	**100**	104	98	**45**	48	46
Past service cost – augmentations	**–**	5	1	**–**	–	–	**–**	–	–
Past service credit – redundancies	**–**	(7)	(1)	**–**	–	–	**–**	–	–
Special termination benefit cost – redundancies	**2**	55	9	**–**	–	–	**–**	–	–
Past service cost – plan amendments	**–**	34	–	**–**	–	–	**–**	–	–
	35	128	58	**100**	104	98	**45**	48	46
Included within finance income and costs									
Net interest (income)/cost	**(31)**	(31)	3	**21**	21	27	**33**	32	35
Total included in income statement	**13**	103	67	**127**	132	134	**79**	81	82
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[1]	**143**	57	1,177	**(588)**	(14)	27	**(279)**	25	109
Exchange adjustments	**–**	–	–	**(42)**	(42)	75	**(55)**	(59)	100
Total included in the statement of other comprehensive income	**143**	57	1,177	**(630)**	(56)	102	**(334)**	(34)	209

1. For the year ended 31 March 2020, UK pensions is stated after an actuarial loss from the purchase of buy-in policies of £0.7 billion.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

25. Pensions and other post-retirement benefits continued
Reconciliation of the net defined benefit liability

	2020 £m	2019 £m	2018 £m
Opening net defined benefit liability	**(218)**	(263)	(1,933)
Cost recognised in the income statement	**(219)**	(316)	(283)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**(821)**	(33)	1,488
Employer contributions	**327**	419	475
Other movements	**(22)**	(25)	(10)
Closing net defined benefit liability	**(953)**	(218)	(263)

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m
Opening net defined benefit asset/(liability)	**1,231**	1,104	(156)	**(509)**	(552)	(728)	**(940)**	(815)	(1,049)
Cost recognised in the income statement	**(13)**	(103)	(67)	**(127)**	(132)	(134)	**(79)**	(81)	(82)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**143**	57	1,177	**(630)**	(56)	102	**(334)**	(34)	209
Employer contributions	**156**	174	150	**153**	231	208	**18**	14	117
Other movements	**3**	(1)	–	**–**	–	–	**(25)**	(24)	(10)
Closing net defined benefit asset/(liability)	**1,520**	1,231	1,104	**(1,113)**	(509)	(552)	**(1,360)**	(940)	(815)

Changes in the present value of defined benefit obligations (including unfunded obligations)

	2020 £m	2019 £m	2018 £m
Opening defined benefit obligations	**(24,939)**	(24,054)	(26,230)
Current service cost	**(178)**	(193)	(193)
Interest cost	**(751)**	(771)	(775)
Actuarial gains/(losses) – experience	**148**	(69)	(100)
Actuarial gains – demographic assumptions	**452**	266	671
Actuarial (losses)/gains – financial assumptions	**(84)**	(619)	174
Past service credit – redundancies	**–**	7	1
Special termination benefit cost – redundancies	**(2)**	(55)	(9)
Past service cost – augmentations	**–**	(5)	(1)
Past service cost – plan amendments	**–**	(34)	–
Medicare subsidy received	**(22)**	(19)	(21)
Employee contributions	**(1)**	(1)	(1)
Benefits paid	**1,282**	1,376	1,285
Exchange adjustments	**(531)**	(768)	1,145
Closing defined benefit obligations	**(24,626)**	(24,939)	(24,054)

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m
Opening defined benefit obligations	**(14,276)**	(14,226)	(15,645)	**(7,155)**	(6,582)	(7,050)	**(3,508)**	(3,246)	(3,535)
Current service cost	**(33)**	(41)	(49)	**(100)**	(104)	(98)	**(45)**	(48)	(46)
Interest cost	**(335)**	(358)	(366)	**(280)**	(277)	(273)	**(136)**	(136)	(136)
Actuarial gains/(losses) – experience	**113**	(56)	(95)	**(45)**	(52)	(38)	**80**	39	33
Actuarial gains – demographic assumptions	**140**	224	565	**78**	–	30	**234**	42	76
Actuarial gains/(losses) – financial assumptions	**798**	(568)	604	**(595)**	(24)	(279)	**(287)**	(27)	(151)
Past service credit – redundancies	**–**	7	1	**–**	–	–	**–**	–	–
Special termination benefit cost – redundancies	**(2)**	(55)	(9)	**–**	–	–	**–**	–	–
Past service cost – augmentations	**–**	(5)	(1)	**–**	–	–	**–**	–	–
Past service cost – plan amendments	**–**	(34)	–	**–**	–	–	**–**	–	–
Medicare subsidy received	**–**	–	–	**–**	–	–	**(22)**	(19)	(21)
Employee contributions	**(1)**	(1)	(1)	**–**	–	–	**–**	–	–
Benefits paid	**752**	837	770	**374**	398	362	**156**	141	153
Exchange adjustments	**–**	–	–	**(362)**	(514)	764	**(169)**	(254)	381
Closing defined benefit obligations	**(12,844)**	(14,276)	(14,226)	**(8,085)**	(7,155)	(6,582)	**(3,697)**	(3,508)	(3,246)

25. Pensions and other post-retirement benefits continued

Changes in the value of plan assets

	2020 £m	2019 £m	2018 £m
Opening fair value of plan assets	**24,793**	23,858	24,375
Interest income	**728**	749	710
Return on plan assets (less than)/in excess of interest[1]	**(1,240)**	490	568
Administration costs	**(16)**	(14)	(16)
Employer contributions	**327**	419	475
Employee contributions	**1**	1	1
Benefits paid	**(1,279)**	(1,377)	(1,285)
Exchange adjustments	**434**	667	(970)
Closing fair value of plan assets	**23,748**	24,793	23,858
Actual return on plan assets	**(512)**	1,239	1,278
Expected contributions to plans in the following year	**269**	307	363

1. For the year ended 31 March 2020, this includes an actuarial loss from the purchase of buy-in policies of £0.7 billion.

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m	2020 £m	2019 £m	2018 £m
Opening fair value of plan assets	**15,507**	15,330	15,489	**6,646**	6,030	6,322	**2,640**	2,498	2,564
Interest income	**366**	389	363	**259**	256	246	**103**	104	101
Return on plan assets (less than)/ in excess of interest[1]	**(908)**	457	103	**(26)**	62	314	**(306)**	(29)	151
Administration costs	**(9)**	(6)	(6)	**(6)**	(7)	(9)	**(1)**	(1)	(1)
Employer contributions	**156**	174	150	**153**	231	208	**18**	14	117
Employee contributions	**1**	1	1	**–**	–	–	**–**	–	–
Benefits paid	**(749)**	(838)	(770)	**(374)**	(398)	(362)	**(156)**	(141)	(153)
Exchange adjustments	**–**	–	–	**320**	472	(689)	**114**	195	(281)
Closing fair value of plan assets	**14,364**	15,507	15,330	**6,972**	6,646	6,030	**2,412**	2,640	2,498
Actual return on plan assets	**(542)**	846	466	**233**	318	560	**(203)**	75	252
Expected contributions to plans in the following year	**137**	148	140	**125**	150	221	**7**	9	2

1. For the year ended 31 March 2020, UK pensions includes an actuarial loss from the purchase of buy-in policies of £0.7 billion.

The markets for unquoted investments are illiquid and the valuations that have been provided by fund managers as at 31 March 2020 may be based on valuation models that have unobservable inputs. Given the current market volatility that has arisen as a result of COVID-19, this means that the prices provided are subject to additional estimation uncertainty. Sensitivity analyses for changes in private equity, property and diversified alternative valuations have been provided in note 35.

Asset allocation strategy

Each plan's investment strategy is formulated in order to target specific asset allocations and returns, and to manage risk. The asset allocation of the plans is as follows:

	2020			2019		
	UK pensions %	US pensions %	US other post-retirement benefits %	UK pensions %	US pensions %	US other post-retirement benefits %
Equities	**10.2**	**36.0**	**57.6**	12.7	40.8	60.2
Corporate bonds	**26.7**	**31.0**	**0.6**	23.4	26.4	0.7
Government securities	**14.3**	**18.2**	**22.9**	39.4	16.0	20.6
Property	**4.8**	**4.4**	**–**	5.5	4.7	–
Diversified alternatives	**6.2**	**9.0**	**13.4**	5.0	10.1	12.9
Liability matching assets	**34.3**	**–**	**–**	11.1	–	–
Infrastructure	**–**	**1.7**	**–**	–	1.5	–
Cash and cash equivalents	**1.8**	**0.3**	**–**	1.9	0.3	–
Other	**1.7**	**(0.6)**	**5.5**	1.0	0.2	5.6
	100.0	**100.0**	**100.0**	100.0	100.0	100.0

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

25. Pensions and other post-retirement benefits continued

Defined benefit investment strategies and risks

DB pension plans can pose a significant risk to future cash flows, as National Grid underwrites the financial and demographic risks associated with these plans. Although the governing bodies have sole responsibility for setting investment strategies and managing risks, National Grid closely works with and supports the governing bodies of each plan, to assist them in mitigating the risks associated with their plans and to ensure that the plans are funded to meet their obligations.

In the UK, each plan has a Trustee that is the governing body. The Trustees' responsibilities are set out in the Trust Deed and Rules. In the US, the fiduciary committee for all the retirement plans is the Retirement Plan Committee (RPC). The RPC is structured in accordance with US laws governing retirement plans under the Employee Retirement Income Security Act (ERISA).

The Trustees and RPC, after taking advice from professional investment advisors and in consultation with National Grid, set the key principles, including expected returns, risk and liquidity requirements. In setting these they take into account expected contributions, maturity of the pension liabilities, and in the UK, the strength of the covenant. The Trustees and RPC formulate an investment strategy to manage risk through diversification, including the use of liability-matching assets, which move in line with the long-term liabilities of the plan, and return-seeking assets, some of which are designed to mitigate downside risk. Where appropriate, the strategies may include interest rate and inflation hedging instruments, and currency hedging to hedge overseas holdings.

Investments are usually grouped into:

- Return-seeking assets: equities, property and diversified funds where the objective is to achieve growth within the constraints of the plans' risk profiles. These assets should produce returns greater than the liability increase, so improving the funding position, and are assessed by reference to benchmarks and performance targets agreed with the investment managers; and
- Liability-matching assets: liability-driven investment (LDI) funds, buy-ins, government securities, corporate bonds and swaps, where the objective is to secure fixed or inflation-adjusted cash flows in future. These investments are generally expected to match the change in liability valuation, so protecting the funding position. Bonds and securities are also measured against certain market benchmarks.

Investments are predominantly made in assets considered to be of investment grade. Where investments are made in non-investment grade assets, the higher volatility involved is carefully judged and balanced against the expected higher returns. Similarly, investments are made predominantly in regulated markets. Where investments are made either in non-investment grade assets or outside of regulated markets, investment levels are kept to prudent levels and subject to agreed control ranges, to control the risk. Should these investments fall outside the pre-agreed ranges, corrective actions and timescales are agreed with the investment manager to remedy the position.

The governing bodies ensure that the performance of investment managers is regularly reviewed against measurable objectives, consistent with each pension plan's long-term objectives and accepted risk levels. Where required, the portfolios are amended, or investment managers changed.

The Trustees and RPC can generally delegate responsibility for the selection of specific bonds, securities and other investments to appointed investment managers. Investment managers are selected based on the required skills, expertise of those markets, process and financial security to manage the investments. The investment managers use their skill and expertise to manage the investments competently. In some cases, they may further delegate this responsibility, through appointing sub-managers.

The pension plans hold sufficient cash to meet benefit requirements, with other investments being held in liquid or realisable assets to meet unexpected cash flow requirements. The plans do not borrow money, or act as guarantor, to provide liquidity to other parties (unless it is temporary).

In the UK, both NGUKPS and NGEG of ESPS have Responsible Investment (RI) Policies, which take into account Environmental, Social and Governance (ESG) areas. The NGUKPS RI also incorporates the six UN-backed Principles for Responsible Investment (UNPRI). The Trustees believe that ESG factors can be material to financial outcomes and therefore these should and will be considered alongside other factors. The Trustees recognise that their primary responsibility remains a fiduciary one, i.e. their first duty is to ensure the best possible return on investments with the appropriate level of risk. However, the Trustees also recognise the increasing materiality of ESG factors and that they have a fiduciary and regulatory duty to consider RI, including ESG factors and the potential impact on the quality and sustainability of long-term investment returns and therefore on the Trustees' primary fiduciary duty.

Whilst in the US there is no regulatory requirement to have ESG-specific principles embedded in investment policies, investment managers often utilise ESG principles to inform their decision-making process.

The most significant risks associated with the DB plans are:

- Asset volatility – the plans invest in a variety of asset classes, but principally in government securities, bulk annuities, corporate bonds, equities and property. Consequently, actual returns will differ from the underlying discount rate adopted, impacting on the funding position of the plan through the net balance sheet asset or liability. Each plan seeks to balance the level of investment return required with the risk that it can afford to take, to design the most appropriate investment portfolio. Volatility will be controlled through using liability-matching asset strategies including bulk annuities, as well as interest rate hedging and management of foreign exchange exposure, and diversification of the return-seeking assets;
- Changes in bond yields – liabilities are calculated using discount rates set with reference to the yields in high-quality corporate bonds prevailing in the UK and US debt markets and will fluctuate as yields change;
- Member longevity – longevity is a key driver of liabilities and changes in life expectancy have a direct impact on liabilities. The NGEG of ESPS holds a longevity insurance contract ("longevity swap") and NGUKPS holds buy-in policies for both Sections A and B, which covers exposure to improvement in longevity, providing long-term protection in the event that members live longer than expected;
- Counterparty risk – is managed by having a diverse range of counterparties and through having a strong collateralisation process (including for the longevity swap held by NGEG of ESPS). Measurement and management of counterparty risk is delegated to the relevant investment managers. For our bulk annuity policies, various termination provisions were introduced in the contracts, managing our exposure to counterparty risk. The insurers' operational performance and financial strength are monitored on a regular basis;
- Deficit risk – the risk that the increase in the liability will outpace the growth in assets is managed through assessing the progress of the actual growth of the liabilities relative to the selected investment policy and adjusting the policy as required;
- Manager risk – expected deviation of the return, relative to the benchmark, is carefully monitored, as is the process, team and expertise of the manager. Where appropriate, the Trustee or RPC will move assets under management to a more robust manager, whom they consider will have a better expectation of performing well in the future;
- Currency risk – fluctuations in the value of foreign denominated assets due to exposure to currency exchange rates is managed through a combination of segregated currency hedging overlay and currency hedging carried out by some of the investment managers;

25. Pensions and other post-retirement benefits continued

Defined benefit investment strategies and risks continued

- Interest rate and inflation risk – changes in inflation will affect the current and future pensions but are partially mitigated through investing in inflation-matching assets and hedging instruments as well as bulk annuity buy-in policies;
- Investment funds – the credit risk arising from investing in investment funds is mitigated by the underlying assets of the investment funds being ring-fenced from the fund managers, the regulatory environments in which the fund managers operate and diversification of investments among investment fund arrangements;
- Political risk – an adverse influence on asset values arising from political intervention in a specific country or region is managed through regular review of the asset distribution and through ensuring geographical diversification of investments within the managers; and
- Custodian risk – the creditworthiness and ability of the custodians to settle trades on time and provide secure safekeeping of the assets under custody is managed by ongoing monitoring of the custodial arrangements against pre-agreed service levels and credit ratings.

Asset allocations

Within the asset allocations below, there is significant diversification across regions, asset managers, currencies and bond categories.

UK pensions

	2020			2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	732	732	1,464	1,181	784	1,965	1,420	813	2,233
Corporate bonds	3,837	–	3,837	3,625	–	3,625	3,949	–	3,949
Government securities	2,051	–	2,051	6,114	–	6,114	5,629	–	5,629
Property	103	585	688	108	749	857	129	834	963
Diversified alternatives	–	893	893	–	771	771	99	690	789
Liability-matching assets	1,704[1]	3,278[2]	4,982	1,751	–	1,751	1,174	–	1,174
Longevity swap	–	(51)	(51)	–	(35)	(35)	–	–	–
Cash and cash equivalents	29	222	251	40	259	299	211	215	426
Other (including net current assets and liabilities)	–	249	249	–	160	160	–	167	167
	8,456	5,908	14,364	12,819	2,688	15,507	12,611	2,719	15,330

1. Consists of pooled funds which invests mainly in fixed interest securities.
2. Comprises the buy-in policies held by NGUKPS.

US pensions

	2020			2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	467	2,043	2,510	533	2,178	2,711	577	1,954	2,531
Corporate bonds	1,640	518	2,158	1,329	425	1,754	1,085	413	1,498
Government securities	535	732	1,267	422	640	1,062	414	565	979
Property	–	307	307	–	316	316	–	279	279
Diversified alternatives	162	464	626	183	487	670	198	421	619
Infrastructure	–	121	121	–	99	99	–	77	77
Cash and cash equivalents	24	–	24	21	–	21	14	–	14
Other (including net current assets and liabilities)	(44)	3	(41)	(8)	21	13	6	27	33
	2,784	4,188	6,972	2,480	4,166	6,646	2,294	3,736	6,030

US other post-retirement benefits

	2020			2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	353	1,037	1,390	404	1,184	1,588	412	1,110	1,522
Corporate bonds	15	–	15	19	–	19	24	–	24
Government securities	551	1	552	540	3	543	508	2	510
Diversified alternatives	162	161	323	175	166	341	161	144	305
Other[1]	–	132	132	–	149	149	–	137	137
	1,081	1,331	2,412	1,138	1,502	2,640	1,105	1,393	2,498

1. Other primarily comprises insurance contracts.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

26. Provisions

We make provisions when an obligation exists resulting from a past event, and it is probable that cash will be paid to settle it, but the exact amount of cash required can only be estimated.

The main estimates relate to environmental remediation and decommissioning costs for various sites we own or have owned and other provisions, including restructuring plans and lease contracts we have entered into that are now loss making. The evaluation of the likelihood of the contingent events has required best judgement by management regarding the probability of exposure to potential loss. Should circumstances change following unforeseeable developments, the likelihood could alter.

Provisions are recognised where a legal or constructive obligation exists at the reporting date, as a result of a past event, where the amount of the obligation can be reliably estimated and where the outflow of economic benefit is probable.

Provision is made for decommissioning and environmental costs, based on future estimated expenditures, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment.

Changes in the provision arising from revised estimates, discount rates or changes in the expected timing of expenditure that relates to property, plant and equipment, are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated useful economic lives; otherwise such changes are recognised in the income statement.

The unwinding of the discount is included within the income statement within finance costs.

	Environmental £m	Decommissioning £m	Restructuring £m	Emissions £m	Other £m	Total provisions £m
At 1 April 2018	1,531	194	3	8	316	2,052
Exchange adjustments	103	7	–	–	14	124
Additions[1]	32	18	125	16	35	226
Unused amounts reversed	(36)	(10)	(3)	(6)	(10)	(65)
Unwinding of discount	62	5	–	–	7	74
Utilised[2]	(53)	(26)	(42)	(9)	(79)	(209)
Transfers[3]	–	–	–	–	(3)	(3)
At 31 March 2019	1,639	188	83	9	280	2,199
Exchange adjustments	82	5	–	1	9	97
Additions[1]	437	93	7	12	40	589
Unused amounts reversed	(29)	(16)	(16)	–	(9)	(70)
Unwinding of discount	65	5	–	–	7	77
Utilised[2]	(123)	(21)	(39)	(5)	(50)	(238)
At 31 March 2020	**2,071**	**254**	**35**	**17**	**277**	**2,654**

	2020 £m	2019 £m
Current	**348**	316
Non-current	**2,306**	1,883
	2,654	2,199

1. For the year ended 31 March 2020, £402 million (2019: £nil) of additions relate to exceptional environmental provisions, of which £76 million relates to the impact of the change in the real discount rate from 1% to 0.5% during the year (see note 5 for details). Additions to other provisions include £15 million (2019: £nil) in relation to discontinued operations.
2. Utilised amounts for other provisions include £8 million (2019: £20 million) in relation to discontinued operations.
3. Represents net amounts transferred to trade and other payables (see note 22) of £nil (2019: £3 million).

26. Provisions continued

Environmental provisions

The environmental provision represents the estimated restoration and remediation costs relating to a number of sites owned and managed by subsidiary undertakings, together with certain US sites that National Grid no longer owns. The environmental provision is as follows:

	2020			2019		
	Discounted £m	Undiscounted £m	Real discount rate	Discounted £m	Undiscounted £m	Real discount rate
UK sites	175	184	0.5%	189	210	1%
US sites	1,896	1,955	0.5%	1,450	1,555	1%
	2,071	2,139		1,639	1,765	

The remediation expenditure in the UK relates to old gas manufacturing sites and also to electricity transmission sites. Cash flows are expected to be incurred until 2075 although the weighted average duration of the cash flows is 11 years. A number of estimation uncertainties affect the calculation of the provision, including the impact of regulation, the accuracy of site surveys, unexpected contaminants, transportation costs, the impact of alternative technologies and changes in the real discount rate. This provision incorporates our best estimate of the financial effect of these uncertainties, but future changes in any of the assumptions could materially impact the calculation of the provision. The undiscounted amount is the undiscounted best estimate of the liability having regard to these uncertainties.

The remediation expenditure in the US is expected to be incurred until 2069, of which the majority relates to three Superfund sites (being sites where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York). The weighted average duration of the cash flows is nine years. The uncertainties regarding the calculation of this provision are similar to those considered in respect of UK sites. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers.

Decommissioning provisions

The decommissioning provisions represent £174 million (2019: £80 million) of expenditure relating to asset retirement obligations estimated to be incurred until 2115, with additional amounts being recognised in the year relating to both interconnectors and other assets commissioned in the year. In addition, £74 million (2019: £90 million) of expenditure relating to the demolition of gas holders is estimated to be incurred until 2026.

Restructuring provisions

In 2019, a cost-efficiency and restructuring programme was undertaken in both our UK and US businesses, as detailed in note 5, which resulted in the recognition of a £125 million charge in that year. £39 million (2019: £42 million) was utilised during the current year, resulting in a closing provision of £35 million (2019: £83 million).

Other provisions

Included within other provisions at 31 March 2020 are the following amounts:

- £37 million (2019: £30 million) in respect of legacy provisions recognised following the sale of UK Gas Distribution;
- £31 million (2019: £29 million) in respect of onerous lease commitments and rates payable on surplus properties with expenditure expected to be incurred until 2039;
- £164 million (2019: £164 million) of estimated liabilities in respect of past events insured by insurance subsidiary undertakings, including employer liability claims. In accordance with insurance industry practice, these estimates are based on experience from previous years, but we currently expect that cash flows will be incurred until 2049; and
- £nil (2019: £13 million) in respect of obligations associated with investments in joint ventures and associates.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

27. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of treasury shares the Company holds, which are shares that the Company has bought itself, predominantly to actively manage scrip issuances and settle employee share option and reward plan liabilities.

Share capital is accounted for as an equity instrument. An equity instrument is any contract that includes a residual interest in the consolidated assets of the Company after deducting all its liabilities and is recorded at the proceeds received, net of direct issue costs, with an amount equal to the nominal amount of the shares issued included in the share capital account and the balance recorded in the share premium account.

	Allotted, called-up and fully paid	
	million	£m
At 1 April 2018	3,638	452
Issued during the year in lieu of dividends[1]	49	6
At 31 March 2019	3,687	458
Issued during the year in lieu of dividends[1]	93	12
At 31 March 2020	**3,780**	**470**

1. The issue of shares under the scrip dividend programme is considered to be a bonus issue under the terms of the Companies Act 2006, and the nominal value of the shares is charged to the share premium account.

The share capital of the Company consists of ordinary shares of $12^{204/473}$ pence nominal value each including ADSs. The ordinary shares and ADSs allow holders to receive dividends and vote at general meetings of the Company. The Company holds treasury shares but may not exercise any rights over these shares including the entitlement to vote or receive dividends. There are no restrictions on the transfer or sale of ordinary shares.

In line with the provisions of the Companies Act 2006, the Company has amended its Articles of Association and ceased to have authorised share capital.

Treasury shares
At 31 March 2020, the Company held 272 million (2019: 277 million) of its own shares. The market value of these shares as at 31 March 2020 was £2,574 million (2019: £2,359 million).

For the benefit of employees and in connection with the operation of the Company's various share plans, the Company made the following transactions in respect of its own shares during the year ended 31 March 2020:

i. During the year, 3 million (2019: 3 million) treasury shares were gifted to National Grid Employee Share Trusts and 2 million (2019: 3 million) treasury shares were re-issued in relation to employee share schemes, in total representing approximately 0.1% (2019: 0.2%) of the ordinary shares in issue as at 31 March 2020. The nominal value of these shares was £1 million (2019: £1 million) and the total proceeds received were £17 million (2019: £18 million). National Grid settles share awards under its Long Term Incentive Plan and the Save As You Earn scheme, by the transfer of treasury shares to its employee share trusts.
ii. During the year, the Company made payments totalling £6 million (2019: £2 million) to National Grid Employee Share Trusts to enable the trustees to make purchases of National Grid plc shares to settle share awards in relation to all employee share plans and discretionary reward plans. The cost of such purchases is deducted from retained earnings in the period that the transaction occurs.

The maximum number of ordinary shares held in treasury during the year was 277 million (2019: 283 million) representing approximately 7.3% (2019: 7.7%) of the ordinary shares in issue as at 31 March 2020 and having a nominal value of £34 million (2019: £35 million).

28. Other equity reserves

Other equity reserves are different categories of equity as required by accounting standards and represent the impact of a number of our historical transactions.

Other equity reserves comprise the translation reserve (see accounting policy D in note 1), cash flow hedge reserve and the cost of hedging reserve (see note 32), available-for-sale reserve, debt instruments at fair value through other comprehensive income reserve (FVOCI debt) and equity investments at fair value through other comprehensive income reserve (FVOCI equity) (see note 15), the capital redemption reserve and the merger reserve.

The merger reserve arose as a result of the application of merger accounting principles under the then prevailing UK GAAP, which under IFRS 1 was retained for mergers that occurred prior to the IFRS transition date. Under merger accounting principles, the difference between the carrying amount of the capital structure of the acquiring vehicle and that of the acquired business was treated as a merger difference and included within reserves. The merger reserve represents the difference between the carrying value of subsidiary undertaking investments and their respective capital structures following the Lattice demerger from BG Group plc and the 1999 Lattice refinancing.

The cash flow hedge reserve will amortise as the committed future cash flows from borrowings are paid or capitalised in fixed assets (as described in note 32). Cost of hedging, FVOCI debt, and FVOCI equity reserves arose as a result of the adoption of IFRS 9 on 1 April 2018. See note 15 for further detail on available-for-sale, FVOCI debt and FVOCI equity reserves and note 32 in respect of cost of hedging reserve.

As the amounts included in other equity reserves are not attributable to any of the other classes of equity presented, they have been disclosed as a separate classification of equity.

	Translation £m	Cash flow hedge £m	Cost of hedging £m	Available-for-sale £m	FVOCI equity £m	FVOCI debt £m	Own credit £m	Capital redemption £m	Merger £m	Total £m
At 1 April 2017	894	103	–	162	–	–	–	19	(5,165)	(3,987)
Exchange adjustments[1]	(504)	–	–	–	–	–	–	–	–	(504)
Net gains/(losses) taken to equity[2]	–	296	–	(30)	–	–	–	–	–	266
Share of net gains of associates taken to equity	–	5	–	–	–	–	–	–	–	5
Transferred from profit or loss[2]	–	(280)	–	(73)	–	–	–	–	–	(353)
Tax	–	4	–	29	–	–	–	–	–	33
At 31 March 2018 (as previously reported)	390	128	–	88	–	–	–	19	(5,165)	(4,540)
Transfer on transition to IFRS 9	–	(3)	76	(88)	34	46	7	–	–	72
At 1 April 2018 (as restated)	390	125	76	–	34	46	7	19	(5,165)	(4,468)
Exchange adjustments[1]	346	–	–	–	–	–	–	–	–	346
Net (losses)/gains taken to equity[2]	–	(206)	(107)	–	–	2	7	–	–	(304)
Share of net gains of associates taken to equity	–	1	–	–	–	–	–	–	–	1
Transferred to profit or loss[2]	–	166	41	–	–	–	–	–	–	207
Net losses in respect of cash flow hedging of capital expenditure	–	(13)	–	–	–	–	–	–	–	(13)
Tax	–	6	7	–	–	–	(1)	–	–	12
Cash flow hedges transferred to the statement of financial position, net of tax	–	(18)	–	–	–	–	–	–	–	(18)
At 1 April 2019	736	61	17	–	34	48	13	19	(5,165)	(4,237)
Exchange adjustments[1]	550	–	–	–	–	–	–	–	–	550
Net losses taken to equity	–	(142)	(33)	–	(13)	(15)	(3)	–	–	(206)
Share of net losses of associates taken to equity	–	(5)	–	–	–	–	–	–	–	(5)
Transferred to profit or loss	–	14	(45)	–	–	–	–	–	–	(31)
Net losses in respect of cash flow hedging of capital expenditure	–	(17)	–	–	–	–	–	–	–	(17)
Tax	–	29	11	–	4	(2)	–	–	–	42
Cash flow hedges transferred to the statement of financial position, net of tax	–	(15)	–	–	–	–	–	–	–	(15)
At 31 March 2020	**1,286**	**(75)**	**(50)**	**–**	**25**	**31**	**10**	**19**	**(5,165)**	**(3,919)**

1. The exchange adjustments recorded in the translation reserve comprise a gain of £545 million (2019: gain of £896 million; 2018: loss of £1,304 million) relating to the translation of foreign operations offset by a gain of £5 million (2019: loss of £550 million; 2018: gain of £800 million) relating to borrowings, cross-currency swaps and foreign exchange forward contracts used to hedge the net investment in non-sterling denominated subsidiaries.
2. Following a review in the year, we have changed our presentation of spot foreign exchange movements on derivatives designated in cash flow hedges of foreign currency risk and interest rates. This has no net impact on the consolidated statement of comprehensive income. It has resulted in a prior year gross up to £166 million (2018: £277 million) to 'Net losses taken to equity' with an equal and offsetting gross up to 'Transferred to profit or loss'.

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

29. Net debt

Net debt represents the amount of borrowings and overdrafts less cash, current financial investments and related financing derivatives.

Funding and liquidity risk management is carried out by the treasury function under policies and guidelines approved by the Finance Committee of the Board. The Finance Committee is responsible for the regular review and monitoring of treasury activity and for the approval of specific transactions, the authority for which fall outside the delegation of authority to management.

The primary objective of the treasury function is to manage our funding and liquidity requirements. A further important objective is to manage the associated financial risks, in the form of interest rate risk and foreign exchange risk, to within pre-authorised parameters. Details of the main risks arising from our financing and commodity hedging activities are included in note 32.

Investment of surplus funds, usually in short-term fixed deposits or placements with money market funds that invest in highly liquid instruments of high credit quality, is subject to our counterparty risk management policy.

(a) Reconciliation of net cash flow to movement in net debt

	2020 £m	2019 £m	2018 £m
Decrease in cash and cash equivalents	**(183)**	(80)	(807)
Decrease in financial investments	**(7)**	(822)	(5,953)
Increase/(decrease) in borrowings and related derivatives[1]	**(23)**	(708)	1,209
Net interest paid on the components of net debt[2]	**888**	866	808
Change in debt resulting from cash flows	**675**	(744)	(4,743)
Changes in fair value of financial assets and liabilities and exchange movements	**(1,081)**	(1,648)	2,098
Net interest charge on the components of net debt	**(1,097)**	(1,076)	(1,017)
Other non-cash movements	**(84)**	(27)	(66)
Movement in net debt (net of related derivative financial instruments) in the year	**(1,587)**	(3,495)	(3,728)
Net debt (net of related derivative financial instruments) at start of year	**(26,529)**	(23,002)	(19,274)
Impact of transition to IFRS 16 (2019: IFRS 9)	**(474)**	(32)	–
Net debt (net of related derivative financial instruments) at end of year	**(28,590)**	(26,529)	(23,002)

Composition of net debt
Net debt is comprised as follows:

	2020 £m	2019 £m	2018 £m
Cash, cash equivalents and financial investments	**2,071**	2,233	3,023
Borrowings	**(30,794)**	(28,730)	(26,625)
Financing derivatives[1]	**133**	(32)	600
	(28,590)	(26,529)	(23,002)

1. The financing derivatives balance included in net debt excludes the commodity derivatives (see note 17).
2. Excludes £6 million (2019: £23 million; 2018: £27 million) cash interest from the Quadgas shareholder loan included within discontinued operations in the cash flow statement.

29. Net debt continued

(b) Analysis of changes in net debt

	Cash and cash equivalents £m	Financial investments £m	Borrowings £m	Financing derivatives £m	Total[1] £m
At 1 April 2017	1,139	8,741	(28,638)	(516)	(19,274)
Cash flow	(807)	(5,983)	2,108	(61)	(4,743)
Fair value gains and losses and exchange movements	(3)	(149)	1,088	1,162	2,098
Interest income/(charges)	–	85	(1,117)	15	(1,017)
Other non-cash movements	–	–	(66)	–	(66)
At 31 March 2018	329	2,694	(26,625)	600	(23,002)
Impact of transition to IFRS 9	–	–	(32)	–	(32)
At 1 April 2018 (as restated)	329	2,694	(26,657)	600	(23,034)
Cash flow	(80)	(846)	(240)	422	(744)
Fair value gains and losses and exchange movements	3	93	(733)	(1,011)	(1,648)
Interest income/(charges)	–	29	(1,062)	(43)	(1,076)
Other non-cash movements	–	11	(38)	–	(27)
At 1 April 2019	252	1,981	(28,730)	(32)	(26,529)
Impact of transition to IFRS 16	–	–	(474)	–	(474)
Cash flow	(183)	(42)	450	450	675
Fair value gains and losses and exchange movements	4	25	(864)	(246)	(1,081)
Interest income/(charges)	–	34	(1,092)	(39)	(1,097)
Other non-cash movements	–	–	(84)	–	(84)
At 31 March 2020	**73**	**1,998**	**(30,794)**	**133**	**(28,590)**
Balances at 31 March 2020 comprise:					
Non-current assets	–	–	–	1,205	1,205
Current assets	73	1,998	–	62	2,133
Current liabilities	–	–	(4,072)	(254)	(4,326)
Non-current liabilities	–	–	(26,722)	(880)	(27,602)
	73	**1,998**	**(30,794)**	**133**	**(28,590)**

1. Includes accrued interest at 31 March 2020 of £246 million (2019: £223 million; 2018: £197 million).

(c) Reconciliation of cash flow from financing liabilities to cash flow statement

	2020 £m	2019 £m	2018 £m
Cash flows per financing activities section of cash flow statement:			
Proceeds received from loans	**4,218**	2,932	1,941
Repayment of loans	**(3,253)**	(1,969)	(2,156)
Payments of lease liabilities	**(121)**	(70)	(71)
Net movements in short-term borrowings	**(424)**	179	(764)
Net movements in derivatives	**(187)**	35	(267)
Interest paid	**(957)**	(914)	(853)
Cash flows per financing activities section of cash flow statement	**(724)**	193	(2,170)
Adjustments:			
Non-net debt-related items	**34**	24	12
Derivative cash inflow in relation to capital expenditure	**13**	13	12
Derivative cash flows per investing section of cash flow statement	**(223)**	(412)	330
Discontinued operations	**–**	–	(231)
Cash flows relating to financing liabilities within net debt	**(900)**	(182)	(2,047)
Analysis of changes in net debt:			
Borrowings	**(450)**	240	(2,108)
Financing derivatives	**(450)**	(422)	61
Cash flow movements relating to financing liabilities within net debt	**(900)**	(182)	(2,047)

Notes to the consolidated financial statements
– analysis of items in the primary statements continued

29. Net debt continued

(d) Reconciliation of changes in liabilities arising from financing activities
The table below reconciles changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the statement of cash flows within financing activities.

Following a review in the year, we have changed our accounting policy in relation to the presentation of certain derivatives in the cash flow statement to be presented as investing activities rather than financing activities (further detail is disclosed in note 1). The reclassified cash flows are in relation to derivatives associated with our net investment hedges, and given they are designated in a hedge relationship, the Group has decided to present them together with the underlying hedged item rather than as part of our overall financing activities.

As a result we have separately disclosed the reconciliation below, excluding derivatives associated with our net investment hedges, given that they are classified in the statement of cash flows within investing activities.

	Borrowings £m	Financing derivatives £m	Total £m
At 1 April 2017	(28,638)	16	(28,622)
Cash flow	2,108	281	2,389
Fair value gains and losses and exchange movements	1,088	222	1,310
Interest income/(charges)	(1,117)	34	(1,083)
Other non-cash movements	(66)	–	(66)
At 31 March 2018	(26,625)	553	(26,072)
Impact of transition to IFRS 9	(32)	–	(32)
At 1 April 2018 (as restated)	(26,657)	553	(26,104)
Cash flow	(240)	23	(217)
Fair value gains and losses and exchange movements	(733)	(334)	(1,067)
Interest charges	(1,062)	(14)	(1,076)
Other non-cash movements	(38)	–	(38)
At 1 April 2019	(28,730)	228	(28,502)
Impact of transition to IFRS 16	(474)	–	(474)
Cash flow	450	240	690
Fair value gains and losses and exchange movements	(864)	(231)	(1,095)
Interest charges	(1,092)	(9)	(1,101)
Other non-cash movements	(84)	–	(84)
At 31 March 2020	**(30,794)**	**228**	**(30,566)**

Notes to the consolidated financial statements
– supplementary information

This section includes information that is important to enable a full understanding of our financial position, particularly areas of potential uncertainty that could affect us in the future.

We also include specific disclosures for Niagara Mohawk Power Corporation in accordance with various rules including Rule 3-10 of Regulation S-X (a US SEC requirement), as they have issued public debt securities which have been guaranteed by National Grid plc. Additional disclosures have also been included in respect of the guarantor company. These disclosures are in lieu of publishing separate financial statements for these companies (see note 36 for further information).

30. Commitments and contingencies

Commitments are those amounts that we are contractually required to pay in the future as long as the other party meets its obligations. These commitments primarily relate to energy purchase agreements and contracts for the purchase of assets which, in many cases, extend over a long period of time. Commitments previously included operating lease commitments but on transition to IFRS 16, which was effective from 1 April 2019, substantially all lease commitments are included on the balance sheet as right-of-use assets (see note 13) and lease liabilities (see note 21). Therefore, only low-value leases and short-term leases are off-balance sheet commitments, both of which are immaterial. We also disclose any contingencies, which include guarantees that companies have given, where we pledge assets against current obligations that will remain for a specific period.

	2020 £m	2019 £m
Future capital expenditure		
Contracted for but not provided	**2,629**	1,973
Energy purchase commitments[1]		
Less than 1 year	**1,365**	1,353
In 1 to 2 years	**890**	779
In 2 to 3 years	**973**	651
In 3 to 4 years	**955**	827
In 4 to 5 years	**861**	862
More than 5 years	**11,314**	11,237
	16,358	15,709
Guarantees[2]		
Guarantee of sublease for US property (expires 2040)	**173**	173
Guarantees of certain obligations of Grain LNG (expire up to 2025)	**34**	39
Guarantees of certain obligations for construction of HVDC West Coast Link (expected expiry 2020)	**92**	139
Guarantees of certain obligations of Nemo Link Limited (expired 2019)	**–**	19
Guarantees of certain obligations of National Grid North Sea Link Limited (various expiry dates)[2]	**683**	865
Guarantees of certain obligations of St William Homes LLP (various expiry dates)[3]	**30**	22
Guarantees of certain obligations for construction of IFA 2 (expected expiry 2022)[2]	**564**	505
Guarantees of certain obligations of National Grid Viking Link Limited (expected expiry 2024)	**1,096**	872
Other guarantees and letters of credit (various expiry dates)	**150**	341
	2,822	2,975

	2019 £m
Operating lease commitments	
Less than 1 year	43
In 1 to 2 years	39
In 2 to 3 years	34
In 3 to 4 years	35
In 4 to 5 years	27
More than 5 years	123
	301

1. Energy purchase commitments relate to contractual commitments to purchase electricity or gas that are used to satisfy physical delivery requirements to our customers or for energy that we use ourselves (i.e. normal purchase, sale or usage) and hence are accounted for as ordinary purchase contracts (see note 32(f)). Details of commodity contract derivatives that do not meet the normal purchase, sale or usage criteria, and hence are accounted for as derivative contracts, are shown in note 17(b).
2. Included within total guarantees are guarantees to both joint ventures and Engineering, Procurement and Construction contractors regarding the construction of interconnectors of £358 million (2019: £470 million).
3. Includes guarantees to related parties.

Through the ordinary course of our operations, we are party to various litigation, claims and investigations. We do not expect the ultimate resolution of any of these proceedings to have a material adverse effect on our results of operations, cash flows or financial position.

Notes to the consolidated financial statements – supplementary information continued

31. Related party transactions

Related parties include joint ventures, associates, investments and key management personnel.

The following significant transactions with related parties were in the normal course of business. Amounts receivable from and payable to related parties are due on normal commercial terms:

	2020 £m	2019 £m	2018 £m
Sales: Goods and services supplied to a pension plan	5	5	3
Sales: Goods and services supplied to joint ventures[1]	101	151	14
Sales: Goods and services supplied to associates[2]	33	192	220
Purchases: Goods and services received from joint ventures[3]	61	26	135
Purchases: Goods and services received from associates[3]	56	141	160
Receivable from joint ventures[4]	255	584	160
Receivable from associates[4]	1	368	376
Payable to joint ventures	72	8	–
Payable to associates	4	12	17
Interest income from joint ventures	2	5	4
Interest income from associates	8	23	27
Dividends received from joint ventures[5]	34	30	43
Dividends received from associates[6]	41	171	170

1. During the year, £38 million (2019: £139 million) of property sites were sold to a joint venture, St William Homes LLP. A further £32 million of sales were made to NGET/SPT Upgrades Limited in 2020.
2. Sales relate to transactions with Quadgas, until the date it ceased to be a related party following the disposal of our 39% stake in June 2019 (see note 10). Included within this is other income of £31 million (2019: £52 million) relating to a Transitional Service Agreement following the sale of the UK Gas Distribution business to Quadgas.
3. During the year, the Group received goods and services from a number of US associates, both for the transportation of gas and for pipeline services in the US, most notably, £31 million (2019: £30 million) of purchases from Millennium Pipeline Company LLC. The Group also purchased capitalised assets of £58 million (2019: £26 million) from NGET/SPT Upgrades Limited (a joint venture).
4. Amounts receivable from associates includes a loan receivable balance of £242 million (2019: £325 million) in relation to St William Homes LLP (a joint venture). There is no longer a loan receivable from Quadgas (2019: £352 million) and Nemo Link (a joint venture) (2019: £258 million). The loan receivable balance from Nemo Link was transferred to equity during 2020 (see note 16 for details).
5. Dividends of £25 million (2019: £30 million) were received from BritNed Development Limited.
6. Includes £32 million (2019: £24 million) of dividend income from Millennium Pipeline Company LLC. No dividends were received from Quadgas this year (2019: £133 million).

Details of investments in principal subsidiary undertakings, joint ventures and associates are disclosed in note 34, and information relating to pension fund arrangements is disclosed in note 25. For details of Directors' and key management remuneration, refer to the Directors' Remuneration Report on pages 88 – 108 and note 4(c).

32. Financial risk management

Our activities expose us to a variety of financial risks including credit risk, liquidity risk, capital risk, currency risk, interest rate risk, inflation risk and commodity price risk. Our risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential volatility of financial performance from these risks. We use financial instruments, including derivative financial instruments, to manage these risks.

Risk management related to financing activities is carried out by a central treasury department under policies approved by the Finance Committee of the Board. The objective of the treasury department is to manage funding and liquidity requirements, including managing associated financial risks, to within acceptable boundaries. The Finance Committee provides written principles for overall risk management, and written policies covering the following specific areas: foreign exchange risk, interest rate risk, credit risk, liquidity risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity. The Finance Committee has delegated authority to administer the commodity price risk policy and credit policy for US-based commodity transactions to the Energy Procurement Risk Management Committee and the National Grid USA Board of Directors. Details of key activities in the current year are set out in the Finance Committee report on page 82.

We have exposure to the following risks, which are described in more detail below:
- credit risk;
- liquidity risk;
- currency risk;
- interest rate risk;
- commodity price risk; and
- capital risk.

Where appropriate, derivatives and other financial instruments used for hedging currency and interest rate risk exposures are formally designated as fair value, cash flow or net investment hedges as defined in IFRS 9. Hedge accounting allows the timing of the profit or loss impact of qualifying hedging instruments to be recognised in the same reporting period as the corresponding impact of hedged exposures. To qualify for hedge accounting, documentation is prepared specifying the risk management objective and strategy, the component transactions and methodology used for measurement of effectiveness.

32. Financial risk management continued

Hedge accounting relationships are designated in line with risk management activities further described below. Categories designated at National Grid are as follows:

- currency risk arising from our forecasted foreign currency transactions (capital expenditure or revenues) is designated in cash flow hedges;
- currency risk arising from our net investments in foreign operations is designated in net investment hedges; and
- currency and interest rate risk arising from borrowings are designated in cash flow or fair value hedges.

Critical terms of hedging instruments and hedged items are transacted to match on a 1:1 ratio by notional values. Hedge ineffectiveness can nonetheless arise from inherent differences between derivatives and non-derivative instruments and other market factors including credit, correlations, supply and demand, and market volatilities. Ineffectiveness is recognised in the remeasurements component of finance income and costs (see note 6). Hedge accounting is discontinued when a hedging relationship no longer qualifies for hedge accounting.

Certain hedging instrument components are treated separately as costs of hedging with the gains and losses deferred in a component of other equity reserves and released systematically into profit or loss to correspond with the timing and impact of hedged exposures, or released in full to finance costs upon an early discontinuation of a hedging relationship.

Refer to sections (c) currency risk and (d) interest rate risk below for further details about hedge accounting.

(a) Credit risk

We are exposed to the risk of loss resulting from counterparties' default on their commitments including failure to pay or make a delivery on a contract. This risk is inherent in our commercial business activities. Exposure arises from derivative financial instruments, deposits with banks and financial institutions, trade receivables and committed transactions with wholesale and retail customers.

Treasury credit risk

Counterparty risk arises from the investment of surplus funds and from the use of derivative financial instruments. As at 31 March 2020, the following limits were in place for investments held with banks and financial institutions:

	Maximum limit £m	Long-term limit £m
Triple 'A' G7 sovereign entities (AAA)	2,049	1,024
Triple 'A' vehicles (AAA)	500	–
Triple 'A' range institutions and non-G7 sovereign entities (AAA)	1,118	559
Double 'A+' G7 sovereign entities (AA+)	1,863	931
Double 'A' range institutions (AA)	745 to 931	372 to 465
Single 'A' range institutions (A)	261 to 373	130 to 186

The maximum limit applies to all transactions, including long-term transactions. The long-term limit applies to transactions which mature in more than 12 months' time.

As at 31 March 2020 and 2019, we had a number of exposures to individual counterparties. In accordance with our treasury policies, counterparty credit exposure utilisations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilisation adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties. Further information on financial investments subject to impairment provisioning is included in note 15.

Commodity credit risk

The credit policy for US-based commodity transactions is owned by the Finance Committee to the Board, which establishes controls and procedures to determine, monitor and minimise the credit exposure to counterparties.

Wholesale and retail credit risk

Our principal commercial exposure in the UK is governed by the credit rules within the regulated codes: Uniform Network Code and Connection and Use of System Code. These set out the level of credit relative to the RAV for each credit rating. In the US, we are required to supply electricity and gas under state regulations. Our policies and practices are designed to limit credit exposure by collecting security deposits prior to providing utility services, or after utility service has commenced if certain applicable regulatory requirements are met. Collection activities are managed on a daily basis. Sales to retail customers are usually settled in cash, cheques, electronic bank payments or by using major credit cards. We are committed to measuring, monitoring, minimising and recording counterparty credit risk in our wholesale business. The utilisation of credit limits is regularly monitored, and collateral is collected against these accounts when necessary. In March 2020, the Group's US distribution business ceased certain cash collection and termination activities in response to regulatory instructions following the COVID-19 pandemic. This has resulted in the recognition of expected credit losses as at 31 March 2020 (see note 19 for further details).

Notes to the consolidated financial statements
– supplementary information continued

32. Financial risk management continued

(a) Credit risk continued

Offsetting financial assets and liabilities

The following tables set out our financial assets and liabilities which are subject to offset and to enforceable master netting arrangements or similar agreements. The tables show the amounts which are offset and reported net in the statement of financial position. Amounts which cannot be offset under IFRS, but which could be settled net under terms of master netting arrangements if certain conditions arise, and with collateral received or pledged, are shown to present National Grid's net exposure.

Financial assets and liabilities on different transactions are only reported net if the transactions are with the same counterparty, a currently enforceable legal right of offset exists, and the cash flows are intended to be settled on a net basis.

Amounts which do not meet the criteria for offsetting on the statement of financial position, but could be settled net in certain circumstances, principally relate to derivative transactions under ISDA agreements, where each party has the option to settle amounts on a net basis in the event of default of the other party.

Commodity contract derivatives that have not been offset on the balance sheet may be settled net in certain circumstances under ISDA or North American Energy Standards Board (NAESB) agreements.

For bank account balances and bank overdrafts, the 'Gross amounts offset' under cash pooling arrangements is £23 million as at 31 March 2020 (2019: £19 million). Our UK bank accounts for National Grid subsidiaries participate in GBP, EUR and USD Composite Accounting System overdraft facilities subject to offsetting gross and net overdraft limits. In the US, no offsetting arrangements exist, and cash transactions are settled through Service Company bank accounts with subsequent intercompany payables and receivables reported by subsidiaries with the Service Company.

The gross amounts offset for trade payables and receivables, which are subject to general terms and conditions, are insignificant.

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2020	**Gross carrying amounts £m**	**Gross amounts offset £m**	**Net amount presented in statement of financial position £m**	**Financial instruments £m**	**Cash collateral received/ pledged £m**	**Net amount £m**
Assets						
Financing derivatives	**1,267**	**–**	**1,267**	**(351)**	**(694)**	**222**
Commodity contract derivatives	**75**	**–**	**75**	**(5)**	**(3)**	**67**
	1,342	**–**	**1,342**	**(356)**	**(697)**	**289**
Liabilities						
Financing derivatives	**(1,134)**	**–**	**(1,134)**	**351**	**646**	**(137)**
Commodity contract derivatives	**(200)**	**–**	**(200)**	**5**	**8**	**(187)**
	(1,334)	**–**	**(1,334)**	**356**	**654**	**(324)**
	8	**–**	**8**	**–**	**(43)**	**(35)**

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2019	Gross carrying amounts £m	Gross amounts offset £m	Net amount presented in statement of financial position £m	Financial instruments £m	Cash collateral received/ pledged £m	Net amount £m
Assets						
Financing derivatives	1,052	–	1,052	(299)	(551)	202
Commodity contract derivatives	101	–	101	29	–	130
	1,153	–	1,153	(270)	(551)	332
Liabilities						
Financing derivatives	(1,084)	–	(1,084)	299	615	(170)
Commodity contract derivatives	(99)	–	(99)	(29)	–	(128)
	(1,183)	–	(1,183)	270	615	(298)
	(30)	–	(30)	–	64	34

32. Financial risk management continued

(b) Liquidity risk

Our policy is to determine our liquidity requirements by the use of both short-term and long-term cash flow forecasts. These forecasts are supplemented by a financial headroom analysis which is used to assess funding requirements for at least a 24-month period and maintain adequate liquidity for a continuous 12-month period.

We believe our contractual obligations, including those shown in commitments and contingencies in note 30, can be met from existing cash and investments, operating cash flows and other financing that we reasonably expect to be able to secure in the future, together with the use of committed facilities if required.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity and financial covenants such as restrictions on the level of subsidiary indebtedness. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

The following is a maturity profile of our financial liabilities and derivatives:

At 31 March 2020	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(3,672)	(2,150)	(1,611)	(22,214)	(29,647)
Interest payments on borrowings[1]	(765)	(750)	(714)	(12,002)	(14,231)
Lease liabilities	(132)	(114)	(99)	(629)	(974)
Other non-interest-bearing liabilities	(3,149)	(318)	–	–	(3,467)
Contingent consideration	(32)	(16)	(32)	(16)	(96)
Derivative financial liabilities					
Financing derivatives – receipts[2]	2,249	986	1,208	3,510	7,953
Financing derivatives – payments[2]	(2,582)	(1,136)	(1,463)	(4,067)	(9,248)
Commodity contract derivatives – receipts[2]	4	2	–	–	6
Commodity contract derivatives – payments[2]	(116)	(50)	(24)	(12)	(202)
Derivative financial assets					
Financing derivatives – receipts[2]	2,469	1,063	570	1,775	5,877
Financing derivatives – payments[2]	(2,271)	(527)	(375)	(1,478)	(4,651)
Commodity contract derivatives – receipts[2]	20	1	1	–	22
Commodity contract derivatives – payments[2]	(21)	–	–	–	(21)
	(7,998)	(3,009)	(2,539)	(35,133)	(48,679)

At 31 March 2019	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(4,129)	(2,348)	(1,998)	(19,673)	(28,148)
Interest payments on borrowings[1]	(800)	(733)	(721)	(13,465)	(15,719)
Lease liabilities	(72)	(63)	(52)	(123)	(310)
Other non-interest-bearing liabilities	(3,306)	(340)	–	–	(3,646)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,045	1,703	163	2,560	7,471
Financing derivatives – payments[2]	(3,421)	(2,029)	(223)	(3,276)	(8,949)
Commodity contract derivatives – receipts[2]	2	3	1	–	6
Commodity contract derivatives – payments[2]	(98)	(26)	(4)	(1)	(129)
Derivative financial assets					
Financing derivatives – receipts[2]	1,928	561	863	1,112	4,464
Financing derivatives – payments[2]	(1,251)	(459)	(783)	(875)	(3,368)
Commodity contract derivatives – receipts[2]	23	9	2	–	34
Commodity contract derivatives – payments[2]	–	(5)	(1)	–	(6)
	(8,079)	(3,727)	(2,753)	(33,741)	(48,300)

1. The interest on borrowings is calculated based on borrowings held at 31 March without taking account of future issues. Floating rate interest is estimated using a forward interest rate curve as at 31 March. Payments are included on the basis of the earliest date on which the Company can be required to settle.
2. The receipts and payments line items for derivatives comprise gross undiscounted future cash flows, after considering any contractual netting that applies within individual contracts. Where cash receipts and payments within a derivative contract are settled net, and the amount to be received/(paid) exceeds the amount to be paid/(received), the net amount is presented within derivative receipts/(payments).

Notes to the consolidated financial statements
– supplementary information continued

32. Financial risk management continued

(c) Currency risk
National Grid operates internationally with mainly the pound sterling as the functional currency for the UK companies and the US dollar for the US businesses. Currency risk arises from three major areas: funding activities, capital investment and related revenues, and holdings in foreign operations. This risk is managed using financial instruments including derivatives as approved by policy, typically cross-currency interest rate swaps, foreign exchange swaps and forwards.

Funding activities – our policy is to borrow in the most advantageous market available. Foreign currency funding gives rise to risk of volatility in the amount of functional currency cash to be repaid. This risk is reduced by swapping principal and interest back into the functional currency of the issuer. All foreign currency debt and transactions are hedged except where they provide a natural offset to assets elsewhere in the Group.

Capital investment and related revenues – capital projects often incur costs or generate revenues in a foreign currency, most often euro transactions done by the UK business. Our policy for managing foreign exchange transaction risk is to hedge contractually committed foreign currency cash flows over a prescribed minimum size, typically by buying euro forwards to hedge future expenditure, and selling euro forwards to hedge future revenues. For hedges of forecast cash flows our policy is to hedge a proportion of highly probable cash flows.

Holdings in foreign operations – we are exposed to fluctuations on the translation into pounds sterling of our foreign operations. The policy for managing this translation risk is to issue foreign currency debt or to replicate foreign debt using derivatives that pay cash flows in the currency of the foreign operation. The primary managed exposure arises from dollar denominated assets and liabilities held by our US operations, with a smaller euro exposure in respect of joint venture investments.

Derivative financial instruments were used to manage foreign currency risk as follows:

	2020					2019				
	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Cash and cash equivalents	18	–	55	–	73	97	2	153	–	252
Financial investments	813	–	1,185	–	1,998	965	–	1,016	–	1,981
Borrowings	(12,407)	(4,150)	(13,217)	(1,020)	(30,794)	(10,591)	(4,787)	(12,126)	(1,226)	(28,730)
Pre-derivative position	(11,576)	(4,150)	(11,977)	(1,020)	(28,723)	(9,529)	(4,785)	(10,957)	(1,226)	(26,497)
Derivative effect	(1,169)	4,341	(4,214)	1,175	133	(1,055)	4,803	(5,245)	1,465	(32)
Net debt position	(12,745)	191	(16,191)	155	(28,590)	(10,584)	18	(16,202)	239	(26,529)

The exposure to dollars largely relates to our net investment hedge activities; exposure to euros largely relates to hedges for our future non-sterling capital expenditure.

The currency exposure on other financial instruments is as follows:

	2020					2019				
	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Trade and other receivables	306	–	1,403	–	1,709	398	–	1,635	–	2,033
Trade and other payables	(1,177)	–	(2,002)	–	(3,179)	(1,221)	–	(2,085)	–	(3,306)
Other non-current liabilities	(85)	–	(277)	–	(362)	(93)	–	(247)	–	(340)

The carrying amounts of other financial instruments are denominated in the above currencies, which in most instances are the functional currency of the respective subsidiaries. Our exposure to dollars is due to activities in our US subsidiaries. We do not have any other significant exposure to currency risk on these balances.

Hedge accounting for currency risk
Where available, derivatives transacted for hedging are designated for hedge accounting. Economic offset is qualitatively determined because the critical terms (currency and volume) of the hedging instrument match the hedged exposure. If a forecast transaction was no longer expected to occur, the cumulative gain or loss previously reported in equity would be transferred to the income statement. This has not occurred in the current or comparative years.

Cash flow hedging of currency risk of capital expenditure and revenues is designated as hedging the exposure to movements in the spot translation rates only; the timing of forecasted transactions is not designated as a hedged risk. Gains and losses on hedging instruments arising from forward points and foreign currency basis spreads are excluded from designation and are recognised immediately in profit or loss, along with any hedge ineffectiveness. On recognition of the hedged purchase or sale in the financial statements, the associated hedge gains and losses, deferred in the cash flow hedge reserve in other equity reserves, are transferred out of reserves and included with the recognition of the underlying transaction. Where a non-financial asset or a non-financial liability results from a forecast transaction or firm commitment being hedged, the amounts deferred in reserves are included directly in the initial measurement of that asset or liability.

Net investment hedging is also designated as hedging the exposure to movements in spot translation rates only: spot-related gains and losses on hedging instruments are presented in the cumulative translation reserve within other equity reserves to offset gains or losses on translation of the hedged balance sheet exposure. Any ineffectiveness is recognised immediately in the income statement. Gains and losses arising from forward points and foreign currency basis spreads are excluded from designation and are treated as a cost of hedging, deferred initially in other equity reserves and released into profit or loss over the life of the hedging relationship. Amounts deferred in the cumulative translation reserve with respect to net investment hedges are subsequently recognised in the income statement in the event of disposal of the overseas operations concerned. Any remaining amounts deferred in the cost of hedging reserve are also released to the income statement.

Hedges of foreign currency funding are designated as cash flow hedges or fair value hedges of forward exchange risk (hedging both currency and interest rate risk together, where applicable). Hedge accounting for funding is described further in the interest rate risk section below.

32. Financial risk management continued

(d) Interest rate risk

National Grid's interest rate risk arises from our long-term borrowings. Our interest rate risk management policy is to seek to minimise total financing costs (being interest costs and changes in the market value of debt). Hedging instruments principally consist of interest rate and cross-currency swaps that are used to translate foreign currency debt into functional currency and to adjust the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the Board. The benchmark interest rates hedged are currently based on LIBOR.

LIBOR is being replaced as an interest rate benchmark by alternative reference rates in certain currencies including our functional currencies, USD and GBP, and foreign currencies in which we operate. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which can impact valuations. We are managing the risk by planning to replace LIBOR cash flows with alternative reference rates on our affected contracts.

We also consider inflation risk and hold some inflation-linked borrowings. We believe that these provide a partial economic offset to the inflation risk associated with our UK inflation-linked revenues.

The table in note 21 sets out the carrying amount, by contractual maturity, of borrowings that are exposed to interest rate risk before taking into account interest rate swaps.

Net debt was managed using derivative financial instruments to hedge interest rate risk as follows:

	2020					2019				
	Fixed rate £m	**Floating rate £m**	**Inflation linked £m**	**Other[1] £m**	**Total £m**	Fixed rate £m	Floating rate £m	Inflation linked £m	Other[1] £m	Total £m
Cash and cash equivalents	**71**	**10**	**–**	**(8)**	**73**	59	104	–	89	252
Financial investments	**–**	**1,966**	**–**	**32**	**1,998**	6	1,944	–	31	1,981
Borrowings	**(20,969)**	**(3,085)**	**(6,740)**	**–**	**(30,794)**	(19,043)	(3,045)	(6,642)	–	(28,730)
Pre-derivative position	**(20,898)**	**(1,109)**	**(6,740)**	**24**	**(28,723)**	(18,978)	(997)	(6,642)	120	(26,497)
Derivative effect	**2,259**	**(1,892)**	**(234)**	**–**	**133**	1,740	(1,559)	(213)	–	(32)
Net debt position	**(18,639)**	**(3,001)**	**(6,974)**	**24**	**(28,590)**	(17,238)	(2,556)	(6,855)	120	(26,529)

1. Represents financial instruments which are not directly affected by interest rate risk, such as investments in equity or other similar financial instruments.

Hedge accounting for interest rate risk

Borrowings paying variable or floating-rates expose National Grid to cash flow interest rate risk, partially offset by cash held at variable rates. Where a hedging instrument results in paying a fixed-rate, it is designated as a cash flow hedge because it has reduced the cash flow volatility of the hedged borrowing. Changes in the fair value of the derivative are initially recognised in other comprehensive income as gains or losses in the cash flow hedge reserve, with any ineffective portion recognised immediately in the income statement.

Borrowings paying fixed-rates expose National Grid to fair value interest rate risk. Where the hedging instrument pays a floating-rate, it is designated as a fair value hedge because it has reduced the fair value volatility of the borrowing. Changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the income statement to the extent the fair value hedge is effective, with the residual difference remaining as ineffectiveness.

Both types of hedges are designated as hedging the currency and interest rate risk arising from changes in forward points. Amounts accumulated in the cash flow hedge reserve (cash flow hedges only) and the deferred cost of hedging reserve (both cash flow and fair value hedges) are reclassified from reserves to the income statement on a systematic basis as hedged interest expense is recognised. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the income statement to match the timing of the hedged interest expense.

When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the income statement to match the impact of outstanding hedged items. Any remaining amounts deferred in the cost of hedging reserve are released immediately to the income statement as finance costs.

The Group early-adopted IFRS Interest Rate Benchmark Reform amendments related to hedge accounting, with effect from 1 April 2019. The amendments allow existing hedge designations to continue unchanged during the period of uncertainty relating to the timing and method of benchmark migrations.

The amendments will be applied until the earlier point in time where affected cash flows are amended, the relationship is formally discontinued, and any cash flow hedge reserve balance has been released, or formal market conventions ending uncertainty are published and widely adopted. If amended cash flows do not cause a hedging relationship to be discontinued, then the amendments will cease to be applied only when that relationship is discontinued under IFRS 9.

The IFRS amendments impact fair value and cash flow hedges of interest rate risk and related hedging instruments, and certain net investment hedges that use cross-currency interest rate swaps to pay a foreign currency floating rate and receive a functional currency floating rate. The notional values of hedging instruments, for each type of hedging relationship impacted, are shown in the hedge accounting tables in note 32(e). These amounts also correspond to the exposures designated as hedged.

Notes to the consolidated financial statements – supplementary information continued

32. Financial risk management continued

(e) Hedge accounting

In accordance with the requirements of IFRS 9, certain additional information about hedge accounting is disaggregated by risk type and hedge designation type in the tables below:

Year ended 31 March 2020	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net losses in respect of:				
Cash flow hedges		(143)	(17)	–
Cost of hedging	5	(7)	–	(30)
Transferred to profit or loss in respect of:				
Cash flow hedges	–	14	–	–
Cost of hedging	1	(1)	–	(45)
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	2	(8)	–	(43)
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	1	–	4	9
Assets – non-current	247	106	8	–
Liabilities – current	(1)	(105)	(8)	(82)
Liabilities – non-current	(39)	(264)	(12)	(19)
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	May 2020 – Feb 2040	Jul 2020 – Dec 2039	Apr 2020 – Dec 2024	Jun 2020 – Sep 2027
Spot foreign exchange range:				
GBP:USD	1.64	1.30 – 1.66	1.24 – 1.41	1.21 – 1.49
GBP:EUR	1.19 – 1.24	1.10 – 1.24	1.04 – 1.30	1.14
EUR:USD	1.13 – 1.17	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+408bps	1.331% – 5.850%	n/a	n/a
USD	LIBOR -44bps/+ 115bps	1.103% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

32. Financial risk management continued

(e) Hedge accounting continued

Year ended 31 March 2019	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net losses in respect of:				
Cash flow hedges[1]	–	(206)	(12)	–
Cost of hedging	(6)	(12)	–	(90)
Transferred to profit or loss in respect of:				
Cash flow hedges[1]	–	166	–	–
Cost of hedging	3	–	–	39
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(4)	–	–	32
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[2]				
Assets – current	17	–	9	–
Assets – non-current	168	78	23	–
Liabilities – current	(9)	(28)	(3)	(43)
Liabilities – non-current	(25)	(134)	(4)	(249)
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Nov 2019 – May 2038	Aug 2019 – Feb 2039	Apr 2019 – Dec 2023	Mar 2020 – Jun 2025
Spot foreign exchange range:				
GBP:USD	1.64 – 1.65	1.52 – 1.66	1.29 – 1.41	1.49
GBP:EUR	1.19 – 1.24	1.14 – 1.24	1.07 – 1.32	1.15
EUR:USD	1.13 – 1.16	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+561bps	1.795% – 5.850%	n/a	n/a
USD	LIBOR -44bps/+115bps	1.103% – 3.864%	n/a	n/a

1. Following a review in the year, we have changed our presentation of spot foreign exchange movements on derivatives designated in cash flow hedges of foreign currency risk and interest rates. This has no net impact on the consolidated statement of comprehensive income. It has resulted in a prior year gross up of £166 million to net losses in respect of cash flow hedges with an equal and offsetting gross up to transferred to profit and loss in respect of cash flow hedges.
2. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

Notes to the consolidated financial statements – supplementary information continued

32. Financial risk management continued

(e) Hedge accounting continued

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge. These tables also present notional values of hedging instruments (and equal hedged exposures) impacted by IFRS 9 Interest Rate Benchmark Reform amendments.

(i) Fair value hedges of foreign currency and interest rate risk on recognised borrowings:

As at 31 March 2020		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1,2]	**(1,751)**	**(31)**	**(95)**	**(42)**	**48**	**6**

1. The carrying value of the hedged borrowings is £1,883 million, of which £72 million is current and £1,811 million is non-current.
2. Included within the hedging instrument notional balance is £1,675 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2019		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(1,707)	11	(117)	15	(10)	5

1. The carrying value of the hedged borrowings was £1,810 million, of which £202 million was current and £1,608 million was non-current. Following a review in the year, we have changed our presentation of spot foreign exchange movements on derivatives designated in fair value hedges of foreign currency risk and interest rates. It has resulted in a prior year equal and offsetting impact of £4 million to the balances used for the 'Change in value used for calculating ineffectiveness'.

(ii) Cash flow hedges of foreign currency and interest rate risk:

As at 31 March 2020		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1]	**(4,127)**	**(69)**	**(22)**	**142**	**(143)**	**(1)**
Foreign currency risk on forecasted cash flows	**(794)**	**8**	**–**	**17**	**(17)**	**–**

1. Included within the hedging instrument notional balance is £176 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2019		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(3,804)	(17)	51	206	(206)	–
Foreign currency risk on forecasted cash flows	(697)	45	–	12	(12)	–

1. Following a review in the year, we have changed our presentation of spot foreign exchange movements on derivatives designated in cash flow hedges of foreign currency risk and interest rates. This has no net impact on the consolidated statement of comprehensive income. It has resulted in a prior year equal and offsetting impact of £167 million to the balances used for the 'Change in value used for calculating ineffectiveness'.

(iii) Net investment hedges of foreign currency risk:

As at 31 March 2020		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Currency risk on foreign operations[1]	**(3,064)**	**45**	**(2,871)**	**(6)**	**6**	**–**

1. Included within the hedging instrument notional balance is £nil impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2019		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Currency risk on foreign operations	(2,974)	(329)	(2,502)	550	(550)	–

32. Financial risk management continued

(f) Commodity price risk

We purchase electricity and gas to supply our customers in the US and to meet our own energy needs. Substantially all our costs of purchasing electricity and gas for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular year that can lead to large fluctuations in the income statement. We follow approved policies to manage price and supply risks for our commodity activities.

Our energy procurement risk management policy and delegations of authority govern our US commodity trading activities for energy transactions. The purpose of this policy is to ensure we transact within pre-defined risk parameters and only in the physical and financial markets where we or our customers have a physical market requirement. In addition, state regulators require National Grid to manage commodity risk and cost volatility prudently through diversified pricing strategies. In some jurisdictions we are required to file a plan outlining our strategy to be approved by regulators. In certain cases, we might receive guidance with regard to specific hedging limits.

Energy purchase contracts for the forward purchase of electricity or gas that are used to satisfy physical delivery requirements to customers, or for energy that the Group uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. Disclosure of commitments under such contracts is made in note 30.

US states have introduced a variety of legislative requirements with the aim of increasing the proportion of our electricity that is derived from renewable or other forms of clean energy. Annual compliance filings regarding the level of Renewable Energy Certificates (and other similar environmental certificates) are required by the relevant department of utilities. In response to the legislative requirements, National Grid has entered into long-term, typically fixed-price, energy supply contracts to purchase both renewable energy and environmental certificates. We are entitled to recover all costs incurred under these contracts through customer billing.

Under IFRS, where these supply contracts are not accounted for as finance leases, they are considered to comprise two components, being a forward purchase of power at spot prices, and a forward purchase of environmental certificates at a variable price (being the contract price less the spot power price). With respect to our current contracts, neither of these components meets the requirement to be accounted for as a derivative. The environmental certificates are currently required for compliance purposes, and at present there are no liquid markets for these attributes. Accordingly, this component meets the expected purchase or usage exemption of IFRS 9. We expect to enter into an increasing number of these contracts, in order to meet our compliance requirements in the short to medium term. It is possible that in future, if and when liquid markets develop, and to the extent that we are in receipt of environmental certificates in excess of our required levels, this exemption may cease to apply, and we may be required to account for forward purchase commitments for environmental certificates as derivatives at fair value through profit and loss.

Notes to the consolidated financial statements
– supplementary information continued

32. Financial risk management continued

(g) Fair value analysis

Included in the statement of financial position are financial instruments which are measured at fair value. These fair values can be categorised into hierarchy levels that are representative of the inputs used in measuring the fair value. The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active, a valuation technique is used.

	2020				2019			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Assets								
Investments held at FVTPL	1,278	–	108	1,386	1,311	–	62	1,373
Investments held at FVOCI	83	352	–	435	93	343	–	436
Investments in associates[1]	–	–	103	103	–	–	90	90
Financing derivatives	–	1,257	10	1,267	–	1,050	2	1,052
Commodity contract derivatives	–	9	66	75	–	33	68	101
	1,361	1,618	287	3,266	1,404	1,426	222	3,052
Liabilities								
Financing derivatives	–	(889)	(245)	(1,134)	–	(868)	(216)	(1,084)
Commodity contract derivatives	–	(136)	(64)	(200)	–	(32)	(67)	(99)
Liabilities held at fair value	(741)	–	–	(741)	(667)	–	–	(667)
Contingent consideration[2]	–	–	(74)	(74)	–	–	–	–
	(741)	(1,025)	(383)	(2,149)	(667)	(900)	(283)	(1,850)
	620	593	(96)	1,117	737	526	(61)	1,202

1. Our Level 3 investments include investments relating to Sunrun Neptune 2016 LLC accounted for at FVTPL.
2. Contingent consideration relates to the acquisition of Geronimo (see note 38).

Level 1: Financial instruments with quoted prices for identical instruments in active markets.

Level 2: Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets, and financial instruments valued using models where all significant inputs are based directly or indirectly on observable market data.

Level 3: Financial instruments valued using valuation techniques where one or more significant inputs are based on unobservable market data.

Our Level 1 financial investments and liabilities held at fair value are valued using quoted prices from liquid markets.

Our Level 2 financial investments held at fair value are valued using quoted prices for similar instruments in active markets, or quoted prices for identical or similar instruments in inactive markets. Alternatively, they are valued using models where all significant inputs are based directly or indirectly on observable market data.

Our Level 2 financing derivatives include cross-currency, interest rate and foreign exchange derivatives. We value these by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. These derivatives can be priced using liquidly traded interest rate curves and foreign exchange rates, and therefore we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 2 commodity contract derivatives include over-the-counter gas and power swaps as well as forward physical gas deals. We value our contracts based on market data obtained from the New York Mercantile Exchange (NYMEX) and the Intercontinental Exchange (ICE) where monthly prices are available. We discount based on externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties and liquidity in the market. Our commodity contracts can be priced using liquidly traded swaps. Therefore, we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 3 financing derivatives include cross-currency swaps, inflation-linked swaps and equity options, where the market is illiquid. In valuing these instruments, we use in-house valuation models and obtain external valuations to support each reported fair value.

Our Level 3 commodity contract derivatives primarily consist of our forward purchases of electricity and gas that we value using proprietary models. Derivatives are classified as Level 3 where significant inputs into the valuation technique are neither directly nor indirectly observable (including our own data, which are adjusted, if necessary, to reflect the assumptions market participants would use in the circumstances).

Our Level 3 investments include equity instruments accounted for at fair value through profit and loss. These equity holdings are part of our corporate venture capital portfolio held by National Grid Partners and comprise a series of small unquoted investments where prices or valuation inputs are unobservable. These investments are either recently acquired or there have been recent funding rounds with third parties and therefore the valuation is based on the latest transaction price and any subsequent investment-specific adjustments.

Our Level 3 investments in associates include our investment in Sunrun Neptune 2016 LLC, which is accounted for at fair value. The investment is fair valued by discounting expected cash flows using a weighted average cost of capital specific to Sunrun Neptune 2016 LLC.

In light of the current ongoing impact of the COVID-19 pandemic, the valuations of certain assets and liabilities can be more subjective. While there have been significant movements in market indices, we are satisfied that there has been no significant impact on the fair values of our financial instruments measured at fair value, and that any impact is reflected in the fair values in the table above.

32. Financial risk management continued

(g) Fair value analysis continued

The changes in value of our Level 3 financial instruments are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3,4]		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
At 1 April	(214)	(219)	1	(1)	152	194	(61)	(26)
Net (losses)/gains for the year[1,2]	(20)	4	6	(16)	26	15	12	3
Purchases	–	–	26	44	51	57	77	101
Acquisition of Geronimo	–	–	–	–	(74)	–	(74)	–
Settlements	(1)	1	(31)	(26)	(18)	(4)	(50)	(29)
Reclassification to held for sale[3]	–	–	–	–	–	(110)	–	(110)
At 31 March	(235)	(214)	2	1	137	152	(96)	(61)

1. Loss of £20 million (2019: £4 million gain) is attributable to derivative financial instruments held at the end of the reporting period and has been recognised in finance costs in the income statement.
2. Loss of £17 million (2019: £21 million loss) is attributable to commodity contract derivative financial instruments held at the end of the reporting period.
3. Relates to our put and call options over our interests in Quadgas, that were classified as held for sale at 31 March 2019.
4. Other comprises our investments in Sunrun Neptune 2016 LLC, Enbala and the investments made by National Grid Partners, which are accounted for at fair value through profit and loss as well as the contingent consideration arising from the acquisition of Geronimo (see note 38).

The impacts on a post-tax basis of reasonably possible changes in significant Level 3 assumptions are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
10% increase in commodity prices[1]	–	–	2	(1)	–	–
10% decrease in commodity prices[1]	–	–	–	2	–	–
+10% market area price change	–	–	(4)	(10)	–	–
-10% market area price change	–	–	4	10	–	–
+20 basis points change in Limited Price Inflation (LPI) market curve[2]	(95)	(88)	–	–	–	–
-20 basis points change in LPI market curve[2]	90	83	–	–	–	–
+50 basis points change in discount rate	–	–	–	–	(3)	(3)
-50 basis points change in discount rate	–	–	–	–	4	3

1. Level 3 commodity price sensitivity is included within the sensitivity analysis disclosed in note 35.
2. A reasonably possible change in assumption of other Level 3 derivative financial instruments is unlikely to result in a material change in fair values.
3. The investments acquired in the period were on market terms, and sensitivity is considered insignificant at 31 March 2020.

The impacts disclosed above were considered on a contract-by-contract basis with the most significant unobservable inputs identified.

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32. Financial risk management continued

(h) Capital risk management

The capital structure of the Group consists of shareholders' equity, as disclosed in the consolidated statement of changes in equity, and net debt (note 29). National Grid's objectives when managing capital are: to safeguard our ability to continue as a going concern; to remain within regulatory constraints of our regulated operating companies; and to maintain an efficient mix of debt and equity funding thus achieving an optimal capital structure and cost of capital. We regularly review and manage the capital structure as appropriate in order to achieve these objectives.

Maintaining appropriate credit ratings for our operating and holding companies is an important aspect of our capital risk management strategy and balance sheet efficiency. We monitor our balance sheet efficiency using several metrics including retained cash flow/net debt (RCF), regulatory gearing and interest cover. For the year ended 31 March 2020, these metrics for the Group were 9.2% (2019: 9.4%), 63% (2019: 66%) and 4.1x (2019: 4.4x), respectively – see pages 28 and 244 – 245. We believe these are consistent with the current credit ratings for National Grid plc in respect of the main companies of the Group, based on guidance from the rating agencies.

We monitor the RAV gearing within NGET and the regulated transmission businesses within NGG. This is calculated as net debt expressed as a percentage of RAV, and indicates the level of debt employed to fund our UK regulated businesses. It is compared with the level of RAV gearing indicated by Ofgem as being appropriate for these businesses, at around 60% to 62.5%. We also monitor net debt as a percentage of rate base for our US operating companies, comparing this with the allowed rate base gearing inherent within each of our agreed rate plans, typically around 50%.

The majority of our regulated operating companies in the US and the UK are subject to certain restrictions on the payment of dividends by administrative order, contract and/or licence. The types of restrictions that a company may have that would prevent a dividend being declared or paid unless they are met include:

- dividends must be approved in advance by the relevant US state regulatory commission;
- subsidiary must have at least two recognised rating agency credit ratings of at least investment grade;
- dividends must be limited to cumulative retained earnings, including pre-acquisition retained earnings;
- the securities of National Grid plc must maintain an investment grade credit rating, and if that rating is the lowest investment grade bond rating it cannot have a negative watch/review for downgrade notice by a credit rating agency;
- the subsidiary must not carry on any activities other than those permitted by the licences;
- the subsidiary must not create any cross-default obligations or give or receive any intra-group cross-subsidies; and
- the percentage of equity compared with total capital of the subsidiary must remain above certain levels.

There is a further restriction relating only to The Narragansett Electric Company, which is required to maintain its consolidated net worth above certain levels.

These restrictions are subject to alteration in the US as and when a new rate case or rate plan is agreed with the relevant regulatory bodies for each operating company and in the UK through the normal licence review process.

As most of our business is regulated, at 31 March 2020 the majority of our net assets are subject to some of the restrictions noted above. These restrictions are not considered to be significantly onerous, nor do we currently expect they will prevent the planned payment of dividends in future in line with our dividend policy.

All the above requirements are monitored on a regular basis in order to ensure compliance. The Group has complied with all externally imposed capital requirements to which it is subject.

33. Borrowing facilities

To support our liquidity requirements and provide backup to commercial paper and other borrowings, we agree loan facilities with financial institutions over and above the value of borrowings that may be required. These committed credit facilities have never been drawn, and our undrawn amounts are listed below.

At 31 March 2020, we had bilateral committed credit facilities of £5,495 million (2019: £5,463 million). In addition, we had committed credit facilities from syndicates of banks of £277 million at 31 March 2020 (2019: £264 million). All committed credit facilities were undrawn in 2020 and 2019. An analysis of the maturity of these undrawn committed facilities is shown below:

	2020 £m	2019 £m
Undrawn committed borrowing facilities expiring:		
Less than 1 year	**–**	–
In 1 to 2 years	**1,940**	–
In 2 to 3 years	**1,668**	2,190
In 3 to 4 years	**277**	1,668
In 4 to 5 years	**1,887**	1,869
More than 5 years	**–**	–
	5,772	5,727

Of the unused facilities at 31 March 2020, £5,495 million (2019: £5,463 million) is available for liquidity purposes, while £277 million (2019: £264 million) is available as backup to specific US borrowings. £1,923 million of the undrawn bilateral facilities due to mature in one to two years, were renegotiated between 1 April and 17 June 2020 with new expiry dates to June 2024. Of the £1,887 million of undrawn committed borrowings facilities due to expire within four to five years, £110 million was renegotiated before 31 March 2020, with the expiry extended by a further year, with effect from 1 June 2020.

For the separately regulated business of National Grid Electricity System Operator Limited, the Group has a facility of £550 million (2019: £550 million). This facility is not available as Group general liquidity support and is not represented in the table above.

In addition to the above, the Group has Export Credit Agreements (ECAs) totalling £901 million (2019: £859 million), of which £233 million (2019: £510 million) is undrawn. Subsequent to the year end, two new ECAs totalling £598 million have been made available and have not been drawn.

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34. Subsidiary undertakings, joint ventures and associates

While we present consolidated results in these financial statements as if we were one company, our legal structure is such that there are a number of different operating and holding companies that contribute to the overall result. This structure has evolved through acquisitions as well as regulatory requirements to have certain activities within separate legal entities.

Subsidiary undertakings

A list of the Group's subsidiaries as at 31 March 2020 is given below. The entire share capital of subsidiaries is held within the Group except where the Group's ownership percentages are shown. These percentages give the Group's ultimate interest and therefore allow for the situation where subsidiaries are owned by partly owned intermediate subsidiaries. Where subsidiaries have different classes of shares, this is largely for historical reasons, and the effective percentage holdings given represent both the Group's voting rights and equity holding. Shares in National Grid (US) Holdings Limited, National Grid Holdings One plc and NGG Finance plc are held directly by National Grid plc. All other holdings in subsidiaries are owned by other subsidiaries within the Group. All subsidiaries are consolidated in the Group's financial statements.

Principal Group companies are identified in bold. These companies are incorporated and principally operate in the countries under which they are shown.

Incorporated in England and Wales
Registered office: 1 – 3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

Beegas Nominees Limited
Birch Sites Limited
Carbon Sentinel Limited
Droylsden Metering Services Limited
Gridcom Limited
Icelink Interconnector Limited
Landranch Limited
Lattice Group Employee Benefit Trust Limited
Lattice Group Limited
Lattice Group Trustees Limited
Natgrid Limited
NatGrid One Limited
NatgridTW1 Limited
National Grid Belgium Limited[1]*
National Grid Blue Power Limited[1]*
National Grid Carbon Limited
National Grid Commercial Holdings Limited
National Grid Distributed Energy Limited
National Grid Electricity Group Trustee Limited
National Grid Electricity System Operator Limited
National Grid Electricity Transmission plc
National Grid Energy Metering Limited
National Grid Four Limited[1]*
National Grid Fourteen Limited[1]*
National Grid Gas Holdings Limited
National Grid Gas plc
National Grid Grain LNG Limited
National Grid Holdings Limited
National Grid Holdings One plc
National Grid IFA 2 Limited
National Grid Interconnector Holdings Limited
National Grid Interconnectors Limited
National Grid International Limited
National Grid Metering Limited
National Grid North Sea Link Limited
National Grid Offshore Limited (previously NG Shetland Link Limited)
National Grid Partners Limited
National Grid Plus Limited (previously National Grid Offshore Limited)
National Grid Property Holdings Limited
National Grid Seventeen Limited[1]*
National Grid Smart Limited
National Grid Ten
National Grid Thirty Five Limited[1]*
National Grid Thirty Six Limited
National Grid Twelve Limited
National Grid Twenty Eight Limited
National Grid Twenty-Five Limited[1]*
National Grid Twenty Seven Limited
National Grid Twenty Three Limited
National Grid UK Limited
National Grid UK Pension Services Limited
National Grid (US) Holdings Limited
National Grid (US) Investments 2 Limited
National Grid (US) Investments 4 Limited
National Grid (US) Partner 1 Limited
National Grid Ventures Limited
National Grid Viking Link Limited
National Grid William Limited
NG Nominees Limited
NGC Employee Shares Trustee Limited
NGG Finance plc
Ngrid Intellectual Property Limited
NGT Telecom No. 1 Limited[1]*
NGT Two Limited
Port Greenwich Limited
Stargas Nominees Limited
Supergrid Electricity Limited
Supergrid Energy Transmission Limited
Supergrid Limited
Thamesport Interchange Limited
The National Grid Group Quest Trustee Company Limited
The National Grid YouPlan Trustee Limited
Transco Limited
Warwick Technology Park Management Company (No 2) Limited (60.56%)[2]

1. Registered office: c/o KPMG, 15 Canada Square, London E14 5GL, UK
2. Registered office: Shire Hall, PO Box 9, Warwick CV34 4RL, UK
* In liquidation.

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in the US

Registered office: National Registered Agents, Inc., 1209 Orange Street, Wilmington, DE 19801, USA (unless stated otherwise in footnotes).

Alden Solar, LLC
Altona Solar, LLC
Apple River Solar, LLC
Apple Solar, LLC
Arapahoe Solar, LLC
Argenta Solar, LLC
Armenia Solar, LLC
Artemisia Solar, LLC[1]
Ashland Solar, LLC
Athens Solar, LLC
Audubon Wind Farm, LLC
Banner Solar, LLC
Bee Hollow Solar, LLC
Benevolent Solar, LLC
Blaze Solar, LLC
Blue Ridge Wind, LLC
Blues Solar, LLC
Blue Stone Solar Energy, LLC
Bluewater Solar, LLC
Boone Solar, LLC
Boston Gas Company[2]
Brewster Solar, LLC
Brilliance Solar, LLC
British Transco Capital Inc.[3]
British Transco Finance, Inc.[3]
Brock Solar, LLC
Broken Bridge Corp.[4]
Brook Trout Solar, LLC
Brookside Solar, LLC
Burlington Solar, LLC
Burr Ridge Wind, LLC
Cage Ranch Solar, LLC
Cage Ranch Solar II, LLC
Cage Ranch Solar III, LLC
Caldwell Solar, LLC
Caldwell Solar II, LLC
Canby Solar, LLC
Cattle Ridge Wind Farm 2, LLC
Cepheus Community Solar Gardens LLC[1]
Claddagh Solar, LLC[1]
Clear Creek Solar, LLC
Clermont Solar, LLC
Clinton County Solar, LLC
Commonwealth Solar, LLC
Conestoga Wind, LLC
Copperhead Solar, LLC
Crocker Wind Farm 2, LLC
Cygnus Community Solar Garden, LLC[1]
Daybreak Solar, LLC
Deer Trail Solar, LLC
Dekalb Solar, LLC
Desoto Solar, LLC
Dodson Creek Solar, LLC
Dorado Community Solar Gardens, LLC[1]
Dorsey Road Solar, LLC
East Galesburg Solar, LLC
East Macomb Solar, LLC
Eastern Hemlock Solar, LLC
Elba Solar, LLC
Elburn Solar, LLC
Eldena Solar, LLC
Elk Creek Solar, LLC
Elk Creek Solar 2, LLC
Empire Solar, LLC
EUA Energy Investment Corporation[2]
Falls City Solar, LLC
Firstview Wind Farm, LLC
Franklin Solar, LLC
Front Range Wind Farm, LLC
Fulton Solar, LLC
Galesburg Solar, LLC
Genesee Solar Energy, LLC
Geronimo Energy LLC
Geronimo E Wind LLC[5]
Geronimo Solar Energy, LLC[1]
Geronimo Stutsman Wind Farm, LLC
Geronimo White Pine Solar, LLC
Gladiolus Solar, LLC[1]
Glenwood Solar, LLC
Glen Rock Solar, LLC
Golden Solar, LLC
Goldendale Solar, LLC
Goldfinch Solar, LLC
Granite State Power Link LLC[3]
Grant Solar, LLC
Grant Solar 2, LLC
Grayson Solar, LLC
Greenbrier Creek Solar, LLC
Greentown Solar, LLC
Greenwood Solar, LLC
Grid NY, LLC[6]
Grindstone Wind Farm, LLC[7]
Hale Solar, LLC
Hampton Solar, LLC
Handley Road Solar, LLC
Hardeman County Solar, LLC
Harmony Solar ND, LLC
Harmony Solar ND 2, LLC
Harrington Solar, LLC
Hartley Solar, LLC
Hearth Solar, LLC
Henderson Solar, LLC
Heyworth Solar, LLC
Honeybee Solar, LLC
Hoosier Solar, LLC[1]
Hyacinth Solar, LLC[1]
Illumination Solar, LLC
Innovation Solar, LLC
Irwin Solar, LLC
Itasca Energy Development, LLC[8]
Itasca Energy Services, LLC
Jack Rabbit Wind, LLC
Jackson County Solar, LLC
Jantz Solar, LLC
Junction Solar, LLC
Kankakee Solar, LLC
Keslinger Solar, LLC
KeySpan CI Midstream Limited[3]
KeySpan Energy Corporation[6]
KeySpan Energy Services Inc.[3]
KeySpan Gas East Corporation[6]
KeySpan International Corporation[3]
KeySpan MHK, Inc.[3]
KeySpan Midstream Inc.[3]
KeySpan Plumbing Solutions, Inc.[6]
Kindle Solar, LLC
KSI Contracting, LLC[3]
KSI Electrical, LLC[3]
KSI Mechanical, LLC[3]
Lake Iris Solar, LLC
Lakeside Solar, LLC
Lamdin Solar, LLC
Lamplight Solar, LLC
Land Management & Development, Inc.[6]
Landwest, Inc.[6]
Lansing Solar, LLC
Lawrence Solar, LLC
Leola Wind Farm, LLC
Lilac Solar, LLC[1]
Lindy Solar, LLC
Lockport Solar, LLC
Lordsburg Solar, LLC
Lydia Solar, LLC
Madden Creek Solar, LLC
Marigold Community Solar Garden, LLC[1]
Massachusetts Electric Company[2]
Maverick Wind Farm, LLC
Mazon Solar, LLC
McFadden Solar, LLC
Merton Solar, LLC
Metro Energy, LLC[6]
Metrowest Realty LLC[3]
Miller Creek Solar, LLC
Morning Glory Solar, LLC[1]
Mottville Solar, LLC
Mountain Laurel Solar, LLC
Mustang Ridge Wind Farm, LLC
Mystic Steamship Corporation[3]
Nantucket Electric Company[2]
National Grid Algonquin LLC[3]
National Grid Connect Inc.3
National Grid Development Holdings Corp.[3]
National Grid Electric Services, LLC[6]
National Grid Energy Management, LLC[3]
National Grid Energy Services LLC[3]
National Grid Energy Trading Services LLC[6]
National Grid Engineering & Survey Inc.[6]
National Grid Generation LLC[6]
National Grid Generation Ventures LLC[6]
National Grid Glenwood Energy Center, LLC[3]
National Grid IGTS Corp.[6]
National Grid Insurance USA Ltd[6]
National Grid Islander East Pipeline LLC[3]
National Grid LNG GP LLC[3]

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34. Subsidiary undertakings, joint ventures and associates continued
Subsidiary undertakings continued

Incorporated in the US continued

National Grid LNG LLC[3]
National Grid LNG LP LLC[3]
National Grid Millennium LLC[3]
National Grid NE Holdings 2 LLC[2]
National Grid North America Inc.[3]
National Grid North East Ventures Inc.[3]
National Grid Partners Inc.[6]
National Grid Partners LLC[3]
National Grid Port Jefferson Energy Center LLC[3]
National Grid Services Inc.[3]
National Grid Transmission Services Corporation[2]
National Grid US 6 LLC[3]
National Grid US LLC[3]
National Grid USA[3]
National Grid USA Service Company, Inc.[2]
Nees Energy, Inc.[2]
New Bremen Solar, LLC
New England Electric Transmission Corporation[4]
New England Energy Incorporated[2]
New England Hydro Finance Company, Inc. (53.704%)[2]
New England Hydro-Transmission Corporation (53.704%)[4]
New England Hydro-Transmission Electric Company Inc. (53.704%)[2]
New England Power Company[2]
Newport America Corporation[9]
NGNE LLC[3]
NGV Emerald Acquisition Co. LLC[3]
NGV Emerald Energy Venture Holdings LLC[3]
NGV Emerald Holdings LLC[3]
NGV US Distributed Energy Inc.[3] (previously National Grid Green Homes Inc.)
NGV US Transmission Inc.[3] (previously Grid America Holdings Inc.)
Niagara Falls Solar, LLC
Niagara Mohawk Energy, Inc.[3]
Niagara Mohawk Holdings, Inc.[6]
Niagara Mohawk Power Corporation[6]
Niobrara Wind, LLC
NM Properties, Inc.[6]
Nordic Vos, LLC
North Adair Solar, LLC
Northeast Renewable Link LLC[3]
North East Transmission Co., Inc.[3]
North Fork Wind, LLC
North Rock Solar, LLC
North Wonder Lake Solar, LLC
Onton Solar, LLC
Opinac North America, Inc.[3]
Oreana Solar, LLC
Patriotic Solar, LLC
Pennington Solar, LLC
Peony Solar, LLC
Perseus Community Solar Garden, LLC[1]
Philadelphia Coke Co., Inc.[3]
Piper Solar, LLC
Pipestone Solar, LLC
Pleasant Plains Solar, LLC
Plum Creek Wind Farm, LLC
Plum Creek Wind Farm 2, LLC
Polaris Community Solar Garden, LLC[1]
Port of the Islands North, LLC[6]
Prairie Oasis Solar, LLC
Prairie Rose Wind 2, LLC[1]
Prairie Wolf Solar, LLC
Prosperity Wind Farm, LLC
Prosperity Wind Farm 2, LLC
Radiance Solar, LLC[1]
Red Rock Solar SD, LLC
Regal Solar, LLC
Regulus Community Solar Gardens, LLC[1]
Rising Solar, LLC
River North Solar, LLC
River Run Solar, LLC
Riverside Solar, LLC
Rochester Solar, LLC[1]
Rock Falls Solar, LLC
Rock Ridge Wind Farm, LLC
Ross County Solar, LLC
Royal Solar, LLC
Royal Solar 2, LLC
Royerton Solar, LLC
Saginaw Bay Solar, LLC
Sandstone Creek Solar, LLC
Sandstone Creek Solar 2, LLC
Sawmill Wind Farm, LLC
Silver City Solar, LLC
Scorpius Community Solar Garden, LLC[1]
Serenity Solar, LLC[1]
Sheas Lake Solar, LLC
Sherco Solar, LLC[1]
Silver Lake Solar, LLC
Sirius Community Solar Gardens, LLC[1]
Snowdrop Solar, LLC[1]
Somerset Solar, LLC
South Belleville Solar, LLC
South Macomb Solar, LLC
Spotlight Solar, LLC
Spring Brook Solar, LLC
Springfield Solar Farm, LLC
Springfield Wind Farm, LLC[1]
Springville Solar, LLC
St. Thomas Solar, LLC
Stockton Solar, LLC
Stony Brook Wind, LLC
Stove Creek Solar, LLC
Sturgis Solar, LLC
Sugar Maple Solar, LLC
Summit Lake Solar, LLC
Sunbeam Solar, LLC
Sunray Solar, LLC
Sunrise Solar, LLC
Sycamore Creek Solar, LLC
The Brooklyn Union Gas Company[6]
The Narragansett Electric Company[9]
Tilton Solar, LLC
Torchlight Solar, LLC[1]
Transgas, Inc.[2]
Uintah Solar, LLC
Upper Hudson Development Inc.[6]
Valley Appliance and Merchandising Company[9]
Vermont Green Line Devco, LLC3 (90%)
Vibrant Solar, LLC
Virgo Community Solar Gardens, LLC[1]
Virtue Solar, LLC
Vivid Solar, LLC
Vulpecula Community Solar Garden, LLC[1]
Wayfinder Group, Inc.[2]
Wheatfield Solar, LLC
Wild Springs Solar, LLC[1]
Wildcat Ridge Wind Farm, LLC
Wilder Junction Wind Farm, LLC
Wildhorse Creek Solar, LLC
Willard Solar, LLC
Wiregrass Solar, LLC
Wonder Lake Solar, LLC
Woodlands Solar, LLC
Yellowbud Solar, LLC

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in Australia
Registered office: Level 7, 330 Collins Street, Melbourne, VIC 3000, Australia

National Grid Australia Pty Limited

Incorporated in Canada
Registered office: Stewart McKelvey Stirling Scales, c/o Charles Reagh, 1959 Upper Water Street, Suite 900, Halifax Nova Scotia, B3J 2N2, Canada

KeySpan Energy Development Co.

Incorporated in Hong Kong
Registered office: Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong

National Grid Hong Kong Limited (previously HK NewCo 2019 Limited)

Incorporated in the Isle of Man
Registered office: Third Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE, Isle of Man, UK

National Grid Insurance Company (Isle of Man) Limited
NGT Holding Company (Isle of Man) Limited*

Incorporated in Jersey
Registered office: 44 Esplanade, St Helier, Jersey JE4 9WG, UK

National Grid Jersey Investments Limited**
NG Jersey Limited**

Incorporated in Luxembourg
Registered office: 412F, Route d'Esch, L-2086, Luxembourg, Grand Duchy of Luxembourg

National Grid Luxembourg Sarl (previously 21 June Sarl)

Incorporated in the Netherlands
Registered office: Westblaak 89, 3012 KG Rotterdam, PO Box 21153, 3001 AD, Rotterdam, Netherlands
British Transco International Finance B.V.

Registered office: Prins Bernhardplein 200, 1097 JB, Amsterdam, Netherlands
National Grid Holdings B.V.*

Incorporated in the Republic of Ireland
Registered office: c/o Moore Stephens Nathans, Third Floor, Ulysses House, 23/24 Foley Street, Dublin 1, D01 W2T2, Ireland

National Grid Company (Ireland) Designated Activity Company (previously National Grid Insurance Company (Ireland) Designated Activity Company)*

1. Registered office: c/o Geronimo Energy LLC, 8400 Normandale Lake Bvld. Suite 1200, Bloomington, MN 55437, USA.
2. Registered office: Corporation Service Company, 84 State Street, Boston MA 02109, USA.
3. Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, USA.
4. Registered office: Lawyers Incorporating Service, 10 Ferry Street, Suite 313, Concord NH 03301, USA.
5. Registered office: National Registered Agents, Inc., 301 S. Bedford St. Suite 1 Madison, WI 53703, USA.
6. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207-2543, USA.
7. Registered office: National Registered Agents, Inc., 30600 Telegraph Road, Suite2345, Bingham Farms, MI 48025-5720, USA.
8. Registered office: 10710 Town Square Drive NE, Suite 201 Minneapolis, MN 55449, USA.
9. Registered office: Corporation Service Company, 222 Jefferson Boulevard, Suite 200, Warwick RI 02888, USA.

* In liquidation.
** Entered liquidation 29 April 2020.

Notes to the consolidated financial statements
– supplementary information continued

34. Subsidiary undertakings, joint ventures and associates continued

Joint ventures

A list of the Group's joint ventures as at 31 March 2020 is given below. All joint ventures are included in the Group's financial statements using the equity method of accounting. Principal joint ventures are identified in **bold**.

Incorporated in England and Wales
Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

BritNed Development Limited (50%)*
Joint Radio Company Limited (50%)[1]**
Nemo Link Limited (50%)
NGET/SPT Upgrades Limited (50%)†
St William Homes LLP (50%)[2]

Incorporated in the US
Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Clean Energy Generation, LLC (50%)
Emerald Energy Venture LLC (51%)
Goldendale Energy Storage LLC (50%)
Island Park Energy Center, LLC (50%)
Islander East Pipeline Company, LLC (50%)[3]
LI Energy Storage System, LLC (50%)
LI Solar Generation, LLC (50%)
Swan Lake North Holdings LLC (50%)

Incorporated in France
Registered office: 1 Terrasse Bellini, Tour Initiale, TSA 41000 – 9291, Paris La Defense, CEDEX, France

IFA2 SAS (50%)

Associates

A list of the Group's associates as at 31 March 2020 is given below. Unless otherwise stated, all associates are included in the Group's financial statements using the equity method of accounting. Principal associates are identified in bold.

Incorporated in the US
Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Clean Line Energy Partners LLC (32%)[3]
Connecticut Yankee Atomic Power Company (19.5%)[4]
Direct Global Power, Inc. (26%)[3]
Energy Impact Fund LP (9.42%)[5]
Greeneru, Inc. (21.6%)[3]
KHB Venture LLC (33%)[6]
Maine Yankee Atomic Power Company (24%)[7]
Millennium Pipeline Company, LLC (26.25%)[3]
New York Transco LLC (28.3%)[8]
Nysearch RMLD, LLC (22.63%)
Sunrun Neptune Investor 2016 LLC[3]***
Yankee Atomic Electric Company (34.5%)[9]

Incorporated in Belgium
Registered office: Avenue de Cortenbergh 71, 1000 Brussels, Belgium

Coreso SA (15.84%)

Other investments

A list of the Group's other investments as at 31 March 2020 is given below.

Incorporated in England and Wales
Registered office: 1 More London Place, London SE1 2AF, UK

Energis plc (33.06%)‡

1. Registered office: Friars House, Manor House Drive, Coventry CV1 2TE, UK.
2. Registered office: Berkeley House, 19 Portsmouth Road, Cobham, Surrey KT11 1JG, UK.
3. Registered office: Corporation Trust Company, 1209 Orange, Wilmington DE 19808, New Castle County, USA.
4. Registered office: Carla Pizzella, 362 Injun Hollow Road, East Hampton CT 06424, USA.
5. Registered office: Harvard Business Services, Inc., 16192 Coastal Highway, Lewes DE 19958, Sussex County, USA.
6. Registered office: De Maximus Inc., 135 Beaver Street, 4th Floor, Waltham MA 02452, USA.
7. Registered office: Joseph D Fay, 321 Old Ferry Road, Wiscasset ME 04578, USA.
8. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
9. Registered office: Karen Sucharzewski, 49 Yankee Road, Rowe MA 01367, USA.

* National Grid Interconnector Holdings Limited owns 284,500,000 €0.20 C Ordinary shares and one £1.00 Ordinary A share.
** National Grid Gas plc owns all £1.00 A Ordinary shares.
*** NGV US Distributed Energy Inc. owns 1,000 Class A Membership Interests.
† National Grid Electricity Transmission plc owns 50 £1.00 A Ordinary shares.
‡ In administration.

Our interests and activities are held or operated through the subsidiaries, joint arrangements or associates as disclosed above. These interests and activities (and their branches) are established in – and subject to the laws and regulations of – these jurisdictions.

35. Sensitivities

In order to give a clearer picture of the impact on our results or financial position of potential changes in significant estimates and assumptions, the following sensitivities are presented. These sensitivities are based on assumptions and conditions prevailing at the year-end and should be used with caution. The effects provided are not necessarily indicative of the actual effects that would be experienced because our actual exposures are constantly changing.

The sensitivities in the tables below show the potential impact in the income statement (and consequential impact on net assets) for a reasonably possible range of different variables each of which have been considered in isolation (i.e. with all other variables remaining constant). There are a number of these sensitivities which are mutually exclusive, and therefore if one were to happen, another would not, meaning a total showing how sensitive our results are to these external factors is not meaningful.

The sensitivities included in the tables below broadly have an equal and opposite effect if the sensitivity increases or decreases by the same amount unless otherwise stated.

(a) Sensitivities on areas of estimation uncertainty

The table below sets out the sensitivity analysis for certain areas of estimation uncertainty set out in note 1E. These estimates are those that have a significant risk of resulting in a material adjustment to the carrying values of assets and liabilities in the next year. Note that the sensitivity analysis for the useful economic lives of our gas network assets is included in note 13.

	2020		2019	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Pensions and other post-retirement benefit liabilities (pre-tax)[1]:				
UK discount rate change of 0.5%[2]	**6**	**877**	6	1,064
US discount rate change of 0.5%[2]	**10**	**514**	16	688
UK RPI rate change of 0.5%[3]	**4**	**670**	4	908
UK long-term rate of increase in salaries change of 0.5%	**1**	**39**	1	56
US long-term rate of increase in salaries change of 0.5%	**2**	**47**	2	46
UK change of one year to life expectancy at age 654	**1**	**545**	1	610
US change of one year to life expectancy at age 65	**4**	**456**	4	406
Assumed US healthcare cost trend rates change of 1%	**31**	**507**	32	503
Pension assets:				
Change in value of unquoted equities by 10%	**–**	**381**	–	415
Change in value of unquoted properties by 10%	**–**	**89**	–	107
Change in value of unquoted diversified alternatives by 10%	**–**	**152**	–	142
Environmental provision:				
10% change in estimated future cash flows	**210**	**210**	165	165

1. The changes shown are a change in the annual pension or other post-retirement benefit service charge and change in the defined benefit obligations.
2. A change in the discount rate is likely to occur as a result of changes in bond yields and as such would be expected to be offset to a significant degree by a change in the value of the bond assets held by the plans. In the UK, there would also be a £205 million net assets offset from the buy-in policies purchased in the year, where the accounting value of the buy-in asset is set equal to the associated liabilities.
3. The projected impact resulting from a change in RPI reflects the underlying effect on pensions in payment, pensions in deferment and resultant increases in salary assumptions. The buy-in policies purchased during the year would have a £152 million net assets offset to the above.
4. In the UK, the buy-in policies purchased during the year, and the longevity swap entered into previously, would have a £223 million net assets offset to the above.

Pensions and other post-retirement benefits assumptions

Sensitivities have been prepared to show how the defined benefit obligations and annual service costs could potentially be impacted by changes in the relevant actuarial assumption that were reasonably possible as at 31 March 2020. In preparing sensitivities, the potential impact has been calculated by applying the change to each assumption in isolation and assuming all other assumptions remain unchanged. This is with the exception of RPI in the UK where the corresponding change to increases to pensions in payment, increases to pensions in deferment and increases in salary are recognised.

Notes to the consolidated financial statements – supplementary information continued

35. Sensitivities continued

(b) Sensitivities on financial instruments

We are further required to show additional sensitivity analysis under IFRS 7 and these are shown separately in the subsequent table due to the additional assumptions that are made in order to produce meaningful sensitivity disclosures.

Our net debt as presented in note 29 is sensitive to changes in market variables, primarily being UK and US interest rates, the UK RPI and the dollar to sterling exchange rate. These impact the valuation of our borrowings, deposits and derivative financial instruments. The analysis illustrates the sensitivity of our financial instruments to reasonably possible changes in these market variables.

The following main assumptions were made in calculating the sensitivity analysis for continuing operations:

- the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives portfolio, and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations in place at 31 March 2020 and 2019 respectively;
- the statement of financial position sensitivity to interest rates relates to items presented at their fair values: derivative financial instruments; our investments measured at fair value through profit and loss (FVTPL) and fair value through other comprehensive income; and our liability measured at FVTPL. Further debt and other deposits are carried at amortised cost and so their carrying value does not change as interest rates move;
- the sensitivity of interest to movements in interest rates is calculated on net floating rate exposures on debt, deposits and derivative instruments;
- changes in the carrying value of derivatives from movements in interest rates of designated cash flow hedges are assumed to be recorded fully within equity; and
- changes in the carrying value of derivative financial instruments designated as net investment hedges from movements in interest rates are presented in equity as costs of hedging, with a one-year release to the income statement. The impact of movements in the dollar to sterling exchange rate are recorded directly in equity.

	2020		2019	
	Income statement £m	**Other equity reserves £m**	Income statement £m	Other equity reserves £m
Financial risk (post-tax):				
UK RPI change of 0.5%[1]	**27**	**–**	27	–
UK interest rates change of 0.5%	**14**	**47**	16	13
US interest rates change of 0.5%	**5**	**27**	11	44
US dollar exchange rate change of 10%[2]	**49**	**216**	53	246

1. Excludes sensitivities to LPI curve. Further details on sensitivities are provided in note 32(g).
2. The other equity reserves impact does not reflect the exchange translation in our US subsidiaries' net assets. It is estimated this would change by £1,319 million (2019: £1,119 million) in the opposite direction if the dollar exchange rate changed by 10%.

Our commodity contract derivatives are sensitive to price risk. Additional sensitivities in respect to commodity price risk and to our derivative fair values are as follows:

	2020		2019	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Commodity price risk (post-tax):				
10% increase in commodity prices	**26**	**26**	26	26
10% decrease in commodity prices	**(27)**	**(27)**	(27)	(27)
Assets and liabilities carried at fair value (post-tax):				
10% fair value change in derivative financial instruments[1]	**12**	**12**	(3)	(3)
10% fair value change in commodity contract derivative liabilities	**9**	**9**	–	–

1. The effect of a 10% change in fair value assumes no hedge accounting.

36. Additional disclosures in respect of guaranteed securities

We have preferred shares that are listed on a US national securities exchange and are guaranteed by other companies in the Group. These guarantors commit to honour any liabilities should the company issuing the debt have any financial difficulties. In order to provide debt holders with information on the financial stability of the companies providing the guarantees, we are required to disclose individual financial information for these companies. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

Niagara Mohawk Power Corporation, a wholly owned subsidiary of the Group, has issued preferred shares that are listed on a US national securities exchange and are guaranteed by National Grid plc. In order to provide preferred shareholders with information on the financial stability of the company providing the guarantee, we are required to disclose individual financial information for these companies. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

The following summarised financial information is given in respect of Niagara Mohawk Power Corporation as a result of National Grid plc's guarantee, dated 29 October 2007, of Niagara Mohawk Power Corporation's 3.6% and 3.9% issued preferred shares, which amount to £29 million. National Grid plc's guarantee of Niagara Mohawk Power Corporation's preferred shares is full and unconditional. There are no restrictions on the payment of dividends by Niagara Mohawk Power Corporation or limitations on National Grid plc's guarantee of the preferred shares, and there are no factors that may affect payments to holders of the guaranteed securities.

The following summarised financial information for National Grid plc and Niagara Mohawk Power Corporation is presented on a combined basis and is intended to provide investors with meaningful and comparable financial information, and is provided pursuant to the early adoption of Rule 13-01 of Regulation S-X in lieu of the separate financial statements of Niagara Mohawk Power Corporation.

Summarised financial information is presented, on a combined basis, as at 31 March 2020. The combined amounts are presented under IFRS measurement principles. Inter-company transactions have been eliminated. Investments in other non-issuer and non-guarantor subsidiaries are included at cost, subject to impairment.

Summarised financial information for the year ended 31 March 2020 – IFRS

	National Grid plc and Niagara Mohawk Power Corporation combined £m
Combined statement of financial position	
Non-current loans to other subsidiaries	363
Non-current assets	8,939
Current loans to other subsidiaries	12,435
Current assets	1,378
Current loans from other subsidiaries	(16,226)
Current liabilities	(1,648)
Non-current loans from other subsidiaries	(2,105)
Non-current liabilities	(5,460)
Net liabilities[1]	(2,324)
Equity	(2,324)
Combined income statement – continuing operations	
Revenue	2,365
Operating costs	(2,131)
Operating profit	234
Other income from other subsidiaries	3,888
Other income and costs, including taxation	(428)
Profit after tax	3,694

1. Excluded from net liabilities above are investments in other consolidated subsidiaries with a carrying value of £14,362 million.

37. Transition to new accounting standards

(a) Transition to IFRS 16

The Group has adopted IFRS 16 'Leases', with effect from 1 April 2019. IFRS 16 introduces a single lease accounting model for lessees (rather than the current distinction between operating and finance leases). A contract is, or contains, a lease, if it provides the right to control the use of an identified asset for a specific period of time in exchange for consideration. The new standard results in our operating leases being accounted for in the consolidated statement of financial position as 'right-of-use' assets with corresponding lease liabilities also recognised. It therefore increases both our assets and liabilities (including net debt). It also changes the timing and presentation in the consolidated income statement as it results in an increase in finance costs and depreciation largely offset by a reduction in the previously straight-line operating costs.

Transition options

We have applied IFRS 16 using the modified retrospective approach. Comparatives have not been restated on adoption. Instead, on the opening balance sheet date, right-of-use assets (net of accrued rent or rent-free periods, and reported within property, plant and equipment), additional lease liabilities (reported within borrowings) and any associated deferred tax have been recognised, with no cumulative transition adjustment to reflect through retained earnings. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis as permitted by IFRS 16.

Notes to the consolidated financial statements
– supplementary information continued

37. Transition to new accounting standards continued

(a) Transition to IFRS 16 continued
We elected to apply the practical expedient to grandfather our previous assessments of whether contracts were previously accounted for as a lease, as permitted by the standard, instead of reassessing all significant contracts as at the date of initial application to determine whether they met the IFRS 16 definition of a lease.

We have elected to apply the practical expedient on transition, which permits right-of-use assets to be measured at an amount equal to the lease liability on adoption of the standard (adjusted for any prepaid or accrued lease expenses).

In addition, we have also elected the option to adjust the carrying amounts of the right-of-use assets as at 1 April 2019 for any onerous lease provisions that had been recognised on the Group consolidated statement of financial position as at 31 March 2019, rather than performing impairment assessments on transition.

Impact of transition
At 31 March 2019, the Group disclosed non-cancellable operating lease commitments of £0.3 billion, of which the majority were in the US. A further £0.4 billion of lease liabilities were recognised due to the requirement in IFRS 16 to recognise lease liabilities for the term that we are reasonably certain to exercise lease extension or lease termination options for, rather than only for the period of the minimum contractual term that was used in determining our lease liability commitments. This was partially offset by the £0.2 billion impact of discounting our lease liabilities at the incremental borrowing rate for each lease. The weighted average discount rate applied to lease liabilities recognised on the transition date was 2.8%.There were some immaterial short-term and low-value leases, which will be recognised on a straight-line basis as an expense in the consolidated income statement over the remaining lease term.

As a result, the Group has recognised additional right-of-use assets of £0.5 billion and lease liabilities (which are included within net debt) of £0.5 billion at 1 April 2019. No additional net deferred tax has arisen. The transition adjustment is in addition to the £270 million of finance leases already recognised on the consolidated statement of financial position under IAS 17. There has been no impact on net assets as shown in the table below, which shows the impacted balances from the Group consolidated statement of financial position.

Impact of transition	31 March 2019 As previously reported £m	IFRS 16 transition adjustments £m	**1 April 2019 As restated £m**
Property, plant and equipment – Right-of-use assets			
Land and buildings	2,560	381	**2,941**
Plant and machinery	36,589	67	**36,656**
Assets in the course of construction	4,425	–	**4,425**
Motor vehicles and office equipment	339	20	**359**
Total property, plant and equipment	43,913	468	**44,381**
Borrowings – Lease liabilities			
Current	(65)	(48)	**(113)**
Non-current	(205)	(426)	**(631)**
Total lease liabilities	(270)	(474)	**(744)**
Other liabilities			
Trade and other payables	(3,769)	3	**(3,766)**
Other non-current liabilities	(808)	3	**(805)**
Net assets	19,369	–	**19,369**
Equity			
Total equity	19,369	–	**19,369**

The impact of IFRS 16 on profit after tax as a result of adopting the new standard is not material. However, it has resulted in an increase in operating profit due to the operating costs now being replaced with depreciation and interest charges.

The impact on the cash flow statement has also not been material, although there has been an increase in operating cash flows and decrease in financing cash flows, because repayment of the principal portion of the lease liabilities is now classified as cash flows from financing activities rather than operating cash flows.

Ongoing accounting policy
With effect from 1 April 2019, new lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term, plus any other costs. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security.

The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

37. Transition to new accounting standards continued

(b) Transition to IFRS 9 and IFRS 15

On 1 April 2018, the Group adopted IFRS 9 and IFRS 15. Both standards were applied using the modified retrospective approach whereby comparative amounts were not restated on transition, but a cumulative adjustment was made to retained earnings in the opening consolidated statement of financial position as at 1 April 2018. The impact of the transition on the opening consolidated statement of financial position is set out in the following table:

		Transition adjustments		
Impact of transition	31 March 2018 As previously reported £m	IFRS 9 £m	IFRS 15 £m	**1 April 2018 £m**
Non-current assets				
Goodwill	5,444	–	–	**5,444**
Other intangible assets	899	–	–	**899**
Property, plant and equipment	39,853	–	–	**39,853**
Other non-current assets	115	–	–	**115**
Pension assets	1,409	–	–	**1,409**
Financial and other investments	899	–[1]	–	**899**
Investments in joint ventures and associates	2,168	–	–	**2,168**
Derivative financial assets	1,319	–	–	**1,319**
Total non-current assets	52,106	–	–	**52,106**
Current assets				
Inventories and current intangible assets	341	–	–	**341**
Trade and other receivables	2,798	–[2]	(3)	**2,795**
Current tax assets	114	–	–	**114**
Financial and other investments	2,694	–[1]	–	**2,694**
Derivative financial assets	405	–	–	**405**
Cash and cash equivalents	329	–	–	**329**
Total current assets	6,681	–	(3)	**6,678**
Total assets	58,787	–	(3)	**58,784**
Current liabilities				
Borrowings	(4,447)	–	–	**(4,447)**
Derivative financial liabilities	(401)	–	–	**(401)**
Trade and other payables	(3,453)	–	59[7]	**(3,394)**
Contract liabilities	–	–	(53)[7]	**(53)**
Current tax liabilities	(123)	–	–	**(123)**
Provisions	(273)	–	–	**(273)**
Total current liabilities	(8,697)	–	6	**(8,691)**
Non-current liabilities				
Borrowings	(22,178)	(32)[3]	–	**(22,210)**
Derivative financial liabilities	(660)	–	–	**(660)**
Other non-current liabilities	(1,317)	–	567[7]	**(750)**
Contract liabilities	–	–	(813)[7]	**(813)**
Deferred tax liabilities	(3,636)	5[4]	74[8]	**(3,557)**
Pensions and other post-retirement benefit obligations	(1,672)	–	–	**(1,672)**
Provisions	(1,779)	–	–	**(1,779)**
Total non-current liabilities	(31,242)	(27)	(172)	**(31,441)**
Total liabilities	(39,939)	(27)	(166)	**(40,132)**
Net assets	18,848	(27)	(169)	**18,652**
Equity				
Share capital	452	–	–	**452**
Share premium account	1,321	–	–	**1,321**
Retained earnings	21,599	(99)[5]	(169)[9]	**21,331**
Other equity reserves	(4,540)	72[6]	–	**(4,468)**
Total shareholders' equity	18,832	(27)	(169)	**18,636**
Non-controlling interests	16	–	–	**16**
Total equity	18,848	(27)	(169)	**18,652**

Notes to the consolidated financial statements
– supplementary information continued

37. Transition to new accounting standards continued
(b) Transition to IFRS 9 and IFRS 15 continued

IFRS 9: Financial Instruments
IFRS 9 has changed the rules concerning the classification and measurement of financial instruments, impairment of financial assets, and hedge accounting. Details of the impact of applying IFRS 9 for the year ended 31 March 2019 are set out below.

Adjustments arising in the year ended 31 March 2019 as a result of the transition to IFRS 9:

1. The available-for-sale category for financial assets was replaced with investments held at fair value through profit and loss (FVTPL) and investments held at fair value through other comprehensive income (FVOCI). Changes to the classification and measurement of financial assets did not alter the carrying value of any financial assets held by the Group. The net impact to retained earnings of the reclassification on transition was an £8 million gain.

   As described in note 15, all recognised financial assets that are within the scope of IFRS 9 are initially recorded at fair value and subsequently measured at amortised cost or fair value based on the Group's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. Therefore on 1 April 2018, the Group reclassified its investments as follows:
   - Money market funds and fund investments held by captive insurance companies were classified as financial assets at FVTPL because their contractual cash flows are not solely payments of principal and interest;
   - Investments in debt securities that have contractual payments that are solely payments of principal and interest, and which are held as part of the liquidity portfolio or to back employee benefit liabilities, were classified as financial assets at FVOCI because they are held in a business model whose objective is to collect the contractual cash flows and to sell the debt instruments;
   - The Group has elected to hold investments in equity securities, which are held to back employee benefit liabilities, as financial assets at FVOCI as the Group does not believe that changes in their fair value is reflective of the financial performance of the Group; and
   - Loans to joint ventures and associates, cash at bank, and short-term deposits are classified at amortised cost as they have contractual cash flows which are solely payments of principal and interest and the Group holds them to collect contractual cash flows.

   Aside from derivative financial instruments, which remain classified as FVTPL, the Group did not previously have any financial assets or liabilities classified at FVTPL.

   The table below illustrates those financial assets and liabilities that were reclassified at 1 April 2018:

Financial asset/liability	Note	Original measurement category under IAS 39	New measurement category under IFRS 9	Original carrying amount under IAS 39 £m	Change to measurement basis under IFRS 9 £m	New carrying amount under IFRS 9 £m
Money market funds and fund investments in equities and bonds	15	Available-for-sale investments	Financial assets at FVTPL	2,294	–	2,294
Cash surrender value of life insurance policies and investments in debt securities	15	Available-for-sale investments	Financial assets at FVOCI	343	–	343
Investments in equity securities	15	Available-for-sale investments	Financial assets at FVOCI (equity instruments)	84	–	84
Loans to joint ventures and associates and restricted balances	15	Loans and receivables	Financial assets at amortised cost	872	–	872
Borrowings	21	Financial liabilities at amortised cost	Financial liabilities at fair value through profit and loss	(570)	(32)	(602)

   Note that the table above does not include derivative assets, derivative liabilities, trade receivables, cash at bank and short-term deposits, borrowings measured at amortised cost or trade payables. This is because neither the classification nor the measurement of these items has changed on transition to IFRS 9.

2. The change from the incurred loss impairment model of IAS 39 to the expected loss model in IFRS 9 did not have a material impact on the Group's credit loss provision. The Group calculates its impairment provision on trade receivables using a sophisticated provisions matrix. The inclusion of forward-looking information did not have a significant impact on the matrix as the relevant short-term future economic conditions affecting our retail customers in the US are expected to be similar to recent experience.

3. The Group elected to reclassify an existing liability with a carrying value of £570 million from amortised cost to fair value through profit and loss to reduce a measurement mismatch. At transition, the resultant impacts included an increase in the carrying value of the liability of £32 million, a reduction in retained earnings of £40 million and the establishment of an own credit reserve (within other equity reserves) of £7 million.

4. Deferred tax was recognised on the adjustments recorded on the transition to IFRS 9. Reserve impacts are stated net of related deferred tax.

5. Retained earnings included the impact from adjustments 1, 3 and 6.

6. The Group adopted the hedge accounting requirements of IFRS 9, which more closely align with the Group's risk management policies. On transition, it was concluded that all IAS 39 hedge relationships are qualifying IFRS 9 relationships with the treatment of the cost of hedging being the main change. The effect was a reclassification in reserves of a £67 million gain from retained earnings and a £10 million gain from the cash flow hedge reserve, into a new cost of hedging reserve (within other equity reserves). In this reserve, qualifying unrealised gains and losses excluded from hedging relationships are deferred and released systematically into profit or loss to match the timing of hedged items.

37. Transition to new accounting standards continued

(b) Transition to IFRS 9 and IFRS 15 continued

IFRS 15: Revenue from Contracts with Customers

IFRS 15 has primarily changed the accounting for our connection and diversion revenues in our regulated businesses. No practical expedients on transition were applied.

The accounting for revenue under IFRS 15 did not represent a substantive change from the Group's previous practice under IAS 18 for recognising revenue from sales to customers with the exception of the following items:

- Certain pass-through revenues (principally revenues collected on behalf of the Scottish and Offshore transmission operators) were recorded net of operating costs, whereas previously they were recognised gross of operating costs. Had we not adopted IFRS 15, our revenues and operating costs for the year ended 31 March 2019 would have been £1,197 million higher, with no impact to operating profits;
- Contributions for capital works relating to connections for our customers were deferred as contract liabilities on our consolidated statement of financial position on transition, and released over the life of the connection assets. This was a change for our US Regulated business and our UK Gas Transmission business, where previously revenues were recorded once the work was completed. Had we not adopted IFRS 15, our revenues and operating profit for the year ended 31 March 2019 would have been £57 million higher; and
- In the UK, contributions for capital works relating to diversions were recognised as the works are completed. This was a change for the UK regulated businesses where revenues were previously deferred over the life of the asset. Had we not adopted IFRS 15, our revenues and operating profit for the year ended 31 March 2019 would have been £26 million and £23 million lower, respectively.

Adjustments arising in the year ended 31 March 2019 as a result of the transition to IFRS 15:

7. Deferred income from contributions for capital works were reclassified to contract liabilities. In addition, these liabilities for capital works relating to connections have increased as these capital contributions for connections were cumulatively adjusted for on 1 April 2018 and are now deferred and released over the life of the connection assets. This was a change for our US Regulated business and our UK Gas Transmission business where previously revenues were recorded once the work was completed.

   Partially offsetting the increase in contract liabilities for connections was the change in accounting treatment for contributions relating to diversions in our UK businesses. These contributions are recognised as revenue as the works are completed where previously revenue was recognised over the life of the assets.

8. Deferred tax was recorded on the incremental amounts recorded against capital contributions and contract liabilities on the transition to IFRS 15. Deferred tax balances have been calculated at the rate substantially enacted at the balance sheet date.

9. The transition adjustment reflected the net of adjustments 7 and 8 above.

Notes to the consolidated financial statements
– supplementary information continued

38. Acquisition of Geronimo Energy LLC and Emerald Energy Venture LLC

On 11 July 2019, National Grid Ventures acquired 100% of the share capital of Geronimo Energy LLC (Geronimo) and 51% of Emerald Energy Venture LLC (Emerald), which is jointly controlled by National Grid and Washington State Investment Board (WSIB). Geronimo is a leading developer of wind and solar generation based in Minneapolis in the US, and the acquisition is a significant step in National Grid's commitment to the decarbonisation agenda, towards developing and growing a large-scale renewable generation business in the US, and delivering sustainable, reliable and efficient energy. This is National Grid's first ownership stake in wind generation and an expansion of our activities in solar generation. Whilst Geronimo develops the assets, Emerald has a right of first refusal to buy, build and operate those assets.

The total consideration was £209 million, satisfied by a combination of cash and contingent consideration. The contingent consideration has been recorded within trade and other payables for the amount payable within one year, with the remainder recorded within other non-current liabilities. The fair value of contingent consideration recognised is determined as the present value of our best estimate of the value that we will be required to pay, taking into consideration management's estimates of the volume of successful development activity by Geronimo over the relevant period.

The fair values of the assets and liabilities recognised from both the acquisition of the subsidiary, Geronimo, and the joint venture, Emerald, are set out below.

	£m
Intangible assets	5
Property, plant and equipment	1
Investment in joint venture – Emerald	90
Cash	2
Other identifiable assets and liabilities	30
Total identifiable assets	128
Goodwill	81
Total consideration transferred	209
Satisfied by:	
Contingent consideration – Geronimo	70
Cash consideration – Geronimo	49
Cash consideration – Emerald	90
	209

The goodwill arising from the acquisition comprises the value associated with the potential future projects that will be developed by Geronimo as well as the expertise of the management team that have been acquired, neither of which qualify for recognition as tangible or intangible assets. At the acquisition date, there were no material contingent liabilities.

Subsequent to the acquisition date, we made an additional capital contribution of £50 million into Emerald.

Total acquisition-related costs of £3 million have been recognised within operating costs within the consolidated income statement, of which £1 million was recognised in the year ended 31 March 2020.

Geronimo earns revenue from selling its development stage assets to Emerald and other third parties. Emerald generates revenue from the assets it purchases from Geronimo once they are operational and has no other business (see note 16). Neither entity has generated significant revenues or profits for the period between the acquisition date and the reporting date. Even if the acquisition had completed on 1 April 2019, there would have been no significant revenues or profits.

39. Post balance sheet events

In the period between 31 March 2020 and 17 June 2020, there have continued to be substantial environmental, economic and social changes in both the UK and US. As described elsewhere in these Annual Report and Accounts, these have had, and will continue to have, significant ramifications for the Group. Other than as disclosed in respect of those areas where forward-looking forecasts are relevant (notably goodwill impairment reviews (note 11), expected credit losses on financial instruments including trade receivables (notes 19 and 32) and the presumption of the going concern basis generally (note 1)), none of these developments have impacted or caused adjustment to the financial statements.

Company accounting policies

We are required to include the stand-alone balance sheet of our ultimate Parent Company, National Grid plc, under the Companies Act 2006. This is because the publicly traded shares are actually those of National Grid plc (the Company) and the following disclosures provide additional information to shareholders.

A. Basis of preparation
National Grid plc is the Parent Company of the National Grid Group, which is engaged in the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited company, limited by shares. The Company is incorporated and domiciled in England, with its registered office at 1–3 Strand, London, WC2N 5EH.

The financial statements of National Grid plc for the year ended 31 March 2020 were approved by the Board of Directors on 17 June 2020. The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. Accordingly, these individual financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101). In preparing these financial statements the Company applies the recognition and measurement requirements of International Financial Reporting Standards (IFRS) as adopted by the EU, but makes amendments where necessary in order to comply with the provisions of the Companies Act 2006 and sets out below where advantage of the FRS 101 disclosure exemptions has been taken.

These individual financial statements have been prepared on an historical cost basis, except for the revaluation of financial instruments, and are presented in pounds sterling, which is the currency of the primary economic environment in which the Company operates. The 2019 comparative financial information has also been prepared on this basis.

These individual financial statements have been prepared on a going concern basis, which presumes that the Company has adequate resources to remain in operation, and that the Directors intend it to do so, for at least one year from the date the financial statements are signed. As the Company is part of a larger group it participates in the Group's centralised treasury arrangements and so shares banking arrangements with its subsidiaries. The Company is expected to generate positive cash flows or be in a position to obtain finance via intercompany loans to continue to operate for the foreseeable future.

As described further in note 1 to the consolidated financial statements, the Directors have considered the impact of COVID-19 on the Group and on the Company, and have concluded that the Company will have adequate resources to continue in operation for at least 12 months from the signing date of these financial statements. Therefore, they continue to adopt the going concern basis of accounting in preparing the financial statements.

In accordance with the exemption permitted by section 408 of the Companies Act 2006, the Company has not presented its own profit and loss account or statement of comprehensive income.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements of the Company in accordance with FRS 101:
- a cash flow statement and related notes;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management; and
- the effects of new but not yet effective IFRS standards.

The exemption from disclosing key management personnel compensation has not been taken as there are no costs borne by the Company in respect of employees, and no related costs are recharged to the Company.

As the consolidated financial statements of National Grid plc, which are available from the registered office, include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 in respect of certain disclosures required by IFRS 13 'Fair value measurement' and the disclosures required by IFRS 7 'Financial instruments: Disclosures'.

The Company has adopted IFRS 16 with effect from 1 April 2019. The adoption of IFRS 16 has had no impact on the Company.

There are no areas of judgement or key sources of estimation uncertainty that are considered to have a significant effect on the amounts recognised in the financial statements.

The balance sheet has been prepared in accordance with the Company's accounting policies approved by the Board and described below.

B. Fixed asset investments
Investments held as fixed assets are stated at cost less any provisions for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairments are calculated such that the carrying value of the fixed asset investment is the lower of its cost or recoverable amount. Recoverable amount is the higher of its net realisable value and its value-in-use. The Company accounts for common control transactions at cost.

C. Tax
Current tax for the current and prior periods is provided at the amount expected to be paid or recovered using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full on temporary differences which result in an obligation at the balance sheet date to pay more tax, or the right to pay less tax, at a future date, at tax rates expected to apply when the temporary differences reverse based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is provided for using the balance sheet liability method and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax assets are recognised to the extent that it is regarded as more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

Company accounting policies continued

D. Foreign currencies
Transactions in currencies other than the functional currency of the Company are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Gains and losses arising on retranslation of monetary assets and liabilities are included in the profit and loss account.

E. Financial instruments
The Company's accounting policies are the same as the Group's accounting policies under IFRS, namely IAS 32 'Financial Instruments: Presentation', IFRS 9 'Financial Instruments' and IFRS 7 'Financial Instruments: Disclosures'. The Company applies these policies only in respect of the financial instruments that it has, namely investments, derivative financial instruments, debtors, cash at bank and in hand, borrowings and creditors.

The policies are set out in notes 15, 17, 19, 20, 21 and 22 to the consolidated financial statements. The Company is taking the exemption for financial instruments disclosures, because IFRS 7 disclosures are given in notes 32 and 35 to the consolidated financial statements.

F. Hedge accounting
The Company applies the same accounting policy as the Group in respect of fair value hedges and cash flow hedges. This policy is set out in note 32 to the consolidated financial statements.

G. Parent Company guarantees
The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. Such guarantees are accounted for by the Company as insurance contracts. In the event of default or non-performance by the subsidiary, a liability is recorded in accordance with IAS 37 with a corresponding increase in the carrying value of the investment.

H. Share awards to employees of subsidiary undertakings
The issuance by the Company to employees of its subsidiaries of a grant over the Company's options represents additional capital contributions by the Company to its subsidiaries. An additional investment in subsidiaries results in a corresponding increase in shareholders' equity. The additional capital contribution is based on the fair value of the option at the date of grant, allocated over the underlying grant's vesting period. Where payments are subsequently received from subsidiaries, these are accounted for as a return of a capital contribution and credited against the Company's investments in subsidiaries. The Company has no employees.

I. Dividends
Interim dividends are recognised when they are paid to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

J. Directors' remuneration
Full details of Directors' remuneration are disclosed on pages 88 to 108.

Company balance sheet
as at 31 March

	Notes	2020 £m	2019 £m
Fixed assets			
Investments	1	**14,362**	9,923
Current assets			
Debtors (amounts falling due within one year)	2	**12,427**	12,625
Debtors (amounts falling due after more than one year)	2	**398**	358
Investments	5	**752**	895
Cash at bank and in hand		**2**	75
Total current assets		**13,579**	13,953
Creditors (amounts falling due within one year)	3	**(16,836)**	(15,529)
Net current liabilities		**(3,257)**	(1,576)
Total assets less current liabilities		**11,105**	8,347
Creditors (amounts falling due after more than one year)	3	**(2,620)**	(2,648)
Net assets		**8,485**	5,699
Equity			
Share capital	7	**470**	458
Share premium account		**1,301**	1,314
Cash flow hedge reserve		**(28)**	1
Cost of hedging reserve		**(6)**	–
Other equity reserves		**399**	380
Profit and loss account	8	**6,349**	3,546
Total shareholders' equity		**8,485**	5,699

The Company's profit after tax for the year was £3,684 million (2019: £202 million loss). Profits available for distribution by the Company to shareholders were in excess of £5 billion at 31 March 2020. The financial statements of the Company on pages 209 to 215 were approved by the Board of Directors on 17 June 2020 and were signed on its behalf by:

Sir Peter Gershon Chairman
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Company statement of changes in equity
for the years ended 31 March

	Share capital £m	Share premium account £m	Cash flow hedge reserve £m	Cost of hedging reserve £m	Other equity reserves £m	Profit and loss account £m	Total shareholders' equity £m
At 1 April 2018	452	1,321	2	–	353	4,892	7,020
Loss for the year	–	–	–	–	–	(202)	(202)
Other comprehensive loss for the year							
Transferred from equity (net of tax)	–	–	(1)	–	–	–	(1)
Total comprehensive loss for the year	–	–	(1)	–	–	(202)	(203)
Other equity movements							
Scrip dividend-related share issue[1]	6	(7)	–	–	–	–	(1)
Issue of treasury shares	–	–	–	–	–	18	18
Purchase of own shares	–	–	–	–	–	(2)	(2)
Share awards to employees of subsidiary undertakings	–	–	–	–	27	–	27
Equity dividends	–	–	–	–	–	(1,160)	(1,160)
At 31 March 2019	458	1,314	1	–	380	3,546	5,699
Profit for the year[2]	–	–	–	–	–	3,684	3,684
Other comprehensive (loss)/profit for the year							
Transferred from equity (net of tax)	–	–	(29)	(6)	–	–	(35)
Total comprehensive (loss)/profit for the year	–	–	(29)	(6)	–	3,684	3,649
Other equity movements							
Scrip dividend-related share issue[1]	12	(13)	–	–	–	–	(1)
Issue of treasury shares	–	–	–	–	–	17	17
Purchase of own shares	–	–	–	–	–	(6)	(6)
Share awards to employees of subsidiary undertakings	–	–	–	–	19	–	19
Equity dividends	–	–	–	–	–	(892)	(892)
At 31 March 2020	**470**	**1,301**	**(28)**	**(6)**	**399**	**6,349**	**8,485**

1. Included within the share premium account are costs associated with scrip dividends.
2. Included within profit for the year is dividend income from subsidiaries of £3,887 million (2019: £nil).

Notes to the Company financial statements

1. Fixed asset investments

	Shares in subsidiary undertakings £m
At 1 April 2018	9,896
Additions	27
At 31 March 2019	9,923
Additions	7,011
Disposals	(2,572)
At 31 March 2020	**14,362**

During the year there was a capital contribution of £19 million (2019: £27 million) which represents the fair value of equity instruments granted to subsidiaries' employees arising from equity-settled employee share schemes.

Furthermore, the Company made a further investment of £2,000 million in National Grid (US) Holdings Limited, following a rights issue by that company; acquired National Grid (US) Investments 2 Limited from an indirect subsidiary undertaking for £2,420 million; and disposed of its investments in National Grid Holdings One plc and National Grid (US) Investments 2 Limited in exchange for an investment in National Grid Luxembourg Sarl at a cost of £2,572 million.

The Company's direct subsidiary undertakings as at 31 March 2020 were as follows: National Grid (US) Holdings Limited; NGG Finance plc; and National Grid Luxembourg Sarl. The names of indirect subsidiary undertakings, joint ventures and associates are included in note 34 to the consolidated financial statements.

The Directors believe that the carrying value of the investments is supported by the fair value of their underlying net assets.

2. Debtors

	2020 £m	2019 £m
Amounts falling due within one year		
Derivative financial instruments (see note 4)	**37**	110
Amounts owed by subsidiary undertakings	**12,390**	12,514
Prepayments and accrued income	**–**	1
	12,427	12,625
Amounts falling due after more than one year		
Derivative financial instruments (see note 4)	**27**	–
Amounts owed by subsidiary undertakings	**363**	358
Deferred tax	**8**	–
	398	358

The carrying values stated above are considered to represent the fair values of the assets. For the purposes of the impairment assessment, loans to subsidiary undertakings are considered low credit risk as the subsidiaries are solvent and are covered by the Group's liquidity arrangements.

A reconciliation of the movement in deferred tax in the year is shown below:

	Deferred tax £m
At 1 April 2018	(1)
Credited to equity	1
At 31 March 2019	–
Charged to equity	8
At 31 March 2020	**8**

Notes to the Company financial statements continued

3. Creditors

	2020 £m	2019 £m
Amounts falling due within one year		
Borrowings (see note 6)	**666**	1,275
Derivative financial instruments (see note 4)	**278**	92
Amounts owed to subsidiary undertakings	**15,834**	14,104
Other creditors	**58**	58
	16,836	15,529
Amounts falling due after more than one year		
Borrowings (see note 6)	**355**	346
Derivative financial instruments (see note 4)	**160**	228
Amounts owed to subsidiary undertakings	**2,105**	2,074
	2,620	2,648
Amounts owed to subsidiary undertakings falling due after more than one year are repayable as follows:		
In 1 to 2 years	**–**	1,077
In 4 to 5 years	**443**	–
More than 5 years	**1,662**	997
	2,105	2,074

The carrying values stated above are considered to represent the fair values of the liabilities.

4. Derivative financial instruments

The fair values of derivative financial instruments are:

	2020			2019		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Amounts falling due within one year	**37**	**(278)**	**(241)**	110	(92)	18
Amounts falling due after more than one year	**27**	**(160)**	**(133)**	–	(228)	(228)
	64	**(438)**	**(374)**	110	(320)	(210)

For each class of derivative, the notional contract[1] amounts are as follows:

	2020 £m	2019 £m
Interest rate swaps	**–**	(1,208)
Cross-currency interest rate swaps	**(3,804)**	(2,900)
Foreign exchange forward contracts	**(7,886)**	(7,920)
	(11,690)	(12,028)

1. The notional contract amounts of derivatives indicate the gross nominal value of transactions outstanding at the balance sheet date.

5. Investments

	2020 £m	2019 £m
Investments in short-term money funds	**572**	672
Restricted balances – collateral	**180**	223
	752	895

6. Borrowings
The following table analyses the Company's total borrowings:

	2020 £m	2019 £m
Amounts falling due within one year		
Bank loans	**46**	–
Bonds	**2**	435
Commercial paper	**618**	840
	666	1,275
Amounts falling due after more than one year		
Bonds	**355**	346
	1,021	1,621

The maturity of total borrowings is as follows:

	2020 £m	2019 £m
Total borrowings are repayable as follows:		
Less than 1 year	**666**	1,275
In 1 to 2 years	**355**	–
In 2 to 3 years	**–**	346
In 3 to 4 years	**–**	–
In 4 to 5 years	**–**	–
More than 5 years	**–**	–
	1,021	1,621

The notional amount of borrowings outstanding as at 31 March 2020 was £1,018 million (2019: £1,618 million).

7. Share capital
The called-up share capital amounting to £470 million (2019: £458 million) consists of 3,780,237,016 ordinary shares of $12^{204/473}$ pence each (2019: 3,687,483,073 ordinary shares of $12^{204/473}$ pence each). For further information on share capital, refer to note 27 of the consolidated financial statements.

8. Shareholders' equity and reserves
At 31 March 2020, the profit and loss account reserve stood at £6,349 million (2019: £3,546 million) of which profits available for distribution by the Company to shareholders were in excess of £5 billion at 31 March 2020. The Company bore no employee costs in either the current or prior year.

For further details of dividends paid and payable to shareholders, refer to note 9 of the consolidated financial statements.

9. Parent Company guarantees
The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. At 31 March 2020, the sterling equivalent amounted to £2,169 million (2019: £2,152 million). The guarantees are for varying terms from less than one year to open-ended.

In addition, as part of the sectionalisation of the National Grid UK Pension Scheme on 1 January 2017, a guarantee of £1 billion has been provided to Section A. This payment is contingent on insolvency or on failure to pay pensions obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total). Refer to note 25 of the consolidated financial statements.

10. Audit fees
The audit fee in respect of the Parent Company was £27,000 (2019: £26,000). Fees payable to Deloitte for non-audit services to the Company are not required to be disclosed as they are included within note 4 to the consolidated financial statements.

4. Additional Information

The business in detail

Key milestones

Some of the key dates and actions in the corporate history of National Grid are listed below. Our full history goes back much further.

1986
British Gas (BG) privatisation

1990
Electricity transmission network in England and Wales transfers to National Grid on electricity privatisation

1995
National Grid listed on the London Stock Exchange

1997
Centrica demerges from BG

Energis demerges from National Grid

2000
Lattice Group demerges from BG and is listed separately

New England Electric System and Eastern Utilities Associates acquired

2002
Niagara Mohawk Power Corporation merges with National Grid in US

National Grid and Lattice Group merge to form National Grid Transco

2004
UK wireless infrastructure network acquired from Crown Castle International Corp

2005
Four UK regional gas distribution networks sold and we adopt National Grid as our name

2006
Rhode Island gas distribution network acquired

2007
UK and US wireless infrastructure operations and the Basslink electricity interconnector in Australia sold

KeySpan Corporation acquired

2008
Ravenswood generation station sold

2010
Rights issue raises £3.2 billion

2012
New Hampshire electricity and gas distribution businesses sold

2016
National Grid separates the UK Gas Distribution business

2017
National Grid sells a 61% equity interest in the UK Gas Distribution business

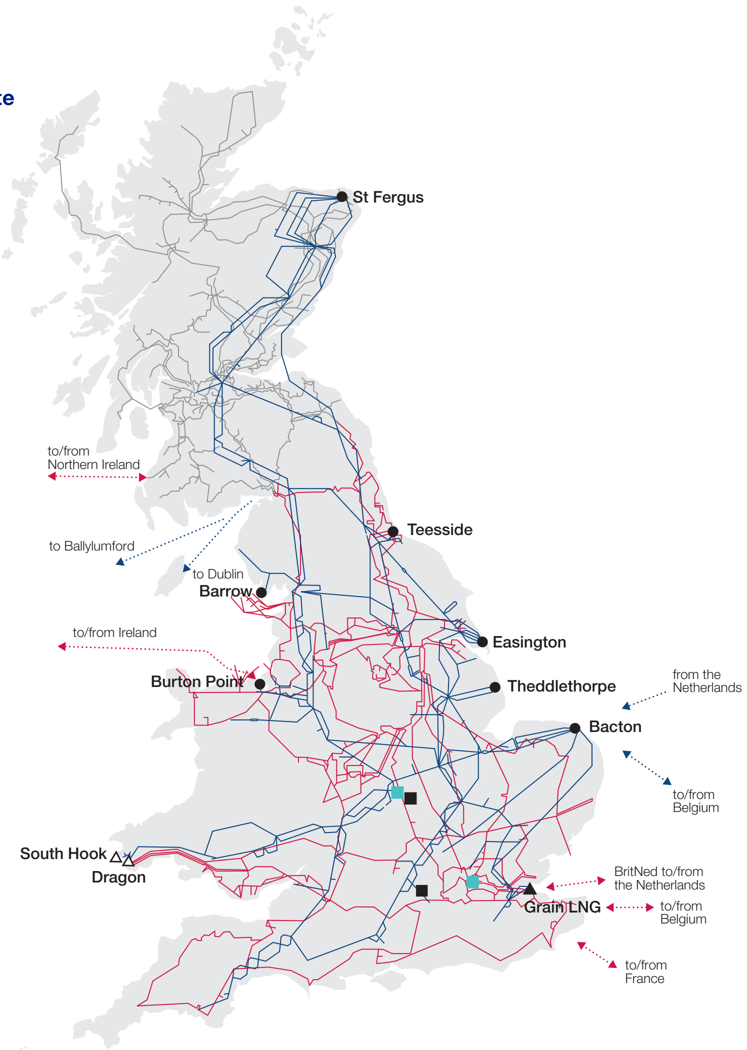
2019
National Grid separates the UK Electricity System Operator business

National Grid sells its remaining 39% equity interest in UK Gas Distribution business

Acquisition of Geronimo

The business in detail continued

Where we operate
Our UK network



UK Transmission[1]

- Scottish electricity transmission system
- English and Welsh electricity transmission system

Approximately 4,481 miles (7,212 kilometres) of overhead line, 1,391 miles (2,239 kilometres) of the underground cable and 347 substations.

- Gas transmission system

Approximately 4,740 miles (7,630 kilometres) of high-pressure pipe and 24 compressor stations connecting to eight distribution networks and third-party independent systems.

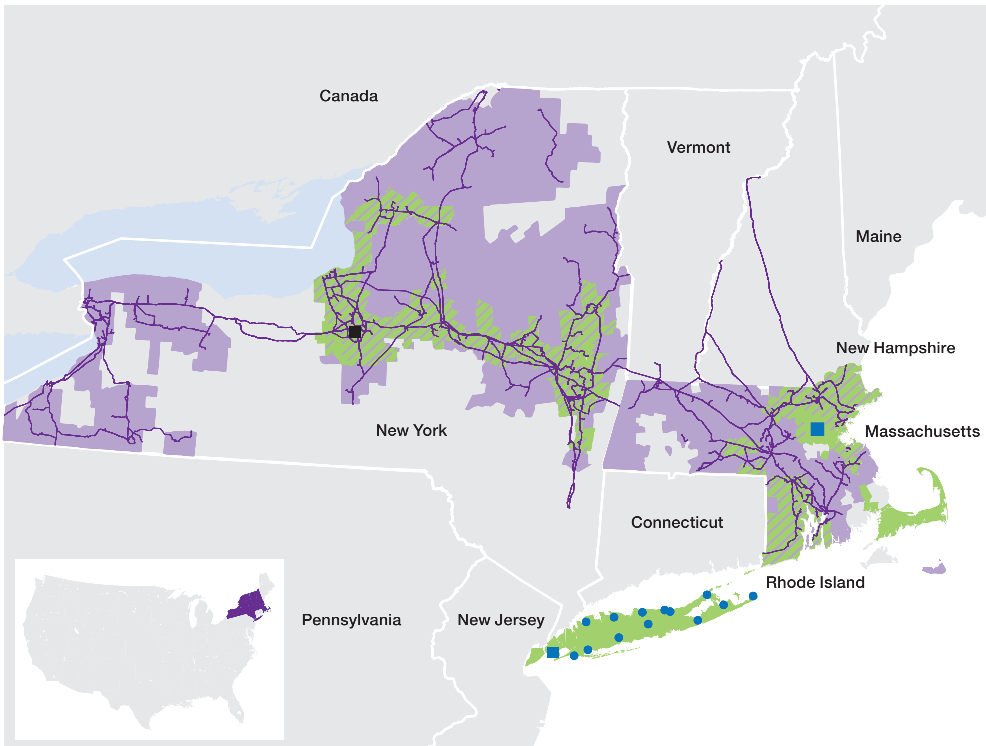
- Terminal
- LNG terminal owned by National Grid
- LNG terminal
- Electricity interconnector
- Gas interconnector

Principal offices

- Owned office space: Warwick and Wokingham
- Leased office space[2]: Solihull and London

Leased office space totalling 134,704 square feet (12,515 square metres) with remaining terms three to six years.

Our US network



US regulated[1]

- Electricity transmission network
- Gas distribution operating area
- Electricity distribution area
- Gas and electricity distribution area overlap

An electricity transmission network of approximately 9,109 miles (14,659 kilometres) of overhead line, 105 miles (169 kilometres) of underground cable and 396 transmission substations.

An electricity distribution network of approximately 73,004 circuit miles (117,488 kilometres) and 730 distribution substations in New England and upstate New York.

A network of approximately 35,682 miles (57,425 kilometres) of gas pipeline. Our network also consists of approximately 498 miles (801 kilometres) of gas transmission pipe, as defined by the US Department of Transportation.

- Generation

Principal offices

- Owned office space: Syracuse, New York
- Leased office space: Brooklyn, New York and Waltham, Massachusetts

Leased office space totalling approximately 635,000 square feet (58,993 square metres) with remaining terms of five to nine years.

In January 2020, we announced we had executed a lease for 86,000 square feet (7,990 square metres) of office space at 2 Hanson Place, Downtown Brooklyn, New York. The lease is anticipated to commence in January 2021. We will begin to exit our current One MetroTech Brooklyn location in phases at the end of the calendar year 2020. Space anticipated to be vacated is being marketed for sub-lease. The MetroTech lease terminates in February 2025 and will not be renewed.

At present, environmental issues are not preventing our UK and US businesses from utilising any material operating assets in the course of their operations.

1. Access to electricity and gas transmission assets on property owned by others is controlled through various agreements.
2. The Warwick (Telent) building lease was terminated on a break clause and was vacated on 24 December 2019.

UK regulation

Our licences to participate in transmission and interconnection activities are established under the Gas Act 1986 and the Electricity Act 1989, as amended (the Acts). These require us to develop, maintain and operate economic and efficient networks and to facilitate competition in the supply of gas and electricity in Great Britain (GB). They also give us statutory powers, including the right to bury our pipes or cables under public highways and the ability to use compulsory powers to purchase land so we can conduct our business.

Our licensed activities are regulated by Ofgem, which has a statutory duty under the Acts to protect the interests of consumers. To protect consumers from the ability of companies to set unduly high prices, Ofgem has established price controls that limit the amount of revenue such regulated businesses can earn. In setting price controls, Ofgem must have regard to the need to secure that licence holders are able to finance their obligations under the Acts. Licensees and other affected parties can appeal licence modifications which have errors, including in respect of financeability. This should give us a level of revenue for the duration of the price control that is sufficient to meet our statutory duties and licence obligations with a reasonable return on our investments.

The price controls include a number of mechanisms designed to help achieve their objectives. These include financial incentives that encourage us to:

- efficiently deliver, through investment and maintenance, the network outputs that customers and stakeholders require, including reliable supplies, new connections and infrastructure capacity;
- innovate so we can continuously improve the services we give our customers, stakeholders and communities; and
- efficiently balance the transmission networks to support the wholesale markets.

The main price controls for electricity and gas transmission networks came into effect on 1 April 2013 for the eight-year period until 31 March 2021. They follow the RIIO (revenue = incentives + innovation + outputs) framework established by Ofgem.

Following the sale of a majority interest in the National Grid UK Gas Distribution business (now known as Cadent) on 31 March 2017, Cadent now has responsibility for operating within the price controls relating to its four gas distribution networks. In November 2018, we announced our decision to exercise our Options for the sale of our remaining 39% share in Cadent and this completed in June 2019.

Our UK gas and electricity transmission and system operator businesses operate under four separate price controls. These comprise two for our electricity operations, one covering our role as Transmission Owner (TO) and the other for our role as System Operator (SO), and two for our gas operations, again one as TO and one as SO. In addition to the four regulated network price controls, there is also a tariff cap price control applied to certain elements of domestic sized metering activities carried out by National Grid Metering and also regulation of our electricity interconnector interests.

In 2017 Ofgem, the Department for Business, Energy and Industrial Strategy (BEIS) and National Grid plc agreed to create a legally separate business, the Electricity System Operator (ESO), within the National Grid Group. The ESO became a separate entity within the Group on 1 April 2019.

A primary goal of ESO legal separation in April 2019 was to increase transparency of our activities and help minimise any perceived conflicts of interest as we take on the challenge of driving forward the energy transformation. There are clear signals from Ofgem and the broader regulatory context that the ESO will play a crucial role in the changing energy environment. As an asset-light and service-based entity the ESO is also fundamentally different from other regulated network companies. The new price control arrangements for RIIO-2 are therefore an opportunity to implement a new regulatory framework that enables us to meet our stakeholders' expectations.

In April 2018, Ofgem introduced a new regulatory and incentives framework for the ESO. This moved away from the use of targeted, mechanistic incentives towards a 'principles-based' evaluative incentives approach. The new approach includes a set of 'Roles and Principles' designed to set clear expectations about the baseline behaviours we expect from the ESO and a requirement for the ESO to produce a Forward Plan, following stakeholder engagement, demonstrating the activities it will undertake over the year to add value for consumers. Ofgem's ESO Performance Panel will challenge the ESO on its plans, evaluate its performance and make recommendations to Ofgem. At the end of the year, Ofgem will decide whether to financially reward or penalise the ESO up to a maximum cap and floor (where sales revenues above the cap are returned to transmission system users, and revenues below the floor are topped up by transmission system users, thus reducing the overall project risk) of ±£30 million, informed by the Performance Panel's recommendations, as well as other evidence collected throughout the year.

In 2019, the ESO published a mission and set of ambitious goals accompanied by its Forward Plan and its RIIO-2 business plan to set out what, when and how it delivers. This RIIO-2 business plan reflects the ambition shared by us and Ofgem for the ESO to be innovative, ambitious and agile, responding to stakeholder needs and the changing energy landscape.

Ofgem published terms of reference for a review of system operators on 13 February 2020. The aim of the review is to consider the current and future challenges facing GB System Operation and assess whether the right governance framework is in place to deliver the UK's net zero emissions target at lowest cost to consumers. A report on the outcome of the review will be produced which is expected to be received in June 2020 or later.

Interconnectors derive their revenues from sales of capacity to users who wish to move power between market areas with different prices. Under European legislation, these capacity sales are classified as 'congestion revenues'. This is because the market price differences result from congestion on the established interconnector capacity which limits full price convergence. European legislation governs how congestion revenues may be used and how interconnection capacity is allocated. It requires all interconnection capacity to be allocated to the market through auctions. Under UK legislation, interconnection businesses must be separate from transmission businesses.

There is a range of different regulatory models available for interconnector projects. These involve various levels of regulatory intervention, ranging from fully merchant (where the project is fully reliant on sales of interconnector capacity) to cap and floor.

The cap and floor regime is now the regulated route for interconnector investment in GB and may be sought by project developers who do not qualify for, or do not wish to apply for, exemptions from European legislation which would facilitate a merchant development.

RIIO price controls

The building blocks of the RIIO price control are broadly similar to the price controls historically used in the UK. There are, however, some significant differences in the mechanics of the calculations.

How is revenue calculated?

Under RIIO, the outputs we deliver are explicitly articulated and our allowed revenues are linked to their delivery. These outputs were determined through an extensive consultation process, which gave stakeholders a greater opportunity to influence the decisions.

There are five output categories for transmission under the current RIIO price controls:

Safety: ensuring the provision of a safe energy network.

Reliability (and availability): promoting networks capable of delivering long-term reliability, minimising the number and duration of interruptions experienced during the price control period and ensuring adaptation to climate change.

Environmental impact: encouraging companies to play their role in achieving broader environmental objectives, specifically, facilitating the reduction of carbon emissions, as well as minimising their own carbon footprint.

Customer and stakeholder satisfaction: maintaining high levels of customer satisfaction and stakeholder engagement, and improving service levels.

Customer connections: encouraging networks to connect customers quickly and efficiently.

The business in detail continued

Within each of these output categories are a number of primary and secondary deliverables that reflect what our stakeholders want us to deliver over the remaining price control period and in preparation for future periods. The nature and number of these deliverables vary according to the output category. Some are linked directly to our allowed revenue and some to legislation, while others have only a reputational impact.

Using information we have submitted, along with independent assessments, Ofgem determines the efficient level of expected costs necessary for these deliverables to be achieved. Under RIIO this is known as 'totex', which is a component of total allowable expenditure and is broadly the sum of what was defined in previous price controls as operating expenditure (opex) and capital expenditure (capex).

A number of assumptions are necessary in setting allowances for these outputs, including the volumes of work that will be needed and the price of the various external inputs required to achieve them. Consequently, there are a number of uncertainty mechanisms within the RIIO framework that can result in adjustments to totex allowances if actual input prices or work volumes differ from the assumptions.

Where we under- or over-spend the allowed totex for reasons that are not covered by uncertainty mechanisms, there is a 'sharing' factor. This means we share the under- or over-spend with customers through an adjustment to allowed revenues in future years. This sharing factor provides an incentive for us to provide the outputs efficiently, as we are able to keep a portion of savings we make, with the remainder benefiting our customers.

The extended eight-year length of the first round of RIIO price controls is one of the ways that RIIO has given innovation more prominence. Innovation refers to all the new ways of working that deliver outputs more efficiently. This broad challenge has an impact on everyone in our business.

Allowed revenue to fund totex costs is split between RIIO 'fast' and 'slow' money categories using specified ratios that are fixed for the duration of the price control. Fast money represents the amount of totex we are able to recover in the year of expenditure. Slow money is added to our Regulatory Asset Value (RAV) – effectively the regulatory IOU. (For more details on the sharing factors under RIIO, please see the table overleaf).

In addition to fast money, each year we are allowed to recover regulatory depreciation, i.e. a portion of the RAV and a return on the outstanding RAV balance. Regulatory depreciation in electricity and gas transmission permits recovery of RAV consistent with each addition bringing benefit to consumers for a period of up to 45 years. We are also allowed to collect additional revenues related to non-controllable costs and incentives. In addition to totex sharing, RIIO incentive mechanisms can increase or decrease our allowed revenue to reflect our performance against various other measures related to our outputs. For example, performance against our customer and stakeholder satisfaction targets can have a positive or negative effect of up to 1% of allowed annual revenues. Many of our incentives affect our revenues two years after the year of performance.

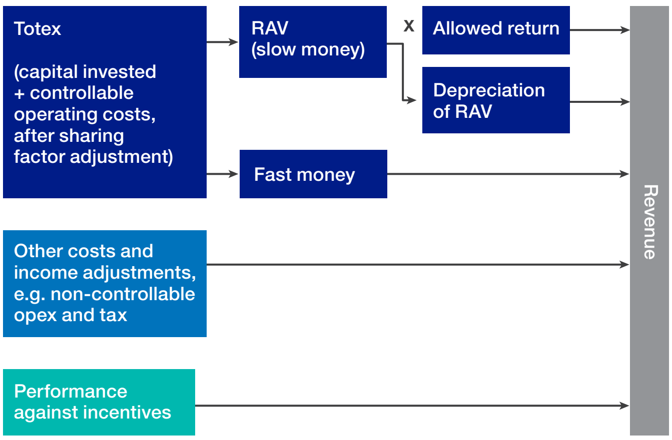
During the eight-year period of the RIIO-T1 price control, our regulator included a provision for a mid-period review, which was completed during 2017 and led to some changes in allowances relating to certain specific costs. Further to the mid-period review, National Grid volunteered that £480 million (in 2009/10 prices) of allowances for electricity transmission investments should be deferred. In August 2017, Ofgem determined how the RIIO allowances would be correspondingly adjusted.

In addition, the RIIO-T1 price controls for transmission included a 're-opener mechanism', in relation to certain specific cost categories where there was uncertainty about expenditure requirements at the time of setting allowances. Both our gas and electricity transmission businesses requested additional funding under this mechanism in May 2018, leading to some changes to the allowed revenues.

Competition in onshore transmission
Ofgem stated in its final decision on the RIIO-T1 price control for electricity transmission that it would consider holding a competition to appoint the constructor and owner of suitably large new transmission projects, rather than including these new outputs and allowances in existing transmission licensee price controls. In the absence of the legislation needed to support a competition, at the end of July 2018, and after consultation, Ofgem decided to fund the delivery of the Hinkley-Seabank (HSB) electricity transmission project by National Grid through a regulatory model called the 'Competition Proxy Model' (CPM). This regulatory model seeks to replicate the outcome of an efficient competitive process for the financing, construction and operation of the project and to provide National Grid Electricity Transmission with a project-specific revenue allowance over the period of its construction and 25 years of operation, but with reduced allowances reflecting prices that Ofgem has observed in other competitions. Ofgem subsequently updated the analysis which supported this decision, and in October 2019 consulted on a new minded-to position to fund delivery of the HSB project through the Strategic Wider Works (SWW) mechanism under the RIIO price control framework, rather than through the CPM as previously intended. The CPM is intended to be a 'late competition' model.

The ESO, at Ofgem's request, is developing an Early Competition Plan. This plan will set out how a model for Early Competition could be implemented, identifying the process, roles and responsibilities, code and licence changes required along with cost and timescales to implement. Plans are being co-created with stakeholders to ensure developed model(s) are attractive to potential bidders in addition to being achievable and aligned with network planning processes. As part of this work, the ESO is also considering what, if any, role the ESO could have in distribution level competition. The Early Competition Plan is due to be completed by the end of February 2021.

Simplified illustration of RIIO regulatory building blocks



Allowed returns
The cost of capital allowed under our current RIIO price controls is as follows:

	Transmission	
	Gas	Electricity
Cost of equity (post-tax real)	6.8%	7.0%
Cost of debt (pre-tax real)	iBoxx 10-year simple trailing average index (1.58% for 2019/20)	
Notional gearing	62.5%	60.0%
Vanilla WACC[1]	3.54%	3.75%

1. Vanilla WACC = cost of debt × gearing + cost of equity × (1-gearing).

Sharing factors are used to share over- and under-spends of allowed totex between the businesses and customers. The sharing figures displayed in the table below are the sharing factors that apply to our electricity and gas transmission businesses, for both TO and SO.

Sharing factors and fast:slow money ratios under our current RIIO price controls are as follows:

	Gas Transmission		Electricity Transmission	
	Transmission owner	**System operator**	**Transmission owner**	**System operator**
Fast[1]	Baseline[3] 35.6% Uncertainty 10%	62.60%	15.00%	72.10%
Slow[2]	Baseline[3] 64.4% Uncertainty 90%	37.40%	85.00%	27.90%
Sharing	44.36%		46.89%	

1. Fast money allows network companies to recover a percentage of totex within a one-year period.
2. Slow money is where costs are added to RAV and, therefore, revenues are recovered slowly (e.g. over 45 years) from both current and future customers.
3. The baseline is the expenditure that is funded through ex-ante allowances, whereas the uncertainty adjusts the allowed expenditure where the level of outputs delivered differ from the baseline level, or if triggered by an event.

RIIO-2

Ofgem has started work on the next round of RIIO price controls (RIIO-2) for the energy network sectors it regulates, including both gas and electricity transmission. It has consulted on a wide range of topics, including incentives, outputs, the cost of capital and other financial parameters. Decisions that have already been taken include reducing the default price control duration back to five years from eight years, extending the role of competition where appropriate from electricity transmission to other sectors and moving away from RPI to CPIH for inflation measurement when calculating RAV and allowed returns. In addition, Ofgem has proposed a methodology for the baseline-allowed cost of equity which, based on the evidence available, it used in May 2019 to calculate its working assumption for RIIO-2 that is lower than the value under the current RIIO price controls. The RIIO-2 proposals will also apply, in part, to the ESO, but due to the nature of its activities some elements are less applicable to the ESO, and Ofgem has proposed that the duration will remain as a five-year price control, but with business plans (and totex allowances) it will be on a two-year cycle and overall the financial framework for the ESO is likely to be very different.

We and other stakeholders will continue to work with Ofgem to develop the framework and parameters for RIIO-2. We submitted business plans in December 2019 and Ofgem is expected to publish and consult on its draft determination in summer 2020, followed by the final price control determination for transmission companies before the end of 2020.

US regulation

Regulators

In the US, public utilities' retail transactions are regulated by state utility commissions. The commissions serve as economic regulators, approving cost recovery and authorised rates of return. The state commissions establish the retail rates to recover the cost of transmission and distribution services, and focus on services and costs within their jurisdictions. They also serve the public interest by making sure utilities provide safe and reliable services at just and reasonable prices. The commissions establish service standards and approve public utility mergers and acquisitions.

The Federal Energy Regulatory Commission (FERC) regulates wholesale transactions for utilities, such as interstate transmission and wholesale electricity sales, including rates for these services, at the federal level. FERC also regulates public utility holding companies and centralised service companies, including those of our US businesses.

Regulatory process

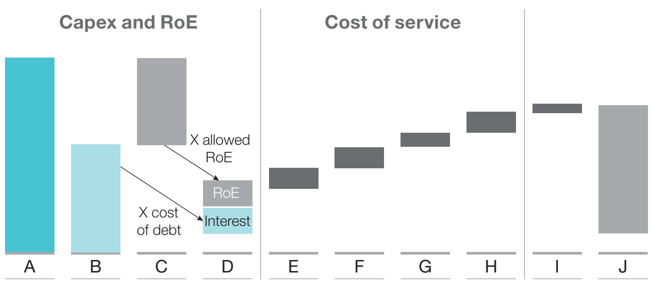
The US regulatory regime is premised on allowing the utility the opportunity to recover its cost of service and earn a reasonable return on its investments as determined by the commission. Utilities submit formal rate filings (rate cases) to the relevant state regulator when additional revenues are necessary to provide safe, reliable service to customers. Utilities can be compelled to file a rate case, either due to complaints filed with the commission or at the commission's own discretion.

The rate case is typically litigated with parties representing customers and other interests. In the states where we operate, it can take 9 to 13 months for the commission to render a final decision. The utility is required to prove that the requested rate change is prudent and reasonable, and the requested rate plan can span multiple years. Unlike the state processes, the federal regulator has no specified timeline for adjudicating a rate case; typically it makes a final decision retroactive when the case is completed.

Gas and electricity rates are established from a revenue requirement, or cost of service, equal to the utility's total cost of providing distribution or delivery service to its customers, as approved by the commission in the rate case. This revenue requirement includes operating expenses, depreciation, taxes and a fair and reasonable return on shareholder capital invested in certain components of the utility's regulated asset base. This is typically referred to as its rate base.

The final revenue requirement and rates for service are approved in the rate case decision. The revenue requirement is derived from a comprehensive study of the utility's total costs during a recent 12-month period of operations, referred to as a test year. Each commission has its own rules and standards for adjustments to the test year. These may include forecast capital investments and operating costs.

US regulatory revenue requirement



A Rate base
B Debt
C Equity
D Return
E Controllable costs
F Non-controllable costs
G Depreciation
H Taxes
I Lagged recoveries
J Allowed revenue

Our rate plans

Each operating company has a set of rates for service. We have three electric distribution operations (upstate New York, Massachusetts and Rhode Island) and six gas distribution networks (upstate New York, New York City, Long Island, Massachusetts (two) and Rhode Island).

Our distribution operating companies have revenue decoupling mechanisms that delink their revenues from the quantity of energy delivered and billed to customers. These mechanisms remove the natural disincentive utility companies have for promoting and encouraging customer participation in energy-efficiency programmes that lower energy end use and distribution volumes.

The business in detail continued

We bill our customers for their use of electricity and gas services. Customer bills typically cover the cost of electricity or gas delivered, and charges covering our delivery service. With the exception of residential gas customers in Rhode Island, our customers are allowed to select an unregulated competitive supplier for the commodity component of electricity and gas utility services.

A substantial proportion of our costs, in particular electricity and gas commodity purchases, are 'pass-through' costs. This means they are fully recoverable from our customers. We recover 'pass-through' costs through making separate charges to customers, designed to recover those costs with no profit. We adjust rates from time to time to make sure that any over- or under-recovery of these costs is returned to, or recovered from, our customers.

Our rate plans are designed to a specific allowed Return on Equity (RoE), by reference to an allowed operating expense level and rate base. Some rate plans include earnings-sharing mechanisms that allow us to retain a proportion of the earnings above our allowed RoE, achieved through improving efficiency, with the balance benefiting customers.

In addition, our performance under certain rate plans is subject to service performance targets. We may be subject to monetary penalties in cases where we do not meet those targets.

Our FERC-regulated transmission companies use formula rates (instead of periodic stated rate cases) to set rates annually that recover their cost of service. Through the use of annual true-ups, formula rates recover our actual costs incurred and the allowed RoE based on the actual transmission rate base each year. We must make annual formula rate filings documenting the revenue requirement that customers can review and challenge.

Revenue for our wholesale transmission businesses in New England and New York is collected from wholesale transmission customers. These are typically other utilities and include our own New England electricity distribution businesses. With the exception of upstate New York, which continues to combine retail transmission and distribution rates to end-use customers, these wholesale transmission costs are incurred by distribution utilities on behalf of their customers. They are fully recovered as a pass-through from end-use customers, as approved by each state commission.

Our Long Island generation plants sell capacity to the Long Island Power Authority (LIPA) under 15-year and 25-year power supply agreements and within wholesale tariffs approved by FERC. Through the use of cost-based formula rates, these long-term contracts provide a similar economic effect to cost-of-service rate regulation.

One measure used to monitor the performance of our regulated businesses is a comparison of achieved RoE to allowed RoE. However, this measure cannot be used in isolation, as several factors may prevent us from achieving the allowed RoE. These include financial market conditions, regulatory lag and decisions by the regulator preventing cost recovery in rates from customers.

We work to increase achieved RoE through:

- productivity improvements;
- positive performance against incentives or earned savings mechanisms, such as available energy-efficiency programmes; and
- filing a new rate case when achieved returns are lower than those the Company could reasonably expect to attain through a new rate case.

US regulatory filings

The objectives of our rate case filings are to make sure we have the right cost of service and are able to earn a fair and reasonable rate of return, while providing safe, reliable and economical service. To achieve these objectives and reduce regulatory lag, we have been requesting structural changes, such as:

- revenue decoupling mechanisms;
- capital trackers;
- commodity-related bad debt true-ups;
- pension and other post-employment benefit true-ups, separately from base rates; and
- performance-based frameworks such as incentives and multi-year plans.

We explain these terms below in the table on page 226.

Below, we summarise significant, recent developments in rate filings and the regulatory environment. In 2017/18, we made full rate case filings with Niagara Mohawk (electric and gas), in April 2017; Boston Gas and Colonial Gas, in November 2017; and the Narragansett Electric Company, also in November 2017. A joint proposal, setting forth a three-year rate plan for Niagara Mohawk, was approved by the New York State Public Service Commission (NYPSC) in March 2018. An amended settlement agreement setting forth a three-year rate plan for the Narragansett Electric Company was approved by the Rhode Island Public Utilities Commission (RIPUC) in August 2018. An order, establishing new base rates for Boston Gas and Colonial Gas, was approved by the Massachusetts Department of Public Utilities (MADPU) in September 2018. In 2018/19, we made a full rate case filing for Massachusetts Electric in November 2018. In 2019/20, we made a full rate case filing for KEDNY and KEDLI in April 2019. More recently, an order, setting forth a five-year performance-based ratemaking plan, was approved by MADPU in September 2019. These filings are expected to capture the benefit of recent increased investments in asset replacement and network reliability, and reflect long-term growth in costs, including property tax and healthcare costs.

Massachusetts

Massachusetts Electric and Nantucket Electric rate cases

We filed a rate case for Massachusetts Electric and Nantucket Electric with MADPU on 15 November 2018 with new rates effective on 1 October 2019. The Massachusetts Electric rate case is the first for Massachusetts Electric and Nantucket Electric since the case filed in 2015. It updates the electric companies' rates to more closely align revenues with the cost of service and bring their earned RoEs closer to the allowed RoE. New rates were approved with an allowed RoE of 9.6% on an equity ratio of 53.5%. MADPU approved a five-year performance-based ratemaking plan, which adjusts distribution rates annually based on a predetermined formula. As part of its decision, MADPU is requiring a management audit addressing the Company's strategic planning processes, staffing decisions and its relationship to National Grid USA Service Company. The audit will take place in two phases beginning in mid-2020 and ending with a final report in 2021. The Company cannot predict the outcome of this proceeding.

Merger of Boston Gas Company and Colonial Gas Company

On 16 December 2019, MADPU approved the Company's proposal to legally merge Colonial Gas Company into Boston Gas Company. The two companies had already effectively consolidated their operations, but the legal merger of these two entities allows for certain small efficiencies and cost savings. The legal merger was effective as of 15 March 2020. However, for ratemaking purposes, the Company must still maintain separate rates for customers of legacy Boston Gas Company and legacy Colonial Gas Company, until otherwise approved by MADPU.

Statewide assessment of gas pipeline safety
In November 2018, MADPU initiated an independent statewide pipeline safety audit of the natural gas distribution systems in Massachusetts and hired an independent auditor. The auditor assessed the safety of the gas systems in the entire state and made recommendations for improvements that may impact operations of Boston and Colonial Gas and pipeline safety compliance requirements in the future. The auditor's final report was issued 29 January 2020, and included 37 recommendations for all the gas companies in Massachusetts as well as state agencies and other stakeholders. The final report also included a number of opportunities specific to Boston Gas and Colonial Gas. MADPU directed the gas companies to file plans in response to the final report. Boston Gas and Colonial Gas filed their plan on 28 February 2020, in which they accepted the final report's recommendations and opportunities, and detailed their actions to assess and address the recommendations and observations. MADPU may take further action on the auditor's final report, but the Company cannot predict what that action may be.

Gas System Enhancement Plan (GSEP)
On 30 April 2019, MADPU approved our recovery of approximately $49.5 million in revenue requirements, related to $269.2 million of anticipated investments in 2019 under an accelerated pipe replacement programme, through rates effective from May 2019 to April 2020. MADPU also raised the cap on GSEP recoveries from 1.5% of revenue to 3% of revenue.

Grid modernisation
In response to a 2014 regulatory requirement, we filed a Massachusetts electricity grid modernisation plan on 19 August 2015 that proposed multiple investment options. An order from MADPU approving some of the proposed investment was received on 10 May 2018. In its order, MADPU refined their objectives for grid modernisation to be: optimise system performance; optimise system demand and interconnect; and integrate distributed energy resources. We continue to implement our grid modernisation plan, and will be making annual cost recovery and annual update filings in conjunction with the plan in March and April of each year, respectively. We will also file our next proposed three-year grid modernisation plan (for 2021–23) on 1 July 2020.

Massachusetts large-scale renewable contracts/clean energy contracts
During 2018, pursuant to state legislation enacted in 2016, our Massachusetts electric distribution companies, Massachusetts Electric Company and Nantucket Electric Company, filed with MADPU requests for approval of long-term contracts for their pro rata share of output and associated transmission from hydroelectric generation from Canada (approximately 1,200 MW), and from an offshore wind energy generation project (approximately 800 MW) to be located on the outer continental shelf.

Between April and June 2019, MADPU approved all of these contracts, along with the companies' request to recover the costs and remuneration equal to 2.75% of the annual payments under the contracts. The MADPU approval of the contracts for hydroelectric generation from Canada was appealed to the Massachusetts Supreme Judicial Court in July 2019. Despite COVID-19, the parties have been heard, but the court has no specific deadline to issue a decision, and the contracts will not become effective without a decision from the court affirming final regulatory approval.

Also, the 2016 legislation requires the companies to solicit a total of 1,600 MW of offshore wind energy generation, and a second competitive solicitation was issued in March 2019. In February 2020, Massachusetts Electric Company and Nantucket Electric Company submitted long-term contracts for their pro rata share of offshore wind energy generation (approximately 804 MW) to MADPU, seeking regulatory approval of the contracts, along with a request to recover the costs and remuneration equal to 2.75% of the annual payments under the contracts. While MADPU has no specific deadline to approve the contracts, despite COVID-19, hearings have been scheduled for July 2020.

The contracts will not become effective without regulatory approval.

Electric vehicle programmes
In September 2018, MADPU approved with modifications a petition filed by Massachusetts Electric Company and Nantucket Electric Company for approval of a three-year pilot Electric Vehicle Market Development Programme (EV Programme). The total allowed cost, including a performance incentive, is approximately $20 million. The companies submitted their first cost recovery filing in May 2020 with effect from 1 July 2020.

In September 2019 MADPU issued its final order in the Petition of Massachusetts Electric Company and Nantucket Electric Company for Approval of General Increases in Base Distribution Rates for Electric Service, which included approval of limited components of the companies' proposed five-year Phase II Electric Vehicle Programme (Phase II). The total allowed cost for Phase II is approximately $9 million.

MADPU allowed the companies to file future EV proposals under the umbrella of the grid modification proceedings, which the companies plan to do. Cost recovery for both the EV Programme and Phase II is governed by the Electric Vehicle Programme Provision.

Solar Massachusetts Renewable Target Program
In September 2018, MADPU approved a petition jointly filed by the Massachusetts electric distribution companies, including Massachusetts Electric Company and Nantucket Electric Company, to offer their customers a new solar programme. Following state legislation enacted in 2016, the Solar Massachusetts Renewable Target (SMART) Programme is required by state regulations issued by the Department of Energy Resources (DOER). The programme's objective is to develop a further 1,600 MW of customer-based solar power, at a lower cost than the prior two solar programmes. It aims to do this by providing on-bill credits and incentive payments, directly from the Company to the customer, at a lower cost than previous programmes. Massachusetts Electric Company's SMART allocation for large solar projects was filled up shortly after SMART opened. In November 2019, the Company has completed its first full year of enrolling projects in SMART and has submitted its proposed 2020 SMART Factor to recover its costs, which MADPU has approved subject to further review and investigation. In April 2020, DOER issued emergency regulations for additional SMART capacity, for review and comment. The SMART regulations require an additional 1,600 MW of customer-based solar power, and DOER has proposed certain changes to the programme incentive structure. About half of the total capacity will be located within the service territories of Massachusetts Electric Company and Nantucket Electric Company, as with the initial SMART programme. The regulations are effective immediately. In May 2020, DOER conducted a virtual public hearing and accepted written comments. Once DOER adopts final regulations, the electric distribution companies must file amended tariffs to allow for the expansion of SMART in summer/autumn 2020.

The business in detail continued

New York

Downstate New York 2019 rate cases

KEDNY and KEDLI filed a rate case with the NYPSC on 30 April 2019 seeking to increase delivery revenues by $195 million and $61 million, respectively, for the year ending 31 March 2021. The filings propose more than $1.5 billion in capital investments to modernise KEDNY and KEDLI's gas infrastructure by replacing ageing pipelines, implementing safety improvements, enhancing storm hardening and resiliency, and reducing methane emissions. The filings also include proposals to enhance gas safety and promote a sustainable and affordable path towards a low-carbon energy future. We are resuming settlement negotiations in the interest of agreeing on a multi-year rate plan that mitigates bill impacts for our customers while allowing us to maintain safe and reliable service, advance our clean energy goals, and earn a reasonable return. If we are unable to reach a negotiated settlement, the rate cases will continue to a litigated outcome at which time we would then plan to file a new multi-year rate case proposal.

In light of the financial hardships our customers have experienced from COVID-19, we delayed implementation of certain previously approved rate increases. We also delayed filing a rate case this Spring and are exploring options including an extension of the current rate plan or a rate case filing later this Summer.

New York regulatory audits

Under the New York Public Service Law, the NYPSC is required to conduct periodic audits of various aspects of public utility activities. In 2018 the NYPSC initiated a comprehensive management and operations audit of our three New York regulated businesses. New York law requires periodic management audits of all utilities at least once every five years.

National Grid's New York regulated business last underwent a New York management audit in 2014, when the NYPSC audited our New York gas business.

In September 2018, the NYPSC selected Saleeby Consulting Group as the independent auditor to perform the audit. The Company was fully committed to the audit with the goal of demonstrating its full capabilities and receiving meaningful feedback that would drive useful recommendations to improve the Company's electric and gas operations for the benefit of its customers. The audit began in November 2018 and ran until August 2019, with a final report due in September 2019. Unexpectedly, in October 2019, the NYPSC employees advised us that they were terminating the contract with the auditors, effective immediately, because of the poor quality of the draft audit report by the auditor, with no fault whatsoever on the part of the Company. NYPSC employees advised their intention to complete the management audit themselves. The audit is expected to be completed sometime in the second half of 2020.

Downstate gas settlement

In May 2019, KEDNY and KEDLI stopped fulfilling applications for new and expanded firm service in most of their downstate New York service territories because the available firm gas supplies were insufficient to keep pace with demand. On 11 October 2019, the NYPSC issued an 'Order Instituting Proceeding and to Show Cause' that directed the Companies to provide gas service to a subset of previously denied applicants and show cause why the Companies should not be subject to financial penalties. On 24 November 2019, the Companies reached a settlement that was approved on 26 November 2019 by the NYPSC. The agreement resolves the proceeding opened by the NYPSC relating to the moratorium and provides the necessary framework for resolving the longer-term energy supply issues. Specifically, the settlement provides that KEDNY and KEDLI will lift the moratorium for approximately two years. National Grid will offer $7 million in customer assistance to address hardships resulting from the moratorium. National Grid also agreed to fund $8 million for new energy-efficiency and gas-conservation measures designed to relieve stress on the system and reduce peak-day gas usage, as well as $20 million of clean technology investments and programmes in New York. The settlement provides for the appointment of a monitor to oversee our downstate New York gas supply operations and compliance with the settlement.

We also agreed to develop a range of options to address the natural gas constraints facing the region, which were initially presented in a report on 24 February 2020 outlining the gas capacity constraints affecting the downstate New York service territory and the reasonably available options for meeting long-term customer demand. These options were further presented at a series of six public meetings during March 2020 in the downstate New York service territory. These meetings were designed to facilitate a dialogue with customers, residents, advocates, business leaders and local elected officials on potential solutions. On 8 May 2020, we published a supplemental report with refined forecasts and additional analyses to evaluate the options for addressing the downstate New York supply constraints, including a preliminary assessment of the impacts of COVID-19 on customer demand, as well as a summary of the public's comments and feedback on the potential solutions. In mid-May certain permits were denied in New York and New Jersey for a pipeline solution and therefore we are advancing a portfolio of solutions that were identified in the supplementary report.

Advanced Metering Infrastructure

On 15 November 2018, Niagara Mohawk Power Corporation (NMPC) filed a report with the NYPSC detailing the initial outcome of NMPC's Advanced Metering Infrastructure (AMI) research and collaborative sessions. The report, which included an AMI Business Plan, a detailed benefit-cost analysis, and a Customer Engagement Plan, proposed a six-year deployment of electric AMI meters and AMI-compatible gas modules in NMPC's service territory beginning in 2019/20. This investment would modernise both customer and grid-facing components of the Company's distribution system and is considered a key enabler of NMPC's strategy to address the comprehensive state energy goals expressed in New York's Reforming the Energy Vision proceedings. The near-term benefits include greater customer choice and control over energy use; improved system modelling, load forecasting, and capital investment planning; increased system efficiency; and operational efficiencies for outage response. On 4 September 2019, we filed a supplemental report detailing the AMI collaborative's continued work. The filing provided an updated benefit-cost analysis and proposed a six-year, $640 million (20-year NPV) deployment of electric AMI meters and AMI-compatible gas modules in NMPC's service territory beginning in 2019/20. Our proposal to deploy AMI is currently pending before the NYPSC. If approved by the NYPSC, the Company would replace approximately 1.7 million electric and 640,000 gas metering points.

Rhode Island

Rhode Island combined gas and electric rate case

On 24 August 2018, the Rhode Island Public Utilities Commission (RIPUC) approved the terms of an Amended Settlement Agreement (ASA). We are currently in year two of the Company's multi-year rate plan. The rate plan includes a 9.275% RoE on an equity ratio of 51%. The ASA also requires the Company to file the next rate case so that new rates take effect no later than 1 September 2022, unless the RIPUC consents to an extension of the term and specifies another date upon which rates are to take effect. The Company will file its Rate Year 3 compliance filing on 1 June 2020 for distribution rates for year three of the multi-year rate plan, effective 1 September 2020.

Rhode Island Aquidneck Island gas service interruption

On 21 January 2019, we suffered a significant loss of gas supply to the distribution system that serves our customers on Aquidneck Island in Rhode Island. As a result, we made the decision to interrupt the gas service to the Aquidneck Island system to protect the safety of our customers and the public. Overall, approximately 7,500 customers lost their gas service. On 30 October 2019, RIPUC issued an Investigation Report regarding the gas service interruption which identified the causes of the outages, which included multiple factors, some of which were outside the control of the Narragansett Electric Company. RIPUC's Report also recommended several gas system improvements, many of which we have addressed already. On 13 December 2019, we filed our response to the RIPUC's Report and continue to meet with RIPUC on a quarterly basis regarding winter reliability issues for Aquidneck Island and Rhode Island.

Power Sector Transformation/Advanced Metering Functionality
On 27 November 2017, we filed a Power Sector Transformation (PST) Vision and Implementation Plan in conjunction with our combined gas and electric rate case (the PST Plan). The PST Plan proposed a suite of investments, including the full deployment of Advanced Metering Functionality (AMF), which were designed to modernise the state's energy infrastructure. We intend to file our Updated AMF Business Case and Grid Modernisation Plan (GMP) with the RIPUC in the second half of 2020/21. The Updated AMF Business Case will present a detailed plan for full-scale AMF deployment in Rhode Island, using a Rhode Island-only scenario and a combination Rhode Island and New York deployment scenario to demonstrate the cost synergies that can be achieved through a multi-jurisdictional deployment. The estimated cost of the Rhode Island programme is approximately $414 million over 20 years in nominal terms (assuming a Rhode Island-only deployment), which reflects the estimated useful life of the meters. The GMP will present a ten-year road map to guide the future development of projects and programmes to enhance distribution system planning and operations, which will be separately recovered as part of the Infrastructure, Safety and Reliability Plan or a future rate case.

Heating Sector Transformation
On 8 July 2019, the Governor signed Executive Order 19-06 launching the Heating Sector Transformation (HST) Initiative to advance the state's development of clean, affordable, and reliable heating technologies. Two state agencies, the Office of Energy Resources (OER) and the Division of Public Utilities and Carriers (Division), were tasked to lead the initiative and instructed to work with government and non-government partners in the development of a report. We engaged with OER, the Division, and external stakeholders through a series of facilitated workshops. On 22 April 2020, the recommendations were provided to the Governor concluding that no one solution was more economically attractive than any other, and the state's decarbonisation solutions should include increased energy efficiency, decarbonised electrification through air and ground source heat pumps, and fuel decarbonisation through renewable natural gas and renewable oil. The document presented guiding principles, rather than technology mandates, for additional policy development proffering that the heating sector policy should remain technology-agnostic while promoting early demonstration and development of promising, carbon-reducing technologies. The report does not specify next steps; however, OER acknowledged it will be conducting an energy and economic analysis to inform actional pathways to meet the Governor's January 2020 Executive Order goal of meeting the state's electricity demand with 100% renewable resources by 2030, which will be linked to decarbonising the heating sector.

Infrastructure, Safety and Reliability Plans
We filed our 2021 Gas and Electric Infrastructure, Safety and Reliability (ISR) Plans on 20 December 2019 for effect 1 April 2020. The Electric ISR Plan proposes capital spending of $103.8 million, plus $10.4 million for vegetation management and total operation and maintenance expense of $1.8 million. The Gas ISR Plan proposes total capital spending of $198.6 million. On 17 March 2020, RIPUC approved the Company's Gas and Electric ISR Plans, which include $200 million and $104 million of investments, respectively, for 2020/21. The Electric ISR Plan investment also includes $3.7 million to readily respond to distributed energy resource (DER) interconnections and $12 million of operation and maintenance expense for vegetation management and inspection and maintenance programmes. RIPUC slightly modified the Electric ISR Plan to move $2 million for certain strategic DER investments such as advance capacitors and feeder monitor systems from the discretionary category (system capacity and performance) to the non-discretionary category. This means that the Company is allowed to invest in those assets if required by the system needs or customer connections, but we may defer the proactive investment in those technologies until after the Grid Modernisation plan is approved. The RIPUC approved both plans with only a $1 million reduction to the gas capital spending proposal.

Rhode Island large-scale renewable contracts
In February 2019, the Company's Rhode Island electric distribution company, the Narragansett Electric Company, filed with the RIPUC for approval of a long-term contract for output from offshore wind energy generation from an approximately 400 MW project to be located on the outer continental shelf. This contract is a voluntary obligation consistent with Governor Raimondo's 1,000 MW clean energy goal for Rhode Island. The bid was submitted in response to the Massachusetts solicitation for offshore wind energy generation, and such bids were shared with Rhode Island. RIPUC approved the contract in May 2019.

In February 2020, the Narragansett Electric Company filed with the RIPUC for approval of a long-term contract for output from an approximately 50 MW solar facility to be located in Connecticut. The contract resulted from a competitive solicitation issued in 2018 to satisfy the Company's obligations under the Rhode Island Long-term Contracting Standard. RIPUC approved the contract at a virtual open meeting on 27 March 2020 and the Company received its written decision on 11 May 2020.

Federal Energy Regulatory Commission

Complaints on New England transmission allowed RoE
In September 2011, December 2012, July 2014 and April 2016, a series of four complaints were filed with FERC against certain transmission owners, including our New England electricity transmission business. These complaints aimed to lower the base RoE, which FERC had authorised at 11.14% prior to the first complaint. FERC issued orders resolving only the first complaint, with the last order in March 2015, lowering the base RoE to 10.57%. A number of parties, including the Company, appealed FERC's order on the first complaint to the US federal court. On 14 April 2017, the court vacated FERC's order and remanded the first complaint back to FERC. This required FERC to reconsider the methodology it adopted in its order. On 5 June 2017, the New England Transmission Owners (NETOs), including the Company, submitted a filing to FERC to document the reinstatement of their transmission rates that had been in effect on 15 October 2014. FERC denied this filing and stated that, until further notice, the base RoE in New England must remain at the filed rate of 10.57%. On 16 October 2018, FERC issued a Preliminary Order Directing Brief on our four New England RoE complaints. In this, FERC proposed a new methodology for determining whether an existing RoE remains just and reasonable and also for determining a new RoE where an existing RoE is found to be unjust and unreasonable. FERC also proposed to set the base RoE in New England at 10.41% with a 13.08% cap on incentives. Briefs were due in January 2019 and responses to the briefs were filed on 8 March 2019. FERC is under no deadline to act on the briefs and it is too early to determine when or how FERC will come to a decision.

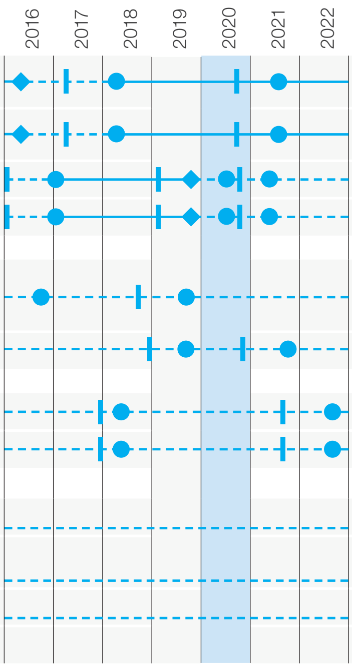
On 21 November 2019, FERC issued an order addressing customer complaints involving the transmission RoE for the transmission owners in the Midcontinent Independent System Operator (MISO TOs). FERC issued an order on rehearing addressing the initial order on 21 May 2020. In those orders, FERC adopted a revised methodology for determining base RoEs for the MISO TOs. This differed significantly from the methodology and framework set forth in its 16 October 2018 preliminary order, which proposed a new RoE methodology in the dockets covering the four RoE complaints against the NETOs. On 23 December 2019, the NETOs filed a Supplemental Paper Hearing Brief and a Motion to Supplement the Record in the NETOs' RoE dockets to respond to the new methodology adopted in the November 2019 MISO TOs' order, as there is uncertainty as to whether the outcome in that proceeding may be applied to the NETOs' cases. Further changes to the FERC RoE methodology applicable to the Company are possible as a result of the orders in the MISO TOs' proceeding and the issues raised in pending pleadings in the NETOs' proceedings. Given the significant uncertainty relating to FERC's methodology, the Company is unable to predict the potential effect of the November 2019 and 21 May 2020 MISO TO orders on the NETOs' RoE dockets or the outcome of the four complaints. Further, the Company cannot reasonably estimate a range of gain or loss for any of the four complaint proceedings.

Formula Rate 206 proceeding
On 28 December 2015, FERC initiated a proceeding under Section 206 of the Federal Power Act. It found that ISO-New England Transmission, Markets, and Services Tariff is unjust, unreasonable and unduly discriminatory or preferential. FERC found that ISO-New England's tariff lacks adequate transparency and challenge procedures regarding the formula rates for ISO-NE Participating Transmission Owners (ISO-NE PTOs). In addition, the Commission found that the ISO-NE PTOs' current Regional Network Service and Local Network Service formula rates appear to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. FERC explained that the formula rates appear to lack sufficient detail to determine how certain costs are derived and recovered in the formula rates. Accordingly, FERC established hearing and settlement judge procedures. Several parties are active in the proceeding, including FERC employees, various interested consumer parties, the New England States Committee on Electricity (NESCOE), and several municipal light departments. In August 2018, the parties to the proceeding agreed to the terms of a settlement and subsequently filed the proposed settlement with the settlement judge in the proceeding. It was opposed by certain municipal parties, making it a contested settlement. On 22 May 2019, FERC rejected the Formula Rate 206 settlement in its entirety and remanded the matter to the Chief Administrative Law Judge for hearing procedures. The parties have continued settlement negotiations and have been granted a suspension of the procedural schedule to attempt to finalise a settlement.

The business in detail continued

Summary of US price controls and rate plans

Regulator	Company	Rate base (31 Mar 2020)	Equity-to-debt ratio	Allowed Return on Equity	Achieved Return on Equity (31 Mar 2020)	Revenue decoupling†	Capital tracker‡	Commodity-related bad debt true-up§	Pension/OPEB true-up◊
New York Public Service Commission	Niagara Mohawk[1] (upstate, electricity)	$5,881m	48:52	9.0%	8.9%	✓	P	P	✓
	Niagara Mohawk (upstate, gas)	$1,328m	48:52	9.0%	8.7%	✓	P	P	✓
	KEDNY (downstate)[2]	$4,555m	48:52	9.0%	7.7%	P	P	P	✓
	KEDLI (downstate)[3]	$2,932m	48:52	9.0%	9.7%	P	P	P	✓
Massachusetts Department of Public Utilities	Massachusetts Electric/Nantucket Electric	$2,858m	53:47	9.6%	10.3%	✓	P	✓	✓
	Massachusetts Gas	$3,108m	53:47	9.5%	7.8%	✓	P	✓	✓
Rhode Island Public Utilities Commission	Narragansett Electric	$895m	51:49	9.28%	11.9%	✓	✓	P	✓
	Narragansett Gas	$944m	51:49	9.28%	8.8%	✓	✓	P	✓
Federal Energy Regulatory Commission	Narragansett	$788m	50:50	10.57%	11.1%	n/a	✓	n/a	✓
	Canadian Interconnector	$52m	100:0	13.0%	13.0%	n/a	✓	n/a	✓
	New England Power	$1,844m	64:36	10.57%	11.0%	n/a	✓	n/a	✓
	Long Island Generation	$456m	47:53	9.9%	14.1%	n/a	✓	n/a	✓



1. Both transmission and distribution, excluding stranded costs.
2. KeySpan Energy Delivery New York (the Brooklyn Union Gas Company).
3. KeySpan Energy Delivery Long Island (KeySpan Gas East Corporation).

Rate filing made
New rates effective
Rate plan ends
Rates continue indefinitely
Multi-year rate plan

✓ Feature in place
P Feature partially in place

†Revenue decoupling
A mechanism that removes the link between a utility's revenue and sales volume so that the utility is indifferent to changes in usage. Revenues are reconciled to a revenue target, with differences billed or credited to customers. Allows the utility to support energy efficiency.

‡Capital tracker
A mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

§Commodity-related bad debt true-up
A mechanism that allows a utility to reconcile commodity-related bad debt to either actual commodity-related bad debt or to a specified commodity-related bad debt write-off percentage. For electricity utilities, this mechanism also includes working capital.

◊Pension/OPEB true-up
A mechanism that reconciles the actual non-capitalised costs of pension and OPEB and the actual amount recovered in base rates. The difference may be amortised and recovered over a period or deferred for a future rate case.

Internal control and risk factors

Disclosure controls

Working with management, including the Chief Executive and Chief Financial Officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as at 31 March 2020. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives; however, their effectiveness has limitations, including the possibility of human error and the circumvention or overriding of the controls and procedures.

Even effective disclosure controls and procedures provide only reasonable assurance of achieving their objectives. Based on the evaluation, the Chief Executive and Chief Financial Officer concluded that the disclosure controls and procedures are effective to provide reasonable assurance that information required for disclosure in the reports that we file and submit under the Exchange Act is recorded, processed, summarised and reported as and when required and that such information is accumulated and communicated to our management, including the Chief Executive and Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure.

Internal control over financial reporting

Our management, including the Chief Executive and Chief Financial Officer, has carried out an evaluation of our internal control over financial reporting pursuant to the Disclosure Guidance and Transparency Rules sourcebook and Section 404 of the Sarbanes-Oxley Act 2002. As required by Section 404, management is responsible for establishing and maintaining an adequate system of internal control over financial reporting (as defined in Rules 13a-5(f) and 15d-15(f) under the Exchange Act).

Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes, in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's evaluation of the effectiveness of the Company's internal control over financial reporting was based on the revised Internal Control-Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission. Using this evaluation, management concluded that our internal control over financial reporting was effective as at 31 March 2020.

Deloitte LLP, which has audited our consolidated financial statements for the year ended 31 March 2020, has also audited the effectiveness of our internal control over financial reporting.

During the year, there were no changes in our internal control over financial reporting that have materially affected it, or are reasonably likely to materially affect it.

Risk factors

Management of our risks is an important part of our internal control environment, as we describe on pages 22 – 25. In addition to the principal risks listed, we face a number of inherent risks that could have a material adverse effect on our business, financial condition, results of operations and reputation, as well as the value and liquidity of our securities.

Any investment decision regarding our securities and any forward-looking statements made by us should be considered in the light of these risk factors and the cautionary statement set out on page 258. An overview of the key inherent risks we face is provided below.

Risk factors

Potentially harmful activities

Aspects of the work we do could potentially harm employees, contractors, members of the public or the environment.

Potentially hazardous activities that arise in connection with our business include: the generation, transmission and distribution of electricity; and the storage, transmission and distribution of gas. Electricity and gas utilities also typically use and generate hazardous and potentially hazardous products and by-products. In addition, there may be other aspects of our operations that are not currently regarded or proved to have adverse effects but could become so, such as the effects of electric and magnetic fields.

A significant safety or environmental incident, or the failure of our safety processes or of our occupational health plans, as well as the breach of our regulatory or contractual obligations or our climate change targets, could materially adversely affect our results of operations and our reputation.

Safety is a fundamental priority for us and we commit significant resources and expenditure to ensuring process safety; to monitoring personal safety, occupational health and environmental performance; and to meeting our obligations under negotiated settlements.

We are subject to laws and regulations in the UK and US governing health and safety matters to protect the public and our employees and contractors, who could potentially be harmed by these activities, as well as laws and regulations relating to pollution, the protection of the environment, and the use and disposal of hazardous substances and waste materials.

These expose us to costs and liabilities relating to our operations and properties, including those inherited from predecessor bodies, whether currently or formerly owned by us, and sites used for the disposal of our waste.

The cost of future environmental remediation obligations is often inherently difficult to estimate and uncertainties can include the extent of contamination, the appropriate corrective actions and our share of the liability. We are increasingly subject to regulation in relation to climate change and are affected by requirements to reduce our own carbon emissions as well as to enable reduction in energy use by our customers. If more onerous requirements are imposed or our ability to recover these costs under regulatory frameworks changes, this could have a material adverse impact on our business, reputation, results of operations and financial position.

Pandemics

We face risks related to health epidemics and other outbreaks.

As seen in the context of COVID-19, pandemics and their associated counter-measures may affect countries, communities, supply chains and markets, including the UK and our service territory in the US. The spread of such pandemics could have adverse effects on our workforce, which could affect our ability to maintain our networks and provide service. In addition, disruption of supply chains could adversely affect our systems or networks.

Pandemics such as COVID-19 can also result in extraordinary economic circumstances in our markets which could negatively affect our customers' ability to pay our invoices in the US or the charges payable to the system operators for transmission services in the UK. The suspension of debt collection and customer termination activities across our service area in response to such pandemics is likely to result in near-term lower customer collections, and could result in increasing levels of bad debt and associated provisions.

The extent to which pandemics such as COVID-19 may affect our liquidity, business, financial condition, results of operations and reputation will depend on future developments, which are highly uncertain and cannot be predicted, and will depend on the severity of the relevant pandemic, the scope, duration, cost to National Grid and overall economic impact of actions taken to contain it or treat its effects.

Internal control and risk factors continued

Infrastructure and IT systems

We may suffer a major network failure or interruption, or may not be able to carry out critical operations due to the failure of infrastructure, data or technology or a lack of supply.

Operational performance could be materially adversely affected by: a failure to maintain the health of our assets or networks; inadequate forecasting of demand; inadequate record keeping or control of data or failure of information systems and supporting technology. This, in turn, could cause us to fail to meet agreed standards of service, incentive and reliability targets, or be in breach of a licence, approval, regulatory requirement or contractual obligation. Even incidents that do not amount to a breach could result in adverse regulatory and financial consequences, as well as harming our reputation.

Where demand for electricity or gas exceeds supply, including where we do not adequately forecast and respond to disruptions in energy supplies, and our balancing mechanisms are not able to mitigate this fully, a lack of supply to consumers may damage our reputation.

In addition to these risks, we may be affected by other potential events that are largely outside our control, such as the impact of the COVID-19 pandemic (including on our operations and as a result of large-scale working from home by our employees), weather (including as a result of climate change and major storms), unlawful or unintentional acts of third parties, insufficient or unreliable supply, or force majeure.

Weather conditions can affect financial performance, and severe weather that causes outages or damages infrastructure, together with our actual or perceived response, could materially adversely affect operational and potentially business performance and our reputation.

Malicious attack, sabotage or other intentional acts, including breaches of our cyber security, may also damage our assets (which include critical national infrastructure) or otherwise significantly affect corporate activities and, as a consequence, have a material adverse impact on our reputation, business, results of operations and financial condition.

Unauthorised access to, or deliberate breaches of, our IT systems may also lead to manipulation of our proprietary business data or customer information. Unauthorised access to private customer information may make us liable for a violation of data privacy regulations. Even where we establish business continuity controls and security against threats to our systems, these may not be sufficient.

Law, regulation and political and economic uncertainty

Changes in law or regulation, or decisions by governmental bodies or regulators and increased political and economic uncertainty, could materially adversely affect us.

Most of our businesses are utilities or networks subject to regulation by governments and other authorities. Changes in law or regulation or regulatory policy and precedent (including any changes arising as a result of emergency legislation to address the COVID-19 pandemic and the UK's exit from the European Union), including decisions of governmental bodies or regulators, in the countries or states in which we operate could materially adversely affect us. We may fail to deliver any one of our customer, investor and wider stakeholder propositions due to increased political and economic uncertainty.

If we fail to engage in the energy policy debate, we may be unable to influence future energy policy and deliver our strategy.

Decisions or rulings concerning the following (as examples) could have a material adverse impact on our results of operations, cash flows, the financial condition of our businesses and the ability to develop those businesses in the future:
- the RIIO-2 price controls; whether licences, approvals or agreements to operate or supply are granted, amended or renewed; whether consents for construction projects are granted in a timely manner; or whether there has been any breach of the terms of a licence, approval or regulatory requirement; and
- timely recovery of incurred expenditure or obligations; the ability to pass through commodity costs; a decoupling of energy usage and revenue, and other decisions relating to the impact of general economic conditions on us, our markets and customers; implications of climate change and of advancing energy technologies; whether aspects of our activities are contestable; and the level of permitted revenues and dividend distributions for our businesses and in relation to proposed business development activities.

For further information, see pages 219 – 226, which explain our regulatory environment in detail.

Business performance

Current and future business performance may not meet our expectations or those of our regulators and shareholders.

Earnings maintenance and growth from our regulated gas and electricity businesses will be affected by our ability to meet or exceed efficiency targets and service quality standards set by, or agreed with, our regulators.

If we do not meet these targets and standards, or if we are not able to deliver the US rate plans strategy successfully, we may not achieve the expected benefits, our business may be materially adversely affected and our performance, results of operations and reputation may be materially harmed and we may be in breach of regulatory or contractual obligations.

Growth and business development activity

Failure to respond to external market developments and execute our growth strategy may negatively affect our performance. Conversely, new businesses or activities that we undertake alone or with partners may not deliver target outcomes and may expose us to additional operational and financial risk.

Failure to grow our core business sufficiently and have viable options for new future business over the longer term, or failure to respond to the threats and opportunities presented by emerging technology or innovation (including for the purposes of adapting our networks to meet the challenges of increasing distributed energy resources), could negatively affect the Group's credibility and reputation and jeopardise the achievement of intended financial returns.

Our business development activities and the delivery of our growth ambition include acquisitions, disposals, joint ventures, partnering and organic investment opportunities, such as development activities relating to changes to the energy mix and the integration of distributed energy resources and other advanced technologies. These are subject to a wide range of both external uncertainties (including the availability of potential investment targets and attractive financing and the impact of competition for onshore transmission in both the UK and US) and internal uncertainties (including actual performance of our existing operating companies and our business planning model assumptions and ability to integrate acquired businesses effectively). As a result, we may suffer unanticipated costs and liabilities and other unanticipated effects.

We may also be liable for the past acts, omissions or liabilities of companies or businesses we have acquired, which may be unforeseen or greater than anticipated. In the case of joint ventures, we may have limited control over operations and our joint venture partners may have interests that diverge from our own.

The occurrence of any of these events could have a material adverse impact on our results of operations or financial condition, and could also impact our ability to enter into other transactions.

Exchange rates, interest rates and commodity price indices

Changes in foreign currency rates, interest rates or commodity prices could materially impact earnings or our financial condition.

We have significant operations in the US and are therefore subject to the exchange rate risks normally associated with non-UK operations including the need to translate US assets, liabilities, income and expenses into sterling (our reporting currency).

In addition, our results of operations and net debt position may be affected because a significant proportion of our borrowings, derivative financial instruments and commodity contracts are affected by changes in interest rates, commodity price indices and exchange rates, in particular the dollar-to-sterling exchange rate.

Furthermore, our cash flow may be materially affected as a result of settling hedging arrangements entered into to manage our exchange rate, interest rate and commodity price exposure, or by cash collateral movements relating to derivative market values, which also depend on the sterling exchange rate into the euro and other currencies.

Post-retirement benefits

We may be required to make significant contributions to fund pension and other post-retirement benefits.

We participate in a number of pension schemes that together cover substantially all our employees. In both the UK and US, the principal schemes are DB schemes where the scheme assets are held independently of our own financial resources.

In the US, we also have other post-retirement benefit schemes. Estimates of the amount and timing of future funding for the UK and US schemes are based on actuarial assumptions and other factors, including: the actual and projected market performance of the scheme assets; future long-term bond yields; average life expectancies; and relevant legal requirements.

Actual performance of scheme assets may be affected by volatility in debt and equity markets (including as a result of the COVID-19 pandemic).

Changes in these assumptions or other factors may require us to make additional contributions to these pension schemes which, to the extent they are not recoverable under our price controls or state rate plans, could materially adversely affect the results of our operations and financial condition.

Financing and liquidity

An inability to access capital markets at commercially acceptable interest rates could affect how we maintain and grow our businesses.

Our businesses are financed through cash generated from our ongoing operations, bank lending facilities and the capital markets, particularly the long-term debt capital markets.

Some of the debt we issue is rated by credit rating agencies, and changes to these ratings may affect both our borrowing capacity and borrowing costs. In addition, restrictions imposed by regulators may also limit how we service the financial requirements of our current businesses or the financing of newly acquired or developing businesses.

Financial markets can be subject to periods of volatility and shortages of liquidity – for example, as a result of unexpected political or economic events or the COVID-19 pandemic. If we were unable to access the capital markets or other sources of finance at commercially acceptable rates for a prolonged period, our cost of financing may increase, the discretionary and uncommitted elements of our proposed capital investment programme may need to be reconsidered, and the manner in which we implement our strategy may need to be reassessed.

Such events could have a material adverse impact on our business, results of operations and prospects.

Some of our regulatory agreements impose lower limits for the long-term unsecured debt credit ratings that certain companies within the Group must hold or the amount of equity within their capital structures, including a limit requiring National Grid plc to hold an investment-grade long-term senior unsecured debt credit rating.

In addition, some of our regulatory arrangements impose restrictions on the way we can operate. These include regulatory requirements for us to maintain adequate financial resources within certain parts of our operating businesses and may restrict the ability of National Grid plc and some of our subsidiaries to engage in certain transactions, including paying dividends, lending cash and levying charges.

The inability to meet such requirements, or the occurrence of any such restrictions, may have a material adverse impact on our business and financial condition.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, and financial covenants, such as restrictions on the level of subsidiary indebtedness.

Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

Customers and counterparties

Customers and counterparties may not perform their obligations.

Our operations are exposed to the risk that customers, suppliers, banks and other financial institutions, and others with whom we do business, will not satisfy their obligations, which could materially adversely affect our financial position.

This risk is significant where our subsidiaries have concentrations of receivables from gas and electricity utilities and their affiliates, as well as industrial customers and other purchasers, and may also arise where customers are unable to pay us as a result of increasing commodity prices or adverse economic conditions (including as a result of the COVID-19 pandemic).

To the extent that counterparties are contracted with for physical commodities (gas and electricity) and they experience events that impact their own ability to deliver, we may suffer supply interruption as described in Infrastructure and IT systems on page 228.

There is also a risk to us where we invest excess cash or enter into derivatives and other financial contracts with banks or other financial institutions. Banks who provide us with credit facilities may also fail to perform under those contracts.

Employees and others

We may fail to attract, develop and retain employees with the competencies (including leadership and business capabilities), values and behaviours required to deliver our strategy and vision and ensure they are engaged to act in our best interests.

Our ability to implement our strategy depends on the capabilities and performance of our employees and leadership at all levels of the business. Our ability to implement our strategy and vision may be negatively affected by the loss of key personnel (including personnel on sick leave or otherwise unable to work on an extended basis because of the COVID-19 pandemic) or an inability to attract, integrate, engage and retain appropriately qualified personnel, or if significant disputes arise with our employees.

As a result, there may be a material adverse effect on our business, financial condition, results of operations and prospects.

There is a risk that an employee or someone acting on our behalf may breach our internal controls or internal governance framework, or may contravene applicable laws and regulations. This could have an impact on the results of our operations, our reputation and our relationship with our regulators and other stakeholders.

Shareholder information

Articles of Association

The following description is a summary of the material terms of our Articles of Association (Articles) and applicable English law. It is a summary only and is qualified in its entirety by reference to the Articles.

Summary

The Articles set out the Company's internal regulations. Copies are available on our website and upon request. Amendments to the Articles have to be approved by at least 75% of those voting at a general meeting of the Company. Subject to company law and the Articles, the Directors may exercise all the powers of the Company. They may delegate authorities to committees and day-to-day management and decision-making to individual Executive Directors. We set out the committee structure on page 68.

General

The Company is incorporated under the name National Grid plc and is registered in England and Wales with registered number 4031152. Under the Companies Act 2006, the Company's objects are unrestricted.

Directors

Under the Articles, a Director must disclose any personal interest in a matter and may not vote in respect of that matter, subject to certain limited exceptions. As permitted under the Companies Act 2006, the Articles allow non-conflicted Directors to authorise a conflict or potential conflict for a particular matter. In doing so, the non-conflicted Directors must act in a way they consider, in good faith, will be most likely to promote the success of the Company for the benefit of the shareholders as a whole.

The Directors (other than a Director acting in an executive capacity) are paid fees for their services. In total, these fees must not exceed £2,000,000 per year or any higher sum decided by an ordinary resolution at a general meeting of shareholders. In addition, special pay may be awarded to a Director who acts in an executive capacity, serves on a committee, performs services which the Directors consider to extend beyond the ordinary duties of a Director, devotes special attention to the business of National Grid, or goes or lives abroad on the Company's behalf. Directors may also receive reimbursement for expenses properly incurred, and may be awarded pensions and other benefits. The compensation awarded to the Executive Directors is determined by the Remuneration Committee. Further details of Directors' remuneration are set out in the Directors' Remuneration Report (see pages 88 – 107).

The Directors may exercise all the powers of National Grid to borrow money. However, the aggregate principal amount of all the Group's borrowings outstanding at any time must not exceed £35 billion or any other amount approved by shareholders by an ordinary resolution at a general meeting. At the Company's AGM for 2020, shareholders will be asked to approve, by ordinary resolution, an increase in this amount (which has remained unchanged since the 2009 AGM) to £45 billion to enable the funding of growth over the medium-term in an efficient manner.

Directors can be appointed or removed by the Board or shareholders at a general meeting. Directors must stand for election at the first AGM following their appointment to the Board. Each Director must retire at least every three years, although they will be eligible for re-election. In accordance with best practice introduced by the UK Corporate Governance Code, all Directors wishing to continue in office currently offer themselves for re-election annually. No person is disqualified from being a Director or is required to vacate that office by reason of attaining a maximum age.

A Director is not required to hold shares in National Grid in order to qualify as a Director.

Rights, preferences and restrictions

(i) Dividend rights

National Grid may not pay any dividend otherwise than out of profits available for distribution under the Companies Act 2006 and other applicable provisions of English law. In addition, as a public company, National Grid may only make a distribution if, at the time of the distribution, the amount of its net assets is not less than the aggregate of its called-up share capital and undistributable reserves (as defined in the Companies Act 2006), and to the extent that the distribution does not reduce the amount of those assets to less than that aggregate. Ordinary shareholders and American Depositary Share (ADS) holders receive dividends.

Subject to these points, shareholders may, by ordinary resolution, declare dividends in accordance with the respective rights of the shareholders, but not exceeding the amount recommended by the Board. The Board may pay interim dividends if it considers that National Grid's financial position justifies the payment. Any dividend or interest unclaimed for 12 years from the date when it was declared or became due for payment will be forfeited and revert to National Grid.

(ii) Voting rights

Subject to any rights or restrictions attached to any shares and to any other provisions of the Articles, at any general meeting on a show of hands, every shareholder who is present in person will have one vote and, on a poll, every shareholder will have one vote for every share they hold. On a show of hands or poll, shareholders may cast votes either personally or by proxy. A proxy need not be a shareholder. Under the Articles, all substantive resolutions at a general meeting must be decided on a poll. Ordinary shareholders and ADS holders can vote at general meetings.

(iii) Liquidation rights

In a winding up, a liquidator may (in each case with the sanction of a special resolution passed by the shareholders and any other sanction required under English law): (a) divide among the shareholders the whole or any part of National Grid's assets (whether the assets are of the same kind or not); the liquidator may, for this purpose, value any assets and determine how the division should be carried out as between shareholders or different classes of shareholders, or (b) transfer any part of the assets to trustees on trust for the benefit of the shareholders as the liquidator determines. In neither case will a shareholder be compelled to accept assets upon which there is a liability.

(iv) Restrictions

There are no restrictions on the transfer or sale of ordinary shares. Some of the Company's employee share plans, details of which are contained in the Directors' Remuneration Report, include restrictions on the transfer of ordinary shares while the ordinary shares are subject to the plan. Where, under an employee share plan operated by the Company, participants are the beneficial owners of the ordinary shares but not the registered owner, the voting rights may be exercised by the registered owner at the direction of the participant. Treasury shares do not attract a vote or dividends.

(v) Variation of rights

Subject to applicable provisions of English law, the rights attached to any class of shares of National Grid may be varied or cancelled. This must be with the written consent of the holders of three quarters in nominal value of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

Shareholder information continued

General meetings
AGMs must be convened each year within six months of the Company's accounting reference date upon 21 clear days' advance written notice. Under the Articles, any other general meeting may be convened provided at least 14 clear days' written notice is given, subject to annual approval of shareholders. In certain limited circumstances, the Company can convene a general meeting by shorter notice. The notice must specify, among other things, the nature of the business to be transacted, the place, the date and the time of the meeting. Consistent with the UK government restrictions in relation to the COVID-19 pandemic, the Company's AGM for 2020 will take place as a closed meeting.

Rights of non-residents
There are no restrictions under the Articles that would limit the rights of persons not resident in the UK to vote in relation to ordinary shares.

Disclosure of interests
Under the Companies Act 2006, National Grid may, by written notice, require a person whom it has reasonable cause to believe to be or to have been, in the last three years, interested in its shares to provide additional information relating to that interest. Under the Articles, failure to provide such information may result in a shareholder losing their rights to attend, vote or exercise any other right in relation to shareholders' meetings.

Under the UK Disclosure Guidance and Transparency Rules (DTR) sourcebook, there is also an obligation on a person who acquires or ceases to have a notifiable interest in shares in National Grid to notify the Company of that fact. The disclosure threshold is 3% and disclosure is required each time the person's direct and indirect holdings reach, exceed or fall below each 1% threshold thereafter.

The UK City Code on Takeovers and Mergers imposes strict disclosure requirements regarding dealings in the securities of an offeror or offeree company, and also on their respective associates, during the course of an offer period. Other regulators in the UK, US and elsewhere may have, or assert, notification or approval rights over acquisitions or transfers of shares.

Depositary payments to the Company
The Depositary (The Bank of New York Mellon) reimburses the Company for certain expenses it incurs in relation to the ADS programme. The Depositary also pays the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses for the mailing of annual and interim financial reports, printing and distributing dividend cheques, the electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimiles and telephone calls. It also reimburses the Company for certain investor relationship programmes or special investor relations promotional activities. There are limits on the amount of expenses for which the Depositary will reimburse the Company, but the amount of reimbursement is not necessarily tied to the amount of fees the Depositary collects from investors.

For the period 16 May 2019 to 17 June 2020, the Company received a total of $1,835,589.41 in reimbursements from the Depositary consisting of $1,225,480.47 and $610,108.94 received in October 2019 and February 2020 respectively. Fees that are charged on cash dividends will be apportioned between the Depositary and the Company.

Any questions from ADS holders should be directed to The Bank of New York Mellon at the contact details on page 257.

Description of securities other than equity securities: Depositary fees and charges
The Depositary collects fees by deducting them from the amounts distributed or by selling a portion of distributable property for:

- delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them; and
- making distributions to investors (including, it is expected, cash dividends).

The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Persons depositing or withdrawing shares must pay:	For:
$5.00 per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; cancellation of ADSs for the purpose of withdrawal, including if the Deposit agreement terminates; and distribution of securities distributed to holders of deposited securities that are distributed by the Depositary to ADS holders.
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	Cable, telex and facsimile transmissions (when expressly provided in the Deposit agreement); and converting foreign currency to dollars.
Taxes and other governmental charges the Depositary or the Custodian has to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes	As necessary.

The Company's Deposit agreement under which the ADSs are issued allows a fee of up to $0.05 per ADS to be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2019/20 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to distribution of the cash dividend.

Documents on display
National Grid is subject to the US Securities and Exchange Commission (SEC) reporting requirements for foreign companies. The Company's Form 20-F and other filings can be viewed on the National Grid website as well as the SEC website at www.sec.gov.

Events after the reporting period

In the period between 31 March 2020 and 17 June 2020, there have continued to be substantial environmental, economic and social changes in both the UK and US. As described further in the Strategic Report, these have had, and will continue to have, significant ramifications for the Group. Other than in respect of those areas where forward-looking forecasts are relevant (notably goodwill impairment reviews (note 11), expected credit losses on financial instruments including trade receivables (notes 19 and 32) and the presumption of the going concern basis generally (note 1)), none of these developments have caused adjustment to the financial statements.

Exchange controls

There are currently no UK laws, decrees or regulations that restrict the export or import of capital, including, but not limited to, foreign exchange control restrictions, or that affect the remittance of dividends, interest or other payments to non-UK resident holders of ordinary shares except as otherwise set out in Taxation on pages 234 and 235 and except in respect of the governments of and/or certain citizens, residents or bodies of certain countries (described in applicable Bank of England Notices or European Union Council Regulations in force as at the date of this document).

Material interests in shares

As at 31 March 2020, National Grid had been notified of the following holdings in voting rights of 3% or more in the issued share capital of the Company:

	Number of ordinary shares	% of voting rights[1]	Date of last notification of interest
BlackRock, Inc.	238,695,907	6.85	3 December 2019
The Capital Group Companies, Inc.	145,094,617	3.88	16 April 2015

1. This number is calculated in relation to the issued share capital at the time the holding was disclosed.

As at 17 June 2020, no further notifications have been received.

The rights attached to ordinary shares are detailed on page 231. All ordinary shares and all major shareholders have the same voting rights. The Company is not, to the best of its knowledge, directly or indirectly controlled.

Share capital

As at 17 June 2020, the share capital of the Company consists of ordinary shares of $12^{204/473}$ pence nominal value each and ADSs, which represent five ordinary shares each.

Authority to purchase shares

Shareholder approval was given at the 2019 AGM to purchase up to 10% of the Company's share capital (being 341,188,512 ordinary shares). The Directors intend to seek shareholder approval to renew this authority at the 2020 AGM.

In some circumstances, the Company may find it advantageous to have the authority to purchase its own shares in the market, where the Directors believe this would be in the interests of shareholders generally. The Directors believe that it is an important part of the financial management of the Company to have the flexibility to repurchase issued shares to manage its capital base, including actively managing share issuances from the operation of the scrip dividend scheme. It is expected that repurchases to manage share issuances under the scrip dividend scheme will not exceed 2.5% of the issued share capital (excluding treasury shares) per annum.

When purchasing shares, the Company has taken, and will continue to take, into account market conditions prevailing at the time, other investment and financing opportunities, and the overall financial position of the Company.

At the 2019 AGM, the Company sought authority to purchase ordinary shares in the capital of the Company as part of the management of the dilutive effect of share issuances under the scrip dividend scheme. During the year, the Company did not purchase any of its own shares.

	Number of shares	Total nominal value	% of called up share capital
Shares held in Treasury purchased in prior years[1]	277,263,224	£34,467,394.44	7.52[1]
Shares purchased and held in Treasury during the year	–	–	–
Shares transferred from Treasury during the year (to employees under employee share plans)	5,331,440	£662,766.75[2]	0.14[3]
Maximum number of shares held in Treasury during the year	277,263,224	£34,467,394.44[2]	7.33[3]

1. Called-up share capital: 3,687,483,073 as at 31 March 2019.
2. Nominal value: $12^{204/473}$p.
3. Called-up share capital of 3,780,237,016 ordinary shares as at the date of this report.

As at the date of this report, the Company held 270,105,462 ordinary shares as treasury shares. This represented 7.15% of the Company's called-up share capital.

Authority to allot shares

Shareholder approval was given at the 2019 AGM to allot shares of up to one third of the Company's share capital. The Directors are seeking this same level of authority this year. The Directors consider that the Company will have sufficient flexibility with this level of authority to respond to market developments and that this authority is in line with investor guidelines.

The Directors currently have no intention of issuing new shares or of granting rights to subscribe for or convert any security into shares. This is except in relation to, or in connection with, the operation and management of the Company's scrip dividend scheme and the exercise of options under the Company's share plans. No issue of shares will be made that would effectively alter control of the Company without the sanction of shareholders in a general meeting.

The Company expects to actively manage the dilutive effect of share issuance arising from the operation of the scrip dividend scheme. In some circumstances, additional shares may be allotted to the market for this purpose under the authority provided by this resolution. Under these circumstances, it is expected that the associated allotment of new shares (or rights to subscribe for or convert any security into shares) will not exceed 1% of the issued share capital (excluding treasury shares) per annum.

Shareholder information continued

Dividend waivers

The trustee of the National Grid Employee Share Trust, which is independent of the Company, waived the right to dividends paid during the year. They have also agreed to waive the right to future dividends, in relation to the ordinary shares and ADSs held by the trust.

Under the Company's ADS programme, the right to dividends in relation to the ordinary shares underlying the ADSs was waived during the year, under an arrangement whereby the Company pays the monies to satisfy any dividends separately to the Depositary for distribution to ADS holders entitled to the dividend. This arrangement is expected to continue for future dividends.

Share information

National Grid ordinary shares are listed on the London Stock Exchange under the symbol NG. The ADSs are listed on the New York Stock Exchange under the symbol NGG.

Shareholder analysis

The following table includes a brief analysis of shareholder numbers and shareholdings as at 31 March 2020.

	Number of shareholders	% of shareholders	Number of shares	% of shares
1–50	170,394	21.39	5,185,345	0.14
51–100	202,748	25.46	14,246,560	0.38
101–500	331,032	41.57	68,966,441	1.82
501–1,000	46,110	5.79	32,119,610	0.85
1,001–10,000	43,274	5.43	106,072,161	2.81
10,001–50,000	1,727	0.22	31,718,701	0.84
50,001–100,000	235	0.03	17,096,831	0.45
100,001–500,000	441	0.05	106,039,599	2.81
500,001–1,000,000	144	0.02	102,719,196	2.72
1,000,001+	300	0.04	3,296,072,572	87.19
Total	796,405	100	3,780,237,016	100

Taxation

The discussion in this section provides information about certain US federal income tax and UK tax consequences for US Holders (defined below) of owning ADSs and ordinary shares. A US Holder is the beneficial owner of ADSs or ordinary shares who:

- is for US federal income tax purposes (i) an individual citizen or resident of the United States; (ii) a corporation created or organised under the laws of the United States, any state thereof or the District of Columbia; (iii) an estate, the income of which is subject to US federal income tax without regard to its source; or (iv) a trust, if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more US persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for US federal income tax purposes;
- is not resident or ordinarily resident in the UK for UK tax purposes; and
- does not hold ADSs or ordinary shares in connection with the conduct of a business or the performance of services in the UK or otherwise in connection with a branch, agency or permanent establishment in the UK.

This discussion is not a comprehensive description of all the US federal income tax and UK tax considerations that may be relevant to any particular investor (including consequences under the US alternative minimum tax or net investment income tax). Neither does it address state, local or other tax laws. National Grid has assumed that shareholders, including US Holders, are familiar with the tax rules applicable to investments in securities generally and with any special rules to which they may be subject. This discussion deals only with US Holders who hold ADSs or ordinary shares as capital assets. It does not address the tax treatment of investors who are subject to special rules. Such investors may include:

- financial institutions;
- insurance companies;
- dealers in securities or currencies;
- investors who elect mark-to-market treatment;
- entities treated as partnerships or other pass-through entities and their partners;
- individual retirement accounts and other tax-deferred accounts;
- tax-exempt organisations;
- investors who own (directly or indirectly) 10% or more of our shares (by vote or value);
- investors who hold ADSs or ordinary shares as a position in a straddle, hedging transaction or conversion transaction;
- individual investors who have ceased to be resident in the UK for a period of five years or less;
- persons that have ceased to be US citizens or lawful permanent residents of the US; and
- US Holders whose functional currency is not the US dollar.

The statements regarding US and UK tax laws and administrative practices set forth below are based on laws, treaties, judicial decisions and regulatory interpretations that were in effect on the date of this document. These laws and practices are subject to change without notice, potentially with retroactive effect. In addition, the statements set forth below are based on the representations of the Depositary and assume that each party to the Deposit agreement will perform its obligations thereunder in accordance with its terms.

US Holders of ADSs generally will be treated as the owners of the ordinary shares represented by those ADSs for US federal income tax purposes. For the purposes of the Tax Convention, the Estate Tax Convention and UK tax considerations, this discussion assumes that a US Holder of ADSs will be treated as the owner of the ordinary shares represented by those ADSs. HMRC has stated that it will continue to apply its long-standing practice of treating a holder of ADSs as holding the beneficial interest in the ordinary shares represented by the ADSs; however, we note that this is an area of some uncertainty and may be subject to change.

US Holders should consult their own advisors regarding the tax consequences of buying, owning and disposing of ADSs or ordinary shares depending on their particular circumstances, including the effect of any state, local or other tax laws.

Taxation of dividends
The UK does not currently impose a withholding tax on dividends paid to US Holders.

US Holders should assume that any cash distribution paid by us with respect to ADSs or ordinary shares will be reported as dividend income for US federal income tax purposes. While dividend income received from non-US corporations is generally taxable to a non-corporate US Holder as ordinary income for US federal income tax purposes, dividend income received by a non-corporate US Holder from us generally will be taxable at the same favourable rates applicable to long-term capital gains provided (i) either: (a) we are eligible for the benefits of the Tax Convention or (b) ADSs or ordinary shares are treated as 'readily tradable' on an established securities market in the United States; and (ii) we are not, for our taxable year during which the dividend is paid or the prior year, a passive foreign investment company for US federal income tax purposes (a PFIC), and certain other requirements are met. We expect that our shares will be treated as 'readily tradable' on an established securities market in the United States as a result of the trading of ADSs on the New York Stock Exchange. We also believe we are eligible for the benefits of the Tax Convention.

Based on our audited financial statements and the nature of our business activities, we believe that we were not treated as a PFIC for US federal income tax purposes with respect to our taxable year ending 31 March 2019. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income, and the nature of our business activities, we do not anticipate becoming a PFIC in the foreseeable future.

Dividends received by corporate US Holders with respect to ADSs or ordinary shares will not be eligible for the dividends-received deduction that is generally allowed to corporations.

Taxation of capital gains
Subject to specific rules relating to assets that derive at least 75% of their value from UK land, US Holders will not be subject to UK taxation on any capital gain realised on the sale or other disposition of ADSs or ordinary shares.

Provided that we are not a PFIC for any taxable year during which a US Holder holds their ADSs or ordinary shares, upon a sale or other disposition of ADSs or ordinary shares, a US Holder generally will recognise a capital gain or loss for US federal income tax purposes that is equal to the difference between the US dollar value of the amount realised on the sale or other disposition and the US Holder's adjusted tax basis in the ADSs or ordinary shares. Such capital gain or loss generally will be long-term capital gain or loss if the ADSs or ordinary shares were held for more than one year. For non-corporate US Holders, long-term capital gain is generally taxed at a lower rate than ordinary income. A US Holder's ability to deduct capital losses is subject to significant limitations.

US information reporting and backup withholding tax
Dividend payments made to US Holders and proceeds paid from the sale, exchange, redemption or disposal of ADSs or ordinary shares to US Holders may be subject to information reporting to the US Internal Revenue Service (IRS). Such payments may be subject to backup withholding taxes if the US Holder fails to provide an accurate taxpayer identification number or certification of exempt status or fails to comply with applicable certification requirements.

US Holders should consult their tax advisors about these rules and any other reporting obligations that may apply to the ownership or disposition of ADSs or ordinary shares. Such obligations include reporting requirements related to the holding of certain foreign financial assets.

UK stamp duty and stamp duty reserve tax (SDRT)
Transfers of ordinary shares – SDRT at the rate of 0.5% of the amount or value of the consideration will generally be payable on any agreement to transfer ordinary shares that is not completed using a duly stamped instrument of transfer (such as a stock transfer form).

The SDRT liability will be cancelled where an instrument of transfer is executed and duly stamped before the expiry of the six-year period beginning with the date on which the agreement is made. If a claim is made within the specified period, any SDRT which has been paid will be refunded. SDRT is due whether or not the agreement or transfer is made or carried out in the UK and whether or not any party to that agreement or transfer is a UK resident.

Purchases of ordinary shares completed using a stock transfer form will generally result in a UK stamp duty liability at the rate of 0.5% (rounded up to the nearest £5) of the amount or value of the consideration. Paperless transfers under the CREST paperless settlement system will generally be liable to SDRT at the rate of 0.5%, and not stamp duty. SDRT is generally the liability of the purchaser, and UK stamp duty is usually paid by the purchaser or transferee.

Transfers of ADSs – no UK stamp duty will be payable on the acquisition or transfer of existing ADSs or beneficial ownership of ADSs, provided that any instrument of transfer or written agreement to transfer is executed outside the UK and remains at all times outside the UK.

An agreement for the transfer of ADSs in the form of American Depositary Receipts will not result in an SDRT liability. A charge to stamp duty or SDRT may arise on the transfer of ordinary shares to the Depositary or The Bank of New York Mellon as agent of the Depositary (the Custodian).

The rate of stamp duty or SDRT will generally be 1.5% of the value of the consideration or, in some circumstances, the value of the ordinary shares concerned. However, there is no 1.5% SDRT charge on the issue of ordinary shares (or, where it is integral to the raising of new capital, the transfer of ordinary shares) to the Depositary or the Custodian.

The Depositary will generally be liable for the stamp duty or SDRT. Under the terms of the Deposit Agreement, the Depositary will charge any tax payable by the Depositary or the Custodian (or their nominees) on the deposit of ordinary shares to the party to whom the ADSs are delivered against such deposits. If the stamp duty is not a multiple of £5, the duty will be rounded up to the nearest multiple of £5.

UK inheritance tax
An individual who is domiciled in the US for the purposes of the Estate Tax Convention and who is not a UK national for the purposes of the Estate Tax Convention will generally not be subject to UK inheritance tax in respect of (i) the ADSs or ordinary shares on the individual's death or (ii) a gift of the ADSs or ordinary shares during the individual's lifetime. This is not the case where the ADSs or ordinary shares are part of the business property of the individual's permanent establishment in the UK or relate to a fixed base in the UK of an individual who performs independent personal services.

Special rules apply to ADSs or ordinary shares held in trust.

In the exceptional case where the ADSs or shares are subject both to UK inheritance tax and to US federal gift or estate tax, the Estate Tax Convention generally provides for the tax paid in the UK to be credited against tax paid in the US or vice versa.

Capital gains tax (CGT) for UK resident shareholders
You can find CGT information relating to National Grid shares for UK resident shareholders on the investor section of our website. Share prices on specific dates are also available on our website.

Other disclosures

All-employee share plans

The Company has a number of all-employee share plans as described below, which operated during the year. These allow UK or US-based employees to participate in tax-advantaged plans and to become shareholders in National Grid.

Sharesave

UK employees are eligible to participate in the Sharesave plan. Under this plan, participants may contribute between £5 and £500 in total each month, for a fixed period of three years, five years or both. Contributions are taken from net salary. At the end of the three or five years, participants may use their savings to purchase ordinary shares in National Grid at a 20% discounted option price, which is set at the time of each annual Sharesave launch.

Share Incentive Plan (SIP)

UK employees are eligible to participate in the SIP. Contributions up to £150 per month are deducted from participants' gross salary and used to purchase ordinary shares in National Grid each month. The shares are placed in a UK resident trust.

US Incentive Thrift Plans

Thrift Plans are open to all US employees of participating National Grid companies; these are tax-advantaged savings plans (commonly referred to as 401k plans). These are defined contribution (DC) pension plans that give participants the opportunity to invest up to applicable federal salary limits. The federal limits for calendar year 2019 were: for pre-tax contributions, a maximum of 50% of salary limited to $19,000 for those under the age of 50 and $25,000 for those aged 50 and above; for post-tax contributions, up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) could not exceed 50% of compensation, and was further subject to the combined federal annual contribution limit of $56,000. For the calendar year 2020, participants may invest up to the applicable federal salary limits: for pre-tax contributions, this is a maximum of 50% of salary limited to $19,500 for those under the age of 50 and $26,000 for those aged 50 and above; for post-tax contributions, this is up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) may not exceed 50% of compensation, and is further subject to the combined federal annual contribution limit of $57,000.

Employee Stock Purchase Plan (ESPP)

Employees of National Grid's participating US companies are eligible to participate in the ESPP (commonly referred to as a 423b plan). Eligible employees have the opportunity to purchase ADSs in National Grid on a monthly basis at a 15% discounted price. Under the plan, employees may contribute up to 20% of base pay each year, up to a maximum annual contribution of $18,888, to purchase ADSs.

Change of control provisions

No compensation would be paid for loss of office of Directors on a change of control of the Company. As at 31 March 2020, the Company had borrowing facilities of £4.2 billion available to it with a number of banks, which, on a change of control of the Company following a takeover bid, may alter or terminate; however, the Company is currently not drawing on any of such borrowing facilities. All of the Company's share plans contain provisions relating to a change of control. Outstanding awards and options would normally vest and become exercisable on a change of control, subject to the satisfaction of any performance conditions at that time. In the event of a change of control of the Company, a number of governmental and regulatory consents or approvals are likely to be required, arising from laws or regulations of the UK, the US or the EU. Such consents or approvals may also be required for acquisitions of equity securities that do not amount to a change of control.

No other agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid are considered to be significant in terms of their potential impact on the business as a whole.

Code of Ethics

In accordance with US legal requirements, the Board has adopted a Code of Ethics for senior financial professionals. This Code is available on our website: www.nationalgrid.com (where any amendments or waivers will also be posted). There were no amendments to, or waivers of, our Code of Ethics during the year.

Conflicts of interest

In accordance with the Companies Act 2006, the Board has a policy and procedure in place for the disclosure and authorisation (if appropriate) of actual and potential conflicts of interest. The Board continues to monitor and note possible conflicts of interest that each Director may have. The Directors are regularly reminded of their continuing obligations in relation to conflicts, and are required to review and confirm their external interests annually. During the year ended 31 March 2020, no new actual or potential conflicts of interest were identified that required approval by the Board. The Board has considered and noted a number of situations in relation to which no actual conflict of interest was identified. Due to current ongoing contractual negotiations that the Company has with Costain plc, the situational conflict that Paul Golby has by virtue of being a Non-executive Director of the Company and Chairman of Costain plc has been kept under constant review during the year and Paul Golby has been recused of all discussions in relation to contractual issues with Costain plc. He has also confirmed to us in writing that the same arrangements are in place in Costain plc.

Corporate governance practices: differences from New York Stock Exchange (NYSE) listing standards

The Company is listed on the NYSE and is therefore required to disclose differences in its corporate governance practices adopted as a UK listed company, compared with those of a US company.

The corporate governance practices of the Company are primarily based on the requirements of the Corporate Governance Code 2018 but substantially conform to those required of US companies listed on the NYSE. The following is a summary of the significant ways in which the Company's corporate governance practices differ from those followed by US companies under Section 303A Corporate Governance Standards of the NYSE.

The NYSE rules and the Code apply different tests for the independence of Board members.

The NYSE rules require a separate nominating/corporate governance committee composed entirely of independent Directors. There is no requirement for a separate corporate governance committee in the UK. Under the Company's corporate governance policies, all Directors on the Board discuss and decide upon governance issues, and the Nominations Committee makes recommendations to the Board with regard to certain responsibilities of a corporate governance committee.

The NYSE rules require listed companies to adopt and disclose corporate governance guidelines. While the Company reports compliance with the Code in each Annual Report and Accounts, the UK requirements do not require the Company to adopt and disclose separate corporate governance guidelines.

The NYSE rules require a separate audit committee composed of at least three independent members. While the Company's Audit Committee exceeds the NYSE's minimum independent Non-executive Director membership requirements, it should be noted that the quorum for a meeting of the Audit Committee, of two independent Non-executive Directors, is less than the minimum membership requirements under the NYSE rules.

The NYSE rules require a compensation committee composed entirely of independent Directors, and prescribe criteria to evaluate the independence of the committee's members and its ability to engage external compensation advisors. While the Code prescribes different independence criteria, the Non-executive Directors on the Company's Remuneration Committee have each been deemed independent by the Board under the NYSE rules. Although the evaluation criteria for appointment of external advisors differ under the Code, the Remuneration Committee is solely responsible for the appointment, retention and termination of such advisors.

Directors' indemnity

The Company has arranged, in accordance with the Companies Act 2006 and the Articles of Association, qualifying third-party indemnities against financial exposure that Directors may incur in the course of their professional duties. Equivalent qualifying third-party indemnities were, and remain, in force for the benefit of those Directors who stood down from the Board in prior financial years for matters arising when they were Directors of the Company. Alongside these indemnities, the Company places Directors' and Officers' liability insurance cover for each Director.

Employees

We negotiate with recognised unions. It is our policy to maintain well developed communications and consultation programmes. Other than the implementation of the Massachusetts workforce contingency plan in June 2018 there have been no material disruptions to our operations from labour disputes during the past five years. The agreement under dispute between the Company and the Massachusetts Gas unions was satisfactorily renegotiated in January 2019. National Grid believes that it can conduct its relationships with trade unions and employees in a satisfactory manner. Further details on the Company's colleagues can be found on pages 52 – 54.

Human rights

Respect for human rights is incorporated into our employment practices and our core values, which are integral to our Code of Ethical Business Conduct. The way in which we conduct ourselves allows us to build trust with the people with whom we work. As a global utility company, we earn this trust by doing things in the right way, complying with the laws of the countries in which we do business while building our reputation as a responsible company that our stakeholders want to do business with and our employees want to work for. Although we do not have specific policies relating to human rights, slavery or human trafficking, our commitment is guided by our Global Supplier Code of Conduct (GSCoC) that integrates human rights into the way we do business throughout our supply chain alongside other areas of sustainability. This Code outlines our values and expectations to ensure we treat people with respect and protect their human rights, protect the environment and preserve natural resources and positively impact the interests of the communities we serve and from which we procure goods and services. Through our GSCoC, we expect our suppliers to act in accordance with the highest ethical standards and comply with all the relevant laws, regulations and licences relating to their business, as well as adhere to the Principles of the United Nations Global Compact, the International Labour Organization (ILO) minimum standards, the Ethical Trading Initiative (ETI) Base Code, the UK Modern Slavery Act 2015, Trafficking and Violence Protection Act 2000 and, for our UK suppliers, the requirements of the Living Wage Foundation.

Listing Rule 9.8.4 R cross-reference table

Information required to be disclosed by LR 9.8.4 R (starting on page indicated):

Interest capitalised	Page 140
Publication of unaudited financial information	Not applicable
Details of long-term incentive schemes	Not applicable
Waiver of emoluments by a director	Not applicable
Waiver of future emoluments by a director	Not applicable
Non-pre-emptive issues of equity for cash	Not applicable
Item (7) in relation to major subsidiary undertakings	Not applicable
Parent participation in a placing by a listed subsidiary	Not applicable
Contracts of significance	Not applicable
Provision of services by a controlling shareholder	Not applicable
Shareholder waivers of dividends	Page 234
Shareholder waivers of future dividends	Page 234
Agreements with controlling shareholders	Not applicable

Material contracts

Each of our Executive Directors has a Service Agreement and each Non-executive Director has a Letter of Appointment. Apart from these, no contract (other than contracts entered into in the ordinary course of business) has been entered into by the Group within the two years immediately preceding the date of this report that is, or may be, material, or that contains any provision under which any member of the Group has any obligation or entitlement that is material to the Group at the date of this report.

Political donations and expenditure

At this year's AGM, the Directors will again seek authority from shareholders, on a precautionary basis, for the Company and its subsidiaries to make donations to registered political parties and other political organisations and/or incur political expenditure as such terms are defined in the Companies Act 2006. In each case, donations will be in amounts not exceeding £125,000 in aggregate. The definitions of these terms in the Companies Act 2006 are very wide. As a result, this can cover bodies such as those concerned with policy review, law reform and the representation of the business community. It could include special interest groups, such as those involved with the environment, which the Company and its subsidiaries might wish to support, even though these activities are not designed to support or influence support for a particular party. The Companies Act 2006 states that all-party parliamentary groups are not political organisations for these purposes, meaning the authority to be sought from shareholders is not relevant to interactions with such groups. The Company has no intention of changing its current practice of not making political donations or incurring political expenditure within the ordinary meaning of those words. This authority is, therefore, being sought to ensure that none of the Company's activities inadvertently infringe these rules.

National Grid made no political donations in the UK or the EU during the year, including donations as defined for the purposes of the Political Parties, Elections and Referendums Act 2000. National Grid USA and its affiliated New York and federal political action committees (PAC) made political donations in the US totalling $46,050 (£36,978) during the year. National Grid USA's affiliated New York PAC was funded partly by contributions from National Grid USA and certain of its subsidiaries and partly by voluntary employee contributions. National Grid USA's affiliated federal PAC was funded wholly by voluntary employee contributions.

Property, plant and equipment

This information can be found in note 13 property, plant and equipment on pages 150 – 152, note 21 borrowing on pages 161 – 163 and where we operate on page 218.

Research, development and innovation activity

Investment in research and development during the year for the Group was £14 million (2018/19: £19 million; 2017/18: £13 million). Due to the way in which we work with a large number of partners on new ideas, our disclosed research and development expenditure is lower than the overall contribution we make to the industry. We only disclose directly incurred expenditure, and not those amounts our partners contribute to joint or collaborative projects. Collaborating across the industry has played a crucial role in our ability to develop new programmes and deliver value to our stakeholders throughout 2019/20.

Continued collaboration and stakeholder engagement have driven the research programmes for ET innovation. Our engagement with stakeholders as part of webinars, podcasts, formal meetings, conferences and dissemination events has been instrumental to developing our strategies including our overall innovation strategy as well as technology and asset-related innovation strategies.

As a result, our project portfolio has been developed around the themes of delivering cleaner and cheaper energy. Our commitment to the 'Net Zero' target for 2050 has provided the focus for our research programme on carbon emission reduction. We have started cross-sector collaboration in order to drive a whole-system approach to decarbonising key sectors such as heat, transport and industry. Our Zero2050 project in South Wales has brought diverse stakeholders from utilities, industry, academia, SMEs, consultants and government together to design a pathway to decarbonisation for South Wales that delivers best value to consumers.

Other disclosures continued

We are also increasing research into decarbonising our own operations and preparing our network for the changes we need to make to accommodate a fully decarbonised energy sector. We have worked with our partners on several projects, investigating ways to eliminate greenhouse gases from our gas-insulated equipment as well as the reduction of our carbon footprint relating to our construction work. Our future network will need to accommodate more renewable energy sources and other converter-based connections and equipment. Providing the infrastructure for a secure, efficient and reliable network requires an increased understanding of network stability with reduced inertia in the system. We have started four projects investigating the impacts of reduced inertia, potential controller interactions and reduced fault levels. As part of these projects we are developing our capabilities to accurately model the electricity transmission network and are developing schemes to mitigate the impacts on system stability and protection performance.

The second key aspect that our stakeholder engagement has highlighted is the delivery of cheaper energy. This has been implemented in our research programme on optimised asset management and monitoring as well as the digitisation of operational technology, considering in particular, cyber security in a context of increasing cyber threats.

As a key enabler for future innovation we have continued the delivery of our Deeside Centre for Innovation. Significant progress has been made with the completion of the control building, good progress on the construction of the overhead line test area and detailed design for the substation area, which notably includes a trial for construction with cement-free concrete.

The ESO has been innovating to make sure the electricity network operates safely and efficiently around the clock. Innovation is key to creating a sustainable, low-carbon electricity system for the future that will help the UK meet its net zero commitments. We refresh our strategy and innovation priorities annually, based on consultation with our stakeholders and this ensures we continue to focus innovation funding only on the most effective projects which can deliver consumer benefits. Next year will see us continue delivering large-scale ESO-led innovation projects, including Distributed ReStart, a £10 million Network Innovation Competition (NIC) project with SP Energy Networks and specialist energy consultancy TNEI. In a world first, this project will develop and demonstrate coordination of DERs to provide a safe and effective Black Start service at lower cost to consumers.

Gas Transmission innovation has continued to focus on developing innovation programmes across core areas such as net zero, safety, reliability and asset health, and embedding these in the business, while also preparing to deliver the energy network of the future and facilitate UK decarbonisation. Highlights from the year include:

- expanding our focus on hydrogen with a number of new projects, including Hydrogen Injection into the NTS, looking at the requirements to carry out a physical trial of hydrogen in the NTS;
- the Monitoring of Real-Time Fugitive Emissions project, looking at developing a robust measurement protocol and a new, low-cost, distributed sensor scheme to monitor fugitive emissions;
- the Spatial GB Clean Heat model, a National Grid-led collaborative project with the gas distribution networks to develop an integrated, cross-vector heat decarbonisation model of the whole heating system within GB to optimise future investment plans;
- launching a number of innovation calls with the Energy Innovation Centre (EIC), reaching out to innovators and small and medium-sized enterprises (SMEs) to find new technologies and solutions to some of our biggest challenges on the NTS;
- the GRAID ART project, which will investigate the addition of Acoustic Resonance Technology (ART) onto the GRAID robotic platform to enhance our underground pipeline inspections, provide robust data about their condition and reduce maintenance and repair costs;
- the installation of the Composite Transition Pieces at Peterborough and Huntingdon; these innovative seal units make it quicker, cheaper and safer to assess pipelines for corrosion.

Research and Development (R&D) work in the US focused on the advancement of products, processes, systems and work methods that may be new to National Grid. This is accomplished by working with internal departments to identify where strategic R&D investment is needed and is likely to prove beneficial. To achieve these goals, we work in collaboration with technical organisations, academia and vendors in the energy sector that align with our goals and objectives to provide a safe, reliable, efficient and clean service. This collaboration has also helped inform our strategic direction in response to jurisdictional requests for electric modernisation (Grid Modernisation in Massachusetts, Rhode Island and Reforming the Energy Vision (REV) in New York). We continue to focus our R&D on increasing public safety, protecting our workforce and reducing the cost of the work we perform.

In 2019/20, we continued to invest and participate in several significant pilot projects with the intention of obtaining operational knowledge and experience of technology-driven system impacts. Below are a few examples of our R&D projects:

US Electricity:

- In Massachusetts under our 'Solar Phase II' programme, we contracted and built 15.27 MW of company-owned photovoltaics facilities. The objective is to better understand the real-world impact advanced technologies can bring to the grid; such as reduced customer interconnection costs and time; increasing hosting capacity; and improving the distribution system's overall power quality and reliability. We partnered with the Electric Power Research Institute (EPRI), Sandia National Laboratories (Sandia) and Fraunhofer Gesellschaft (Fraunhofer);
- With the EPRI, we explored the value of customised smart inverter settings and advanced metering at the Point of Common Coupling (PCC) and published our findings in a white paper titled 'Recommended Smart Inverter Settings for Grid Support and Test Plan: Interim Report'. We also worked with them to calculate the severity of PV Arc Flashes, of which the team shared their findings in a paper titled 'DC Arc Flash on Photovoltaic Equipment';
- With National Grid's support, Sandia initiated an Advanced Distribution Management Systems (ADMS) to optimise commands to allow PV penetration of 50% or greater. Our work was published in a paper titled 'Optimal Distribution System Voltage Regulation using State Estimation and DER Grid-Support Functions';
- Under the support of the US Department of Energy, the Fraunhofer CSE-led project, called 'SunDial', we created a system that optimally manages facility loads and energy storage charging and discharging with PV to mitigate potential problems due to intermittency and large ramps in generation;
- In the 'Solar Phase III' programme, we developed seven additional sites each equipped with a unique combination of smart inverters, energy storage, advanced metering, plant level control, and other equipment with features beyond today's industry standards. We will be testing these new technologies on a variety of distribution circuits; and
- Last year, we completed two New York REV pilot projects:
  - Fruit Belt Neighbourhood Solar and Community Resilience. This year we have completed an additional New York REV demonstration project; and
  - The Distributed System Platform (DSP) REV demonstration project tested a small-scale distribution system energy market involving customer-owned DERs to support the Distribution System Operator (DSO) concept.

- We continued to progress our Smart City REV demonstration project in partnership with the city of Schenectady. Phase 1, which involves procurement, deployment and initial operation of all selected technologies, has progressed beyond 90% completion. Now we are collaborating on the establishment and assessment of functional performance characteristics, including feedback from city stakeholders to evaluate the public acceptance and the overall value proposition. Phase 2 of the project is currently in the technology procurement phase, which will then be deployed in the remaining areas of the city.
- National Grid is heavily engaged on several programmes, including bulk system renewables, DERs integration, planning and asset management, energy storage, asset management for transmission and distribution, system automation and integrating emerging technologies.
- To proactively monitor environmental conditions within underground structures (manholes) we have piloted the installation of manhole monitoring technology produced by CNIguard. Underground infrastructure can be susceptible to the accumulation of water, debris and salt that can result in the degradation of assets. This can result in failure of the assets thereby increasing the operation and loading on parallel equipment. National Grid has installed nine units in Providence, Rhode Island and 11 in Brockton, Massachusetts and will be installing 12 in Albany, NY, 12 in Brockton, Massachusetts and 12 in Providence, Rhode Island in the second quarter of 2020.
- National Grid is preparing to demonstrate online monitoring technology at transmission substations and lines in our New England service area. These technologies will allow the Company to utilise the capacity of lines and transformers more efficiently and focus maintenance efforts on the assets which are at the greatest risk.
- Over the next 10 years we will be deploying up to 170 digital substations in New England and New York as we transition to fully digital substations on our transmission network, which will utilise the IEC 61850 communications standard. The digital substation reduces construction and operation costs, engineering and construction time, increases system flexibility, and helps facilitate the large-scale incorporation of renewable power.

US gas:

- While partnering with a robotics company and another utility, we have been developing and testing new technology to locate inadvertent sewer cross bores created when using some trenchless technology. This technology is deployed in our gas main immediately after installation, prior to the introduction of natural gas. It differs from the current process, which requires us to gain access to the municipal sewer system. Deployment will reduce the risk and cost associated with sewer cross bores. We constructed a functional sewer system covering five hectares at one of our facilities to test the accuracy of the technology. We purposefully created cross bores in the system at several points to determine if the technology could locate them. The technology found all the cross bores with no false negatives. We are currently transitioning the technology to the field for live testing.
- We have been working with a Canadian valve manufacturer to develop a service isolation valve to locally and remotely isolate a gas service. The application has become necessary due to recent industry incidents in the US. The valve has passed all industry and National Grid required testing and can be installed on service lines up to 11 bar of pressure. The valve can take a switched signal from any source and locally isolate the gas service. Signals include flood, fire, seismic, under-pressurisation, over-pressurisation and methane. The valve can also be closed via a wireless signal from National Grid. We are currently building 75 units to be deployed in the New York State service territory. We are in conversations with our regulators to expand the testing to 1,000 units as a solution to hurricane Sandy flooding issues.
- To enhance the functionality of the service isolation valve, we have been working to develop and deploy enhanced residential methane detectors (RMDs). With the deployment of the 75 service isolation valves, we are installing European manufactured RMDs that are powered by 120 V and hard wired to the valve control. We are working with several manufacturers on enhancements: first to power the unit with long-term batteries (current technology limits battery life to three years); and second, to introduce wireless communication to the valve controller (as current technology requires wiring from the RMD to the isolation valve). We are developing an RMD with communications technology that would allow installation of the RMD in remote locations in residential flats, and installation of the RMD in locations where gas is being used to signal if gas escapes.

The Company is utilising all the R&D efforts described above, to create the Grid modernisation plans for all jurisdictions.

Unresolved SEC staff comments

There are no unresolved SEC staff comments required to be reported.

Other unaudited financial information

Alternative performance measures/non-IFRS reconciliations

Within the Annual Report, a number of financial measures are presented. These measures have been categorised as alternative performance measures (APMs), as per the European Securities and Markets Authority (ESMA) guidelines and the Securities and Exchange Commission (SEC) conditions for use of non-GAAP financial measures.

An APM is a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined under IFRS. The Group uses a range of these measures to provide a better understanding of its underlying performance. APMs are reconciled to the most directly comparable IFRS financial measure where practicable.

The Group has defined the following financial measures as APMs derived from IFRS: net revenue, the various adjusted operating profit, earnings and earnings per share metrics detailed in the 'adjusted profit measures' section below, net debt, capital investment, funds from operations (FFO), FFO interest cover and retained cash flow (RCF)/adjusted net debt. For each of these we present a reconciliation to the most directly comparable IFRS measure.

We also have a number of APMs derived from regulatory measures which have no basis under IFRS; we call these Regulatory Performance Measures (RPMs). They comprise: Group Return on Equity (RoE), UK and US regulatory RoE, regulated asset base, regulated financial performance, regulatory gearing, asset growth, Value Added, including Value Added per share and Value Growth. These measures include the inputs used by utility regulators to set the allowed revenues for many of our businesses.

We use RPMs to monitor progress against our regulatory agreements and certain aspects of our strategic objectives. Further, targets for certain of these performance measures are included in the Company's Annual Performance Plan (APP) and Long Term Performance Plan (LTPP) and contribute to how we reward our employees. As such, we believe that they provide close correlation to the economic value we generate for our shareholders and are therefore important supplemental measures for our shareholders to understand the performance of the business and to ensure a complete understanding of Group performance.

As the starting point for our RPMs is not IFRS, and these measures are not governed by IFRS, we are unable to provide meaningful reconciliations to any directly comparable IFRS measures, as differences between IFRS and the regulatory recognition rules applied have built up over many years. Instead, for each of these we present an explanation of how the measure has been determined and why it is important, and an overview as to why it would not be meaningful to provide a reconciliation to IFRS.

Alternative performance measures

Net revenue

Net revenue is revenue less pass-through costs, such as UK system balancing costs, gas and electricity commodity costs in the US and, prior to the adoption of IFRS 15, payments to other UK network owners. Pass-through costs are fully recoverable from our customers and are recovered through separate charges that are designed to recover those costs with no profit. Any over- or under-recovery of these costs is returned to, or recovered from, our customers.

	2020			2019			2018		
	Gross revenue £m	**Pass-through costs £m**	**Net revenue £m**	Gross revenue £m	Pass-through costs £m	Net revenue £m	Gross revenue £m	Pass-through costs £m	Net revenue £m
UK Electricity Transmission	**3,702**	**(1,528)**	**2,174**	3,351	(1,397)	1,954	4,154	(2,243)	1,911
UK Gas Transmission	**927**	**(242)**	**685**	896	(227)	669	1,091	(257)	834
US Regulated	**9,205**	**(3,460)**	**5,745**	9,846	(3,978)	5,868	9,272	(3,804)	5,468
NGV and Other	**736**	**–**	**736**	876	–	876	776	–	776
Sales between segments	**(30)**	**–**	**(30)**	(36)	–	(36)	(43)	–	(43)
Total	**14,540**	**(5,230)**	**9,310**	14,933	(5,602)	9,331	15,250	(6,304)	8,946

Adjusted profit measures

In considering the financial performance of our business and segments, we use various adjusted profit measures in order to aid comparability of results year-on-year.

The various measures are presented on pages 28 – 37 and reconciled below.

Adjusted results, also referred to as Headline results – these exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by management that forms part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in Note 5 to the financial statements.

Underlying results – further adapts our adjusted results to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues, including revenue incentives, as governed by our rate plans in the US or regulatory price controls in the UK (but excluding totex-related allowances and adjustments). For 2019/20, as highlighted on page 241, our underlying results exclude £147 million (2018/19: £108 million) of timing differences. We have not excluded major storm costs this year as costs were below our $100 million storm cost timing threshold (2018/19: £93 million). We expect to recover major storm costs incurred through regulatory mechanisms in the US.

Constant currency – the adjusted profit measures are also shown on a constant currency basis to show the year-on-year comparisons excluding any impact of foreign currency movements.

Reconciliation of statutory, adjusted and underlying profits and earnings – at actual exchange rates – continuing operations

Year ended 31 March 2020	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	**1,316**	**4**	**1,320**	**(146)**	**–**	**1,174**
UK Gas Transmission	**347**	**1**	**348**	**54**	**–**	**402**
US Regulated	**880**	**517**	**1,397**	**239**	**–**	**1,636**
NGV and Other	**237**	**5**	**242**	**–**	**–**	**242**
Total operating profit	**2,780**	**527**	**3,307**	**147**	**–**	**3,454**
Net finance costs	**(1,113)**	**64**	**(1,049)**	**–**	**–**	**(1,049)**
Share of post-tax results of joint ventures and associates	**87**	**1**	**88**	**–**	**–**	**88**
Profit before tax	**1,754**	**592**	**2,346**	**147**	**–**	**2,493**
Tax	**(480)**	**47**	**(433)**	**(45)**	**–**	**(478)**
Profit after tax	**1,274**	**639**	**1,913**	**102**	**–**	**2,015**

Year ended 31 March 2019	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	778	237	1,015	77	–	1,092
UK Gas Transmission	267	36	303	38	–	341
US Regulated	1,425	299	1,724	(223)	93	1,594
NGV and Other	400	–	400	–	–	400
Total operating profit	2,870	572	3,442	(108)	93	3,427
Net finance costs	(1,069)	76	(993)	–	–	(993)
Share of post-tax results of joint ventures and associates	40	–	40	–	–	40
Profit before tax	1,841	648	2,489	(108)	93	2,474
Tax	(339)	(149)	(488)	36	(24)	(476)
Profit after tax	1,502	499	2,001	(72)	69	1,998

Year ended 31 March 2018	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,041	–	1,041	14	–	1,055
UK Gas Transmission	487	–	487	18	–	505
US Regulated	1,734	(36)	1,698	(136)	142	1,704
NGV and Other	231	–	231	–	–	231
Total operating profit	3,493	(36)	3,457	(104)	142	3,495
Net finance costs	(882)	(119)	(1,001)	–	–	(1,001)
Share of post-tax results of joint ventures and associates	49	(5)	44	–	–	44
Profit before tax	2,660	(160)	2,500	(104)	142	2,538
Tax	889	(1,473)	(584)	42	(51)	(593)
Profit after tax	3,549	(1,633)	1,916	(62)	91	1,945

Other unaudited financial information continued

Reconciliation of adjusted and underlying profits – at constant currency

		At constant currency				
Year ended 31 March 2019	Adjusted at actual exchange rate £m	Constant currency adjustment £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,015	–	1,015	77	–	1,092
UK Gas Transmission	303	–	303	38	–	341
US Regulated	1,724	25	1,749	(226)	94	1,617
NGV and Other	400	1	401	–	–	401
Total operating profit	3,442	26	3,468	(111)	94	3,451
Net finance costs	(993)	(11)	(1,004)	–	–	(1,004)
Share of post-tax results of joint ventures and associates	40	–	40	–	–	40
Profit before tax	2,489	15	2,504	(111)	94	2,487

		At constant currency				
Year ended 31 March 2018	Adjusted at actual exchange rate £m	Constant currency adjustment £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,041	–	1,041	14	–	1,055
UK Gas Transmission	487	–	487	18	–	505
US Regulated	1,698	94	1,792	(144)	150	1,798
NGV and Other	231	(4)	227	–	–	227
Total operating profit	3,457	90	3,547	(112)	150	3,585
Net finance costs	(1,001)	(38)	(1,039)	–	–	(1,039)
Share of post-tax results of joint ventures and associates	44	1	45	–	–	45
Profit before tax	2,500	53	2,553	(112)	150	2,591

Earnings per share calculations from continuing operations – at actual exchange rates

The table below reconciles the profit before tax from continuing operations as per the previous tables back to the earnings per share from continuing operations for each of the adjusted profit measures. Earnings per share is only presented for those adjusted profit measures that are at actual exchange rates, and not for those at constant currency.

Year ended 31 March 2020	**Profit after tax £m**	**Non-controlling interest £m**	**Profit after tax attributable to shareholders £m**	**Weighted average number of shares millions**	**Earnings per share pence**
Statutory	**1,274**	**(1)**	**1,273**	**3,461**	**36.8**
Adjusted (also referred to as Headline)	**1,913**	**(1)**	**1,912**	**3,461**	**55.2**
Underlying	**2,015**	**(1)**	**2,014**	**3,461**	**58.2**

Year ended 31 March 2019	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	1,502	(3)	1,499	3,386	44.3
Adjusted (also referred to as Headline)	2,001	(3)	1,998	3,386	59.0
Underlying	1,998	(3)	1,995	3,386	58.9

Year ended 31 March 2018	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	3,549	(1)	3,548	3,461	102.5
Adjusted (also referred to as Headline)	1,916	(1)	1,915	3,461	55.3
Underlying	1,945	(1)	1,944	3,461	56.2

Timing and regulated revenue adjustments

As described on pages 219 – 226, our allowed revenues are set in accordance with our regulatory price controls or rate plans. We calculate the tariffs we charge our customers based on the estimated volume of energy we expect will be delivered during the coming period. The actual volumes delivered will differ from the estimate. Therefore, our total actual revenue will be different from our total allowed revenue. These differences are commonly referred to as timing differences.

If we collect more than the allowed revenue, the balance must be returned to customers in subsequent periods, and if we collect less than the allowed level of revenue, we may recover the balance from customers in subsequent periods. In the US, a substantial portion of our costs are pass-through costs (including commodity and energy-efficiency costs) and are fully recoverable from our customers. Timing differences between costs of this type being incurred and their recovery through revenue are also included in timing. The amounts calculated as timing differences are estimates and subject to change until the variables that determine allowed revenue are final.

Our continuing operating profit for the year includes a total estimated in-year under-collection of £147 million (2018/19: £108 million over-collection). Our closing balance at 31 March 2020 was £256 million over-recovered. In the UK, there was a cumulative over-recovery of £24 million at 31 March 2020 (2019: under-recovery of £59 million). In the US, cumulative timing over-recoveries at 31 March 2020 were £240 million (2019: £466 million over-recovery).

The total estimated in-year over- or under-collection excludes opening balance adjustments related to estimates or finalisation of balances as part of regulatory submissions.

In addition to the timing adjustments described above, as part of the RIIO price controls in the UK, outperformance against allowances as a result of the totex incentive mechanism, together with changes in output-related allowances included in the original price control, will almost always be adjusted in future revenue recoveries, typically starting in two years' time. We are also recovering revenues in relation to certain costs incurred (for example pension contributions made) in prior years.

Our current IFRS revenues and earnings include these amounts that relate to certain costs incurred in prior years or that will need to be repaid or recovered in future periods. Such adjustments will form an important part of the continuing difference between reported IFRS results and underlying economic performance based on our regulatory obligations.

For our UK Regulated businesses as a whole, timing and regulated revenue adjustments totalled a recovery of £92 million in the year (2018/19: £115 million return). In the US, accumulated regulatory entitlements cover a range of different areas, with the most significant being environmental remediation and pension assets, as well as deferred storm costs.

All regulatory entitlements are recoverable (or repayable) over different periods, which are agreed with the regulators to match the expected payment profile for the liabilities.

	UK Electricity Transmission £m	**UK Gas Transmission £m**	**US Regulated £m**	**Total £m**
1 April 2019 opening balance[1]	**(127)**	**59**	**471**	**403**
Over/(under) recovery	**146**	**(54)**	**(239)**	**(147)**
31 March 2020 closing balance to (recover)/return[3]	**19**	**5**	**232**	**256**

	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	Total £m
1 April 2018 opening balance[1]	(41)	97	245	301
Over/(under) recovery	(77)	(38)	226	111
31 March 2019 closing balance to (recover)/return[2,3]	(118)	59	471	412

	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	Total £m
1 April 2017 opening balance[1]	(30)	111	108	189
Over/(under) recovery	(14)	(18)	143	111
31 March 2018 closing balance to (recover)/return[2,3]	(44)	93	251	300

1. Opening balances have been restated to reflect the finalisation of calculated over/(under)-recoveries in the UK and the US.
2. US over/(under) recovery and all US Regulated balances have been translated using the average exchange rate for the year ended 31 March 2020.
3. The over-recovered closing balance at 31 March 2020 was £264 million (translated at the closing rate of $1.24:£1). 31 March 2019 was £407 million (translated at the closing rate of $1.30:£1). 31 March 2018 was £279 million (translated at the closing rate of $1.40:£1).

Other unaudited financial information continued

Capital investment

'Capital investment' or 'investment' refer to additions to property, plant and equipment and intangible assets, and contributions to joint ventures and associates, other than the St William Homes LLP joint venture during the period. We also include the Group's investments by National Grid Partners during the period, which are classified for IFRS purposes as non-current financial assets in the Group's consolidated statement of financial position.

Investments made to our St William Homes LLP arrangement are excluded based on the nature of this joint venture arrangement. We typically contribute property assets to the joint venture in exchange for cash and accordingly do not consider these transactions to be in the nature of capital investment.

Year ended 31 March	At actual exchange rates			At constant currency		
	2020 £m	2019 £m	% change	2020 £m	2019 £m	% change
UK Electricity Transmission	**1,043**	925	13	**1,043**	925	13
UK Gas Transmission	**249**	308	(19)	**249**	308	(19)
US Regulated	**3,228**	2,650	22	**3,228**	2,688	20
NGV and Other	**559**	438	28	**559**	439	27
Group capital expenditure	**5,079**	4,321	18	**5,079**	4,360	16
Equity investment, funding contributions and loans to joint ventures and associates[1]	**56**	127	(56)	**56**	128	(56)
Acquisition of Geronimo and Emerald	**209**	–	n/a	**209**	–	n/a
Increase in financial assets (National Grid Partners)	**61**	58	5	**61**	59	3
Group capital investment	**5,405**	4,506	20	**5,405**	4,547	19

1. Excludes £15 million (2019: £47 million) equity contribution to the St William Homes LLP joint venture.

Net debt

See note 29 on page 178 for the definition and reconciliation of net debt.

Funds from operations and interest cover

FFO is the cash flows generated by the operations of the Group. Credit rating metrics, including FFO, are used as indicators of balance sheet strength.

Year ended 31 March	2020 £m	2019[1] £m	2018[1] £m
Interest expense (income statement)	**1,119**	1,066	1,128
Hybrid interest reclassified as dividend	**(39)**	(51)	(51)
Capitalised interest	**122**	135	128
Pensions interest adjustment	**16**	(4)	(49)
Interest on lease rentals adjustment	**–**	11	16
Unwinding of discount on provisions	**(77)**	(74)	(75)
Other interest adjustments	**–**	1	12
Adjusted interest expense	**1,141**	1,084	1,109
Net cash inflow from operating activities	**4,715**	4,389	4,710
Interest received on financial instruments	**73**	68	57
Interest paid on financial instruments	**(957)**	(914)	(853)
Dividends received	**75**	201	213
Working capital adjustment	**(269)**	(40)	(118)
Excess employer pension contributions	**176**	260	211
Hybrid interest reclassified as dividend	**39**	51	51
Lease rentals	**–**	34	86
Difference in net interest expense in income statement to cash flow	**(187)**	(186)	(178)
Difference in current tax in income statement to cash flow	**67**	(13)	(206)
Current tax related to prior periods	**(45)**	(52)	(22)
Cash flow from discontinued operations	**(97)**	(71)	(207)
Funds from operations (FFO)	**3,590**	3,727	3,744
FFO interest cover ((FFO + adjusted interest expense)/adjusted interest expense)	**4.1x**	4.4x	4.4x

1. Numbers for 2019 and 2018 reflect the calculations for the total Group as based on the published accounts for the respective years.

Retained cash flow/adjusted net debt

RCF/adjusted net debt is one of two credit metrics that we monitor in order to ensure the Group is generating sufficient cash to service its debts, consistent with maintaining a strong investment-grade credit rating. We calculated RCF/adjusted net debt applying the methodology used by Moody's, as this is one of the most constrained calculations of credit worthiness. The net debt denominator includes adjustments to take account of the equity component of hybrid debt.

Year ended 31 March	2020 £m	2019 £m	2018 £m
Funds from operations (FFO)	**3,590**	3,727	3,744
Hybrid interest reclassified as dividend	**(39)**	(51)	(51)
Ordinary dividends paid to shareholders	**(892)**	(1,160)	(1,316)
RCF (excluding share buybacks)	**2,659**	2,516	2,377
Repurchase of shares	**–**	–	(178)
RCF (net of share buybacks)	**2,659**	2,516	2,199
Borrowings	**30,794**	28,730	26,625
Less:			
50% hybrid debt	**(1,054)**	(1,039)	(1,050)
Cash and cash equivalents	**(73)**	(252)	(329)
Financial and other investments	**(1,278)**	(1,311)	(2,304)
Underfunded pension obligations	**1,442**	845	857
Operating leases adjustment	**–**	248	408
Derivative balances removed from debt	**(116)**	141	(479)
Currency swaps	**203**	38	117
Nuclear decommissioning liabilities reclassified as debt	**6**	18	5
Collateral – cash received under collateral agreements	**(785)**	(558)	(878)
Accrued interest removed from short-term debt	**(246)**	(223)	(195)
Adjusted net debt (includes pension deficit)	**28,893**	26,637	22,777
RCF (excluding share buybacks)/adjusted net debt	**9.2%**	9.4%	10.4%
RCF (net of share buybacks)/adjusted net debt	**9.2%**	9.4%	9.7%

Regulatory Performance Measures

Regulated financial performance – UK

Regulatory financial performance is a pre-interest and tax measure, starting at segmental operating profit and making adjustments (such as the elimination of all pass-through items included in revenue allowances and timing) to approximate regulatory profit for the UK regulated activities. This measure provides a bridge for investors between a well-understood and comparable IFRS starting point and through the key adjustments required to approximate regulatory profit. This measure also provides the foundation to calculate Group RoE.

For the reasons noted above, the table below shows the principal differences between the IFRS operating profit and the regulated financial performance, but is not a formal reconciliation to an equivalent IFRS measure.

UK Electricity Transmission

Year ended 31 March	2020 £m	2019 £m	2018 £m
Adjusted operating profit	**1,320**	1,015	1,041
Movement in regulatory 'IOUs'	**(99)**	174	51
Deferred taxation adjustment	**63**	64	70
RAV indexation (average 3% long-run inflation)	**406**	391	374
Regulatory vs IFRS depreciation difference	**(459)**	(394)	(377)
Fast money/other	**26**	72	69
Pensions	**(52)**	(51)	(49)
Performance RAV created	**119**	90	83
Regulated financial performance	**1,324**	1,361	1,262

Other unaudited financial information continued

UK Gas Transmission

Year ended 31 March	2020 £m	2019 £m	2018 £m
Adjusted operating profit	**348**	303	487
Movement in regulatory 'IOUs'	**67**	68	(91)
Deferred taxation adjustment	**25**	8	18
RAV indexation (average 3% long-run inflation)	**185**	179	173
Regulatory vs IFRS depreciation difference	**(77)**	(42)	(29)
Fast money/other	**(17)**	(10)	(11)
Pensions	**(34)**	(33)	(32)
Performance RAV created	**(24)**	(30)	(16)
Regulated financial performance	**473**	443	499

Regulated financial performance – US

US Regulated

Year ended 31 March	2020 £m	2019 £m	2018 £m
Adjusted operating profit	**1,397**	1,724	1,698
Bad debt provision (COVID-19)[1]	**117**	–	–
Major storm costs	**–**	93	142
Timing	**239**	(223)	(136)
US GAAP pension adjustment	**(4)**	(80)	(73)
Regulated financial performance	**1,749**	1,514	1,631

1. US Regulated financial performance includes an adjustment reflecting our expectation for future recovery of COVID-19 related bad and doubtful debt costs.

Total regulated financial performance

Year ended 31 March	2020 £m	2019 £m	2018 £m
UK Electricity Transmission	**1,324**	1,361	1,262
UK Gas Transmission	**473**	443	499
US Regulated	**1,749**	1,514	1,631
Total regulated financial performance	**3,546**	3,318	3,392

US timing, major storms and movement in UK regulatory 'IOUs' – Revenue related to performance in one year may be recovered in later years. Revenue may be recovered in one year but be required to be returned to customers in future years. In the UK, this is calculated as the movement in other regulated assets and liabilities.

Performance RAV – UK performance efficiencies are in-part remunerated by the creation of additional RAV which is expected to result in future earnings under regulatory arrangements. This is calculated as in-year totex outperformance multiplied by the appropriate regulatory capitalisation ratio and multiplied by the retained company incentive sharing ratio.

Pension adjustment – Cash payments against pension deficits in the UK are recoverable under regulatory contracts. In US Regulated operations, US GAAP pension charges are generally recoverable through rates. Revenue recoveries are recognised under IFRS but payments are not charged against IFRS operating profits in the year. In the UK, this is calculated as cash payments against the regulatory proportion of pension deficits in the UK regulated business, whereas in the US, it is the difference between IFRS and US GAAP pension charges.

3% RAV indexation – Future UK revenues are expected to be set using an asset base adjusted for inflation. This is calculated as UK RAV multiplied by 3% (long-run RPI inflation assumption).

UK deferred taxation adjustment – Future UK revenues are expected to recover cash taxation cost including the unwinding of deferred taxation balances created in the current year. This is the difference between: (a) IFRS underlying EBITDA less other regulatory adjustments; and (b) IFRS underlying EBITDA less other regulatory adjustments less current taxation (adjusted for interest tax shield) then grossed up at full UK statutory tax rate.

Regulatory depreciation – US and UK regulated revenues include allowance for a return of regulatory capital in accordance with regulatory assumed asset lives. This return does not form part of regulatory profit.

Fast/slow money adjustment – The regulatory remuneration of costs incurred is split between in-year revenue allowances and the creation of additional RAV. This does not align with the classification of costs as operating costs and fixed asset additions under IFRS accounting principles. This is calculated as the difference between IFRS classification of costs as operating costs or fixed asset additions and the regulatory classification.

Regulated asset base

The regulated asset base is a regulatory construct, based on predetermined principles not based on IFRS. It effectively represents the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulated asset base over the long term, and this in turn contributes to delivering shareholder value. Our regulated asset base is comprised of our regulatory asset value in the UK, plus our rate base in the US.

Maintaining efficient investment in our regulated asset base ensures we are well positioned to provide consistently high levels of service to our customers and increases our revenue allowances in future years. While we have no specific target, our overall aim is to achieve between 5% and 7% growth in regulated asset base each year through continued investment in our networks in both the UK and US.

In the UK, the way in which our transactions impact RAV is driven by principles set out by Ofgem. In a number of key areas these principles differ from the requirements of IFRS, including areas such as additions and the basis for depreciation. Further, our UK RAV is adjusted annually for inflation. RAV in each of our retained UK businesses has evolved over the period since privatisation in 1990, and as a result, historical differences between the initial determination of RAV and balances reported under UK GAAP at that time still persist. Due to the above, substantial differences exist in the measurement bases between RAV and an IFRS balance metric, and therefore, it is not possible to provide a meaningful reconciliation between the two.

In the US, rate base is a regulatory measure determined for each of our main US operating companies. It represents the value of property and other assets or liabilities on which we are permitted to earn a rate of return, as set out by the regulatory authorities for each jurisdiction. The calculations are based on the applicable regulatory agreements for each jurisdiction and include the allowable elements of assets and liabilities from our US companies. For this reason, it is not practical to provide a meaningful reconciliation from the US rate base to an equivalent IFRS measure. However, we include the calculation below.

'Total Regulated and other balances' includes the under or over-recovery of revenues that National Grid's UK regulated businesses target to collect in any year, which are based on the regulator's forecasts for that year. Under the UK price control arrangements, revenues will be adjusted in future years to take account of actual levels of collected revenue, costs and outputs delivered when they differ from those regulatory forecasts. In the US, other regulatory assets and liabilities include regulatory assets and liabilities which are not included in the definition of rate base, including working capital where appropriate.

The investment in 'NGV and other businesses' includes net assets excluding pensions, tax and items related to the UK Gas Distribution sale.

	RAV, rate base or other business assets		Total Regulated and other balances	
Year ended 31 March (£m at constant currency)	**2020 £m**	2019[1] £m	**2020 £m**	2019[1] £m
UK Electricity Transmission	**14,133**	13,537	**13,769**	13,291
UK Gas Transmission	**6,298**	6,155	**6,305**	6,099
US Regulated	**20,644**	18,407	**22,435**	20,394
Total regulated	**41,075**	38,099	**42,509**	39,784
NGV and other businesses	**4,105**	3,351	**3,591**	2,672
Total Group regulated and other balances	**45,180**	41,450	**46,100**	42,456

1. Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2019, and finalisation of US balances.

US rate base and Total Regulated and other balances for 31 March 2019 have been restated in the table above at constant currency. At actual currency the values were £17.6 billion and £19.5 billion respectively.

Other business assets and other balances for NGV and Other businesses for 31 March 2019 have been restated in the table above for the impact of IFRS 16 leases, constant currency and to exclude out 39% share of our investment in Quadgas. At actual currency excluding IFRS 16 leases the values were £2.8 billion and £2.7 billion respectively.

Group RoE

Group RoE provides investors with a view of the performance of the Group as a whole compared with the amounts invested by the Group in assets attributable to equity shareholders. It is the ratio of our regulatory financial performance to our measure of equity investment in assets. It therefore reflects the regulated activities as well as the contribution from our non-regulated businesses together with joint ventures and non-controlling interests.

We use Group RoE to measure our performance in generating value for our shareholders, and targets for Group RoE are included in the incentive mechanisms for executive remuneration within both the APP and LTPP schemes.

Group RoE is underpinned by our regulated asset base. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical. However, we do include the calculations below.

Calculation: Regulatory financial performance including a long-run assumption of 3% RPI inflation, less adjusted interest and adjusted taxation divided by equity investment in assets:

- adjusted interest removes interest on pensions, capitalised interest in regulated operations and unwind of discount rate on provisions;
- adjusted taxation adjusts the Group taxation charge for differences between IFRS profit before tax and regulated financial performance less adjusted interest; and
- equity investment in assets is calculated as the total opening UK regulatory asset value, the total opening US rate base plus goodwill plus opening net book value of National Grid Ventures and Other activities and our share of joint ventures and associates, minus opening net debt as reported under IFRS restated to the weighted average £/$ exchange rate for the year.

Other unaudited financial information continued

Year ended 31 March	2020 £m	2019 £m	2018 £m
Regulated financial performance	**3,546**	3,318	3,392
Operating profit of other activities	**269**	424	255
Group financial performance	**3,815**	3,742	3,647
Share of post-tax results of joint ventures and associates	**88**	40	238
Non-controlling interests	**(1)**	(3)	(1)
Adjusted Group interest charge	**(1,069)**	(1,037)	(980)
Group tax charge	**(433)**	(488)	(639)
Tax on adjustments	**(117)**	(34)	27
Group financial performance after interest and tax	**2,283**	2,220	2,292
Opening rate base/RAV	**37,459**	35,045	32,446
Share of Cadent RAV	**–**	–	512
Opening other balances	**3,304**	2,298	1,787
Opening goodwill	**5,938**	5,852	5,626
Opening capital employed	**46,701**	43,195	40,371
Opening net debt	**(27,194)**	(24,345)	(21,770)
Opening equity	**19,507**	18,850	18,601
Return on Equity	**11.7%**	11.8%	12.3%

UK and US regulated RoE

		Achieved Return on Equity		Base or Allowed Return on Equity	
Year ended 31 March	Regulatory Debt: Equity assumption	2020 %	2019 %	2020 %	2019 %
UK Electricity Transmission	**60/40**	**13.5**	13.7	**10.2**	10.2
UK Gas Transmission	**62.5/37.5**	**9.8**	9.5	**10.0**	10.0
US Regulated	**Avg. 50/50**	**9.3**	8.8	**9.4**	9.4

UK regulated RoE
UK regulated RoEs are a measure of how the businesses are performing against the assumptions used by our UK regulator. These returns are calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure, at the cost of debt assumed by the regulator, and that RPI inflation is equal to a long-run assumption of 3%. They are calculated by dividing elements of out/under-performance versus the regulatory contract (i.e., regulated financial performance disclosed above) by the average equity RAV in line with the regulatory assumed capital structure and adding to the base allowed RoE.

This is an important measure of UK regulated business performance, and our operational strategy continues to focus on this metric. This measure can be used to determine how we are performing under the RIIO framework and also helps investors to compare our performance with similarly regulated UK entities. Reflecting the importance of this metric, it is also a key component of the APP scheme.

The UK RoE is underpinned by the UK RAV. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical.

US regulated RoE
US regulated RoE is a measure of how a business is performing against the assumptions used by the US regulators. This US operational return measure is calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure and allowed cost of debt. The returns are divided by the average rate base (or where a reported rate base is not available, an estimate based on rate base calculations used in previous rate filings) multiplied by the adjudicated equity portion in the regulatory adjudicated capital structure.

This is an important measure of our US regulated business performance, and our operational strategy continues to focus on this metric. This measure can be used to determine how we are performing and also helps investors compare our performance with similarly regulated US entities. Reflecting the importance of this metric, it is also a key component of the APP scheme.

The US return is based on a calculation which gives proportionately more weighting to those jurisdictions which have a greater rate base. For the reasons noted above, no reconciliation to IFRS for the RoE measure has been presented, as we do not believe it would be practical to reconcile our IFRS balance sheet to the equity base.

The table below shows the principal differences between the IFRS result of the US Regulated segment, and the 'return' used to derive the US RoE. In outlining these differences, we also include the result for the US regulated Operating Companies (OpCo) entities aggregated under US GAAP.

In respect of 2018/19 and 2017/18, this measure is the aggregate operating profit of our US OpCo entities' publicly available financial statements prepared under US GAAP. For 2019/20, this measure represents our current estimate, since local financial statements have yet to be prepared.

	2020 £m	2019 £m	2018 £m
Underlying IFRS operating profit for US regulated segment	**1,636**	1,594	1,704
Weighted average £/$ exchange rate	**$1.2868**	$1.305	$1.358

	2020 $m	2019 $m	2018 $m
Underlying IFRS operating profit for US regulated segment	**2,105**	2,081	2,313
Adjustments to convert to US GAAP as applied in our US OpCo entities			
Adjustment in respect of customer contributions	**(50)**	(50)	(151)
Pension accounting differences[1]	**(13)**	(10)	(101)
Environmental charges recorded under US GAAP	**(94)**	(117)	(106)
Storm costs and recoveries recorded under US GAAP	**(9)**	(112)	(113)
Other regulatory deferrals, amortisation and other items	**3**	121	(146)
Results for US regulated OpCo entities, aggregated under US GAAP[2]	**1,942**	1,913	1,696
Adjustments to determine regulatory operating profit used in US RoE			
Levelisation revenue adjustment	**(122)**	(48)	82
Adjustment for COVID-19 related provision for bad and doubtful debts[3]	**150**	–	–
Net other	**51**	(1)	40
Regulatory operating profit	**2,021**	1,864	1,818
Pensions[1]	**19**	(95)	–
Regulatory interest charge	**(491)**	(457)	(395)
Regulatory tax charge	**(408)**	(345)	(520)
Regulatory earnings used to determine US RoE	**1,141**	967	903

1. Following a change in US GAAP accounting rules, an element of the pensions charge is reported outside operating profit with effect from 2019.
2. Based on US GAAP accounting policies as applied by our US regulated OpCo entities.
3. US RoE includes an adjustment reflecting our expectation for future recovery of COVID-19 related bad and doubtful deb costs.

	2020 $m	2019 $m	2018 $m
US equity base (average for the year)	**12,331**	11,045	10,092
US RoE	**9.3%**	8.8%	8.9%

Value Added and Value Added per share and Value Growth

Value Added is a measure that reflects the value to shareholders of our cash dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), and corresponding growth in net debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making and long-term management incentive arrangements.

Value Added is derived using our regulated asset base and, as such, it is not practical to provide a meaningful reconciliation from this measure to an equivalent IFRS measure due to the reasons set out for our regulated asset base. However, the calculation is set out in the Financial review on page 32. Value Added per share is calculated by dividing Value Added by the weighted average number of shares (3,461 million) set out in note 8 on page 145.

Value Growth of 10.4% (2018/19: 11.5%) is derived from Value Added by adjusting Value Added to normalise for a 3% long-run RPI inflation rate. In 2019/20, the numerator for Value Growth was £2,068 million (2018/19: £2,166 million). The denominator is Group equity as used in the Group RoE calculation, adjusted for foreign exchange movements.

Asset growth

Asset growth is the annual percentage increase in our RAV and rate base and other business balances (including the assets of NGV and NGP) calculated at constant currency.

Regulatory gearing

Regulatory gearing is a measure of how much of our investment in RAV and rate base and other elements of our invested capital (including our investments in NGV, UK property and other assets and US other assets) is funded through debt. Comparative amounts as at March 2019 are presented at historical exchange rates and have not been restated for opening balance adjustments.

As at 31 March	2020 £m	2019 £m	
UK RAV	**20,431**	19,692	
US rate base	**20,644**	17,565	
Other invested capital included in gearing calculation	**4,105**	2,815	
Total assets included in gearing calculation	**45,180**	40,072	
Net debt (including 100% of hybrid debt)	**(28,590)**	(26,529)	change
Group gearing (based on 100% of net debt)	**63%**	66%	3% pts
Group gearing (excluding 50% of hybrid debt from net debt)	**61%**	64%	3% pts

Commentary on consolidated financial statements
for the year ended 31 March 2019

In compliance with SEC rules, we present a summarised analysis of movements in the income statement and an analysis of movements in adjusted operating profit (for the continuing group) by operating segment. This should be read in conjunction with the 31 March 2020 financial review included on pages 28 – 37.

Analysis of the income statement for the year ended 31 March 2019

Revenue

Revenue for the year ended 31 March 2019 decreased by £317 million to £14,933 million. This decrease was driven by lower revenues in our UK Electricity Transmission business and in our UK Gas Transmission business, partially offset by higher revenues in our US Regulated and NGV and Other businesses. US Regulated revenues were £574 million higher year-on-year, principally due to the impact of new rate plans, the benefit of foreign exchange and recovery of prior year timing under-collections, partially offset by the collection of lower tax allowances and the impact of IFRS 15. UK Electricity Transmission revenues decreased by £803 million, (related to IFRS 15, which reduced both revenues and costs by £1.0 billion), partly offset by higher BSIS pass-through costs and return of prior year timing over-collections. UK Gas Transmission revenues were £195 million lower, driven by the return of allowances related to Avonmouth. Revenue from NGV and Other businesses increased by £100 million, primarily driven by sales in our Commercial Property business.

Operating costs

Operating costs for the year ended 31 March 2019 of £12,063 million were £306 million higher than the prior year. This increase in costs included a £608 million increase in exceptional items and remeasurements, which is discussed below. Excluding exceptional items and remeasurements, operating costs were £302 million lower, driven by the impact of IFRS 15, which reduced costs (and related revenues) for payments to other network owners by £1,043 million, partially offset by higher pass-through costs, increased rates and property taxes, higher depreciation as a result of continued asset investment and the impact of movement in exchange rates.

Net finance costs

For the year ended 31 March 2019, net finance costs before exceptional items and remeasurements were £8 million lower than 2017/18 at £993 million, mainly as a result of the impact of the stronger US dollar and lower pension net interest expense due to lower pension net liabilities and other interest gains, partially offset lower gains on the sale of financial assets and the impact of higher UK RPI inflation. Net finance costs in 2018/19 included remeasurement losses of £76 million on derivative financial instruments used to hedge our borrowings, compared to £119 million of remeasurement gains in 2017/18.

Tax

The tax charge on profits before exceptional items and remeasurements of £488 million was £96 million lower than 2017/18. This reduction was primarily due to a full year's benefit in 2018/19 from the Tax Cut & Jobs Act which reduced the US corporate tax rate from 35% to 21% with effect from 1 January 2018.

Exceptional items and remeasurements

Operating costs for the year ended 31 March 2019 included £283 million of costs arising from the workforce contingency plan related to the Massachusetts Gas labour dispute, £204 million of restructuring charges in our UK and US businesses and £137 million related to the impairment of nuclear connection development costs following the cancellation of the NuGen and Horizon projects. These were partially offset by a net £52 million gain on remeasurement of commodity contracts. In the previous year, operating costs included a £26 million gain on settlement of outstanding balances related to the LIPA Management Services Agreement, together with a net £10 million gain on remeasurement of commodity contracts.

Finance costs for the year ended 31 March 2019 included a net loss of £76 million on financial remeasurements of derivative financial instruments used to hedge our borrowings, compared to a gain of £119 million on financial remeasurements in 2017/18.

Share of post-tax results of joint ventures and associates before exceptional items for the year ended 31 March 2019 of £40 million was £4 million lower, principally due to higher costs in St William.

Adjusted earnings and EPS from continuing operations

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the Group's results on a 'business performance' basis, described further in note 5. See page 242 for a reconciliation of adjusted basic EPS to EPS.

The above earnings performance translated into an increase in adjusted EPS in 2018/19 of 3.7p (7%).

Exchange rates

Our financial results are reported in sterling. Transactions for our US operations are denominated in dollars, so the related amounts that are reported in sterling depend on the dollar to sterling exchange rate. The table below shows the average and closing exchange rates of sterling to US dollars.

	2018/19	2017/18	% change
Weighted average (income statement)	1.31	1.36	4%
Year-end (statement of financial position)	1.30	1.40	7%

The movement in foreign exchange during 2018/19 has resulted in a £355 million increase in revenue, a £62 million increase in adjusted operating profit and a £63 million increase in operating profit.

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Analysis of the adjusted operating profit by segment for the year ended 31 March 2019

UK Electricity Transmission

For the year ended 31 March 2019, revenue in the UK Electricity Transmission segment decreased by £803 million to £3,351 million, and adjusted operating profit decreased by £26 million to £1,015 million. Revenue was significantly impacted by the adoption of IFRS 15, with revenues collected from customers but passed on to the Scottish and Offshore transmission operators are now excluded from both revenue and operating costs, compared to £1,027 million in 2017/18. Excluding pass-through costs, net revenue was £43 million higher, reflecting higher baser allowances including the impact of inflation and increased incentives income, partially offset by the return of outstanding timing balances along with higher adjustments this year to return the benefits of efficiencies and lower required outputs to customers. Regulated controllable costs were £11 million higher, reflecting inflation, increased headcount and workload, and initiative spend. Depreciation and amortisation was £18 million higher, reflecting the continued capital investment programme. Other costs were £41 million higher, principally relating to provision against income recognised on early termination of connections.

Capital expenditure decreased by £74 million compared with 2016/17 to £925 million reflecting reduced activity on Western Link and completion of the London Power Tunnels project.

UK Gas Transmission
Revenue in the UK Gas Transmission segment decreased by £195 million to £896 million, and adjusted operating profit decreased by £184 million to £303 million.

After deducting pass-through costs, net revenue was £165 million lower than 2017/18, reflecting the refund of revenues previously received in respect of the proposed Avonmouth pipeline project that is no longer required. Regulated controllable costs were £2 million lower than 2017/18, with efficiency savings offsetting the higher IT run-the-business costs and the impact of inflation. Pension costs were £9 million higher mainly related to the Guaranteed Minimum Pension equalisation ruling. Depreciation and amortisation costs were £13 million lower following a detailed review of asset lives in the year. Other operating costs were £25 million higher than 2017/18, as a result of the release of unused provisions in the prior year.

Capital expenditure marginally decreased to £308 million, £2 million lower than last year.

US Regulated
Revenue in our US Regulated business increased by £574 million to £9,846 million, and adjusted operating profit increased by £26 million to £1,724 million.

The stronger US dollar decreased revenue and operating profit in 2018/19. Excluding the impact of foreign exchange rate movements, revenue increased by £202 million. Of this increase, £21 million was due to increases in pass-through costs charged on to customers. Excluding pass-through costs, net revenue increased by £181 million at constant currency, principally reflecting increased revenue allowances under rate plans in upstate and downstate New York and in Massachusetts, partially offset by the impact of US tax reform (as the billing tariffs now reflect lower tax requirements) and the impact of IFRS 15, under which customer connection revenues are now recognised over the life of the asset rather than on completion of the works.

We incurred £93 million of major storm costs in 2018/19 through a number of heavy winter storms that caused substantial damage to our electricity networks, compared to £142 million in 2017/18. Excluding these costs and the impact of foreign exchange movements, regulated controllable costs increased by £106 million, reflecting workload increases agreed with regulators and the impact of inflation. Bad debt expense increased by £42 million at constant currency, reflecting higher levels of receivables and cash collection studies. Depreciation and amortisation was £40 million higher in 2018/19 at constant currency as a result of ongoing investment in our networks. Other operating costs were £41 million higher at constant currency, due to more expenditure on 'minor' storms (non-deferrable) and increased cost of removal.

Capital expenditure in the US Regulated business increased to £2,650 million in 2018/19, £226 million more than in 2017/18. At constant currency, this represented a £129 million increase in investment driven by higher investment in new and replacement gas mains and gas business enablement investment, partially offset by the impact of the Massachusetts Gas labour dispute.

NGV and Other
Revenue in NGV and Other increased by £100 million to £876 million, and adjusted operating profit increased by £169 million to £400 million. This reflects higher revenues and profit on disposal of property sites in the UK and lower costs to setting up our new business and the absence of the impairment of land value in 2017/18.

Capital expenditure in NGV and Other was £107 million higher than 2017/18 at £438 million, including the increased investment in a second French Interconnector and in the North Sea Link interconnector to Norway.

Summary consolidated financial information

Financial summary (unaudited)

The financial summary set out below has been derived from the audited consolidated financial statements of National Grid for the five financial years ended 31 March 2020. It should be read in conjunction with the consolidated financial statements and related notes, together with the Strategic Report. The information presented below is adjusted for the matters described in the footnotes below for the years ended 31 March 2020, 2019, 2018, 2017 and 2016 where relevant and has been prepared under IFRS as issued by the IASB and as adopted by the EU.

Summary income statement (£m)	2020	2019	2018[1]	2017	2016[2]
Continuing operations					
Revenue	**14,540**	14,933	15,250	15,035	13,212
Operating profit					
Before exceptional items, remeasurements	**3,307**	3,442	3,457	3,773	3,214
Exceptional items, remeasurements	**(527)**	(572)	36	(565)	11
Profit before tax					
Before exceptional items, remeasurements	**2,346**	2,489	2,500	2,807	2,417
Exceptional items, remeasurements	**(592)**	(648)	160	(623)	(88)
Profit after tax from continuing operations					
Before exceptional items, remeasurements	**1,913**	2,001	1,916	2,141	1,813
Exceptional items, remeasurements	**(639)**	(499)	1,633	(331)	89
(Loss)/profit after tax from discontinued operations					
Before exceptional items, remeasurements	**5**	57	145	606	576
Exceptional items, remeasurements	**(14)**	(45)	(143)	57	116
Gain on disposal of UK Gas Distribution after tax	**–**	–	–	5,321	–
Total profit for the year	**1,265**	1,514	3,551	7,794	2,594
Profit for the year attributable to equity shareholders					
Before exceptional items, remeasurements	**1,917**	2,055	2,060	2,747	2,386
Exceptional items, remeasurements	**(653)**	(544)	1,490	(273)	205
Gain on disposal of UK Gas Distribution after tax	**–**	–	–	5,321	–
Total	**1,264**	1,511	3,550	7,795	2,591
Earnings per share					
Basic – continuing operations (pence)	**36.8**	44.3	102.5	48.1	50.4
Diluted – continuing operations (pence)	**36.6**	44.1	102.1	47.9	50.2
Basic – total (pence)	**36.5**	44.6	102.6	207.1	68.7
Diluted – total (pence)	**36.3**	44.4	102.1	206.2	68.4
Weighted average number of shares – basic (millions)	**3,461**	3,386	3,461	3,763	3,774
Weighted average number of shares – diluted (millions)	**3,478**	3,401	3,476	3,780	3,790
Dividends per ordinary share					
Paid during the year (pence)	**47.83**	46.52	128.97	43.51	43.16
Approved or proposed during the year (pence)[3]	**48.57**	47.34	45.93	128.65	43.34
Paid during the year ($)	**0.615**	0.607	1.751	0.555	0.664
Approved or proposed during the year ($)	**0.625**	0.618	0.624	1.642	0.635

1. Items previously reported for 2018 have been re-presented to reflect our investment in Quadgas HoldCo Limited being presented as a discontinued operation in the current year.
2. Items previously reported for 2016 have been re-presented to reflect UK Gas Distribution being presented as a discontinued operation.
3. Following the disposal of UK Gas Distribution, 2017 includes a special interim dividend of 84.375 pence per share that was paid on 2 June 2017

Summary statement of net assets (£m)	2020	2019	2018	2017	2016
Non-current assets	**61,288**	55,017	52,106	52,266	52,622
Current assets	**5,801**	7,946	6,681	13,574	6,312
Total assets	**67,089**	62,963	58,787	65,840	58,934
Current liabilities	**(8,564)**	(9,129)	(8,697)	(10,511)	(7,721)
Non-current liabilities	**(38,941)**	(34,465)	(31,242)	(34,945)	(37,648)
Total liabilities	**(47,505)**	(43,594)	(39,939)	(45,456)	(45,369)
Net assets	**19,584**	19,369	18,848	20,384	13,565
Total shareholders' equity	**19,562**	19,349	18,832	20,368	13,555

Definitions and glossary of terms

Our aim is to use plain English in this Annual Report and Accounts. However, where necessary, we do use a number of technical terms and abbreviations. We summarise the principal ones below, together with an explanation of their meanings. The descriptions below are not formal legal definitions. Alternative and Regulatory Performance Measures are defined on pages 240 – 249.

A

Adjusted interest
A measure of the interest charge of the Group, calculated by making adjustments to the Group reported interest charge.

Adjusted net debt
A measure of the indebtedness of the Group, calculated by making adjustments to the Group reported borrowings, including adjustments made to include elements of pension deficits and exclude elements of hybrid debt financing.

Adjusted results (also referred to as headline results)
Financial results excluding the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by National Grid management that forms part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in note 5 to the Financial Statements.

American Depositary Shares (ADSs)
Securities of National Grid listed on the New York Stock Exchange, each of which represents five ordinary shares. They are evidenced by American Depositary Receipts or ADRs.

Annual General Meeting (AGM)
Meeting of shareholders of the Company held each year to consider ordinary and special business as provided in the Notice of AGM.

B

BAME
Black, Asian and Minority Ethnic (being the UK term used to refer to members of non-white communities).

BEIS
The Department for Business, Energy and Industrial Strategy, the UK government department responsible for business, industrial strategy, and science and innovation with energy and climate change policy.

Board
The Board of Directors of the Company (for more information see pages 66 and 67).

bps
Basis point (bp, bps) is a unit that is equal to 1/100th of 1% and is typically used to denote the movement in a percentage-based metric such as interest rates or RoE. A 0.1% change in a percentage represents 10 basis points.

BritNed
BritNed Development Limited.

C

Cadent
Cadent Gas Limited, the Company's former UK Gas Distribution business. A 61% equity interest in it was sold to the Consortium on 31 March 2017, and the sale of the remaining 39% to the Consortium completed on 28 June 2019.

Called-up share capital
Shares (common stock) that have been issued and have been fully paid for.

Capital tracker
In the context of our US rate plans, this is a mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

Carrying value
The amount at which an asset or a liability is recorded in the Group's statement of financial position and the Company's balance sheet.

The Company, the Group, National Grid, we, our or us
We use these terms to refer to either National Grid plc itself or to National Grid plc and/or all or certain of its subsidiaries, depending on context.

Consolidated financial statements
Financial statements that include the results and financial position of the Company and its subsidiaries together as if they were a single entity.

Consortium
The Consortium that purchased Cadent. It comprised Macquarie Infrastructure and Real Assets, Allianz Capital Partners, Hermes Investment Management, CIC Capital Corporation, Qatar Investment Authority, Dalmore Capital, and Amber Infrastructure Limited/International Public Partnerships.

Constant currency
'Constant currency basis' refers to the reporting of the actual results against the results for the same period last year, which, in respect of any US$ currency denominated activity, have been translated using the average US$ exchange rate for the year ended 31 March 2020, which was \$1.29 to £1. The average rate for the year ended 31 March 2019 was \$1.31 to £1, and for the year ended 31 March 2018 was \$1.36 to £1. Assets and liabilities as at 31 March 2019 have been retranslated at the closing rate at 31 March 2020 of \$1.24 to £1. The closing rate for the balance sheet date 31 March 2019 was \$1.30 to £1.

Contingent liabilities
Possible obligations or potential liabilities arising from past events for which no provision has been recorded, but for which disclosure in the financial statements is made.

COVID-19
COVID-19 or coronavirus disease is an infectious disease caused by a newly discovered coronavirus which spreads through droplets of saliva or discharge from the nose when an infected person coughs or sneezes.

CPIH
The UK Consumer Prices Index including Owner Occupiers' Housing Costs as published by the Office for National Statistics.

D

Dth
Decatherm, being an amount of energy equal to 1 million British thermal units (BTUs), equivalent to approximately 293 kWh.

DB
Defined benefit, relating to our UK or US (as the context requires) final salary pension schemes.

DC
Defined contribution, relating to our UK or US (as the context requires) pension schemes to which National Grid, as an employer, pays contributions based on a percentage of employees' salaries.

Deferred tax
For most assets and liabilities, deferred tax is the amount of tax that will be payable or receivable in respect of that asset or liability in future tax returns as a result of a difference between the carrying value for accounting purposes in the statement of financial position or balance sheet and the value for tax purposes of the same asset or liability.

Deposit agreement
The amended and restated deposit agreement entered into between National Grid plc, the Depositary and all the registered holders from time to time of ADRs, pursuant to which ADSs have been issued, dated 23 May 2013, and any related agreement.

Depositary
Depositary means the Bank of New York Mellon acting as depositary.

Derivative
A financial instrument or other contract where the value is linked to an underlying index, such as exchange rates, interest rates or commodity prices. In most cases, we exclude contracts for the sale or purchase of commodities that are used to supply customers or for our own needs from this definition.

Directors/Executive Directors/Non-executive Directors
The Directors/Executive Directors and Non-executive Directors of the Company, whose names are set out on pages 66 and 67 of this document.

Definitions and glossary of terms continued

Distributed Energy Resources (DER)
Decentralised assets, generally located behind the meter, covering a range of technologies including solar, storage, electric vehicle charging, district heating, smart street lighting and combined heat and power.

Dollars or $
Except as otherwise noted, all references to dollars or $ in this Annual Report and Accounts relate to the US currency.

E

Earnings per share (EPS)
Profit for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Electricity System Operator (ESO)
The party responsible for the long-term strategy, planning and real-time operation (balancing supply and demand) of the electricity system in Great Britain.

Electricity Transmission (ET)
National Grid's UK electricity transmission business.

Employee engagement
A key performance indicator (KPI), based on the percentage of favourable responses to certain indicator questions repeated in each employee survey. It is used to measure how employees think, feel and act in relation to National Grid. Research shows that a highly engaged workforce leads to increased productivity and employee retention. We use employee engagement as a measure of organisational health in relation to business performance.

Employee resource group (ERG)
A group of employees who join together in their workplace based on shared characteristics or life experiences.

Estate Tax Convention
The convention between the US and the UK for the avoidance of double taxation with respect to estate and gift taxes.

EU
The European Union (EU) is the economic and political union of 27 member states located in Europe. The UK left the European Union on 31 January 2020.

Exchange Act
The US Securities Exchange Act 1934, as amended.

F

FERC
The US Federal Energy Regulatory Commission.

Finance lease
A lease where the asset is treated as if it was owned for the period of the lease, and the obligation to pay future rentals is treated as if they were borrowings. Also known as a capital lease.

Financial year
For National Grid this is an accounting year ending on 31 March. Also known as a fiscal year.

FRS
A UK Financial Reporting Standard as issued by the UK Financial Reporting Council (FRC). It applies to the Company's individual financial statements on pages 209 – 215, which are prepared in accordance with FRS 101.

Funds from Operations (FFO)
A measure used by the credit rating agencies of the operating cash flows of the Group after interest and tax but before capital investment.

G

Gas Transmission (GT)
National Grid's UK gas transmission business.

Geronimo
Geronimo, a leading developer of wind and solar generation based in Minneapolis in the US, which National Grid acquired in July 2019.

Grain LNG
National Grid Grain LNG Limited.

Great Britain
England, Wales and Scotland.

Group Value Growth
Group Value Growth is Group-wide value added expressed as a proportion of Group equity. See page 32 for an explanation of Value Added.

GW
Gigawatt, an amount of power equal to 1 billion watts (10^9 watts).

GWh
Gigawatt hours, an amount of energy equivalent to delivering 1 billion watts (10^9 watts) of power for a period of one hour.

H

Hinkley-Seabank (HSB)
A project to connect the new Hinkley Point C nuclear power station to the electricity transmission network.

HMRC
HM Revenue & Customs. The UK tax authority.

HVDC
High-voltage, direct-current electric power transmission that uses direct current for the bulk transmission of electrical power in contrast to the more common alternating current systems.

I

IAS or IFRS
An International Accounting Standard (IAS) or International Financial Reporting Standard (IFRS), as issued by the International Accounting Standards Board (IASB). IFRS is also used as the term to describe international generally accepted accounting principles as a whole.

Individual financial statements
Financial statements of a company on its own, not including its subsidiaries or joint ventures and associates.

Injury frequency rate (IFR)
The number of lost time injuries (LTIs) per 100,000 hours worked in a 12-month period.

Interest cover
A measure used by the credit rating agencies, calculated as FFO plus adjusted interest divided by adjusted interest.

J

Joint venture (JV)
A company or other entity that is controlled jointly with other parties.

K

KEDLI
KeySpan Gas East Corporation, also known as KeySpan Energy Delivery Long Island.

KEDNY
The Brooklyn Union Gas Company, also known as KeySpan Energy Delivery New York.

KPI
Key performance indicator.

kW
Kilowatt, an amount of power equal to 1,000 watts.

L

LIPA
The Long Island Power Authority.

LNG
Liquefied natural gas is natural gas that has been condensed into a liquid form, typically at temperatures at or below -161°C (-258°F).

Lost time injury (LTI)
An incident arising out of National Grid's operations that leads to an injury where the employee or contractor normally has time off for the following day or shift following the incident. It relates to one specific (acute) identifiable incident which arises as a result of National Grid's premises, plant or activities, and was reported to the supervisor at the time and was subject to appropriate investigation.

M

MADPU
The Massachusetts Department of Public Utilities.

MW
Megawatt, an amount of power equal to 1 million watts.

MWh
Megawatt hours, an amount of energy equivalent to delivering 1 million watts (10^6) of power for a period of one hour.

N

National Grid Metering Limited (NGM)
The Company's UK regulated metering business.

National Grid Partners (NGP)
The Company's venture investment and innovation business established in November 2018.

National Grid Ventures (NGV)
The Company's division that operates outside its core UK and US regulated businesses, comprising a broad range of activities in the UK and US, including Geronimo, electricity interconnectors, the Grain LNG terminal and energy metering, as well as being tasked with investment in adjacent businesses, distributed energy opportunities and the development of new and evolving technologies.

National Transmission System (NTS)
The gas National Transmission System in Great Britain.

Net Promoter Score (NPS)
A commonly used tool to measure customer experience to gauge the loyalty of a company's customer relationships. It is an index ranging from -100 to +100.

Net Zero
Net zero means that a person, legal entity (such as a company), country or other body's own emissions of greenhouse gases are either zero or that its remaining greenhouse gas emissions are balanced by schemes to offset, through the removal of an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

New England
The term refers to a region within northeastern US that includes the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. National Grid's New England operations are primarily in the states of Massachusetts and Rhode Island.

Northeastern US
The northeastern region of the US, comprising the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

NYPSC
The New York Public Service Commission.

O

Ofgem
The UK Office of Gas and Electricity Markets is part of the UK Gas and Electricity Markets Authority (GEMA), which regulates the energy markets in the UK.

OPEB
Other post-employment benefits.

Ordinary shares
Voting shares entitling the holder to part ownership of a company. Also known as common stock. National Grid's ordinary shares have a nominal value of $12^{204/473}$ pence following the share consolidation approved at the General Meeting of the Company held on 19 May 2017.

P

Paris Agreement
The agreement, also known as the Paris Climate Accord, within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020, and adopted by consensus on 12 December 2015.

Price control
The mechanism by which Ofgem sets restrictions on the amounts of revenue we are allowed to collect from customers in our UK businesses. The allowed revenues are intended to cover efficiently incurred operational expenditure, capital expenditure and financing costs, including a Return on Equity invested.

R

Rate base
The base investment on which the utility is authorised to earn a cash return. It includes the original cost of facilities, minus depreciation, an allowance for working capital and other accounts.

Rate plan
The term given to the mechanism by which a US utility regulator sets terms and conditions for utility service, including, in particular, tariffs and rate schedules. The term can mean a multi-year plan that is approved for a specified period, or an order approving tariffs and rate schedules that remain in effect until changed as a result of future regulatory proceedings. Such proceedings can be commenced through a filing by the utility or on the regulator's own initiative.

Regulated controllable costs
Total operating costs under IFRS less depreciation and certain regulatory costs where, under our regulatory agreements, mechanisms are in place to recover such costs in current or future periods.

Regulatory asset value (RAV)
The value ascribed by Ofgem to the capital employed in the relevant licensed business. It is an estimate of the initial market value of the regulated asset base at privatisation, plus subsequent allowed additions at historical cost, less the deduction of annual regulatory depreciation. Deductions are also made to reflect the value realised from the disposal of certain assets that formed part of the regulatory asset base. It is also indexed to the RPI to allow for the effects of inflation.

Regulatory IOUs
Net under/over-recoveries of revenue from output-related allowance changes, the totex incentive mechanism, legacy price control cost true-up and differences between allowed and collected revenues.

Retained cash flow (RCF)
A measure of the cash flows of the Group used by the credit rating agencies. It is calculated as funds from operations less dividends paid and costs of repurchasing scrip shares.

Revenue decoupling
Revenue decoupling is the term given to the elimination of the dependency of a utility's revenue on the volume of gas or electricity transported. The purpose of decoupling is to encourage energy-efficiency programmes by eliminating the disincentive a utility otherwise has to such programmes.

Definitions and glossary of terms continued

RIIO
Revenue = Incentives + Innovation + Outputs, the regulatory framework for energy networks issued by Ofgem.

RIIO-T1
The regulatory framework for transmission networks that was implemented in the eight-year price controls that started on 1 April 2013.

RIIO-2
The regulatory framework for energy networks expected to be issued by Ofgem to start on 1 April 2021.

RIPUC
The Rhode Island Public Utilities Commission.

RPI
The UK retail price index as published by the Office for National Statistics.

S

Scope 1 greenhouse gas emissions
Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are owned or controlled by the Company. Examples include emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2 greenhouse gas emissions
Scope 2 emissions are greenhouse gas emissions from the generation of purchased electricity consumed by the Company. Purchased electricity is defined as electricity, heat, steam or cooling that is purchased or otherwise brought into the organisational boundary of the Company. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3 greenhouse gas emissions
Scope 3 emissions are indirect greenhouse gas emissions as a consequence of the operations of the Company, but are not owned or controlled by the Company, such as emissions from third-party logistics providers, waste management suppliers, travel suppliers, employee commuting, and combustion of sold gas by customers.

SEC
The US Securities and Exchange Commission, the financial regulator for companies with registered securities in the US, including National Grid and certain of its subsidiaries.

SF_6
Sulphur hexafluoride is an inorganic, colourless, odourless and non-flammable greenhouse gas. SF_6 is used in the electricity industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear and other electrical equipment. The Kyoto protocol estimated that the global warming potential over 100 years of SF_6 is 23,900 times more potent than that of CO_2.

Share premium
The difference between the amount shares are issued for and the nominal value of those shares.

STEM
Science, technology, engineering and mathematics.

Stranded cost recoveries
The recovery of historical generation-related costs in the US, related to generation assets that are no longer owned by us.

Subsidiary
A company or other entity that is controlled by National Grid.

Swaption
A swaption gives the buyer, in exchange for an option premium, the right, but not the obligation, to enter into an interest-rate swap at some specified date in the future. The terms of the swap are specified on the trade date of the swaption.

T

Tax Convention
Tax Convention means the income tax convention between the US and the UK.

Taxes borne
Those taxes that represent a cost to the Company and are reflected in our results.

Taxes collected
Those taxes that are generated by our operations but do not affect our results. We generate the commercial activity giving rise to these taxes and then collect and administer them on behalf of HMRC.

Tonne
A unit of mass equal to 1,000 kilogrammes, equivalent to approximately 2,205 pounds.

Tonnes carbon dioxide equivalent (CO_2e)
A measure of greenhouse gas emissions in terms of the equivalent amount of carbon dioxide.

Totex
Total expenditure, comprising capital and operating expenditure.

Treasury shares
Shares that have been repurchased but not cancelled. These shares can then be allotted to meet obligations under the Company's employee share schemes.

U

UK
The United Kingdom, comprising England, Wales, Scotland and Northern Ireland.

UK Corporate Governance Code (the Code)
Guidance, issued by the Financial Reporting Council in 2018, on how companies should be governed, applicable to UK listed companies, including National Grid, in respect of reporting periods starting on or after 1 January 2019.

UK GAAP
Generally accepted accounting principles in the UK. These differ from IFRS and from US GAAP.

Underlying EPS
Underlying results for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Underlying results
The financial results of the Company, adjusted to exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such, and to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues.

US
The United States of America, its territories and possessions, any state of the United States and the District of Columbia.

US GAAP
Generally accepted accounting principles in the US. These differ from IFRS and from UK GAAP.

US state regulators (state utility commissions)
In the US, public utilities' retail transactions are regulated by state utility commissions, including the New York Public Service Commission (NYPSC), the Massachusetts Department of Public Utilities (MADPU) and the Rhode Island Public Utilities Commission (RIPUC).

V

Value growth
Value growth is the Value Added, adjusted to normalise for a 3% long-run RPI inflation rate, expressed as a proportion of Group equity. See page 249.

Want more information or help?

Equiniti

For queries about ordinary shares:

0800 169 7775
This is a Freephone number from landlines within the UK, mobile costs may vary. Lines are open 8.30am to 5.30pm, Monday to Friday, excluding public holidays. If calling from outside the UK: +44 (0) 121 415 0931. Calls from outside the UK will be charged at the applicable international rate.

Visit help.shareview.co.uk for information regarding your shareholding (from here you will also be able to email a query securely).

National Grid Share Register
Equiniti
Aspect House
Spencer Road, Lancing
West Sussex BN99 6DA

The Bank of New York Mellon

For queries about American Depositary Shares:

1-800-466-7215
If calling from outside the US:
+1-201-680-6825

www.mybnymdr.com
Email: shrrelations@cpushareownerservices.com

BNY Mellon – ADR
PO Box 505000
Louisville, KY 40233-5000

Further information about National Grid, including share price and interactive tools, can be found on our website: http://investors.nationalgrid.com

Beware of share fraud

Investment scams are often sophisticated and difficult to spot. Shareholders are advised to be wary of any unsolicited advice or offers, whether over the telephone, through the post or by email. If you receive any unsolicited communication, please check the company or person contacting you is properly authorised by the Financial Conduct Authority (FCA) before getting involved. Be ScamSmart and visit www.fca.org.uk/scamsmart. You can report calls from unauthorised firms to the FCA by calling 0800 111 6768.

Financial calendar

The following dates have been announced or are indicative:

18 June 2020	2019/20 full-year results
1 July 2020	ADRs go ex-dividend for 2019/20 final dividend
2 July 2020	Ordinary shares go ex-dividend for 2019/20 final dividend
3 July 2020	Record date for 2019/20 final dividend
9 July 2020	Scrip reference price announced
22 July 2020 (5pm London time)	Scrip election date
27 July 2020	2020 AGM
19 August 2020	2019/20 final dividend paid to qualifying shareholders
12 November 2020	2020/21 half-year results
25 November 2020	ADRs go ex-dividend for 2020/21 interim dividend
26 November 2020	Ordinary shares go ex-dividend for 2020/21 interim dividend
27 November 2020	Record date for 2020/21 interim dividend
3 December 2020	Scrip reference price announced
14 December 2020 (5pm London time)	Scrip election date for 2020/21 interim dividend
13 January 2021	2020/21 interim dividend paid to qualifying shareholders

Dividends

The Directors are recommending a final dividend of 32.00 pence per ordinary share ($2.0126 per ADS) to be paid on 19 August 2020 to shareholders on the register as at 3 July 2020. Further details on dividend payments can be found on page 37. If you live outside the UK, you may be able to request that your dividend payments are converted into your local currency.

Under the Deposit agreement, a fee of up to $0.05 per ADS can be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2019/20 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to the distribution of the cash dividend.

Have your dividends paid directly into your bank or building society account:

- your dividend reaches your account on the payment day;
- it is more secure – cheques sometimes get lost in the post; and
- no more trips to the bank.

Elect to receive your dividends as additional shares:
Join our scrip dividend scheme; no stamp duty or commission to pay.

Electronic communications

Please register at www.shareview.co.uk.

It only takes a few minutes to register – just have your 11-digit Shareholder Reference Number to hand. You will be sent an Activation Code to complete registration.

Once you have registered, you can elect to receive your shareholder communications electronically.

Registered office

National Grid plc was incorporated on 11 July 2000. The Company is registered in England and Wales No. 4031152, with its registered office at 1–3 Strand, London WC2N 5EH.

Share dealing

Postal share dealing: Equiniti offer our European Economic Area resident shareholders a share dealing service by post. This service is available to private shareholders resident within the European Economic Area, the Channel Islands or the Isle of Man. If you hold your shares in CREST, you are not eligible to use this service. For more information and to obtain a form, please visit www.shareview.co.uk or call Equiniti on 0800 169 7775.

Internet and telephone share dealing: Equiniti also offer telephone and online share dealing at live prices. For full details together with terms and conditions, please visit www.shareview.co.uk. You can call Equiniti on 03456 037037 for further details, or to arrange a trade. Lines are open Monday to Friday, 8.00am to 4.30pm for dealing, and until 6.00pm for enquiries.

ShareGift: If you only have a small number of shares that would cost more for you to sell than they are worth, you may wish to consider donating them to ShareGift. ShareGift is a registered charity (No. 1052686) which specialises in accepting such shares as donations. For more information, visit www.sharegift.org or contact Equiniti.

Individual Savings Accounts (ISAs): ISAs for National Grid shares are available from Equiniti. For more information, call Equiniti on 0345 300 0430 or visit www.shareview.co.uk/ISA.

Cautionary statement

This document comprises the Annual Report and Accounts for the year ended 31 March 2020 for National Grid and its subsidiaries.

It contains the Directors' Report and Financial Statements, together with the independent auditor's report thereon, as required by the Companies Act 2006. The Directors' Report, comprising pages 1 – 107 and 216 – 252 has been drawn up in accordance with the requirements of English law, and liability in respect thereof is also governed by English law. In particular, the liability of the Directors for these reports is solely to National Grid.

This document contains certain statements that are neither reported financial results nor other historical information. These statements are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements include information with respect to our financial condition, our results of operations and businesses, strategy, plans and objectives. Words such as 'aims', 'anticipates', 'expects', 'should', 'intends', 'plans', 'believes', 'outlook', 'seeks', 'estimates', 'targets', 'may', 'will', 'continue', 'project' and similar expressions, as well as statements in the future tense, identify forward-looking statements. These forward-looking statements are not guarantees of our future performance and are subject to assumptions, risks and uncertainties that could cause actual future results to differ materially from those expressed in or implied by such forward-looking statements. Many of these assumptions, risks and uncertainties relate to factors that are beyond our ability to control or estimate precisely, such as the impact of COVID-19 on our operations, our employees, our counterparties, our funding and our regulatory and legal obligations, but also more widely in terms of changes in laws or regulations, including any arising as a result of the United Kingdom's exit from the European Union; announcements from and decisions by governmental bodies or regulators, including proposals relating to the RIIO-2 price as well as increased economic uncertainty resulting from COVID-19; the timing of construction and delivery by third parties of new generation projects requiring connection; breaches of, or changes in, environmental, climate change, and health and safety laws or regulations, including breaches or other incidents arising from the potentially harmful nature of our activities; network failure or interruption, the inability to carry out critical non-network operations, and damage to infrastructure, due to adverse weather conditions, including the impact of major storms as well as the results of climate change, due to counterparties being unable to deliver physical commodities, or due to the failure of or unauthorised access to or deliberate breaches of our IT systems and supporting technology; failure to adequately forecast and respond to disruptions in energy supply; performance against regulatory targets and standards and against our peers with the aim of delivering stakeholder expectations regarding costs and efficiency savings; and customers and counterparties (including financial institutions) failing to perform their obligations to the Company. Other factors that could cause actual results to differ materially from those described in this document include fluctuations in exchange rates, interest rates and commodity price indices; restrictions and conditions (including filing requirements) in our borrowing and debt arrangements, funding costs and access to financing; regulatory requirements for us to maintain financial resources in certain parts of our business and restrictions on some subsidiaries' transactions, such as paying dividends, lending or levying charges; the delayed timing of recoveries and payments in our regulated businesses and whether aspects of our activities are contestable; the funding requirements and performance of our pension schemes and other post-retirement benefit schemes; the failure to attract, develop and retain employees with the necessary competencies, including leadership and business capabilities, and any significant disputes arising with our employees or the breach of laws or regulations by our employees; the failure to respond to market developments, including competition for onshore transmission; the threats and opportunities presented by emerging technology; the failure by the Company to respond to, or meet its own commitments as a leader in relation to, climate change development activities relating to energy transition, including the integration of distributed energy resources; and the need to grow our business to deliver our strategy, as well as incorrect or unforeseen assumptions or conclusions (including unanticipated costs and liabilities) relating to business development activity.

For further details regarding these and other assumptions, risks and uncertainties that may affect National Grid, please read the Strategic Report and the risk factors on pages 227 – 230 of this document. In addition, new factors emerge from time to time and we cannot assess the potential impact of any such factor on our activities or the extent to which any factor, or combination of factors, may cause actual future results to differ materially from those contained in any forward-looking statement. Except as may be required by law or regulation, the Company undertakes no obligation to update any of its forward-looking statements, which speak only as of the date of this document.

The contents of any website references in this document do not form part of this document.

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The paper used in this report has been Carbon Balanced with the World Land Trust, an international conservation charity, who offset carbon emissions through the purchase and preservation of high conservation value land.

Through protecting standing forests, under threat of clearance, carbon is locked in that would otherwise be released. These protected forests are then able to continue absorbing carbon from the atmosphere, referred to as REDD (Reduced Emissions from Deforestation and forest Degradation). This is now recognised as one of the most cost-effective and swiftest ways to arrest the rise in atmospheric CO_2 and global warming effects. Additional to the carbon benefits is the flora and fauna this land preserves, including a number of species identified at risk of extinction on the IUCN Red List of Threatened Species.

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United Kingdom

www.nationalgrid.com

nationalgrid

Annual Report and Accounts 2020/21

Bring Energy to Life

PRINCIPAL PARTNER
UN CLIMATE CHANGE CONFERENCE UK 2021
IN PARTNERSHIP WITH ITALY

Annual Report
and Accounts 2020/21

Interactive PDF

The functionality of this PDF is outlined below. Please note that tablet users will find a reduced functionality.

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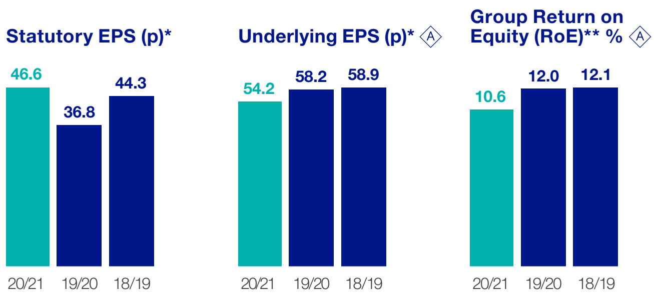
Bring Energy to Life

National Grid operates at the heart of the energy system, connecting millions of people safely, reliably and efficiently to the energy they use every day.

Highlights

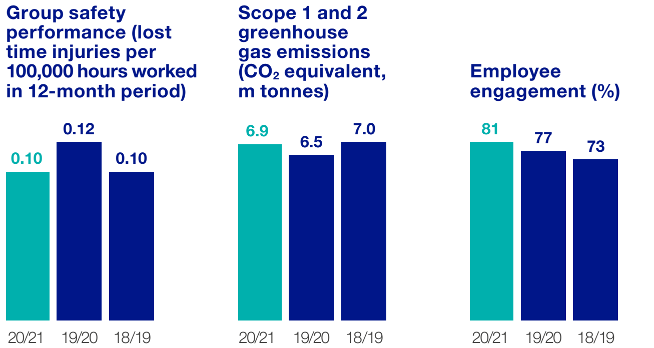
We have continued to make strategic and operational progress while maintaining excellent safety levels across all our networks. We have retained a focus on our environmental sustainability record and employee engagement.

Group financial highlights



* From continuing operations.
** Group RoE in 2018/19 and 2019/20 has been recalculated to reflect the revision to decrease the comparative goodwill balances (see note 1F on page 137 for details).

Group operational highlights



Further reading

Online report
The PDF of our Annual Report and Accounts 2020/21 includes a full search facility. You can find the document by visiting the 'About us' section at nationalgrid.com/about-us/annual-report-and-accounts.

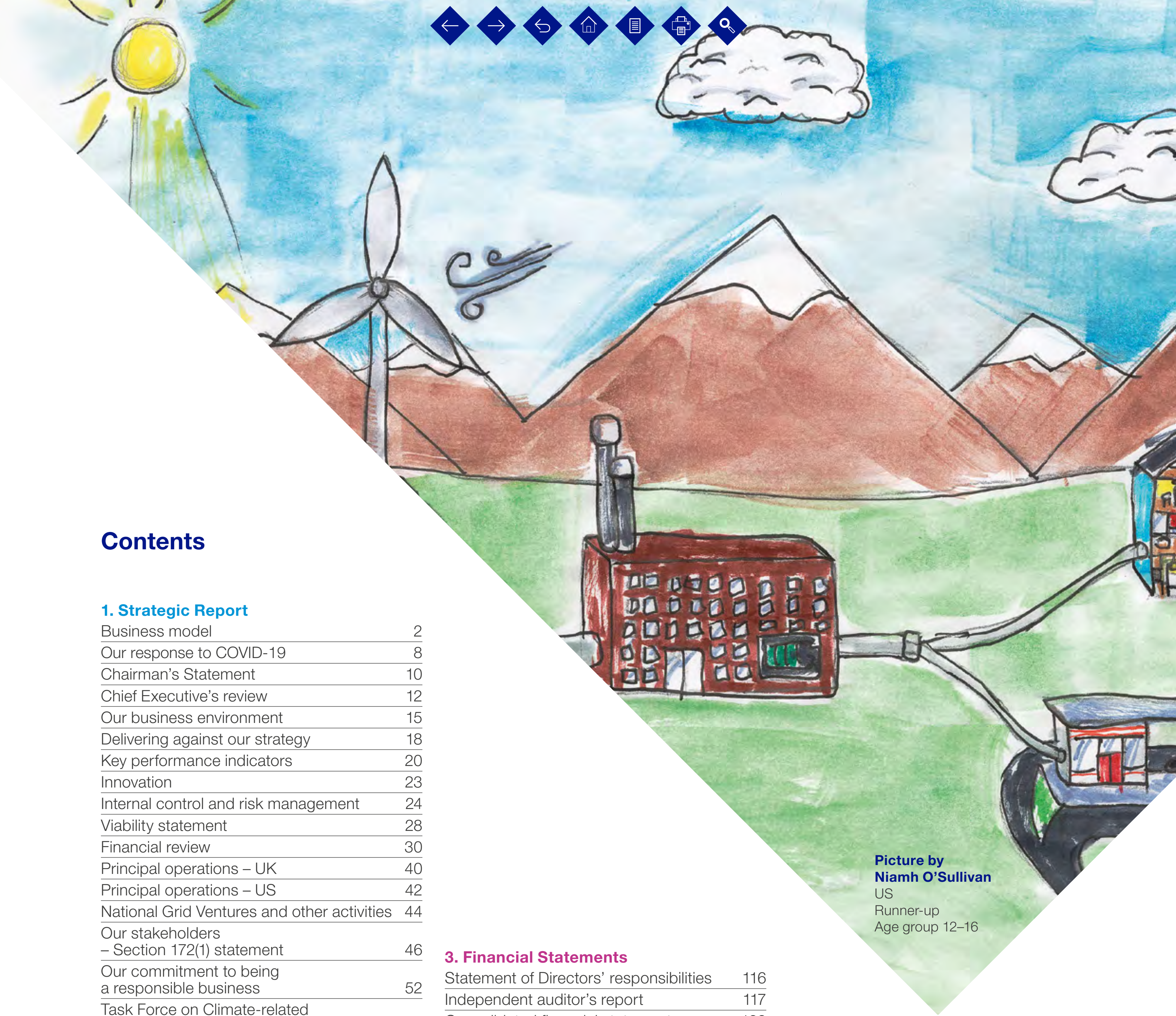
QR codes
Throughout the report there are QR codes that you can scan to easily view content online. Simply open your camera app on your smartphone device to scan the code.

More detail
Throughout this report you can find links to further detail within this document.

Responsible business
National Grid has published its first annual Responsible Business Report (RBR). The RBR reports progress on the responsible business agenda, including against the commitments made in our Responsible Business Charter (RBC). You can find both documents by visiting nationalgrid.com/responsibility.

Front cover
We're excited to be a principal partner for COP26. COP stands for Conference of the Parties. We're getting behind the conference because it's a unique chance to call for a more ambitious action towards a clean energy future.

For more information
nationalgrid.com/responsibility/environment/cop26



Picture by
Niamh O'Sullivan
US
Runner-up
Age group 12–16

Contents

Reporting currency

Our financial results are reported in sterling. We convert our US business results at the weighted average exchange rate during the year, which for 2020/21 was \$1.34 to £1 (2019/20: \$1.29 to £1).

Alternative performance measures Ⓐ

In addition to IFRS figures, management also use a number of 'alternative measures' to assess performance. Definitions and reconciliations to statutory financial information can be found on pages 250 – 259. These measures are highlighted with the symbol above.

Business model

Our business at a glance

National Grid plc is one of the world's largest investor-owned energy utilities, committed to delivering electricity and gas safely, reliably and efficiently to the customers and communities we serve.

Key:
- UK Electricity Transmission (including ESO)
- UK Gas Transmission
- US Regulated (New England and New York)
- National Grid Ventures and other activities

Statutory operating profit (%)

Underlying operating profit (%) Ⓐ

RAV, rate base and other assets (%) Ⓐ

National Grid owns a range of high-quality, long-term assets with low commercial risk profiles, typically supported by long-term contracts or stable regulatory arrangements. Our current operating model comprises our core regulated businesses, being UK Electricity Transmission, including the UK Electricity System Operator, UK Gas Transmission and our US Regulated business, which together generated over 90% of our operating profits this year. Alongside these, we also own a diverse and growing portfolio of commercial energy operations which form our National Grid Ventures business, and are reported on together with certain other non-core activities of the Group.

Our new operating model

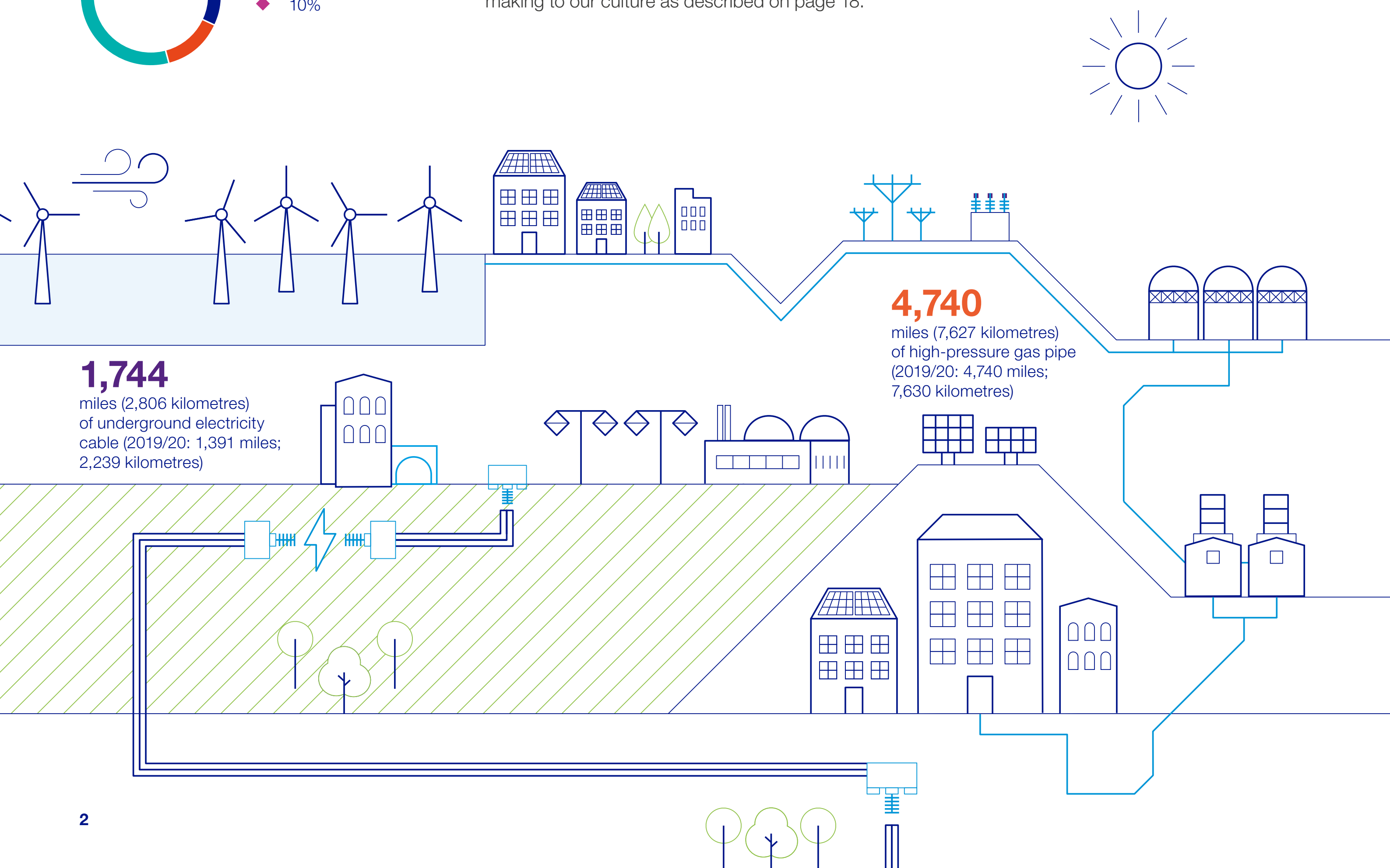
National Grid's vision is to be at the heart of a clean, fair and affordable energy future in an industry sector where the pace of change is accelerating with increasing focus on decarbonisation, digitalisation and decentralisation. Faced with this, and in order to ensure we can effectively and efficiently deliver the financial, customer and regulatory outcomes that will help us on our journey towards net zero, building on the opportunities offered by digitalisation, from 1 April 2021, we are changing our operating model as a company, alongside the changes we are making to our culture as described on page 18.

The building blocks of this new operating model will be six business units, being:
- UK Electricity Transmission;
- the UK Electricity System Operator;
- UK Gas Transmission;
- New England;
- New York; and
- National Grid Ventures and other activities

which will each be run as end-to-end enterprises within the Group portfolio.

On 18 March 2021, National Grid announced it had agreed to buy Western Power Distribution (WPD) from PPL Corporation. At the same time, and conditional on the WPD Acquisition, we agreed to sell our Rhode Island electricity and gas distribution business to PPL and we announced that we will be initiating a process for the sale of a majority stake in our UK Gas Transmission and metering business later this year.

Conditional on completion of the purchase, WPD will form an additional UK business unit.



UK Electricity Transmission

Electricity Transmission

We own the high-voltage electricity transmission (ET) network in England and Wales. We are responsible for ensuring electricity is transported safely and efficiently from where it is produced, reaching homes and businesses reliably. We also facilitate the connection of assets to the transmission system.

Electricity System Operator

Since 1 April 2019, the Electricity System Operator (ESO) operates as a separate company within National Grid. We are responsible for making sure supply and demand of electricity is balanced in real time across Great Britain (GB). While we operate as the ESO across GB, we do not own the transmission assets in Scotland.

Although the ESO is legally separate from ET, for 2020/21, its results are still presented to the Board as part of the UK ET segment.

4,496
miles (7,236 kilometres) of overhead electricity lines (2019/20: 4,481 miles; 7,212 kilometres)

UK Gas Transmission

Our UK Gas Transmission (GT) business comprises both the gas transmission assets and an integrated gas system operator.

We own and operate the high-pressure gas transmission network in Great Britain. We are responsible for making sure the country's gas is transported safely and efficiently from where it is produced to where it is consumed.

As the Gas System Operator, we are responsible for ensuring that supply and demand are balanced in real time on a day-to-day basis.

On 18 March 2021, we announced that we will be initiating a sale process later this year for a majority stake in this business (including our UK metering business which currently forms part of NGV).

8,972
miles (14,439 kilometres) of electricity transmission overhead lines (2019/20: 9,109 miles; 14,659 kilometres)

73,010
miles (117,498 kilometres) of electricity distribution circuit miles (2019/20: 73,004 miles; 117,488 kilometres)

US Regulated

New England

Electricity
We own and operate transmission facilities and distribution networks across Massachusetts, New Hampshire, Vermont and Rhode Island. Conditional on completion of the WPD Acquisition and certain regulatory approvals, we have agreed to sell our Rhode Island electricity transmission and distribution business to PPL. The sale is expected to complete in the first quarter of 2022.

Gas
We own and operate gas distribution networks across Massachusetts and Rhode Island. We have also agreed to sell our Rhode Island gas distribution business to PPL.

New York

Electricity
We own and operate transmission facilities and distribution networks across upstate New York. We also own and operate electricity generation facilities on Long Island, although under the new operating model they form part of NGV.

Gas
We own and operate gas distribution networks across upstate New York, in New York City and on Long Island.

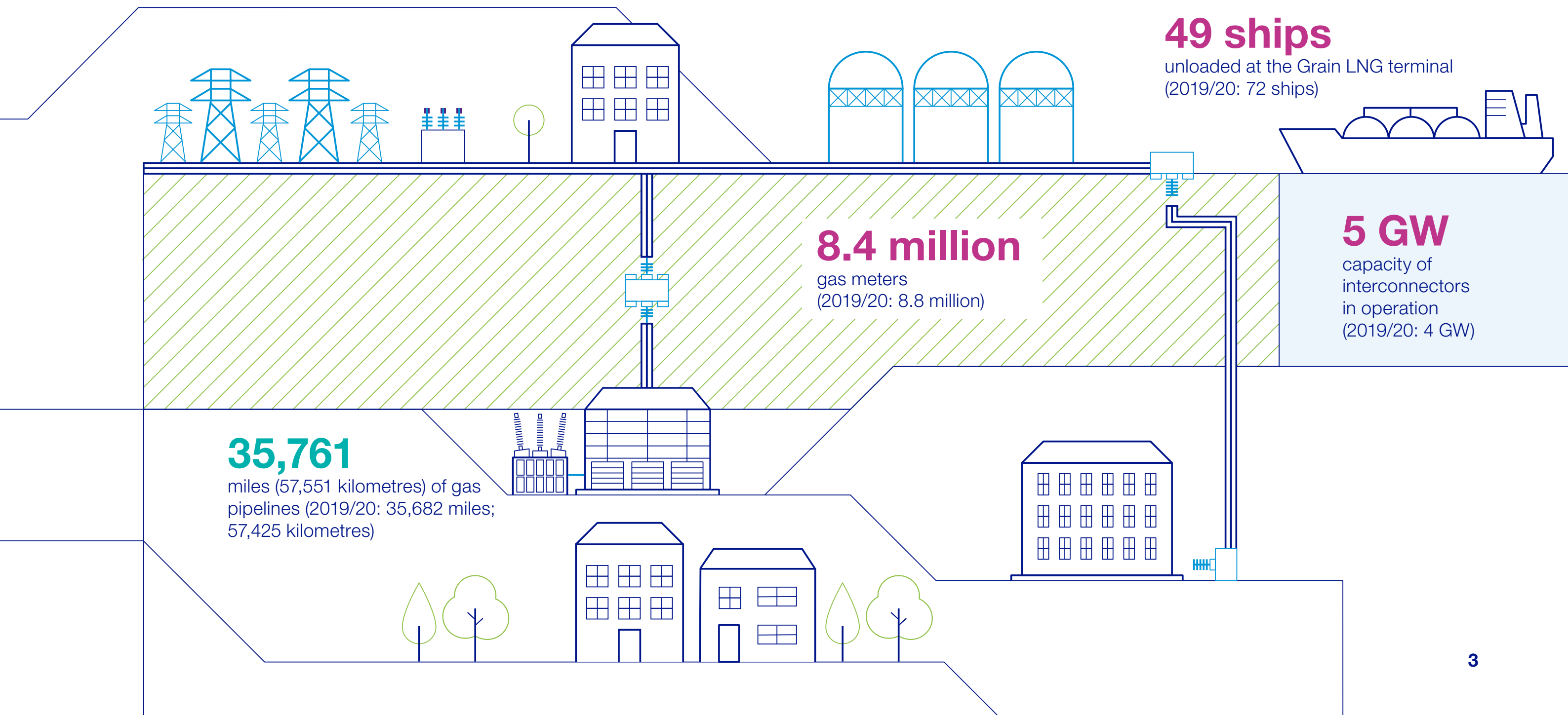
National Grid Ventures and other activities

National Grid Ventures (NGV) manages our diverse portfolio of energy businesses that are complementary to our core regulated operations. This operating segment represents our main strategic growth area outside our regulated core business, in competitive markets across the US and the UK. The business comprises commercial operations in energy metering, electricity interconnectors, renewables development and the storage of liquefied natural gas (LNG) in the UK.

In the US, NGV includes National Grid Renewables (which includes the renewables development company formerly known as Geronimo), a leading wind and solar developer in North America, and partners with companies including NextEra, SunRun and RWE to develop and own high-quality renewable energy assets. It also owns non-controlling stakes in joint ventures including New York Transco and the Millennium Pipeline Company.

Our other activities that do not form part of any of our core regulated businesses or NGV, primarily relate to our UK property business together with insurance and corporate activities in the UK and US, and the Group's investments in technology and innovation companies, through National Grid Partners (NGP).

49 ships
unloaded at the Grain LNG terminal (2019/20: 72 ships)



8.4 million
gas meters (2019/20: 8.8 million)

5 GW
capacity of interconnectors in operation (2019/20: 4 GW)

35,761
miles (57,551 kilometres) of gas pipelines (2019/20: 35,682 miles; 57,425 kilometres)

Business model continued

How we operate

We rely on our internal resources and our strong relationships which we use to do business, drawing on our technical expertise and culture in order to deliver value for our stakeholders and for wider society.

What we rely on

The key internal resources that we rely on to do business are:

- our physical assets that move the energy;
- appropriate funding that allows us to invest in our colleagues and assets; and
- our talented colleagues who ensure energy is moved efficiently and reliably.

We also rely on maintaining strong relationships with a number of key external stakeholder groups to ensure we best meet their needs and maintain our licence to operate (see pages 46 – 51).

Internal resources

Physical assets

We own electricity and gas networks that transmit energy over long distances from where it is produced. In the US, we also distribute it locally to where it is consumed. These networks are built to last for many decades. Such networks account for the vast majority of our asset base. We also own four subsea electricity interconnectors, with two further subsea cables under construction as well as LNG importation facilities.

Funding

We fund our business through a combination of shareholder equity and long- and short-term debt. We maintain an appropriate mix of the two and manage financial risks prudently.

Colleagues

Our highly skilled, dedicated colleagues have a strong public service ethos. They manage and maintain the physical energy infrastructure, and assist and develop the many stakeholder relationships that are crucial to the Company's success.

As we support the changes needed to build a net zero energy system, we are providing employment opportunities and supporting our colleagues to build the skills necessary to support these changes. By attracting and retaining the people capable of supporting the journey to net zero in the energy sector, we can help the places where we operate reach their emissions targets.

Strong relationships

Customers

In the UK we do not own the energy that flows through our electricity cables and gas pipes. This energy is owned by our customers, such as electricity generators and gas shippers. These industrial customers, together with domestic consumers through a small portion of their energy bills, pay to use our networks. In the US, we have almost seven million residential and commercial accounts.

Contractors and suppliers

We work in partnership with our supply chain, which has complementary experience, skillsets and resources. We agree mutually beneficial contractual arrangements and, wherever possible, leverage economies of scale and use sustainable and global sourcing opportunities.

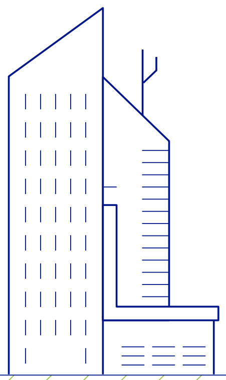
Communities and governments

The societal impact of our activities means that a range of stakeholders have a legitimate interest in and influence on the work we do. These include national and regional governments, local communities, our supply chain, and business and domestic consumers of the energy we transport.

Economic, health, safety and environmental regulators

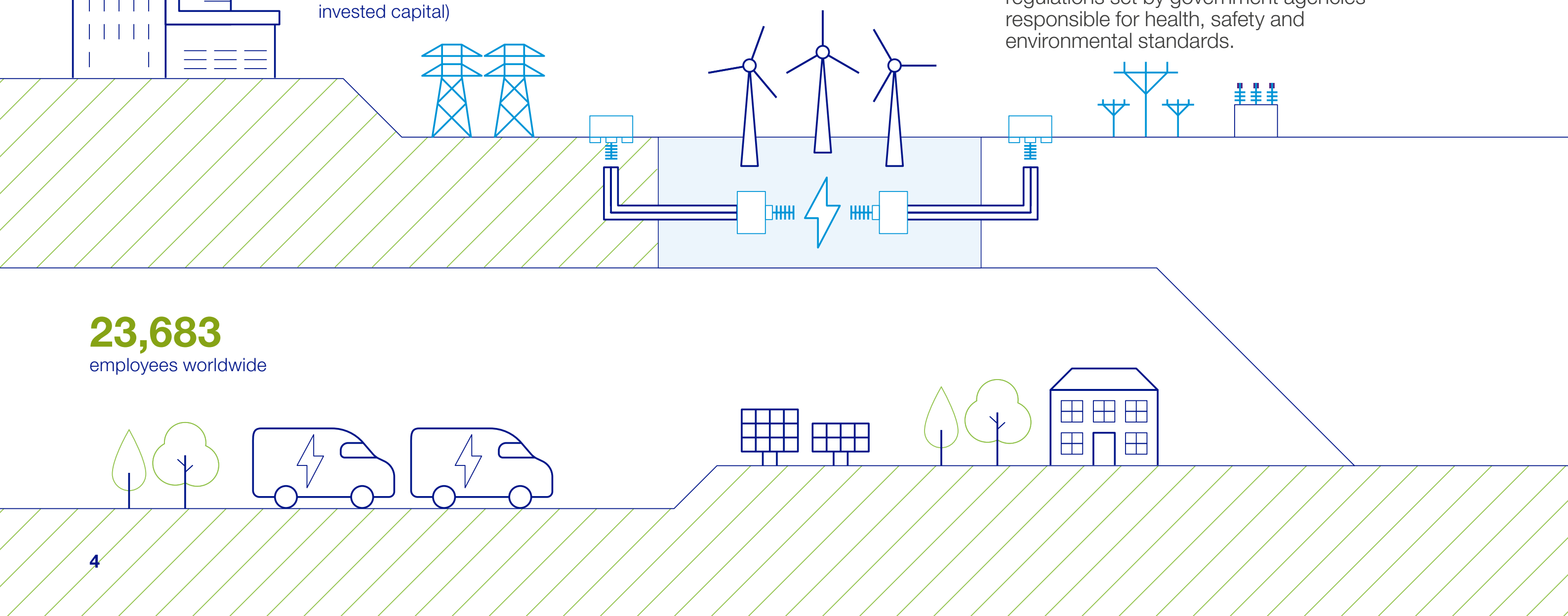
We are subject to economic regulation by bodies that are entirely independent of the Company. These economic regulators set the prices we can charge for providing an economic, efficient and non-discriminatory service. Our regulated revenue therefore covers day-to-day running costs, financing capital expenditures to renew and extend our networks, and incentives or penalties relative to performance targets. It also affords our shareholders a fair return on their investment.

The energy we transport and the activities we undertake are intrinsically hazardous; therefore our operations have to comply with laws and regulations set by government agencies responsible for health, safety and environmental standards.



65% Ⓐ
regulatory gearing (net debt as a proportion of the value of regulatory assets and other invested capital)

c.£5.0bn p.a. Ⓐ
average investment in our assets over the past three years (on a constant currency basis)



23,683
employees worldwide

How we do business

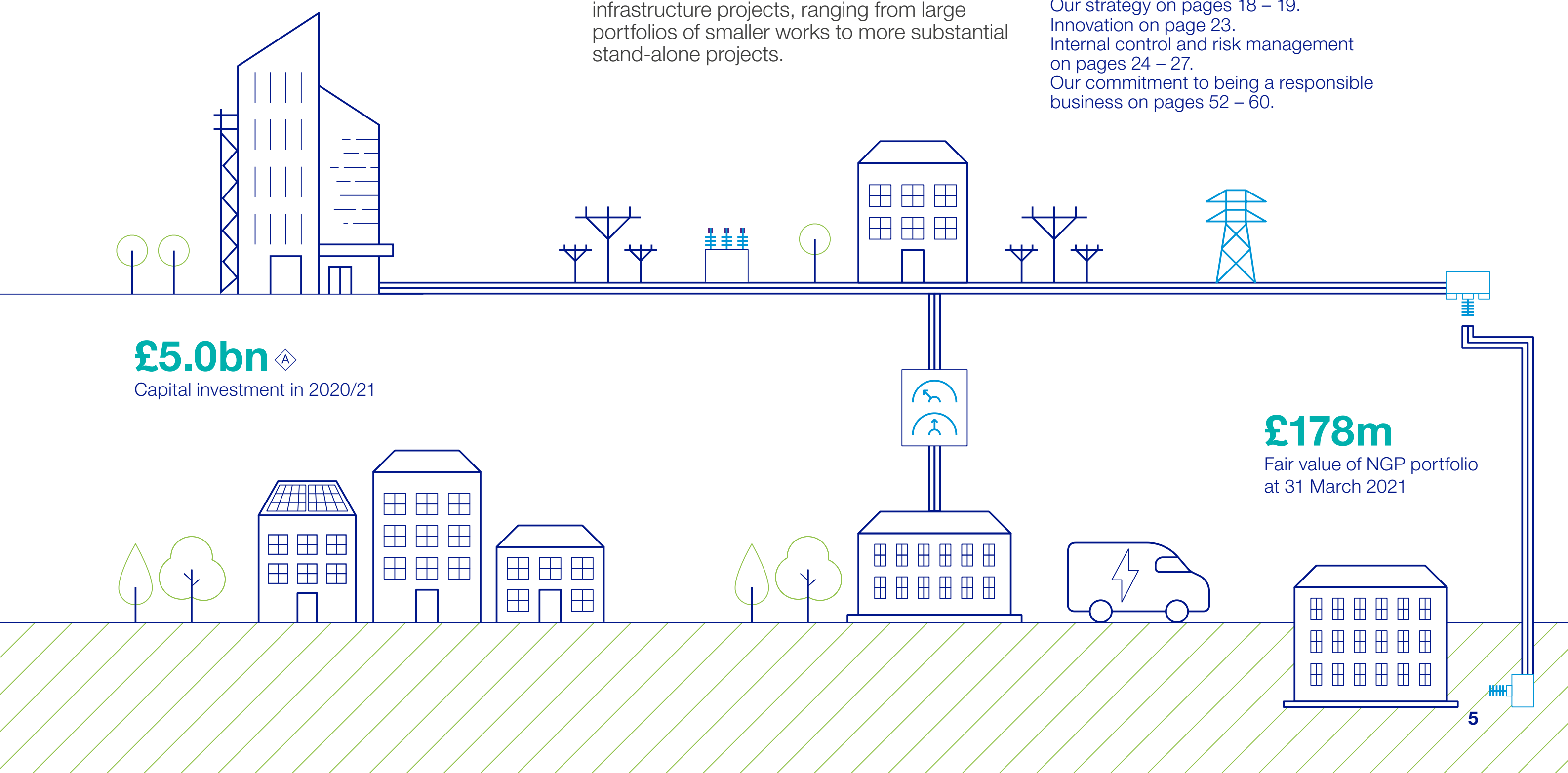
We combine these internal resources and strong relationships with our technical expertise to achieve our purpose and strategic objectives.

We do all of this in accordance with our culture and values, which guide everything that we do.

Our strategy is designed to deliver our vision, while being supported by robust governance and risk management processes.

Our innovation activities are focused on future-proofing the business for our customers as the energy landscape changes.

5.6%
Asset growth 2020/21



£5.0bn
Capital investment in 2020/21

£178m
Fair value of NGP portfolio at 31 March 2021

Our technical expertise

Over the many decades in which we have played a vital role connecting people to the energy they use, National Grid has built safe and reliable networks. We continue in our efforts to develop a well-respected and trusted reputation for engineering excellence.

We combine our extensive skills, knowledge and capabilities with innovation to ensure our core competencies continuously create value for shareholders and wider stakeholders alike.

We are recognised for our excellence in:

Asset management

We invest in and maintain our assets across their life as cost-effectively as possible.

Our focus ensures efficient management of our assets across their lifetime.

Engineering

The skills of our engineers are vital in delivering safe, efficient, reliable and sustainable performance for all our businesses. Our colleagues strive to:

- find practical and innovative solutions to complex problems;
- employ risk-based decision-making; and
- adopt common approaches and continuous improvements.

Our engineering expertise supports the delivery of a reliable network.

Capital delivery

We add value for our stakeholders by ensuring safe and effective delivery of large and complex infrastructure projects, ranging from large portfolios of smaller works to more substantial stand-alone projects.

Our culture

National Grid's culture is the values, beliefs and behaviours that characterise our Company and guide our practices.

As the energy transition accelerates, our strategic priorities will determine how we respond and shape our business over the next decade. To ensure success, we are working to change our current culture to one with a greater sense of purpose, strengthening our focus on results and performance, with leaders who empower, steer and act decisively.

We maintain high standards of ethical business. We also promote the right behaviours that are aligned with our values and culture by recognising our employees through a company-wide reward system that supports both what they achieve and how they have delivered their achievements.

Strategy and risk management

As the energy industry continues its transition to a cleaner future, we have evolved our strategy so that it clearly articulates our priorities, while positioning our business to continue to deliver long-term economic benefits in the regions in which we operate.

We have well-established governance structures that include comprehensive risk management, strong controls and financial discipline.

Further reading
Our strategy on pages 18 – 19.
Innovation on page 23.
Internal control and risk management on pages 24 – 27.
Our commitment to being a responsible business on pages 52 – 60.

Business model continued

How we operate continued

We provide the energy systems that help economies grow in a sustainable, affordable and reliable way. We continue to work with partners and customers on the technologies required to make net zero a reality.

The value we create

We deliver value for our stakeholders, which include our customers, as well as financial value for shareholders, by:

- **operating within our regulatory frameworks, and thereby being efficient and compliant;**
- **performing well against our regulatory incentives, delivering customer benefits and good returns;**
- **managing our cash flow requirements and securing low-cost funding; and**
- **maintaining a disciplined approach to investment in our networks and in development opportunities that are complementary to our core businesses.**

Investors

We aim to be a low-risk investment proposition, focused on generating shareholder value through dividends, supported by asset growth from investing in essential assets under primarily regulated market conditions, and servicing long-term sustainable consumer-led demands.

10.6% Ⓐ
Group Return on Equity 2020/21

For stakeholders and wider society

Our colleagues

We seek to create an environment in which our colleagues can make a positive contribution, develop their careers and reach their full potential.

Customers

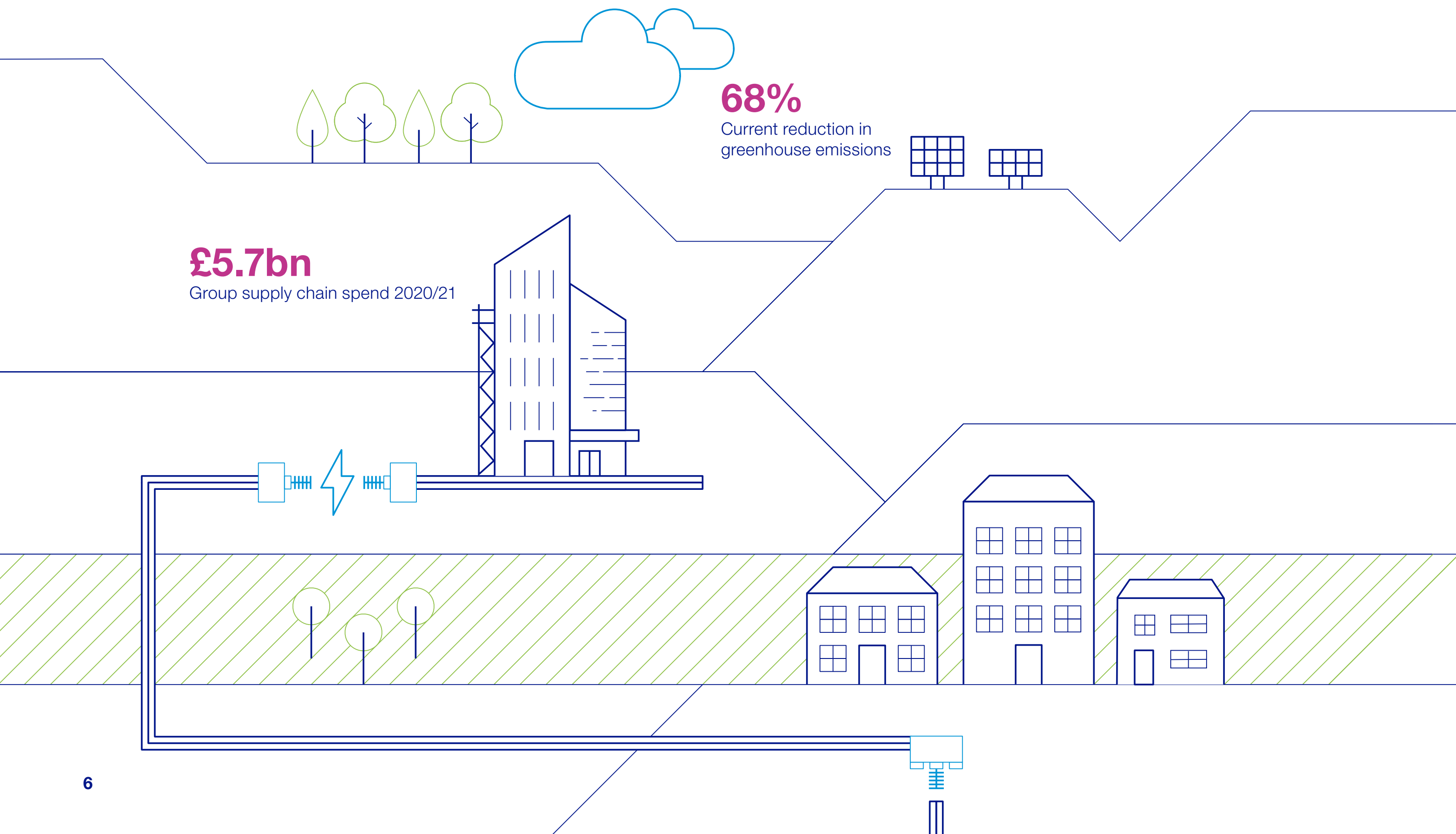
By delivering the energy they need and dealing with them in a transparent and responsive manner, we seek to build trusted relationships with our customers as we deliver services to them.

Contractors and suppliers

We maintain responsible and efficient supply chains in which our interests and those of our suppliers are aligned with the interests of customers.

Communities and governments

We help national and regional governments formulate and deliver their energy policies and commitments. The taxes we pay help fund essential public services. We have an important role to play in sustainability, enabling the transition to a low-carbon future.



Economic, health, safety and environmental regulators

Through constructive, transparent engagement and consistent, reliable delivery of our commitments, we build trust with our regulators.

Financial value

The chart below describes how our businesses create financial value. Further detail can be found in our financial review on pages 30 – 39.

1

Revenue and profits

The vast majority of our revenues are set in accordance with our regulatory agreements (see pages 30 – 39), and are calculated based on a number of factors including investment in network assets, performance against incentives, allowed returns on equity and cost of debt, and customer satisfaction.

2

Cash flows

Our ability to convert revenue to profit and cash is important. By managing our operations efficiently, safely and for the long term, we generate substantial cash flows. Coupled with long-term debt financing, as well as additional capital generated through the take-up of the shareholder scrip dividend option during periods of higher investment, we are able to invest in growing our asset base and fund our dividends.

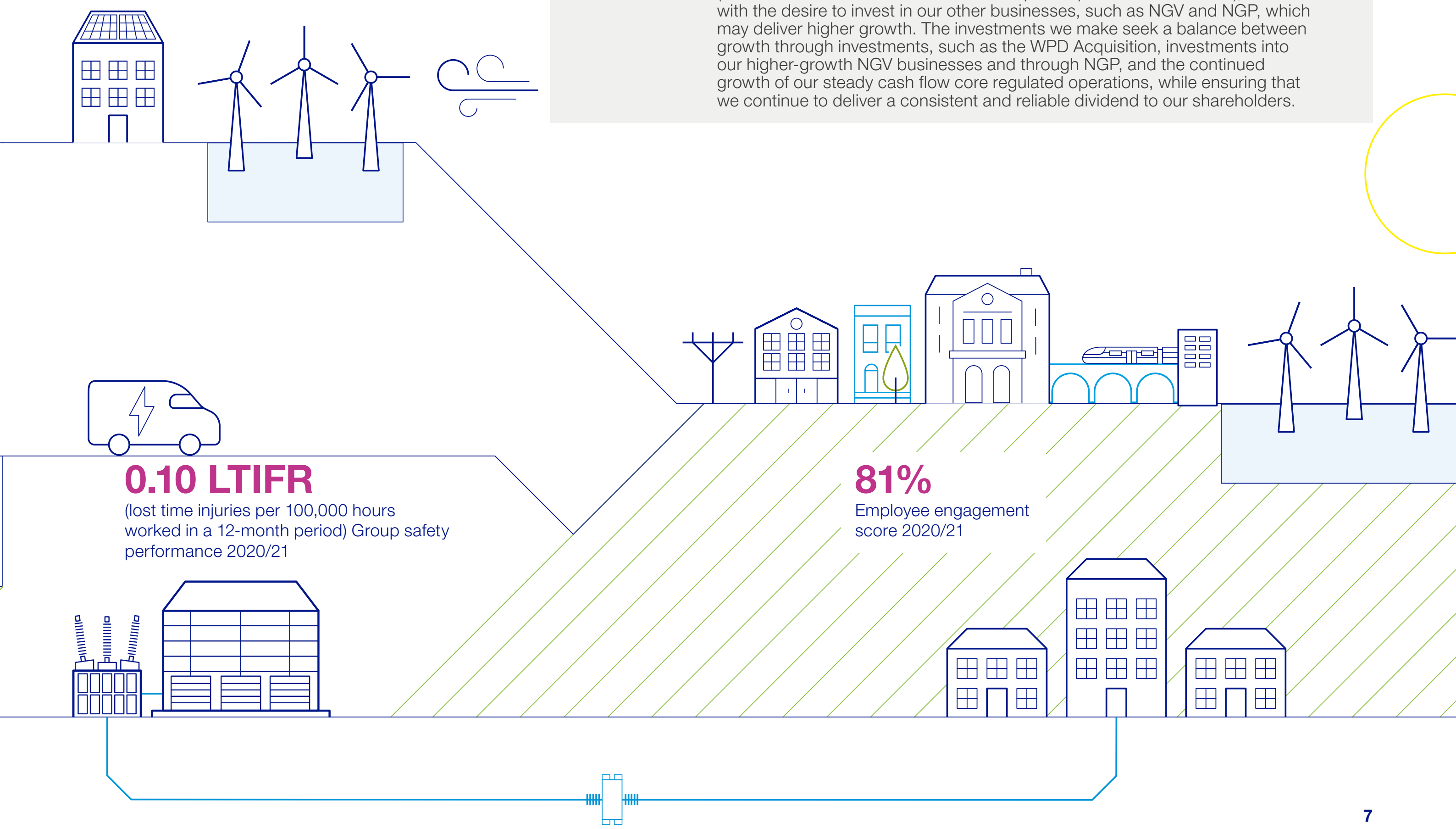
3

Investment

We invest efficiently in our networks to deliver strong and sustainable growth in our regulated asset base over the long term. We continually assess, monitor and challenge investment decisions so we can continue to deliver safe, reliable and cost-effective networks.

Capital allocation

Our capital allocation is determined by the need to deliver the investments and outputs required under our regulatory frameworks in the UK and US (which accounted for over 90% of our capital expenditure in 2020/21), balanced with the desire to invest in our other businesses, such as NGV and NGP, which may deliver higher growth. The investments we make seek a balance between growth through investments, such as the WPD Acquisition, investments into our higher-growth NGV businesses and through NGP, and the continued growth of our steady cash flow core regulated operations, while ensuring that we continue to deliver a consistent and reliable dividend to our shareholders.



0.10 LTIFR

(lost time injuries per 100,000 hours worked in a 12-month period) Group safety performance 2020/21

81%

Employee engagement score 2020/21

Our response to COVID-19

Throughout the financial year, we have continued to prioritise our stakeholders, maintain reliable and safe networks and protect against financial implications due to COVID-19.

Considering our stakeholders

The COVID-19 pandemic has impacted all of our stakeholders since it began in March 2020. We have sought to work with them to address the challenges they faced as these have evolved over the last year.

Further reading
our section 172 statement detailed summary pages 46 – 51

Our commitment to being a responsible business is central to the way in which we operate. This has been the governing principle behind our Board's response to the COVID-19 pandemic. We have had to think through and debate on the choices and actions we need to consider over the coming months to position us best for success in the medium to long term taking account of the impact on our key stakeholders. The Board has continued to monitor its responsibilities to the Company's different stakeholder groups. Good engagement has been crucial in understanding the views of our stakeholders in order to make informed decisions during this period of crisis. For example, the Company has been seeking regular feedback from employees that has helped to shape its response to the COVID-19 pandemic.

Colleagues

From the outset our focus has been on ensuring we remain in communication with our colleagues and ensure they are kept informed, whether by presentations and question and answer sessions with senior leadership or through other channels, on the actions being taken to keep them safe and to equip them for work as well as to address their wider wellbeing. This is the case whether they are key workers out on site keeping gas and electricity flowing, or colleagues able to work from home.

Communities and governments

Our colleagues have been supporting our communities by volunteering and providing their time and expertise to support charities and the most vulnerable, and we have set up Grid for Good to help play our part in addressing the economic impacts of COVID-19 in the UK and US, including rising youth unemployment. In total National Grid has made donations of around £2.5 million to help those affected by COVID-19, as well as grants and other financial support.

Investors

Having stress-tested the finances of the Company against a number of potential COVID-19 scenarios, the Board recommended a final dividend for 2019/20 and interim dividend for 2020/21 in line with policy. On 2 March, the Company announced its updated policy of growing the dividend per share annually in line with CPIH with effect from financial year 2021/22.

Customers, regulators and suppliers

We suspended our debt collection and customer termination activities across our US jurisdictions resulting in lower customer collections and additional provisioning for bad and doubtful debts. In the UK, we actively supported Ofgem's measures to protect customers by relaxing network charge payment terms for suppliers and shippers facing cash flow challenges as a result of COVID-19.

Our response to the COVID-19 pandemic

April

May

June

- The Board met weekly throughout April to review the COVID-19 situation and to understand the impact on our stakeholders and operations
- Onsite accommodation was set up for control room staff in both the US and UK, with established shift patterns, to protect ongoing operations
- Wellbeing pulse surveys were introduced to get feedback from employees; 70% of our employees responded
- The Company upgraded the provision of gas to a college gym in Long Island to turn it into a 1,000-bed hospital in just 7 days
- The Company was signatory to an open letter from UK business leaders to the government calling for the alignment of economic recovery plans with the country's wider environmental and climate goals
- National Grid Partners (NGP) became an official investor partner in 2020 Clean Fight New York with the aim of supporting energy start-ups with goals of building back better after COVID-19, providing clean energy jobs for the region

July

August

September

- Our upstate New York business submitted a request for new delivery prices beginning in July 2021 with up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers
- The Company demonstrated a strong response, despite the COVID-19 impact, to Tropical Storm Isaias, rapidly restoring power to 95% of 440,000 customers within 55 hours
- We worked to facilitate the safe return to office locations of colleagues across offices, making offices COVID-19 secure and establishing protocols
- The ESO launched 'Dynamic Containment' to facilitate faster acting frequency response in the face of lower inertia and larger, more numerous losses than usual arising from the effects of the pandemic
- Our US business donated $100,000 to Feeding America for its Hunger Action Month, helping tackle food insecurities across Massachusetts, New York and Rhode Island

2020 2021

Delivering safe, reliable networks through the pandemic

Throughout the COVID-19 pandemic the Group has adapted to new ways of working. We have delivered safe, reliable networks, while managing through all the new regulations and restrictions.

UK

The March 2020 lockdown meant that there was a suspension for a few weeks of our capital programmes, but once they resumed, we saw minimal delays. We worked closely with our contractors across all projects to minimise delays associated with COVID-19, including on major projects such as the London Power Tunnels 2 and Hinkley Point projects.

At times, during the summer, electricity demand fell to 20% below expected levels and zero-carbon sources made up their largest ever share of the power mix. For our ESO business, this meant our control room engineers had to take more actions, on more days, increasing and decreasing sources of power to keep the system stable and secure.

Despite the combined challenges of Brexit and COVID-19, NGV successfully implemented alternative trading arrangements to ensure there was no impact to the interconnector portfolio.

US

In the US, our COVID-19 Health and Safety Plan served as a guideline for all employees and contractors throughout the year. We ensured that safety expectations were made clear for new ways of working, including reduced size teams and single occupancy vehicles, allowing us to deliver our critical investment, while limiting the impact of the pandemic on our capital delivery programme.

Allowing for higher storm replacement costs, our electricity business delivered its full capital investment programme for the year. Our gas distribution business was impacted for longer, but recovered in the second half of the year, with expenditure only slightly below plan. Its work included our leak-prone pipe replacement programme, which this year saw a further 350 miles of pipeline replaced, above our target of 300 miles, despite the impact of COVID-19.

We conducted more than 32,000 virtual home energy assessments in New England when in-person home energy assessments were suspended due to COVID-19.

Estimated financial impact

The ongoing financial impact of COVID-19 is largely in line with our expectations, with increased provisions for bad and doubtful debts being incurred.

Group

During the year, the estimated impact of COVID-19 on our operating profit has been £296 million, compared to market guidance of around £400 million. The reduction is largely due to regulatory recovery of some of the US bad debt and the impact of better cost savings than expected. The impact has been more significant in our US businesses than our UK businesses, primarily due to the large US retail customer base. The operating profit impact is driven by the following broad areas:

- the most significant impact on our results is due to approximately £179 million (2020: £117 million) COVID-19-related increase in our provision for bad and doubtful debts, with our total bad debt charges for the period rising from £234 million last year to £326 million this year for the Group as a whole, of which the majority relates to our US business. The additional bad debt charges largely reflect the impacts of moratoria over collection and termination activities that remained in place for residential customers in the US throughout the year;
- our revenues were adversely impacted by approximately £78 million, mainly due to the suspension of late payment fees in the US, lower UK incentives and fewer US customers requesting 'protected status' due to the moratoriums on disconnections; partly offset by a recognition of a timing under-recovery in the US relating to allowed revenue of some of the bad debts, through regulatory mechanisms already in place;
- delay in updating rates in our NIMO, KEDNY and KEDLI businesses at the start of COVID-19 of approximately £70 million; and
- estimated incremental costs of £97 million (2019/20: £10 million) incurred related to enabling safe working (PPE, cleaning, sequestering staff, IT for remote access) and costs associated with delays to a number of planned capex works, as a direct consequence of the pandemic. These incremental costs have been partly mitigated by around £69 million of cost savings as a result of customer-facing workplan reductions, the pause in collections activities and lower travel and other costs.

For 2021/22, we expect some continuing impact, driven largely by our US operations where we are expecting further risk of bad debt, although lower than we have experienced in 2020/21 and 2019/20. In the longer term, we expect the impact of COVID-19 on our business to be limited on the basis that the majority of COVID-19-related costs will be recovered through our regulatory mechanisms. However, until the exact mechanism and timing for the regulatory recovery are finalised, we will still experience cash flow impacts from COVID-19 in the shorter term. In the US, we remain confident that we will recover the majority of our COVID-19 related costs relating to bad and doubtful debts through our regulatory mechanisms, either through the usual course of rate filing negotiations such as recovering revenue deferrals, or through separate filings, which we have already commenced in New York, Massachusetts and Rhode Island.

The estimated impact of COVID-19 on our cash flows for the full year is £600–£750 million, lower than our market guidance of up to £1 billion. The incremental cash flow impact beyond the operating profit impact described above results from the weaker demand and lower revenues that we expect to be recovered as usual through regulatory true-ups in later years, lower levels of cash collections from our US customers and revenue deferrals related to Balancing System Use of Charges and other timing differences in the UK that we will recover next year.

October **November** **December**

- Notwithstanding Centre for Disease Control (CDC) restrictions, our US business delivered a strong response to the third most impactful storm in the last 15 years, reconnecting, within 72 hours, 95% of 550,000 customers who lost power in New York
- In the final quarter of 2020, a Cogent Valuation report scored National Grid 7.22 out of 10, 5th out of 25 eastern US utilities, for its response to the pandemic
- Putting the spirit of giving into action, our Alliance of Black Professionals (ABP) members volunteered at Soco Restaurant in Brooklyn, New York for their Thanksgiving turkey giveaway event at a time when food insecurity was expected to rise by 38% throughout New York City in 2020, as a result of the pandemic
- In the UK, £83,000 was donated to the Trussell Trust at Christmas, in addition to £18,000 raised from colleagues' personal contributions

January **February** **March**

- Despite the challenges presented by COVID-19, the IFA2 subsea interconnector between the UK and France was launched in January
- In the UK, partnering with Restore Technology and several charities, we continued to provide laptops to schools as the second lockdown forced children to work from home, bringing the total number donated during the pandemic to around 1,400
- The Company has encouraged everyone who is able to have the COVID-19 vaccine to do so as soon as they are eligible, to protect themselves and their family, colleagues and communities, but, in line with industry peers, has not mandated vaccination
- In our US business, the Bill Payment and Customer Assistance Program Management Office continues its targeted customer outreach strategy, focussing on bill payment options, payment assistance programmes, community initiatives, scam awareness and safety protocols with the aim of helping customers maintain their bill health through assistance programmes and energy savings

◆ 2020 ◆ 2021

Chairman's Statement

"Amidst all the change, it's the dedication of our people that has allowed us to navigate challenging times and emerge stronger."

Sir Peter Gershon
Chairman

Over the past year, the COVID-19 pandemic has had a far-reaching and deep impact across the whole world. But through it all, we have delivered good operational performance and have begun a major strategic pivot for the Group.

So, I want to begin by thanking those who have worked tirelessly across our business, as they played their part in keeping our networks running and the energy flowing to hospitals, care homes, businesses and homes. Amidst all the change, it's the dedication of our people that has allowed us to navigate challenging times and emerge stronger.

I am also pleased that we are able to use our extensive resources to help support the communities we serve to get through and recover from the pandemic. Although the Company has implemented a number of measures to limit discretionary external spending, it has not relied on government support.

Strategy

As the Board has said on many occasions, our vision at National Grid is to be at the heart of a clean, fair and affordable energy future.

We'll do this through the execution of our strategic priorities, which are to deliver for our customers efficiently, to grow our organisational capabilities, to empower colleagues for great performance and to enable the energy transition for all.

It's with this vision in mind that we announced three significant and connected transactions:

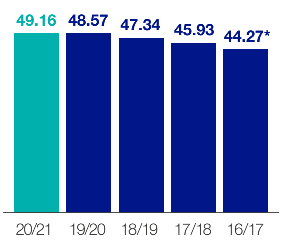
- the proposed acquisition of WPD in the UK from PPL Corporation;
- the sale of our Rhode Island business in the US to PPL Corporation; and
- the commencement of a process later this year for the sale of a majority stake in our UK GT and metering businesses.

These transactions will significantly improve National Grid's strategic positioning while enhancing our long-term growth prospects, put National Grid at the heart of delivering net zero across the UK electricity sector, and deliver attractive financial returns for our shareholders.

Following the vote at a General Meeting in April, I'm delighted that our shareholders strongly supported the proposed acquisition of WPD.

Final dividend of
32.16p
per share proposed to be paid on 18 August 2021

Full year dividend (pence per share)



*excludes a special dividend of 84.375p.

The 2021 Annual General Meeting (AGM) of National Grid plc will be held at 11.30am on Monday 26 July 2021. More details on the arrangements of this year's AGM and how to view the live webcast of the AGM can be found on our website in the Investor section at: nationalgrid.com/investors.

Safety

Safety is incredibly important to us and we're pleased we maintained a world class benchmark performance with an injury frequency rate of 0.10 during the year. Despite the strong performance, in November 2020, a contractor in New York suffered a fatal injury. An investigation was launched, resulting in further assurance checks being developed. It's absolutely imperative that we continue to focus on encouraging good safety behaviours across the entire workforce.

Dividend

The Board has recommended an increase in the final dividend to 32.16 pence per ordinary share ($2.2812 per American Depository Share) which will be paid on 18 August 2021 to shareholders on the register of members as at 4 June 2021. If approved, this will bring the full year dividend to 49.16 pence per ordinary share, an increase of 1.21% over the 48.57 pence per ordinary share in respect of the financial year ended 31 March 2020. This is in line with the increase in average UK RPI inflation for the year ended 31 March 2021 as set out in our previous dividend policy. In March 2021, we announced that from 2021/22, the dividend policy will aim to deliver annual dividend per share growth in line with the rate of CPIH inflation.

Regulatory issues

We continue an open dialogue with our regulators. In the UK, following a detailed analysis of Ofgem's RIIO-2 Final Determination, we submitted a technical appeal to the Competition and Markets Authority (CMA) on two points.

We welcomed the government's consultation into energy system operation, and we have been working closely with the government, regulator and industry to explore what changes will be needed to achieve net zero.

We also welcome the Prime Minister's 10 Point Plan and the government's very recent announcement to set a new target of 78% reduction in greenhouse gas (GHG) emissions by 2035, compared with 1990 levels.

Similarly, the US pledged to cut carbon emissions by 50–52% below 2005 levels by 2030. This new target almost doubles their previous promise and is a welcome step forward.

In the US, we filed a proposal for review with the Massachusetts Department of Public Utilities to increase gas distribution rates for our Massachusetts gas customers. The total impact of $139 million would be spread across our customer base. This rate case is still underway and if approved, these new rates would come into effect in November 2021.

Our upstate New York three-year rate agreement expired in April 2021, and in July we submitted a request for new delivery prices beginning in July 2021.

Performance

The International Financial Reporting Standard (IFRS) technical requirements make reporting some of the performance measures that we use as a regulated business challenging. We provide additional information, on page 34, about both our significant assets and liabilities that do not form part of our audited accounts, to help our investors gain a fair, balanced and understandable view of our business. Where practicable, we reconcile these with our statutory measures in 'Other unaudited financial information' on pages 250 – 259.

How we generate and preserve value

During the year, we published our Responsible Business Charter (RBC), setting out what our responsibility means for us and commitments and ambitions over the coming years. It's important that we are open and transparent for all our stakeholders, and that's why we are reporting on our progress in our new annual Responsible Business Report (RBR).

It's also why this year we want shareholders to have their say on how the Company is tackling net zero. As a result, we are making a commitment at this year's AGM to bring our climate transition plan to be voted on by our shareholders at our AGM in July 2022. Engagement with our key stakeholders has been a crucial part of defining our net zero commitments and ambition. It has helped us better understand their expectations to develop a path we believe is consistent with the Paris Agreement and consistent with the Task Force on Climate-related Financial Disclosures (TCFD).

Culture, Inclusion & Diversity

In 2020, the Board agreed a new approach to the way it monitors culture, inclusion and diversity to enable it to assess progress. We have made progress in a number of areas, pointing towards real change. In particular, our business leaders have demonstrated the ability to change behaviours and ways of working in the face of the pandemic and insight gleaned from our internal communication and engagement channels shows our colleagues have responded positively to the human and authentic way we have led over the last 12 months.

I am pleased that our commitments have been recognised with a number of external awards including the FT's Diversity Leaders List. As a result of our continued dedication and focus on inclusion and diversity, our ONE employee resource group was awarded the title of Top Network Group at the 2020 Ethnicity Awards, and we were placed in the top 10 in the Outstanding Employer category. This is in addition to the numerous individual awards across the business.

We are making progress, but the Board recognises that we have more work to do. This is important now, more than ever.

Appointments and Board changes

You can read more details of all our Board members' experience and the Committees they support in the Corporate Governance review on pages 72 – 73.

This has been my last year as Chairman as I stepped down on 31 May after over nine years in the role, and I am delighted to be handing over to Paula Rosput Reynolds as the new Chair.

During my time as Chairman, there has been significant transformation in the energy sector, and I am optimistic about the direction of travel. I believe innovative and transformational engineering will continue to be critical to tackling climate change. I am also pleased that over this period, our Total Shareholder Return has averaged just over 9% compared with the FTSE 100 average of just over 6%.

I have great confidence that, as Paula takes up her role, National Grid will continue to lead the way to a clean, fair and affordable energy future.

Finally, it is with great pride that I would like to take this opportunity to express my thanks to colleagues across our business who are tackling the impacts of climate change with huge professionalism and commitment and finding innovative engineering solutions in the pursuit of net zero goals.

Sir Peter Gershon
Chairman

Chief Executive's review

"We will enhance our role in the energy transition and drive long-term shareholder value."

John Pettigrew
Chief Executive

Key highlights in 2020/21

10.6%
RoE

£5bn
investment in critical infrastructure

1,000
economically disadvantaged young people helped through Grid for Good programme

Our vision is for National Grid to be at the heart of a clean, fair and affordable energy future. It's with this vision in mind that in March, we announced three transformational deals that will significantly change National Grid's positioning and give us an even greater role to play on the journey to net zero.

Our acquisition of WPD, the UK's largest electricity distribution network operator, for an equity value of £7.8 billion, selling our Rhode Island gas and electricity business for an equity value of $3.8 billion (£2.7 billion) and initiating a sale process for a majority stake in our UK GT and metering business, will enhance our role in the energy transition and drive long-term shareholder value.

With increased exposure to the UK's electricity sector, we will be able to take a more holistic approach, helping the UK's wider net zero ambitions.

For example, with renewable generation, our high- and low-voltage engineers will be able to share their knowledge and experience, to efficiently deliver increasing levels of renewables connections, both large and small.

We will also be able to share best practice across engineering and customer solutions, to help drive a more effective roll-out of the infrastructure needed for electric vehicles. While we are working to deliver ultra-fast charging infrastructure at a national level, WPD is looking to deliver over 200,000 charging points across its territory by 2023.

When all three transactions are completed, nearly 70% of group assets will be focused on electricity, up from around 60% today. That's very significant at a time when electricity demand is expected to rise substantially in the years ahead. The UK Committee on Climate Change expects a 70% increase in UK electricity demand by 2050. As the largest electricity transmission and distribution owner and operator in the UK, we will play a pivotal role in enabling growing levels of electrification.

These transactions will transform National Grid's positioning and strengthen our core ambition to be at the heart of a clean, fair and affordable energy future.

Increasing political will

It has been a significant year with climate change continuing to rise up the agenda, despite the challenges posed by the COVID-19 pandemic. We have seen businesses, governments, regulators and stakeholders come together with the shared ambition of reaching net zero by 2050. We welcome the important progress that has been made across all our jurisdictions.

National Grid applauded the new US administration's decision to rejoin the Paris Agreement on President Biden's first day in office and the package of executive orders signed, which aim to put the US on the path to reducing its share of emissions. The Energy Act of 2020 was passed by US Congress in December 2020, extending financial support to key decarbonisation technologies and infrastructure through tax credits, research and development funding, and loan guarantees.

Both Massachusetts and Rhode Island launched the Transportation & Climate Initiative, which commits to cutting GHG emissions from motor vehicles by 26% between 2022 and 2032 and investing $300 million per year in equitable low-carbon transport. In July 2020, New York issued an EV 'Make Ready' Order, authorising public utilities to invest $700 million by 2025 to build out beneficial EV charging infrastructure.

In the UK, we welcomed the Energy White Paper, setting out the steps the government will take over the next 10 years to cut emissions from industry, transport and buildings, while creating new jobs. We were also pleased that the UK government confirmed funding for the ultra-fast charging network needed to enable the large-scale take-up of electric vehicles.

Alongside this, I'm pleased that 2020 was the greenest year on record for Britain's electricity system including almost 68 days with coal-free generation. Record-breaking levels of power from zero carbon sources were key factors in reducing 2020's carbon intensity – while record low electricity demand during the nation's lockdown also contributed. In the US, our energy efficiency programmes, the largest in the country, have saved more than 4.2 tonnes of carbon since 2015.

2021 will be a crucial year as the UK prepares to host COP26, where we are a principal partner. It is a unique opportunity to drive more ambitious change and show that with the right policy and regulatory frameworks in place, we can take huge strides forward to reach net zero.

Investing in our infrastructure

During the year, investment in critical infrastructure remained strong, with capital expenditure at £5 billion. This was driven predominantly by continued investment in large capital programmes in our UK Electricity Transmission business, continued high levels of US capital expenditure, much of it mandated on safety spend, and investment in National Grid Ventures as we progress our interconnector projects. This has driven asset growth of 5.6%.

Across our US gas businesses, we invested $1.77 billion, including the replacement of more than 350 miles (563 kilometres) of leak-prone pipe. And in our electricity business, in New York, we energised two new substations to deliver continued safe, reliable electricity to customers. National Grid's three newest substations in the region represent a total investment of $42.5 million.

Looking forward, National Grid will continue to work with stakeholders to develop infrastructure projects. For example, National Grid is a co-participant to build the Northern New York Priority Transmission Project (NNYPTP), a major transmission line rebuild project that will help unlock existing renewable energy resources such as wind and hydro power in the region, and will also lead to emissions reductions of 1.2 million tonnes of CO_2 and save $447 million in transmission congestion costs. The project is expected to begin construction next year and be completed by the end of 2025.

In the UK, we invested just over £1.2 billion across Electricity and Gas Transmission. Major electricity projects included the 21-mile (34-kilometre) London Power Tunnels 2 project and the 29-mile (47-kilometre) Hinkley Point connection. In our gas business, we've completed the tunnelling of the Feeder 9 pipeline and secured our place in the Guinness World Records for the world's longest hydraulically inserted pipeline at 3 miles (5 kilometres).

NGV's capital investment decreased, principally due to a net decrease in interconnectors under construction and lower investment on IFA2, the interconnector between the UK and France, which successfully went into operation in January. With a capacity of 1,000 MW, the 149-mile (240-kilometre) subsea power cable can provide enough energy to power 1 million British homes. Since construction began in 2018, IFA2 has seen more than 1,000 engineers and specialists work a total of more than 3 million hours.

Within National Grid Renewables in the US, we signed a power purchase agreement with Basin Electric Power Cooperative for a large solar project in South Dakota, which is expected to generate 128 MW of clean power from 2022. We also signed power purchase agreements with Big Rivers Electric Corporation for the 160 MW Unbridled Solar Project in Kentucky and started construction for the 40 MW MiSolar Portfolio in Michigan which, when completed later this year, will power around 8,000 homes. We have also started construction on the 200 MW Prairie Wolf Solar Project in Illinois. The project will remove 285,000 metric tonnes of CO_2 from entering the atmosphere annually, which is the equivalent of fuelling 34,321 homes' energy use for one year.

Innovations and new technology

Our commitment to net zero continues to shape our innovation strategy. And I'm very proud of the innovative solutions that our teams are working on, which are focused on the advancement of products, systems and work methods that prepare the way for more efficient and safer networks that further facilitate the integration of renewables.

Towards the end of this year, we will open the Deeside Centre for Innovation. We hope it will become a globally recognised centre for innovations and collaborations in all green technologies. It will be the first test centre in Europe where testing can be carried out at voltages of up to 600 kV at an off-grid substation, bridging the gap between laboratory testing and installation in a connected and operational substation.

We've continued to advance efforts to decarbonise our gas network for a clean energy future. In the UK, Ofgem's Network Innovation Competition approved a first-of-its-kind offline hydrogen research facility to understand how transmission assets could be used to transport hydrogen in the future to heat homes and deliver green energy to industry. Similarly, the US Department of Energy awarded $12.4 million to facilitate research and development in accelerating hydrogen blending into the transmission infrastructure. Separately, we've partnered with Standard Hydrogen Corporation to demonstrate the US's first multi-use, renewable hydrogen-based energy storage/delivery system in New York's Capital Region, with completion expected by late 2022.

Scan here to view our story

Green collar jobs: Julia Gold – growing up green

I'm Principal Strategy and Policy Analyst – Clean Transportation, covering Massachusetts, New York and Rhode Island.

I help to accelerate the adoption of electric vehicles and prepare the grid for our evolving transportation system. This includes designing programmes for our customers, collaborating with stakeholders, developing public policy priorities and coordinating with state regulators.

The transportation sector, which is responsible for almost 40% of the greenhouse gas emissions in the Northeast, is an essential part of shaping our path forward. My role is to help accelerate this transition.

I grew up in a family of environmental activists – sustainability has always been a big part of my life.

Chief Executive's review
continued

On asset health innovation, we are developing valve clean-up techniques and looking at drone technology for inspection, flying drones beyond visual line of sight to inspect large areas of our network and assets.

And in the US, National Grid Partners has a growing portfolio of 23 companies and four fund investments at a fair value of £178 million. It is investing in a smarter energy future, with artificial intelligence (AI) playing a central role. For example, this year, we invested in Silicon Valley-based AiDash, which uses satellite imaging and AI to protect transmission and distribution grids from overgrown vegetation.

Delivering for our customers efficiently

We continue an open dialogue with our regulators. In the UK, following a detailed analysis of Ofgem's RIIO-2 Final Determinations, we accepted the overall package for the ESO, and broadly accepted the majority of the package for the ET and GT businesses. Whilst we welcome the significant movement from Ofgem's Draft Determinations in total expenditure allowances and greater flexibility around future net zero investment for ET and GT, we have submitted a technical appeal to the Competition and Markets Authority (CMA) regarding Ofgem's proposed cost of equity and outperformance wedge. The CMA has accepted our appeal on both points and expects to reach a decision in the autumn.

In the US, we filed a proposal to increase gas distribution rates for our Massachusetts gas customers. This rate case is still underway and if approved, these new rates would come into effect in November 2021. Separately, our upstate New York three-year rate agreement expired in April 2021, and in July we submitted a request for new delivery prices beginning in July 2021. And in May, we reached an agreement on a joint proposal with New York PSC Staff for new rates in KEDNY and KEDLI, our downstate New York gas businesses, which provides funding for research into hydrogen blending, and geothermal and natural gas projects. The NYPSC's final decision is expected later this summer.

As we invest to decarbonise the energy system, driving operational excellence and financial discipline to keep bills affordable for customers is more important than ever.

That's why, in the UK, we launched ConnectNow, a one-stop portal for electricity connection customers, which received high direct customer satisfaction feedback.

Customer performance remains a key metric for National Grid, and so I'm pleased we've seen a steady increase in our customer satisfaction scores for ET and GT. In the US, customer sentiment has improved over the past year and we have appointed a Chief Customer Officer. I am confident that they will help to further improve customer satisfaction and make it easier for our customers to engage with us.

In both the UK and US, we continued to maintain high levels of reliability on all our networks. We successfully managed low levels of demand, particularly in the UK, with the ESO developing new flexibility tools to maintain security of supply. And in the US we've responded to some of the most impactful storms we've seen in almost 20 years. Hurricane Isaias was one of the most severe weather events to affect our customers. Despite COVID-19 adjustments made early on to accommodate Center for Disease Control (CDC) and other restrictions, our storm response performance has remained focused and steady. Our efforts around recovery and response continue to be recognised across the industry, receiving multiple awards in 2020, including from the Edison Electric Institute and the North Atlantic Mutual Assistance Group.

Optimising performance

The UK regulated businesses delivered a weighted average RoE of 12.6%, consistent with the return achieved in the prior year. US RoE decreased to 7.2%.

Enabling the energy transition for all

In October, we published our Responsible Business Charter (RBC), which set out ambitious future priorities for the business.

We are publishing for the first time a separate Responsible Business Report alongside the Annual Report to report annually against the commitments set out in our Charter.

Our carbon emission reduction targets are aligned to a well below 2°C pathway and have been officially verified by the Science Based Targets initiative (SBTi).

Empowering colleagues for great performance

As we look ahead at the significant changes needed across our industry, the politics and regulations to enable the decarbonisation of the economies in which we operate, it is important that we are set up in the best possible way to deliver against the challenges of a clean energy future.

That's why we are evolving our operating model in both the US and the UK. We need to continue to drive efficiency through innovation to meet the changing needs of our customers and will do so through a programme of changes over the next 18–24 months.

In our RBC, we set specific and sustainable targets for diversity across the organisation for the next 5–10 years in order to achieve the inclusive culture and diversity we seek. We want our workforce to reflect the diversity of the communities we serve and are committed to providing an inclusive, equal and fair working environment. I am delighted that we have appointed a Chief Diversity Officer for the first time, this year. This will help us achieve our ambitions.

Against the backdrop of the COVID-19 pandemic, when young people are facing one of the toughest job markets for generations, there is a huge opportunity to support and leverage motivated young minds through apprenticeship programmes.

Unemployment and social exclusion amongst young people existed before the COVID-19 pandemic, but the economic downturn in the UK and US has seen youth unemployment double, pushing young people even further away from the job market. That's why we set up Grid for Good, a flagship energy industry programme to deliver a positive impact to socio-economically disadvantaged young people. The scheme sees us working with our supply chain partners and charities to provide training and employment opportunities for 16–24 year olds, who come from disadvantaged backgrounds. We've already helped 1,000 young people through our pilots and trials, and in our first year, this will encompass 12,000 volunteering hours from our colleagues.

Looking ahead

I would like to welcome Paula Rosput Reynolds as our new Chair. Paula joins us as the first female Chair at National Grid. She brings a wealth of board-level experience leading global companies in the energy and financial sectors. Her experience within international and US companies and insight into strategic and regulatory issues will be an asset to the Board, and I look forward to working alongside her.

Our outgoing Chair, Sir Peter Gershon, has made an exceptional contribution to the business and I would like to thank him on behalf of the Board for his wise counsel and strategic direction.

Finally, I would like to extend my personal thanks to all my colleagues who have shown such dedication and commitment to delivery and ensuring the networks keep running as efficiently and safely as ever through a uniquely challenging time.

John Pettigrew
Chief Executive

Scan here to view our video

Or visit:
nationalgrid.com/about-us/annual-report-and-accounts

Our business environment

As well as managing through the COVID-19 pandemic, our societal ambition remains to achieve net zero. We are committed to working with governments and regulators in the UK and US to help them meet their own carbon reduction targets in a fair and affordable way.

Net zero

The COVID-19 pandemic has contributed to an increase in climate action by many stakeholders this year, including: investors, companies and governments. This global focus on the 'critical decade' (2020-2030) has created a drive for action which has been supported by UK and US governments.

68%

National Grid's reduction in Scope 1 & 2 carbon emissions since 1990.

Net zero

by 2050

We are continuing to progress towards our own net zero commitment to reduce our greenhouse gas (GHG) emissions to net zero by 2050. As well as our own direct emissions, we are also committed to working with governments and regulators in the UK and US to help them meet their own carbon reduction targets. As a principal partner for COP26, we will be playing our part to show how we can achieve net zero, utilising the technologies we have today and developing opportunities for the future.

Stimulating a 'green economic recovery', with an emphasis on jobs and skills for the future, will be key as economies are rebuilt in the wake of COVID-19. At National Grid, we are focused on how to manage the energy transition whilst balancing key societal issues for the regions in which we operate.

2020/21 developments

UK

Following the UK's binding commitment to net zero emissions by 2050, further developments towards decarbonising the economy have been seen throughout 2020.

2020 was the greenest year on record for Great Britain's electricity system, with record-breaking levels of power from zero-carbon sources aided by low electricity demand during the nation's lockdown.

The publication of the Prime Minister's Ten Point Plan and the Energy White Paper in late 2020 has committed the UK to delivering clean energy and transport with support for: increased offshore wind capacity, hydrogen trials, nuclear and CCUS investment, roll-out of electric vehicles and charging infrastructure, greener maritime trials, and targets to decarbonise our homes.

US

Early actions by the Biden Administration signal climate change as a top priority for the federal government over the next four years. Executive Orders were issued re-joining the Paris Climate Agreement and directing all federal agencies to review, revise and add policies to mitigate climate change and bolster environmental justice.

The Energy Act of 2020 was passed by US Congress in December 2020, extending financial support to key decarbonisation technologies and infrastructure through tax credits, research and development funding and loan guarantees.

The Accelerated Renewable Energy Growth and Community Benefit Act was passed in April 2020, which granted the New York Power Authority (NYPA) the authority to designate priority transmission projects (PTPs) in order to expedite New York State's green energy policy objectives pursuant to the Climate Leadership and Communities Protection Act.

Massachusetts proposed its Clean Energy and Climate Plan to 2030, which provides details on the actions the state will undertake through the next decade to ensure the 2030 emissions limit is met. Both Massachusetts and Rhode Island launched the Transportation & Climate Initiative, which commits to cutting GHG emissions from motor vehicles by 26% between 2022 and 2032 and investing $300 million per year in low-carbon transport. In July 2020, New York issued an EV 'Make Ready' Order, authorising public utilities to invest $700 million through to 2025 to build out EV charging infrastructure.

Our response

- We have been announced as a COP26 principal partner and are working closely with the UK government and other sponsors to create a successful and ambitious climate change conference in November 2021.
- In April 2021, National Grid joined the SBTi, with our commitments to reduce our emissions in line with climate science approved by SBTi. The targets we have set are consistent with the reductions required to keep warming to well below 2°C.
- For the fifth consecutive year we received the prestigious climate change 'A' score from CDP Climate Change for our actions in corporate sustainability for cutting emissions and moving towards a low-carbon economy.
- This year, we are presenting our shareholders with our intention to share our climate transition action plan ahead of the Company's 2022 AGM and for an annual vote on our climate change-related net zero commitment and associated targets such as our 2030 net zero target.
- We are strategically pivoting our UK portfolio towards electricity, to be at the heart of the energy transition. On 18 March 2021 National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals. The proportion of the Group's assets in electricity will increase from around 60% to around 70% subject to completion of the WPD Acquisition, the NECO Sale and the proposed sale of a majority stake in our UK GT business.
- Our UK GT business got approval for £9 million of funding via the Network Innovation Competition (NIC) for FutureGrid, a project to test the possibilities of using hydrogen on the National Transmission System (NTS).
- We joined 11 leading organisations in the £75 million bid to create the world's first net zero industrial cluster in the Humber region in the UK.
- We helped secure $12 million funding from the US Department of Energy to facilitate research and development in accelerating hydrogen blending into the transmission infrastructure, working with six national laboratories, 20 industry leaders and leading academic institutions.
- The innovative 'Home Energy Savings Program' has been launched in Central New York in cooperation between the New York State Energy and Research Development Authority (NYSERDA) and National Grid. The programme supports clean energy jobs and offers energy bill savings. This also supports Governor Cuomo's nation-leading goals of an 85% reduction in greenhouse gases by 2050.
- NYPA announced National Grid as its selected co-participant to move forward with the Northern New York PTP, a major transmission line rebuild that will harden the resilience of New York's power grid. The project includes rebuilding transmission lines and rebuilding and expanding several substations along the impacted transmission corridor, and will help unlock existing renewable energy sources in the region and is expected to bring hundreds of clean energy construction jobs.
- A power purchase agreement with Basin Electric Power Cooperative has been published for a large solar energy project in South Dakota. It is expected to generate 128 MW of clean power from 2022, provide support for the local community, and offer around $500,000 of charitable funds to The Wild Springs Education Fund.
- The 40 MW Michigan Solar Portfolio has started construction to power around 8,000 homes.
- The New York Energy Solution, being developed by New York Transco and our NGV business joint venture, continued to progress through New York State's Article VII permit application process to modernise the electricity grid. The project is expected to start construction in 2022.
- National Grid Partners became an official investor partner of 2020 The Clean Fight New York with the aim of supporting clean energy startups with goals of building back better after COVID-19 and providing clean energy jobs for the region.

The future of heat:

The UK Climate Change Committee's (CCC) 6th Carbon Budget report in 2020 highlights there will be a combination of solutions required to decarbonise heat. These solutions will include both mature and nascent technologies of electrification, hydrogen, biofuels and carbon capture utilisation and storage. As a result, we currently continue to believe that our gas assets will have useful purpose in supporting the transition to clean gases. However, the scale of the networks will be dependent on technological developments and policy choices of governments and regulators.

The future of power:

The UK CCC's 6th Carbon Budget report in 2020 highlights the importance of electrification across power, heat, and transport, for meeting net zero. As large-scale renewable resources play an essential role in the low-carbon future, we are excited to help connect these clean resources to our communities. We recognise the need for continued investment in our transmission and distribution assets to make this a reality.

The future of transport:

We will continue to promote both EV adoption and charging infrastructure, preparing for 'make ready' investments to reinforce our infrastructure across the UK and US.

Our business environment
continued

Fairness and Affordability

National Grid delivers energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring that no one is left behind in the short term during the COVID-19 crisis, or in the longer-term transition to clean energy.

#1

#1 Ranked US electric utility for energy efficiency by American Council for an Energy-Efficient Economy.

3%

UK electricity transmission network costs per average household dual fuel bill.

2020/21 developments

UK

Cost of energy and the lowest cost transition to net zero continues to be a key priority, evidenced by Ofgem's RIIO-2 Final Determinations to reduce network costs in energy bills and the plans set out by BEIS in the Energy White Paper to keep energy bills out to 2030 in line with 2019.

Advisors such as the Climate Change Committee continue to stress the importance that net zero is delivered in a fair way as a 'just transition' across society, with vulnerable consumers protected, and have provided analysis on how both net zero and affordable energy bills can be achieved.

US

COVID-19 has brought serious economic hardship to many of our customers, elevating affordability concerns even further. Each of our US jurisdictions last year ordered extended moratoria on disconnection for non-payment. The crisis also saw increased prioritisation and deferral of utility spend to alleviate economic distress during the pandemic.

Our response

- In October, across our UK and US businesses, we launched our Responsible Business Charter, committing to have a real impact across five key areas: the environment, our communities, our people, the economy, and our governance.
- We have set up Grid for Good to help play our part in addressing the effects of the economic downturn in the UK and US which has seen youth unemployment double in the wake of the pandemic.
- National Grid was one of 200 signatories to an open letter from UK business leaders to government calling for the alignment of economic recovery plans with the UK's wider environmental and climate goals, including a quote from John Pettigrew calling for 100,000 jobs to be created in the energy sector as we work towards net zero.
- In the UK, we donated £83,000 to the Trussell Trust, following a £100,000 donation to the Trust previously to support its network of 1,200 food bank centres providing emergency food and compassionate, practical support to people in crisis.
- In the US, we deferred our New York rate increases and established special COVID-19 payment plans to relieve pressure on customers during the challenging COVID-19 period.
- In our US business, we partnered with Feeding America for Hunger Action Month in September to donate $100,000 for helping tackle food insecurities across Massachusetts, New York, and Rhode Island.
- In the US, we filed a customer assistance proposal for NIMO with our New York regulator that would provide up to $50 million in financial assistance to support economically vulnerable residential customers as well as businesses that are struggling because of the pandemic's financial impact.
- More than $760,000 funding has been given in economic development grants for seven Western New York initiatives to grow the regional economy.
- $500,000 support funding was provided to customers with health impacts, financial hardships and disruption caused by COVID-19, helping communities across Massachusetts, New York and Rhode Island.
- Via National Grid Renewables we established a Community Fund for its 200 MW Crocker Wind Farm in South Dakota. The Community Fund will provide an estimated $800,000 in charitable funding to benefit surrounding communities over the first 20 years of the project's operation.

Decentralisation

The energy system continues its transition from high to low carbon. This change coincides with a shift to more decentralised generation, including renewables and battery storage. As the volume of this intermittent and distributed generation increases, a more resilient and flexible system will be required; one that makes best use of available energy resources to meet consumers' needs in a balanced, efficient and economical way.

28%

of generation in the UK is now connected at the distribution level or behind the meter.

2020/21 developments

UK

There is continued support for developing decentralised electricity systems, supported by developments in smart systems and flexibility solutions, and local initiatives to develop decarbonisation pathways.

The BEIS Energy White Paper shines a light on the growing importance of a smarter, more flexible system, which has the potential to unlock savings of up to £12 billion per year by 2050 compared to a system with low levels of flexibility. This in turn will lower costs for customers of the future as it means less generation and network need to be built.

US

The state of Massachusetts expanded its incentive programme ('SMART') in April 2020 to support the development of solar energy, doubling capacity eligible for incentives to 3,200 MW and including adders for paired storage.

New York State regulators approved plans to install advanced metering infrastructure which will allow future customer-centric solutions and services.

Our response

- The WPD Acquisition will further enable us to be at the heart of the energy transition and further support the development of decentralised electricity systems in the UK.
- In the UK, the first small-scale generator was connected to our Nursling substation via the tertiary winding on our super grid transformers.
- National Grid announced the transition to a new operating model effective from April 2021. As a result, US business operations will be aligned to New York and New England to be more customer focused.
- Following acquisition of Geronimo Energy, a leading wind and solar developer in North America, last year, we expanded our onshore portfolio and launched National Grid Renewables.
- Our partner Sunrun, the leading home solar, battery storage and energy services company in the US, recently announced the launch of two pilot programmes to aggregate home batteries to act as virtual power plants in Southern California and New York. The programmes will enable approximately 300 customers in each state to create distributed solar-plus-storage networks through Sunrun's Brightbox home energy systems that local utilities can then call on to provide peaking capacity.

	2020/21 developments	Our response
Digitalisation As the COVID-19 pandemic accelerated the migration to digital, utilities continued to advance their digital capabilities. Customers are benefiting from more access to digital information to support their decision making and more digital ways of engaging. Through the power of sensor data, advanced analytics and Artificial Intelligence (AI) we are improving the way we manage our assets and by providing omni-channel digital tools we are able to enhance the productivity and engagement of our employees. **150** New digital substations to be built in the next 10 years by National Grid on its electricity networks. A digital substation leverages the latest technology to enable better control of the electrical system, providing more real-time data for predictive maintenance, enhanced network reliability and savings for customers.	Even before COVID-19, an energy consultancy, DNV, had found that 40% of the 1,919 energy professionals they surveyed considered digitalisation to be at the core of their corporate strategies. The impetus to accelerate digital transformation has only grown since then, with the research group International Data Corporation, expecting a 27% increase in comprehensive digital roadmap strategies to 75% of all organisations by 2023 in their most recent forward-looking predictions. Utilities across the globe are facing greater pressure than ever to decarbonise and democratise our energy resources. That will only be possible through effective digital transformations that put forward our best digital innovations and drive widespread cultural change across the organisation. Advancements in AI, machine learning, the internet of things, cloud computing, and digital workflow automation will drive greater efficiencies and better decision-making for all energy stakeholders while we push for a cleaner and fairer future.	• In the UK, we introduced a brand-new Interconnector Monitoring and Response Centre (IMRC) across our North Sea Link and Viking Link interconnectors, currently under construction. The IMRC will deliver numerous benefits such as increased resilience, a closer relationship between the operators and the commercial teams as well as increased efficiency. It will also provide unique opportunities for our IMRC operators to develop as they work across both NSL and Viking Link. • In the US, we have invested in a data-driven work plan optimisation product that will deliver eight-figure capital and operational expenditure savings within four years. This product delivers an optimised work, budget and resource plan. • Re-imagined and launched a new billing experience for our large commercial and industrial customers that manage several hundred bills monthly for large mutli-building and multi-facility organisations. This intuitive and easy to use interface has improved customer satisfaction by 63% for this segment as well as increased e-bill and e-pay enrolment by 50% which helps save on paper and mailing costs. • Leveraging satellite imagery along with computer vision AI, we are directing our vegetation management teams to focus on areas of the network that carry the greatest risk of vegetation-driven outages. This replaces traditional time-based vegetation management with real-time, AI-driven, optimised decision-making, reducing operational costs, and improving the reliability of the electricity network. • Our Digital Acceleration Team has been working with our UK ET business to implement two innovative digital products – ConnectNow, which lets new customers research, apply for and track connection applications online, and Connect3D, which will digitise our connections design process, reducing lead times and enabling cost savings through standardisation across customer and asset replacement projects. • National Grid Partners has invested $6 million in two artificial intelligence startups (Aperio Systems and AiDash) to secure critical network infrastructure and reduce costs for customers.

Case study – Gas

The future of clean gas across the UK and US

UK – Landmark study reviews current technology that could help roll out hydrogen across the UK gas network
National Grid, in collaboration with Cadent, Northern Gas Networks, SGN and Wales & West Utilities, has completed a feasibility study that could promote an earlier and more flexible conversion to hydrogen for certain areas of the UK gas network. The first-of-its-kind project examined the application of hydrogen deblending technologies within a network to control the gas blend that a customer might receive. Hydrogen deblending would allow for a varying mix of hydrogen and natural gas to flow through the network, and then separating the two gases so a controlled blend can be supplied to the customer. The deblending feasibility study has shown that the UK gas networks could use the concept of deblending as a tool to aid the transition to a green gas network which could help facilitate the decarbonisation of industry, heating, transport and green power generation.

US – Accelerating hydrogen blending to decarbonise heat
National Grid helped secure $12.45 million in funding from the US Department of Energy to facilitate research and accelerate the potential of hydrogen blending, working with six national laboratories, 20 industry leaders and leading academic institutions to support the research on blending hydrogen into natural gas distribution systems. This work will directly support National Grid's pathway to net zero, including unlocking the true potential for hydrogen as a renewable source of energy that can serve multiple sectors of the economy, including heat.

Case study – Electricity

The future of electric transport across the UK and US

UK – Supporting the roll-out of high-power electric vehicle (EV) chargers across the motorway network
National Grid is actively engaging with the wider transport industry to support transport decarbonisation, from heavy goods vehicles (HGV) and rail, through to the maritime and aviation sectors. With a focus on passenger transport, National Grid has been working alongside the UK distribution companies to support the roll-out of high-power chargers (>150kW) across the motorway network, called the Rapid Charging Fund. Recently, the Rapid Charging Fund received £950 million of government funding, to support the necessary connection infrastructure to facilitate this roll-out. This covers transmission and distribution connections across the UK, targeting at least six high-power chargers by 2023, aiming for 6,000 by 2035. This will enable drivers to be within 30 miles of a high-power charger across the motorway network, thus reducing range anxiety, supporting the wider uptake and deployment of passenger EVs and improving air quality.

US – Launching scalable vehicle-to-grid (V2G) electric school buses
Over the last year, National Grid partnered with Highland Electric Transportation and the City of Beverly in Massachusetts to deliver a V2G electric school bus and accompanying charging infrastructure to Beverly Middle School. The project is the first-of-its-kind to lease the electric bus to a school at the cost of a standard diesel bus. Highland was able to achieve this through grants and by participating in National Grid's and ISO-New England's demand response programmes such as V2G energy storage, which will begin this summer. The project has generated a great deal of interest in electric school buses throughout the rest of National Grid's territory and has been critical in enabling Highland to secure a $253 million venture capital investment and a contract with Montgomery County Schools in Maryland for 326 electric school buses. This innovative business model demonstrates the opportunity for V2G to improve electric bus project economics, accelerating the uptake of electric transport.

Delivering against our strategy

To own and operate large, long-life energy assets in networks and renewables that deliver fair returns and high societal value. Our portfolio of mainly regulated assets in stable geographies will be underpinned by a strong and efficient balance sheet.

Our purpose

To Bring Energy to Life.

Our vision

To be at the heart of a clean, fair and affordable energy future.

Our values

Every day we … do the right thing, find a better way, and make it happen.

Taken together, these values guide our actions and behaviours as a responsible business and help us create a culture where colleagues become less cautious and take greater ownership. At National Grid, we expect our leaders to be role models and engage all colleagues to demonstrate our values:

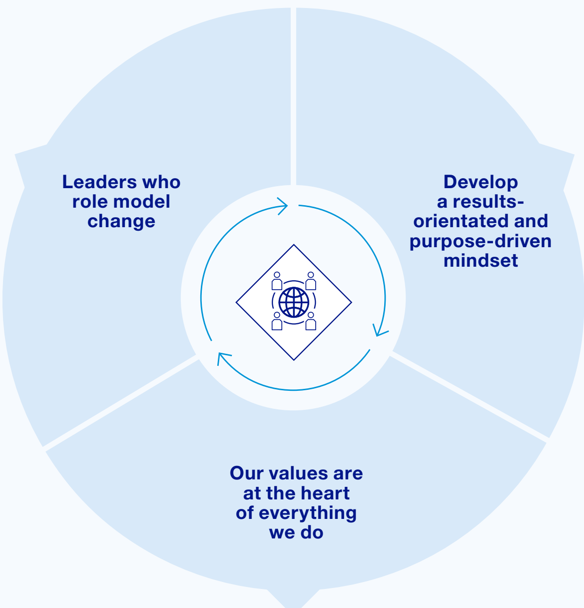
"Do the right thing" means we act safely, inclusively and with integrity. We support and care for each other, and ensure it is safe for colleagues to speak up.

"Find a better way" is all about working as one team to find solutions, embracing learning and new ideas.

"Make it happen" means being bold and acting with passion and purpose, taking ownership to deliver for customers and focusing on progress over perfection.

Our culture

- Change is owned and led by leaders who empower colleagues to make decisions and take ownership
- Measured feedback for all leaders to adjust and align behaviour and increase accountability
- Leaders act safely, inclusively and with integrity



- Greater ownership and accountability
- Deliver at a greater pace for our customers and continue to drive efficiency
- Embrace bold thinking and new ideas
- One team, focused on finding solutions

- Colleagues are recognised for living our new values
- Encourage sharing stories demonstrating how change is taking place; empowering colleagues to challenge and speak up where our values are not being lived
- Our values are instilled into our people, processes, policies and ways of working

Strategic priority

Enable the energy transition for all

Deliver for customers efficiently

Grow our organisational capability

Empower colleagues for great performance

What this means | **2020/21 achievements** | **Looking ahead**

Enable the energy transition for all

What this means

We will **increase the positive impact we make on society**, environmentally and socially, primarily through enabling a transition to a clean energy future. By innovating to decarbonise our networks, investing for a changing climate, and influencing policy and regulation, we will enable clean electricity, heat and transport, and **champion better outcomes for all**; outcomes where skills are developed and where no one is left behind.

Business environment link:

2020/21 achievements

- In the UK, our GT business secured Ofgem innovation funding to deliver FutureGrid – a hydrogen transmission test facility, and announced Project Union, an ambitious plan to develop a UK hydrogen backbone
- In the UK, our ET business has been working alongside the UK electricity distribution companies to support the roll-out of high-power chargers (>150kW) across the motorway network
- The ESO published the Offshore Coordination Project Phase 1 report to facilitate offshore wind's contribution to the net zero target and reduce the environmental and social impact of onshore connections
- US service areas were ranked among the top five states in energy efficiency in the 2020 State Energy Efficiency Scorecard
- National Grid Renewables got approved investment in the 200 MW Prairie Wolf Solar project in Illinois, which is expected to begin operations in 2021

5,147

coal-free hours in the UK in 2020 (3,666 hours in 2019)

Looking ahead

- We will support the decarbonisation of the communities we serve, migrating to cleaner energy solutions across the board
- We will enable a fully decarbonised electricity grid through grid modernisation and increased flexibility, and connect renewables quickly and efficiently
- We will lead the way in the decarbonisation of gas, by investing in a range of solutions like renewable natural gas, blending hydrogen in our networks and carbon offsetting

Deliver for customers efficiently

What this means

Delivering **safe, reliable, resilient and affordable energy for customers in our communities** has always been at the heart of what we do. As we invest to decarbonise the energy system, driving **operational excellence** and **financial discipline** to **keep bills affordable** for customers is more important than ever.

Business environment link:

2020/21 achievements

- Our ET business launched ConnectNow, a one-stop portal for electricity connection customers, which received direct customer satisfaction feedback of 8.8/10
- The ESO launched a new wider access Application Programming Interface that allows smaller providers to interface more easily and cost-effectively with the balancing mechanism
- ISO-New England selected the Ready Path Solution, developed by National Grid and Eversource in the first ever FERC Order 1000 Solicitation in New England, to maintain grid reliability when the Mystic Generating Station retires in 2024

£5bn

investment in energy infrastructure

Looking ahead

- We will continue to deliver safe, reliable and affordable energy for our customers around the clock no matter the weather
- We will do this by driving operational excellence and financial discipline through every part of our business and continuing to build relationships with regulators and policy-makers that strengthen partnerships and unlock added value

Grow our organisational capability

What this means

In the context of a rapidly changing energy sector, we will need to build on and evolve our organisational capabilities. We will **digitally transform** our processes, strengthen our **customer focus**, and sharpen our **commercial edge**. To successfully make this transformation and deliver results, our **ability to implement change effectively** will be paramount.

Business environment link:

2020/21 achievements

- We implemented a new group operating model focusing on six business units across the UK and US to improve the quality of our customer and stakeholder relationships; to evolve our behaviours and ways of working, instilling a culture of ownership and accountability; and to drive a step change in the efficiency and effectiveness of our organisation
- We established an agile transformation office in the UK, which is responsible for accelerating National Grid's transition to agile delivery and enabling teams across the business to deliver rapid, high-quality change
- We designed a new digital product, 'On My Way', for the US electricity field force to receive, update, and close out work digitally in real time. The tool is expected to deliver $8–$13 million in savings

70%

of required artefacts and

50%

of stage gates removed to streamline our software development process

Looking ahead

- We will build strong leadership and teaming capabilities to create a generation of leaders who empower, take accountability and act decisively
- We will create an organisation built on fully accountable business units that optimise delivery for local stakeholders supported by a thin (US/UK) regional layer

Empower colleagues for great performance

What this means

All our people shape the culture and **ways of working** needed to deliver performance and outcomes that will exceed all our stakeholders' expectations including customers, communities, regulators and investors.

Our leaders will empower our people to be at their best at each moment that matters to them. From attracting **diverse talent**, **developing** our people and **recognising great achievement**, we will ensure that our colleagues are engaged and enabled to work towards a clean energy future.

Business environment link:

2020/21 achievements

- Our ONE employee resource group (ERG) was awarded the title of Top Network Group at the 2020 Ethnicity Awards for its support in rolling out education and mandatory training in the UK
- Through the Responsible Business Charter, we committed to achieving 50% diversity in senior leadership and our new talent programmes by 2025
- Chris Cleveland, leader in Safety, Health, Environmental, Assurance Risk and Resilience team in National Grid Metering, has been named as one of the Top 30 future leaders and selected to be on the mentoring programme from Safety4Good outside of National Grid

38.5%

women on our Board and

42.9%

women on our Group Executive Committee

(33% for both women on our Board and our Group Executive Committee in 2019/20)

Looking ahead

- We will embed our purpose, vision and values, and reinforce our new third value 'make it happen'
- We will strategically manage our people; simplify our banding structure to minimise hierarchy and align talent management and reward structures to employee performance

Key performance indicators

The Board uses a range of metrics, reported periodically, against which we measure Group performance. These metrics are aligned to our strategic priorities.

Link to strategy

- Enable the energy transition for all
- Grow our organisational capability
- Deliver for customers efficiently
- Empower colleagues for great performance
- A: Indicates an alternative performance measure

Link to remuneration

Remuneration of our Executive Directors, and our employees, is aligned to successful delivery of our strategy. We use a number of our KPIs/alternative performance measures as specific measures in determining the Annual Performance Plan (APP) and Long Term Performance Plan (LTPP) outcomes for Executive Directors. While not explicitly linked to APP and LTPP performance outcomes, the remaining KPIs and wider business performance are considered. For further detail, please see our Directors' Remuneration Report, on pages 92 – 113.

Further reading:

You can find out additional detail to support some of these KPIs in our Responsible Business Report. This document can be found by visiting: nationalgrid.com/responsibility

Business-unit-level measures that are specific to our strategic priorities are set out within our Principal Operations review, on pages 40 – 45.

Our non-financial KPIs detailed on pages 21 and 22 do not include data from Geronimo, the National Grid Renewables (NGR) business, acquired in July 2019.

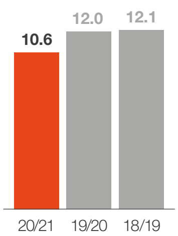
Financial measures

Strategy link | **KPI and performance** | **Progress in 2020/21**

Group Return on Equity (RoE, %) (A)

We measure our performance in generating value for shareholders by dividing our annual return by our equity base. This calculation provides a measure of whole Group performance compared with the amounts invested in assets attributable to equity shareholders.

Target: 11–12.5% each year



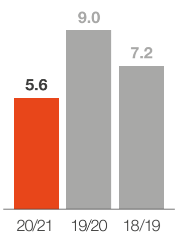
Group RoE of 10.6% was lower than 2019/20 (12.0%), principally due to the impact of COVID-19, higher storms and the retention of the £2 billion Cadent proceeds, which was used to finance asset growth in our US business.

Group RoE in 2018/19 and 2019/20 has been recalculated to reflect the revision to decrease the comparative goodwill balances (see note 1F on page 137 for details).

Total regulated asset growth (%) (A)

Maintaining efficient growth in our regulated assets ensures we are well positioned to provide consistently high levels of service to our customers and increases our future revenue allowances. This includes investment for a changing climate, enabling clean electricity, heat and transport.

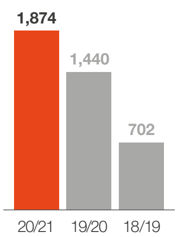
Target: 5–7% growth each year



Asset growth during the year was 5.6% (2019/20: 9.0%). This was primarily driven by lower UK RAV growth of 2.2% (2019/20: 3.8%) due to lower inflation and a slower rate of US rate base growth of 8% (2019/20: 12%). Asset growth in 2019/20 included £209 million for the acquisition of NGR in NGV.

Cumulative investment in delivering new low-carbon energy sources (£m)

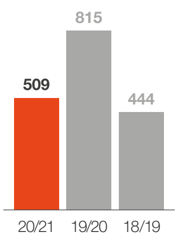
We invest in new low-carbon energy sources primarily through our interconnector businesses (North Sea Link, IFA2 and Viking Link), investments in and partnerships with, companies delivering low-carbon energy sources (for example, our partnership with Sunrun) and investments into large-scale renewables (for example, our new investment in NGR).



Investment in delivering new low-carbon energy sources decreased by £304m (41%) in 2020/21 compared to 2019/20. This is primarily due to the acquisition of NGR in 2019/20. Excluding the initial investment into the acquisition of NGR of £209 million in 2019/20, investment in new low-carbon sources decreased by around £100 million. This is primarily due to a decrease in interconnectors under construction, investment driven by timing of cable and convertor milestone activity, and lower investment on IFA2 as it became operational in January 2021.

NGV capital investment (£m) (A)

NGV is focused on investment in a broad range of energy businesses across the UK and US, including our interconnector business, large-scale renewable generation, LNG storage and regasification, and energy metering.



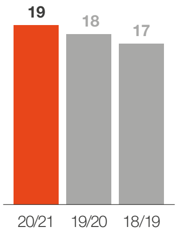
NGV capital investment has decreased year-on-year by £306 million (38%). This is principally due to the acquisition of NGR in July 2019 and a net decrease in interconnectors under construction, investment driven by timing of cable and convertor milestone activity, and lower investment on IFA2 as it became operational in January 2021.

Non-financial measures

Strategy link	KPI and performance	Progress in 2020/21

Cumulative low-carbon generation connected to our UK network (GW)

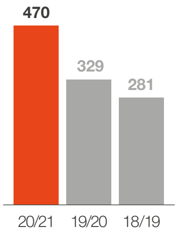
Low-carbon generation supported by our network to date.



A total of 19.0 GW of low-carbon generation is currently connected to our network, following additional offshore wind capacity connecting at Triton Knoll (+360 MW) and Burbo Bank Extension (+4 MW). The government's offshore wind sector deal and continued cost reductions observed in the latest Contracts for Difference (CfD) allocation round, indicate further increases in capacity over the coming years. Additionally, we have seen connections of Tees Renewable Energy Plant (+285 MW of Biomass-fired generation) and increased capacity at Sizewell B Nuclear plant (+7 MW).

Connections of renewable schemes to US electric distribution network (MW)

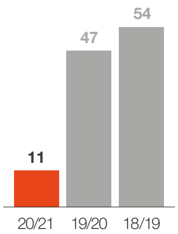
The table represents the amount of customer-owned renewable energy capacity installed on our distribution network across our US footprint. Given the variability and unpredictability of customer-driven projects, the Company does not presently have a MW target. Current targets primarily focus on regulatory compliance and customer need date attainment.



The Company interconnected 470 MW of distributed renewable energy resources in 2020/21 across our service territory, an all-time high and a 37% increase compared to 2019/20. Massachusetts and New York installed a record amount of capacity (207 MW and 177 MW, respectively) and Rhode Island experienced a slight decline in customer-ready projects to interconnect. The Company continues to make progress in Massachusetts and Rhode Island to enable greater renewable energy integration and has completed 637 MW area-wide transmission and distribution studies for non-residential systems and 314 MW was still in progress in 2020/21. While these systems have represented less than 5% volume of connected applications, they have accounted for 78% of the installed capacity over the last three years.

Contribution of our corporate responsibility work (£m)

Working with communities is important for creating shared value.

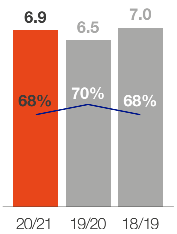


We use the Business for Societal Impact (previously London Benchmarking Group) measurement framework to provide an overall community investment figure which includes education (but excludes investment in university research projects). While we have no specific target, our overall aim is to ensure we add value to society to enable communities to thrive.

In the UK, the overall contribution of our activities was valued at over £3.7 million. In the US, our contribution was just over £7.5 million. This gives us a combined Group-wide contribution of over £11 million. This was lower than prior years because some events were cancelled due to COVID-19.

Climate change – Scope 1 and 2 emissions

This is a measure of our reduction of Scope 1 and Scope 2 emissions of the six primary Kyoto greenhouse gases. Our target is to reduce our greenhouse gas emissions by 80% by 2030, 90% by 2040 and to net zero by 2050, compared with our 1990 emissions of 21.6 million tonnes. The percentages in the adjacent chart reflect a reduction in our emissions from a 1990 baseline.



We seek to continuously improve our environmental performance, in instances going beyond regulatory requirements, through implementation of our ISO 14001-certified Environmental Management System and Environmental Sustainability Standard.

Further reading

You can read more about the Task Force on Climate-related Financial Disclosures and our wider sustainability activities and performance on pages 62 – 66.

Our Scope 1 greenhouse gas emissions for 2020/21 equate to 4.7 million tonnes of carbon dioxide equivalent (2019/20: 3.9 million tonnes) and our Scope 2 emissions (including electricity line losses) equate to 2.2 million tonnes (2019/20: 2.6 million tonnes). This is a total of 6.9 million tonnes of carbon dioxide equivalent for Scope 1 and 2 emissions. These figures include line losses and are equivalent to an intensity of around 467 tonnes per £1 million of revenue (2019/20: 447 tonnes). Our Scope 3 emissions for 2020/21 were 28.9 million tonnes of carbon dioxide equivalent (2019/20: 30.8 million tonnes). In accordance with the greenhouse gas protocol, we have enhanced our measurement of Scope 3 emissions which has resulted in a consistent adjustment to all Scope 3 emissions presented in this report.

Our underlying energy use is 2,602 GWh where the UK and US are responsible for 1,627 GWh and 975 GWh respectively. This excludes fuels consumed for power generation in the US (16,155 GWh) and system losses (11,154GWh).

We measure and report in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol. 100% of our Scope 1, 2 and 3 emissions are independently assured against ISAE 3410 Assurance Engagements on Greenhouse Gas Statements. This data complies with the UK government's Streamlined Energy and Carbon Reporting (SECR) requirements. For further detail, please see page 57.

Network reliability

We aim to deliver reliability by planning our capital investments to meet challenging demand and supply patterns, designing and building robust networks, having risk-based maintenance and replacement programmes, and detailed and tested incident response plans. We measure network reliability separately for each of our business areas. The table below represents our performance across all our networks in terms of availability.

%	**2020/21**	2019/20	2018/19
UK Electricity Transmission	**99.99997**	99.99997	99.99998
UK Gas Transmission	**100.00000**	99.99960	99.98963
US Electricity Transmission	**99.95429**	99.95511	99.95207
US Electricity Distribution	**99.91977**	99.94242	99.95046
Interconnector availability			
IFA interconnector	**95.4**	91.4	93.9
IFA2 interconnector	**96.5**	–	–
BritNed interconnector	**75.1**	98.6	98.2
NEMO Link interconnector	**99.2**	96.1	–

In both the UK and US, we continued to maintain high levels of reliability on all our networks.

US Electricity Distribution data has been re-stated for years prior to 2020/21, to reflect financial year information in comparison to calendar year.

BritNed suffered two offshore cable faults resulting in the asset being offline from December to February and again in March. The IFA2 interconnector started commercial operations in January 2021.

Key performance indicators
continued

Non-financial measures continued

Strategy link | KPI | Performance | Progress in 2020/21

Customer satisfaction

We measure customer and stakeholder satisfaction, while also maintaining engagement with these groups and improving service levels.

	2020/21	2019/20	2018/19	Target
UK Electricity Transmission (/10)	**8.4**	8.2	7.9	**6.9**
UK Electricity System Operator (/10)	**7.5**	7.6	–	**8.2**
UK Gas Transmission (/10)	**8.2**	8.0	7.8	**6.9**
US Residential – Customer Trust Advice survey (%)	**66.2**	59.8	58.7	**61.6**
Metering NPS score (index)	**+61**	+40	+44	**–**

Our UK customer satisfaction (CSAT) KPI comprises Ofgem's electricity and gas transmission customer satisfaction scores. Figures represent our baseline targets set by Ofgem for reward or penalty under RIIO (maximum score is 10).

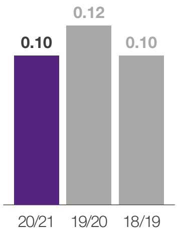
The US metric measures customers' sentiment with National Grid by asking customers their level of trust in our advice to make good energy decisions. The metric, which is tied to the value customers feel they receive from National Grid, has improved over the past year.

NPS scores reported represent the UK metering business.

Group lost time injury frequency rate (LTIs per 100,000 hours worked)

This is the number of worker lost time injuries per 100,000 hours worked in a 12-month period (including fatalities) and includes our employee and contractor population.

Target: < 0.1 LTIs

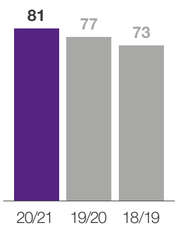


As at 31 March 2021, our Group lost time injury frequency rate (LTIFR) was 0.10, which is in line with the Group target. This is a combined employee and contractor LTI rate, which reflects our continued focus on encouraging good safety behaviours across the entire workforce.

The majority of lost time injuries are a result of individual issues such as slips, trips and falls, and soft tissue injuries from inappropriate tooling, lifting and carrying. We continue to address these and other incidents by implementing best practice injury prevention techniques that mitigate potential for harm factors.

Employee engagement index (%)

This is a measure of how engaged our employees feel, based on the percentage of favourable responses to questions repeated annually in our employee engagement survey. Our target is to increase engagement compared with the previous year.

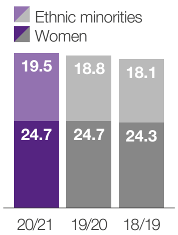


We measure employee engagement through our employee engagement survey (EES) called Grid: Voice.

Our engagement score was 81%, which is four points ahead of the 2019/20 results.

Workforce diversity (%)

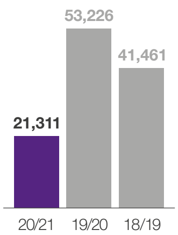
We measure the percentage of women and ethnic minorities in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 59).



During 2020/21, the representation of our ethnic minority groups has increased to reflect in-year changes. Prior year data has also been re-stated as a result of a correction that was made in our data systems. We continue to build our diverse talent pipeline.

Education, skills and capabilities (>1 hour interactions)

We support the development of young people's skills and capabilities through skills-sharing employee volunteering. In particular, we focus on STEM subjects as these support our future talent recruitment and our desire to see young people gain meaningful employment.



We measure quality (>1 hour) interactions with young people from all backgrounds on STEM subjects and broader industry skills development. In the UK, in 2020/21, we have had 921 quality interactions with young people in these categories. We had 20,390 interactions in the US. Overall we have seen a total of 21,311 interactions with young people, a decrease of 31,955 resulting from the impacts of the COVID-19 pandemic. Whilst levels of interactions dropped we were able to run some of our skills, training and education initiatives virtually.

Innovation

Our commitment to net zero continues to shape our innovation strategy. Our innovation and Research and Development (R&D) portfolio enables us to identify and target carbon savings for our own operations and we are also developing innovation projects to ensure we are prepared and play a pivotal role in the decarbonisation of energy for power, heat, transport and industry. We place a high value on collaboration to inform, generate ideas and solve the challenges we see ahead of us, and we work with technical organisations, academia and suppliers in the energy sector that align with our goals and objectives.

Innovation in our principal operations

The UK electricity transmission project portfolio has been developed around the themes of delivering cleaner and cheaper energy. We are focused on decarbonising our own operations and have worked on projects investigating ways to eliminate greenhouse gases from our gas-insulated equipment, replacing diesel generators with low-carbon alternatives for backup at our substations and reducing our carbon footprint in relation to our construction work. Our work with Smart Wires (see page 40) looks to use modular power flow control devices to increase renewable power transfer capability on our network. Following stakeholder engagement our research programme has focused on optimised asset management to help deliver cheaper energy as well as the monitoring and digitisation of operational technology, and in particular cyber security. We are aiming to open our Deeside Centre for Innovation to wider industry use in October 2021 as a key enabler for future innovation.

The ESO has delivered a diverse innovation portfolio that supports our role in keeping electricity supplies safe, reliable and efficient, while pushing the boundaries to enable a net zero energy future. Our innovation projects continue to explore how we work in ground-breaking areas such as blockchain and machine learning, as well as state-of-the-art technologies such as Virtual Synchronous Machines. We refresh our strategy and innovation priorities annually, based on consultation with our stakeholders, and this ensures we continue to focus innovation funding only on the most effective projects which can deliver consumer benefits.

Our UK gas transmission business continues to lead our research on transitioning to a hydrogen future. Our Hydrogen in the NTS programme includes hydrogen deblending, allowing for the separation of hydrogen in a natural gas mix, (see also the case study on page 17) and we have been working with the Institute of Gas Engineers and Managers to overhaul the gas technical standards to meet hydrogen specifications as well as securing funding to build a hydrogen test facility from decommissioned assets. Two key projects for methane emissions include developing a fugitive emission detection system and looking at reducing emissions from rotating gas equipment. On asset health innovation, we are developing valve remediation techniques and looking at drone technology for inspection, flying drones beyond visual line of sight to inspect large areas of our network and assets.

In Massachusetts, under the Company's Solar Phase I, II and III programmes, comprising approximately 35 MW of photovoltaics (PV) and 6.2 MW of energy storage, we continue to explore new technologies that can help reduce the interconnection cost and time of solar energy as well as researching how to move from interconnection of distributed energy resource (DER) to integration of it.

In New York, several Reforming the Energy Vision (REV) pilots are underway, testing market solutions in support of demand reduction programmes, smart city opportunities and renewable heating technologies to provide us with the knowledge and experience to evolve our systems for the grid of the future. These projects involve working with customers to manage usage and reduce energy bills and demand during peak times. We are also moving ahead with the procurement of energy storage projects. As part of our Niagara Mohawk rate case, we have proposed a distributed communications project to investigate greater integration of DER into our networks.

In our US gas businesses, our innovation continues to prioritise increasing public safety, protecting our workforce, reducing the cost of the work we perform and reducing our impact on the environment. We have several programmes exploring the introduction of renewable natural gas and alternative low-carbon heating solutions for our customers, as well as blending hydrogen into natural gas distribution systems, as referenced in the case study on page 17.

National Grid Partners

NGP, our corporate investment and innovation arm, continued delivering impact to the Group. Faced with the challenges of COVID-19, NGP focused on activities to keep the Company more secure and resilient by investing in emerging technologies such as artificial intelligence (AI), data security and cybersecurity, and embedding these innovations across our US and UK core operations. NGP's portfolio as at 31 March 2021 comprises 23 companies and four fund investments at a fair value of £178 million.

During the past fiscal year, NGP invested in six new start-ups – AccuKnox, AiDash, Aperio, Copper Labs, Linevision and Panaseer – as well as The Hive, a venture studio that helps entrepreneurs and corporations launch AI start-ups. NGP also led a $110 million Series C round in existing portfolio company Dragos – the most substantial investment ever in industrial control system cybersecurity.

NGP continues to build use cases of its portfolio innovations across our core businesses. In collaboration with NGP portfolio company Urbint, for example, National Grid is using AI to focus our damage prevention resources with increased precision; this has the potential to save millions of dollars annually in avoided damage and to minimise disruption to critical networks.

In July, NGP joined NYSERDA and other corporate and investor partners in sponsoring The Clean Fight New York, which helps scale up clean energy startups and innovators throughout New York State. Additionally, NGP launched the NextGrid Alliance (NGA), a consortium of 60+ utilities where best practices and technology innovations are shared. NGP held the inaugural NGA meeting in September and has been heads-down since then, working on issues like modernising utility infrastructure and keeping power grids safe from cyber threats. Later this year, NGP plans to host its first NGA Summit in the UK as part of COP26.

Also in 2020, NGP's Innovation team created a dashboard that, for the first time, tracks company-wide innovation efforts of all stages and sizes using common criteria. A three-member Innovation Reporting team devised the dashboard to help senior leadership better prioritise innovation and quantify its impact on the bottom line. The team engaged with more than 100 stakeholders and identified 399 discrete innovation activities. This new approach to innovation will be updated every six months to help leaders see trends across the organisation and seek out areas of collaboration.

NGP will continue to deliver strategic and financial value to our core businesses and looks forward to delivering on our mandate to invest in valuable startup technologies; tackling innovation and business development projects that can improve our company performance; and acting as a catalyst for change across the broader Group.

More details can be found at ngpartners.com including details of each of our portfolio investments.

Scan here to view our story

Strategy in action

Case study – Spot the robot dog

At National Grid we're always looking to the future, exploring new innovations and efficient ways of working, while ensuring our employees stay safe. Spot the robot dog is part of the new guard, conducting essential safety inspections at one of our US electricity substations.

Further reading
Further details about our R&D and innovation activities can be found in Additional Information on pages 247 – 249.

Internal control and risk management

The Board is committed to protecting and enhancing our reputation and assets, while safeguarding the interests of our shareholders.

Managing our risks

National Grid is exposed to a variety of uncertainties that could have a material adverse effect on the Group's financial condition, our operational results, our reputation and the value of our shares.

The Board oversees the Company's risk management and internal control systems. As part of this role, the Board sets and monitors the amount of risk the Company is prepared to seek or accept in pursuing our strategic objectives – our risk appetite. The Board assesses the Company's principal risks and monitors the risk management process through risk review and challenge sessions twice a year.

Risk management process

Overall risk strategy, policy and process are set at Group level with implementation owned by the business. Our Enterprise Risk Management (ERM) process provides a framework through which we can consistently identify, assess, prioritise, manage, monitor and report risks. The process is designed to support the delivery of our vision, strategy and business model as described on pages 2 – 7. During 2020/21 a Group-wide transformation programme has driven further improvements in the risk and controls framework, focusing on quality and completeness of risk and controls, increased capability and accountability within the business and effective assurance activities.

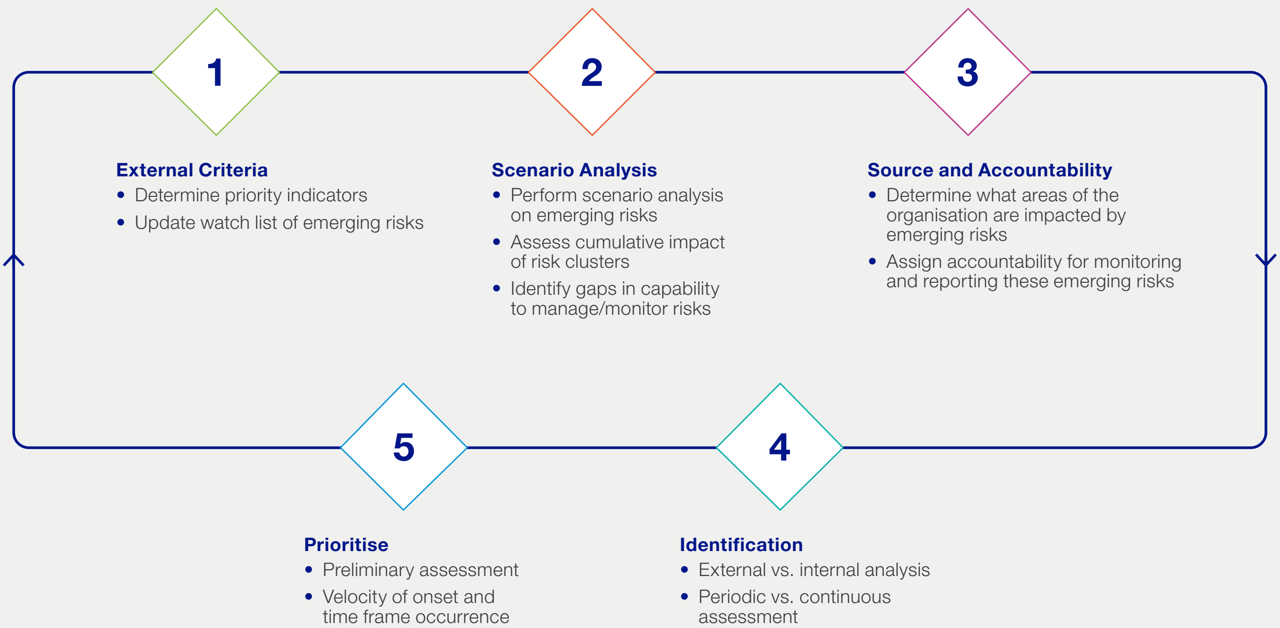
Our corporate risk profile contains the principal risks that the Board considers to be the main uncertainties currently facing the Group as we endeavour to achieve our strategic objectives. These top risks are agreed through discussions on the Group's risk profile with the Group Executive Committee and the Board. The risks are reported and debated with the Group Executive Committee and the Board every six months.

When determining what our principal risks should be, a broad range of factors are considered. We test principal risks annually to establish their impact on the Group's ability to continue operating and to meet its liabilities over the assessment period. We test the impact of these risks on a reasonable worst-case basis, alone and in clusters, over a five-year assessment period. This work informs our viability statement (see pages 28 – 29). The five-year period was carefully considered in light of the nature of our businesses, our business planning cycles, and risk profile. The Board considered that this period remained appropriate for our stable regulated business model. The Board and Group Executive Committee discuss the results of the annual principal risk testing at the end of the year.

Top-down, bottom-up assessment

Risk management activities take place through all levels of our organisation. Through a 'top-down, bottom-up' approach, all business areas identify the main risks to our business model and our business objectives. For each risk the effectiveness of our internal controls is assessed when calculating the financial, operational and reputational impacts, and how likely the risk is to materialise. Where current risk levels are outside of agreed target scores and our risk appetite, the business area identifies and implements actions to close the gap. These are collated and reported at functional and regional levels on a regular cadence. The most significant risks for the UK, US and NGV businesses are highlighted in regional risk profiles. Additionally, the Group Executive Committee and the Board may also identify and assess other principal risks. These risks and any associated management actions are cascaded through the organisation as appropriate.

Continuous cycle to identify and manage emerging risks:



Emerging risks

We have an established process to identify and monitor emerging risks. The process is designed to ensure adequate steps are taken to prevent the occurrence or manage the impact of surprises.

The ERM process monitors management information from a wide variety of internal and external sources when considering emerging risks.

Changes during the year

The Company's risk profile has been developed drawing upon the most significant risks across our business profiles. In March 2021, we announced our agreement to acquire WPD, sell our Rhode Island business, along with our intention to sell a majority stake in the UK GT business; these transactions will strategically pivot our UK business portfolio towards electricity. A failure to generate the anticipated value from the successful integration of WPD, separation of Rhode Island, and the intended sale of a majority stake in the UK GT business has been added as a new principal risk. 11 principal risks are now carried at Group Executive Committee and Board level as detailed below. All principal risks were reviewed at least twice across the year, including an assessment of the key controls, the Key Risk Indicators (KRIs), risk scores, alignment to risk appetite, and future mitigation actions.

In 2020/21, we developed new ways of working to deal with the significant impact of the COVID-19 pandemic across our operations. We have continued to deliver our critical services, minimising the impact to our customers and reducing the risk to our workforce with new COVID-19 operating procedures and controls. We have continually assessed its impact on our workforce, finances and all aspects of our operations, with regular reports provided to the Board. The risk associated with regulatory outcomes has reduced in the UK with the final determinations from RIIO-2. We have accepted the ESO's RIIO-2 package; for the ET and GT businesses we are broadly accepting most of the package but have submitted a technical appeal to the CMA on the cost of equity and outperformance wedge. Outside of the CMA appeal, the UK business is now focused on successfully delivering against the new RIIO-2 price controls.

The operating environment in New York (NY) continues to present risk and challenges. The Company continues to execute and comply with the settlement entered in November 2019 that resolved the Order to Show Cause issued following the moratorium in downstate NY. The independent monitor appointed pursuant to that settlement continues to oversee compliance with the settlement and gas supply operations. Following significant storms and delays in restoration efforts for other utilities in NY, significant legislation has been proposed that would require reimbursements to customers, result in increased penalties, and impose storm preparation and restoration requirements among other things. Positively, the Company has reached an agreement in principle with Department of Public Service (DPS) Staff regarding the KEDNY and KEDLI rate cases and Niagara Mohawk Power Corporation settlement negotiations are progressing to plan. Regulatory scrutiny in Rhode Island (RI) continues to increase, with particular focus and scrutiny on cost recovery and gas supply plans. The final audit report for the Massachusetts (MA) Management Audit, conducted by FTI Consulting Co., was issued on 29 March 2021 and there are no significant new issues and the recommendations are largely constructive. The MA Management Audit encompassed all National Grid MA businesses including Massachusetts Electric, Boston Gas, and New England Power (NEP). MA has issued material clean energy policy statements and the Company is working collaboratively to respond.

Our principal risks and uncertainties

Accepting that it is not possible to identify, anticipate or eliminate every risk that may arise, and that risk is an inherent part of doing business, our risk management process aims to provide reasonable assurance that we understand, monitor and manage the main uncertainties that we face in delivering our objectives. This aim includes considering inherent risks, which in turn exist because of the nature of day-to-day operations in our industry, including financial risks, which exist because of our financing activities. Our principal risks, and a summary of actions taken by management, are provided in the table below. We have provided an overview of the key inherent risks we face on pages 236 – 238, and specifically our key financial risks, which are incorporated within note 32 to our consolidated financial statements on pages 190 – 202. Risk trends reported below take into account controls, any additional mitigation actions and may be influenced by internal or external developments.

People risks

It is through the high-quality work of our employees that we will achieve our vision, respond to the changing needs of our stakeholders and create a competitive advantage. Building and fostering an engaged and talented team that has the knowledge, training, skills and experience to deliver our strategic objectives is vital to our success. We must attract, integrate and retain the talent we need at all levels of the business. These risks link to our strategic priority to 'Empower colleagues for great performance'.

Risks	Actions taken by management
There is a risk of failure to build capability and leadership capacity (including effective succession planning) required to deliver our vision and strategy. ***Risk trend: Neutral (19/20 Neutral)** * Risk trends are assessed to include any external factors outside our control as well as the strength and effectiveness of our controls and additional mitigations as reviewed by management up to 31 March 2021.	We have embedded strategic workforce planning in our US and UK organisations. This process helps to effectively inform financial and operational business planning, as well as human resourcing needs. Our entry-level talent development schemes (graduate training and apprenticeships) are a potential source of competitive advantage in the marketplace. We are involved in a number of initiatives to help secure the future engineering talent we require, including the UK annual residential work experience week and the US Pipeline and Graduate Development Programmes. We also continue to develop the rigour of our succession planning and development planning process, particularly at senior levels. It is now being applied deeper into the organisation as well as continued attention in relation to the ethnic diversity of both our management and field force population. There are multiple activities underway to drive this agenda, including 'neutral' talent and selection processes, development interventions and a global review of our inclusion and diversity strategy and resources including the appointment of a Chief Diversity Officer during the year.

Financial risks

While all risks have a direct or indirect financial impact, financial risks are those which relate to financial objectives and performance. Financial risk management is a critical process used to make investment decisions and aims to maximise investment returns and earnings for a given level of risk.

Our key financial risks are described in note 32 to our financial statements on pages 190 – 202.

Internal control and risk management continued

Strategic and regulatory risks

Strategic risk is the risk of failing to achieve the Company's overall strategic business plans and objectives, as well as failing to have the 'right' strategic plan. We intentionally accept some risk so we can generate the desired returns from our strategy.

Management of strategic risks focuses on reducing the probability that the inherent risk would materialise, while improving the Company's ability to effectively respond to the risk should it occur. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. These risks link to our strategic priorities of 'enable the energy transition for all' and 'deliver for customers efficiently'. The political climate and policy decisions of our regulators were key considerations in assessing our risks.

The climate change related risk is classed as a strategic and regulatory risk but is also an operational risk, in particular as regards weather-related events in the northeastern US (where storm planning and preparation are key to what we do), flood defence in both the UK (where flood resilience works are being developed) and the US (where flood contingency plans are in place) and the investigation of the impact of rising temperatures and widening temperature ranges on the performance and operation of our networks.

Risks	Actions taken by management
There is a risk that we fail to identify and/or deliver upon actions necessary to address the physical and transitional impacts of climate change on our business and demonstrate our leadership of climate change within the energy sector. **Risk trend: Neutral (19/20 Increasing Risk)**	Putting in place measures to: • evolve our environmental sustainability metrics to better reflect our strategy, measure our impact and track our progress; • address our greenhouse gas (GHG) emissions and deliver on our sustainability commitments, including net zero by 2050, hosting our first environmental, social and governance (ESG) investor seminar, including the publishing of our Responsible Business Charter setting out what responsibility means for us and our commitments and ambitions over the coming years; annual progress will be reported in our inaugural Responsible Business Report to be published in June 2021; • advocate for legislative and policy changes that advance decarbonisation, while proposing and delivering actions in the regions we operate to accelerate decarbonisation for the public and our customers. This work is wide-ranging from system improvements to supporting renewable generation connections, electric vehicle (EV) proposals, oil to gas/electricity heat conversions, energy efficiency, interconnectors, thought leadership and investment in new and emerging areas. Note that a number of the above measures also address the physical impacts of climate change on our operations; • address physical impacts through flood contingency plans, winter preparedness planning, and storm hardening; and • regularly assess the potential range of net zero pathways and future impact on our gas assets, including evaluation of new and evolving technologies and alternative fuel sources (e.g. hydrogen). We have committed to full compliance with the Task Force on Climate-related Financial Disclosures (TCFD) requirements including physical and transitional scenario analysis (see pages 61 – 66). Ongoing work to address transition risks and opportunities includes: • ensuring our electricity network is reliable and able to actively support and contribute to a future where renewables and intermittency of supply are increasing; • supporting the charging infrastructure required for increased use of EVs; • promoting energy efficiency programmes for customers in the US; • facilitating decarbonisation in the US and UK including zero-carbon operation of the GB electricity system through ESO in the UK; and • continuing work on programmes to develop skills in our current and future workforce.
There is a risk that we fail to influence future energy policies and secure satisfactory regulatory agreements. **Risk trend: Neutral (19/20 Increasing Risk)**	In both the UK and the US, we strive to maintain a good understanding of the regulatory agenda and emerging issues, so that robust, public interest aligned responses can be selected and developed in good time. Our reputation as a competent operator of important national infrastructure is critical to our ability to do this. We have plans and governance structures in place to address specific issues such as RIIO-2 and US rate case filings. Ongoing work to support our regulatory relationships includes: • our internal teams focused on activities around gas capacity, large-scale renewables, utilities of the future and EVs; • research and development on the role of hydrogen as a substitute for natural gas; • establishment of US and UK Regulatory Steering Committees; and • increased focus on understanding the needs and expectations of all our stakeholders through regulatory relationship surveys, investor surveys and review of media sentiment.
There is a risk of reputational damage because we fail to respond to shifts in societal and political expectations and perceptions. **Risk trend: Increasing due to current political environment (19/20 Increasing Risk)**	Processes and resources are in place to review, monitor and influence perceptions of our business and our reputation by: • enhancing and consolidating our digital roadmap and social channels; • developing an internal forum to increase management of stakeholder and media reputational issues; • delivering on our commitment to be a responsible business (see pages 52 – 60); and • promoting partnerships and discussions of decarbonisation across the jurisdictions where we operate. Considerations on emerging risks such as the economic downturn due to COVID-19 impacts and mergers and acquisitions (M&A) strategies have also been addressed as part of financial and reputational impact assessments. These processes, along with twice-yearly Board strategy discussions, are reviewed regularly to ensure they continue to support our short- and long-term strategy. We regularly monitor and analyse market conditions, competitors and their potential.
There is a risk that we fail to adequately anticipate, respond to, minimise the impact or take advantage because of disruptive forces such as technology and innovation. **Risk trend: Neutral (19/20 Neutral)**	NGP, our central innovation function, leads our strategy with regards to new technology and monitoring disruptive technology and business model trends, acting as a bridge for emerging technology into the core regulated businesses and business development teams. In addition, NGP is investing in emerging startup companies and venture funds, and the NGV function will further the focus on new strategies, business development and technology and innovation.

There is a risk that we fail to generate anticipated levels of value from the WPD integration, Rhode Island separation and intended sale of a majority stake in the UK GT business. **Risk trend: N/A (New this year)**	• Extensive pre-transaction due diligence undertaken on WPD • Both transactions evaluated to assess alignment to overall strategic objectives • A discrete WPD integration plan established and is being overseen by new internal governance procedures • Post-acquisition performance will be monitored and assessed • Highly capable sale and separation teams established for the UK GT business disposal • Extensive separation plans are being developed for the Rhode Island and UK GT businesses, based on our experience from the disposal of Cadent in 2016/17.

Operational risks

Operational risks relate to the losses resulting from inadequate or failed internal processes, people and systems, or due to external events. These risks normally fall within our low-risk appetite level as there is no strategic benefit from accepting the risk, as it will not be in line with our vision and values.

Our operational principal risks have a low inherent likelihood of occurring. However, should an event occur, without effective prevention or mitigation controls, it would be likely to have a high level of impact. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. Operational risks are managed through policy, standards, procedure-based controls, active prevention and monitoring. The operational risks link to our strategic priority to 'Deliver for customers efficiently'. Principal risk assessment includes reasonable worst-case scenario testing i.e. gas transmission pipeline failure, loss of licence to operate, cyber security attack – and the financial and reputational impact should a single risk or multiple risks materialise.

Risks	Actions taken by management
There is a risk that we fail to prepare and respond to significant disruptive factors caused by the COVID-19 pandemic. **Risk trend: Decreasing**	The COVID-19 pandemic impacted multiple areas of our business, and we responded with a comprehensive plan, supporting the safety of our workforce and customers. • As vaccinations are rolled out across the UK and the US we are carefully assessing the risk, alongside relevant regulations and guidelines to determine the impact on our operations, and the implementation of transition plans to reopen our offices to non-operational employees. • Throughout 2020/21 we have actively monitored effects on our people, operations, strategic objectives, regulatory and political engagement, and financial implications. Our approach has been proactive to ensure our business can continue to serve its customers appropriately.
A catastrophic cyber incident caused by the abuse of our digital systems because of a malicious action by an external or internal party. **Risk trend: Increasing due to the dynamic nature of the cyber security threat (19/20 Increasing)**	We are committed to providing secure and resilient services and continue to commit significant resources and financial investment to maintain the security of our systems and our data. Our approach is holistic and includes: • close partnerships with UK and US government agencies including the Department for Business, Energy and Industrial Strategy (BEIS), the Centre for Protection of National Infrastructure (CPNI), The Department of Energy and the Department for Homeland Security. To understand risks and collaborate on risk management activities; • utilisation of good practice frameworks including the National Institute of Standards and Technology Cyber Security Framework to ensure National Grid can identify, protect, detect, respond and recover from cyber security threats; and • a strong focus on compliance with our regulatory obligations including the European Union (EU) Directive on Security of Network and Information Systems Regulation (NIS-R) and US North American Electric Reliability Corporation critical infrastructure protection (NERC CIP).
There is a risk of a catastrophic asset failure resulting in a significant safety and/or environmental event. **Risk trend: Neutral (19/20 Neutral)**	We continue to focus on risk mitigation actions designed to reduce the risk and help meet our business objectives; including: • putting a Group-wide process safety management system in place to make sure a robust and consistent framework of risk management exists across our higher hazard asset portfolio, with safety-critical assets clearly identified on the asset register; • implementing asset management and data management standards with supporting guidelines to provide clarity around what is expected, with a strong focus on what we need in place to keep us safe, secure and legally compliant; and • in support of this, we have an established capability framework to make sure our workforce have the appropriate skills and expertise to meet the performance requirements in these standards.
There is a risk that we fail to predict and respond to a significant disruption of energy. **Risk trend: Increasing (19/20 Increasing)**	We continue to apply a holistic approach encompassing preventative and mitigating actions including pre-emptive measures to maintain network reliability such as: • flood contingency plans for substations; • system operator supply and demand forecasting; • our UK GT Winter Preparedness Plan; • US gas mains replacement programmes; • US storm hardening programme; and • diversity of suppliers in our US gas procurement. Should energy flow disruptions occur: • business continuity and emergency plans are in place and practised, including Black Start testing; and • critical spares are maintained to ensure we can quickly and effectively respond to a variety of incidents – storms, physical and cyber-related attacks, environmental incidents and asset failures. • The ESO considered the significant impact on the UK power networks on responding to the unprecedented decrease in energy consumption and demand during the COVID-19 restrictions.
There is a risk of failure to adequately identify, collect, utilise and keep private the physical and IT data required to support company operations and future growth. **Risk trend: Neutral (19/20 Decreasing)**	Controls for our IT processes have been redefined and are aligned to the National Institute of Standards and Technology (US) and the Network Information Framework and System Regulations (UK). We continue to progress and improve our data management processes including: • implementation of our data and other related business management standards; • privacy impact assessments carried out across business areas affected by General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA) legislation; • data governance councils for UK and US regions; and • increased levels of data leadership and capability with the recruitment of a Chief Data Officer and establishment of an associated function. The increase of home-working due to COVID-19 has led to new protocols for data handling and restrictions around data distribution.

Viability statement

The Board's consideration of the longer-term viability of the Company is an extension of our business planning process. The process includes financial forecasting, a robust risk management assessment, regular budget reviews as well as scenario planning incorporating industry trends, considering any emerging issues and economic conditions. Our business strategy aims to enhance our long-term prospects by making sure our operations and finances are sustainable.

Utilising our established top-down/bottom-up risk management framework, the principal risks facing the Company as described on pages 24 – 27 are identified, monitored and challenged. The Board considers the preventative and mitigating controls and risk management actions in place and discusses the potential financial and reputational impact of the principal risks against our ability to deliver the Company's business plan. Specifically, the Board considers the principal risks shown in the table below in detail.

The assessment of the potential impact of our principal risks on the longer-term viability of the Company tests the significant solvency and liquidity risks involved in delivering our business objectives and priorities. After careful consideration of the risk landscape and other considerations including: our long-term business model; high-quality, long-term assets and stable regulatory arrangements; the Board's stewardship responsibilities; and the Company's ability to model a range of severe but plausible reasonable worst-case scenarios, the Board concludes that it remains appropriate to consider a five-year timeframe over which we should assess the long-term viability of the Company.

Operational impacts

Scenario 1 – A significant cyber-attack.

Scenario 2 – Significant supply disruption event occurring in the US leading to loss of licence.

Scenario 3 – A significant process safety gas pipeline failure in the US.

Scenario 4 – Significant physical damage due to climate change event, along with a failure to meet stakeholder expectations on our climate commitments.

Performance impacts

Scenario 5 – The breach of personal data information.

Scenario 6 – Poor outcome of future US rate case filings, and low performance under RIIO-2.

Scenario 7 – A breach of compliance rules for onshore competition in electricity transmission by NGET. NY legislation and political relationships leading to loss of NY licences.

Scenario 8 – Inability to recover US COVID-19 related bad debts through future regulatory agreements.

Scenario 9 – Anticipated value from our business acquisition and disposals is not fully realised.

Cluster impacts

Scenario 10 – A significant cyber-attack, resulting in a significant data breach and a catastrophic asset failure, causing a significant disruption of energy supply, leading to loss of operator licence for our NY Gas business.

The following factors have been taken into account in making this decision:

- we have reasonable clarity over a five-year period, allowing an appropriate assessment of our principal risks to be made;
- in order to test the five-year period, the Board considers whether there are specific, foreseeable risk events relating to the principal risks that are likely to materialise within a five- to ten-year period, and which might be substantial enough to affect the Company's viability and therefore should be taken into account when setting the assessment period. No risks of this sort were identified; and
- each principal risk was considered for inclusion within the testing and, where appropriate, a reasonable worst-case scenario was identified and assessed for impacts on operations and/or financial performance over the five-year assessment time period as detailed below.

National Grid entered into a series of business acquisition and disposal agreements prior to year end that are yet to be finalised: these include the proposed acquisition of WPD in the UK, the disposal of our Rhode Island business in the US, and we announced our intention to initiate the sale of a majority stake in our UK GT business. We have considered these future transactions during our risk testing and our viability assessment and do not believe they impact the Company's viability or the risk testing scenarios for 2020/21. The transactions support the future delivery of our strategic priorities. Our financial and operational diligence has shown that the performance, management, values and culture of WPD are closely aligned to the existing National Grid group. The transactions are subject to various shareholder and regulatory approvals.

In addition to testing individual principal risks, the impact of a cluster of the principal risks materialising over the assessment period was also considered. For our theoretical reasonable worse-case scenario on risk clusters we identified a scenario of a significant cyber-attack, resulting in a significant data breach and a catastrophic asset failure, causing a significant disruption to our energy supply, that in turn causes us to lose our NY Gas business operator licenses. For this scenario we have assumed it occurs in the US and the cascade of risks occurs within our US Gas business.

The reputational and financial impacts for each scenario were considered. The principal risks relating to leadership capacity and disruptive forces were not tested, as the Board did not feel they would threaten the viability of the Company within the five-year assessment period.

The Board assessed our reputational and financial headroom and reviewed principal risk testing results against that headroom. The testing of the risk cluster also included an assessment of the impact upon the business plan. No principal risk or cluster of principal risks was found to have an impact on the viability of the Company over the five-year assessment period. Preventative and mitigating controls in place to minimise the likelihood of occurrence and/or financial and reputational impact are contained within our assurance system.

In assessing the impact of the principal risks on the Company, the Board has considered the fact that we operate in stable markets and the robust financial position of the Group, including the ability to sell assets, raise capital and suspend or reduce the payment of dividends.

Each Director was satisfied that they had sufficient information to judge the viability of the Company. Based on the assessment described above and on pages 24 – 27 the Directors have a reasonable expectation that the Company will be able to continue operating and meet its liabilities over the period to May 2026.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Catastrophic cyber security incident: catastrophic cyber security breach of business, operational technology and/or Communications, Navigation and Identification (CNI) systems/data.	**Scenario 1** – A terror-related cyber-attack. Included in the risk cluster testing of **Scenario 9.**	**The Board reviewed and discussed cyber security reports in:** • July 2020; and • December 2020. • Cyber security training was also delivered in June and December 2020.
Significant disruption of energy: failure to predict and respond to a significant disruption of energy that adversely affects our customers and/or the public.	**Scenario 2** – Significant supply disruption event occurring in US leading to loss of license. Included in the cluster testing of **Scenario 9**.	**Two Board Strategy sessions were held during the year covering:** • bi-annual overviews; • reviews of the gas business strategy; • external reviews of operational issues within the US Gas business; and • review of the sequence of events that resulted in the partial UK power outage on Friday 9 August 2019.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Safety or environmental incident (asset failure): catastrophic asset failure resulting in a significant safety and/or environmental event.	**Scenario 3** – A significant process safety gas pipeline failure in the US. Included in the cluster testing of **Scenario 9**.	**The Board reviewed and evaluated the current safety performance of the Company at each meeting during the year. In addition:** • safety is a fundamental priority and is discussed in detail by the Safety, Environment and Health Committee (SEH Committee) who have delegated authority from the Board; and • our Electricity and Gas Engineering Reports to the SEH Committee also provide progress updates on our asset management improvements.
Data Management: failure to adequately identify, collect, use and keep private the physical and digital data required to support Company operations and future growth.	**Scenario 5** – The breach of personal data information. Included in the cluster testing of **Scenario 9**.	**Data Management is a principal risk discussed by the Board at least annually, as well as:** • bi-annual updates on the Company's information systems.
Capability and leadership: failure to build sufficient leadership capability and capacity (including succession planning) required to deliver our vision and strategy.	N/A	**Capability and Leadership is an integral part of the Board's vision and strategy. The Board's approach included:** • bi-annual updates on people matters; • considered capabilities to support the delivery of strategic priorities; and • Nominations Committee: considers the structure, size and composition of the Board and committees and succession planning. It identifies and proposes individuals to be Directors and establishes the criteria for any new position.
Political and societal expectations and perceptions: failure to deliver any customer, investor and wider stakeholder propositions due to increased political and economic uncertainty.	**Scenario 7** – A breach of compliance rules for onshore competition in electricity transmission by NGET. NY legislation and political relationships leading to loss of NY licenses. Included in the cluster testing of **Scenario 9**.	**The Board received updates and reviews of:** • the impact of Hard Brexit and access to the Internal Energy Market; • implementation of measures to strengthen ability to obtain fair price for UK assets if potential threat of state ownership materialised; and • UK and US regulatory strategies. These scenarios were evaluated for potential impact on the business.
Satisfactory regulatory outcomes: failure to influence future energy policy and secure satisfactory regulatory agreements.	**Scenario 6** – Poor outcome of future US rate case filings, and low performance under RIIO-2.	**The Board received updates and performed reviews of:** • US regulatory strategy; • UK regulatory strategy; • UK ESO regulatory strategy; • key regulatory policy issues for 2019/20; and • RIIO-2.
Adverse impact – disruptive forces: failure to respond to the asset failure resulting in a significant safety and/or environmental event.	N/A	**The Board evaluated:** • bi-annual updates from National Grid Partners in April 2020 and November 2020; and • Board strategy sessions that considered digital strategy as well as technology and innovation.
COVID-19: failure to respond to disruptive factors caused by the COVID-19 pandemic resulting in an impact on our networks, our people and our financial targets.	**Scenario 8** – Inability to recover US bad debt through future regulatory agreements.	• Board briefings including a weekly update from the Chief Executive (CEO) and Chief Financial Officer (CFO) on our crisis management response; • COVID-19 updates on operational issues, people absences and wellbeing to the Board; and Finance Committee consideration of liquidity; • review of our Business Continuity Planning response and effectiveness of the Crisis Management controls to the SEH Committee; and • briefings from the CFO and finance team on possible financial impacts including a range of scenario modelling and planning.
Climate Change: failure to respond to physical and transitional impacts of climate change and demonstrate our leadership within the energy sector.	**Scenario 4** – Failure to deliver on our climate commitments.	• Board briefings reviewing our sustainability metrics to reflect and track our impact and progress; • committed to reduction of Scope 1 and 2 emissions – 80% by 2030, 90% by 2040 and to net zero by 2050; • committed to reduction of carbon emission (Scope 3) – 37.5% by 2033/34; • reviewed and approved the publication of the Responsible Business Charter; and • disclosures with TCFD including physical and transitional scenario analysis.
Transaction Value: failure to generate anticipated levels of value from the integration of WPD, the separation of Rhode Island and the intended sale of a majority stake in the UK GT business.	**Scenario 9** – Anticipated value from our business acquisition and disposals is not fully realised.	• Board briefings on pre-acquisition due diligence of WPD; • Board assessed the transactions against pre-determined performance, operational, and financial measures and for strategic alignment; and • reviewed and approved the transactions.

Financial review

Summary of Group financial performance

Performance management framework

In managing the business, we focus on various non-IFRS measures which provide meaningful comparisons of performance between years, monitor the strength of the Group's balance sheet as well as profitability and reflect the Group's regulatory economic arrangements. Such alternative and regulatory performance measures are supplementary to, and should not be regarded as a substitute for, IFRS measures, which we refer to as statutory results. We explain the basis of these measures and, where practicable, reconcile these to statutory results in 'Other unaudited financial information' on pages 250 – 259.

Specifically, we measure the financial performance of the Group from different perspectives:

- **Capital investment and asset growth:** Currently we expect to invest c. £5 billion per year.
- **Accounting profit:** In addition to statutory IFRS measures we distinguish between adjusted results, which exclude exceptional items and remeasurements, and underlying results, which further take account of: (i) volumetric and other revenue timing differences arising from our regulatory contracts; and (ii) major storm costs, which are recoverable in future periods, neither of which give rise to economic gains or losses. In doing so, we intend to make the impact of such items clear to users of the financial information in this Annual Report.
- **Economic profit:** Measures such as Return on Equity (RoE) and Value Added take account of the regulated value of our assets and of our regulatory economic arrangements to illustrate the returns generated on shareholder equity.
- **Balance sheet strength:** Maintaining a strong investment grade credit rating allows us to finance our growth ambitions at a competitive rate. Hence, we monitor credit metrics used by the major rating agencies to ensure we are generating sufficient cash flow to service our debts.

This balanced range of measures of financial well-being informs our dividend policy, which from 2021/22 is to grow the dividend per share at least in line with rate of CPIH each year.

Assessment of the estimated impact of the COVID-19 pandemic on the Group's position and results

The COVID-19 pandemic has adversely impacted our reported results in 2020/21. We have experienced a more significant impact in our US businesses than in our UK businesses, mainly due to our large US customer base. During 2020/21, we made a further provision for bad and doubtful debts of approximately £179 million (2019/20: £117 million) in respect of COVID-19. The higher US charge reflects the impact of moratoriums in response to regulatory instructions as requested by regulatory authorities in the US states in which we operate, along with other macroeconomic factors, which limited our ability to collect outstanding debts. We remain committed to continuing to supply our customers, debt collection activities have been curtailed and termination of customer connections has been cancelled.

Our revenues suffered an adverse impact of £78 million, mainly the suspension of late payment fees in the US, lower UK incentives and lower 'hardship recoveries' in Massachusetts, due to fewer US customers re-certifying 'protected status' due to the moratoriums on disconnections. In our underlying results, we have recognised some additional revenue in the US related to allowances for recovery of some of the bad debts through regulatory mechanisms already in place. Incremental COVID-19-related costs of £97 million (2019/20: £10 million), mainly in the US, have been incurred related to enabling safe working (PPE, cleaning, sequestering staff, IT for remote access) and costs associated with delays to a number of planned capex works, as a direct consequence of the pandemic. These incremental costs were partly mitigated by £69 million of cost savings as a result of customer-facing workplan reductions, the pause in collections activities and lower travel and other costs.

In NGV & Other, the pandemic has not caused a significant adverse impact on financial performance in 2020/21, but the disruption from COVID-19 has caused some delays, resulting in £50 million lower than planned capital investment in 2020/21.

For 2021/22, we expect some continuing impact, driven largely by our US operations where we are expecting further risk of bad debt, although lower than we have experienced in 2020/21 and 2019/20. Given our regulatory mechanisms and precedents, we expect to recover a large part of the total bad debt arising as a result of COVID-19. We continue to work with regulators to provide support to our customers. This may lead to cash flow impacts in 2021/22. While COVID-19 may continue to impact earnings and cash flow in the short term, we currently anticipate limited economic impact longer term. However, there could be a range of impacts on cash flows and earnings, which could be different from our current assessment.

Summary of Group financial performance for the year ended 31 March 2021

Financial summary for continuing operations

£m	2020/21	2019/20	Change
Statutory results:			
Operating profit	**2,895**	2,780	4 %
Profit after tax	**1,641**	1,274	29 %
Earnings per share (pence)	**46.6 p**	36.8 p	27 %
Dividend per share (pence), including proposed final dividend	**49.16 p**	48.57 p	1 %
Capital expenditure	**4,931**	5,079	(3)%
Alternative performance measures:			
Underlying operating profit	**3,283**	3,454	(5)%
Underlying profit after tax	**1,911**	2,015	(5)%
Adjusted earnings per share (pence)	**46.4 p**	55.2 p	(16)%
Underlying earnings per share (pence)	**54.2 p**	58.2 p	(7)%
Underlying dividend cover	**1.1**	1.2	(0.1)
Capital investment	**5,047**	5,405	(7)%
Retained cash flow/adjusted net debt	**6.6 %**	9.2 %	-260bps
Regulatory performance measures:			
Asset growth	**5.6 %**	9.0 %	-340bps
Group Return on Equity[1]	**10.6 %**	12.0 %	-140bps
Value Added	**1,808**	2,040	(11)%
Regulatory gearing	**65 %**	63 %	200bps

1. Group RoE for 2019/20 recalculated to reflect the revision to decrease the comparative goodwill balance (see note 1F for details).

We explain the basis of these alternative performance measures and regulatory performance measures and, where practicable, reconcile them to statutory results on pages 250 – 259.

The Group's statutory results for the year were impacted by exceptional charges. The impact on statutory EPS as a result of these charges is presented after each item. These included costs associated with the implementation of our new operating model (1.2p) and transaction costs associated with the acquisition of Western Power Distribution (WPD) and the sale of NECO expected to take place in 2021/22 (0.7p). Last year's statutory results were adversely impacted by additional environmental provisions, a reduction in the discount rate applied to certain provisions across the Group (8.6p) and a deferred tax charge due to the reversal of the expected reduction in the UK corporation tax rate originally enacted by the Finance Act 2016 (5.6p). The 2020/21 statutory results include an exceptional credit of (0.3p) for the £14 million release of environmental provisions relating to one of our US Superfund sites, where this was originally treated as an exceptional item.

Statutory operating profit was favourably impacted by commodity remeasurement gains of £34 million in 2020/21 (2019/20: £125 million losses) from mark-to-market movements on derivatives which are used to hedge the cost of buying wholesale gas and electricity on behalf of our US customers.

Underlying operating profit was down 5% (down 3% at constant currency) as higher rate case revenues in US Regulated and increased net revenues in UK Gas Transmission and NGV were more than offset by increased costs, including £103 million increase in US bad debt costs (with an estimated £67 million of this increase being COVID-19-related), and higher depreciation and amortisation, along with and lower levels of sales in our property business. The combination of these factors was partly offset by lower net financing costs, driven by lower inflation on RPI-linked debt and new borrowings issued at lower interest rates, partly offset by higher non-debt interest charges. A lower contribution was made by our joint ventures and associates and the tax charge was higher primarily due to reduction in tax credits relating to prior years. Underlying profit after tax decreased by 5% and, combined with a higher share count, resulted in a 7% decrease in underlying EPS to 54.2p.

Capital investment of £5.0 billion helped increase our asset growth to 6%. We delivered Value Added (our measure of economic profit) of £1.8 billion in 2020/21, lower than in 2019/20. Group RoE of 10.6% was lower than 12.0% for 2019/20, reflecting the impact of COVID-19 (excluding bad debts), higher level of non-deferrable storms in the US and lower level of property sales in the UK. RCF/net debt at 6.6% was lower than 9.2% in 2019/20. The recommended full-year dividend per share of 49.16p is in line with the policy of increasing in line with RPI inflation and is covered 1.1 times by underlying EPS. In March 2021, we announced that from 2021/22 onwards, the dividend policy will aim to deliver annual dividend per share growth in line with UK CPIH inflation.

Profitability and earnings

The table below reconciles our statutory profit measures for continuing operations, at actual exchange rates, to adjusted and underlying versions.

Reconciliation of profit and earnings from continuing operations

	Operating profit			Profit after tax			Earnings per share		
£m	2020/21	2019/20	Change	2020/21	2019/20	Change	2020/21	2019/20	Change
Statutory results	**2,895**	2,780	4 %	**1,641**	1,274	29 %	**46.6 p**	36.8 p	27 %
Exceptional items	**65**	402		**57**	491		**1.6 p**	14.2 p	
Remeasurements	**(34)**	125		**(64)**	148		**(1.8)p**	4.2 p	
Adjusted results	**2,926**	3,307	(12)%	**1,634**	1,913	(15)%	**46.4 p**	55.2 p	(16)%
Timing	**207**	147		**166**	102		**4.7 p**	3.0 p	
Major storm costs	**150**	—		**111**	—		**3.1 p**	— p	
Underlying results	**3,283**	3,454	(5)%	**1,911**	2,015	(5)%	**54.2 p**	58.2 p	(7)%

Exceptional income/(expense) from continuing operations

	Impact on operating profit		Impact on profit after tax		Impact on EPS	
£m	2020/21	2019/20	2020/21	2019/20	2020/21	2019/20
Changes in environmental provision	**14**	(402)	**11**	(299)	**0.3 p**	(8.6)p
Transaction costs	**(24)**	—	**(24)**	—	**(0.7)p**	— p
New operating model implementation costs	**(55)**	—	**(44)**	—	**(1.2)p**	— p
Deferred tax arising on the reversal of the reduction in UK corporation tax rate	**—**	—	**—**	(192)	**— p**	(5.6)p
Total	**(65)**	(402)	**(57)**	(491)	**(1.6)p**	(14.2)p

This year we have classified the following items as exceptional:

- **Changes in environmental provisions:** a £14 million credit in relation to a reduction in the environmental provision booked in 2019/20 as exceptional;
- **Transaction costs:** £24 million of transaction costs associated with the acquisition of Western Power Distribution (WPD) and the sale of NECO expected to take place during 2021/22; and
- **New operating model implementation costs:** £55 million of costs in relation to the design and implementation of our new operating model that is designed to transform our operating framework and will be built on a foundation of six business units, as described further on page 2.

In the prior year we classified the £402 million of environmental costs (comprising a £326 million increase in the provision for clean-up related to former manufacturing gas plant facilities, formerly owned or operated by the Group or its predecessor companies and £76 million for the impact of a reduction of 0.5% in the real discount rate applied to the environmental provisions across the Group); and a £192 million impact on deferred tax as a result of the reversal of the provisions of The Finance Act 2016 which reduced the UK corporation tax rate to 17% with effect from April 2020.

We also exclude certain unrealised gains and losses on mark-to-market financial instruments from adjusted profit; see notes 5 and 6 to the financial statements for further information. Net remeasurement gains of £34 million on commodity contract derivatives were incurred in addition to net remeasurement gains of £72 million on financing-related instruments and a further £8 million of remeasurement losses related to our share of post-tax results of joint ventures.

Financial review continued

Timing over/(under)-recoveries

In calculating underlying profit, we exclude regulatory revenue timing over- and under-recoveries and major storm costs (as defined below). Under the Group's regulatory frameworks, most of the revenues we are allowed to collect each year are governed by regulatory price controls in the UK and rate plans in the US. If more than this allowed level of revenue is collected, an adjustment will be made to future prices to reflect this over-recovery; likewise, if less than this level of revenue is collected, an adjustment will be made to future prices in respect of the under-recovery. We also collect revenues from customers and pass these on to third parties (e.g. NYSERDA). These variances between allowed and collected revenues and timing of revenue collections for pass-through costs give rise to over- and under-recoveries.

The following table summarises management's estimates of such amounts for the two years ended 31 March 2021. All amounts are shown on a pre-tax basis and, where appropriate, opening balances are restated for exchange adjustments and to correspond with subsequent regulatory filings and calculations. All amounts are translated at the current year average exchange rate of $1.34:£1.

£m	2020/21	2019/20
Balance at start of year (restated)	**261**	384
In-year (under)/over-recovery	**(207)**	(137)
Balance at end of year	**54**	247

In 2020/21, we experienced timing under-recoveries of £88 million in UK Electricity Transmission, £96 million in UK Gas Transmission and £23 million in US Regulated. In calculating the post-tax effect of these timing recoveries, we impute a tax rate, based on the regional marginal tax rates, consistent with the relative mix of UK and US balances.

Major storm costs

We also take account of the impact of major storm costs in the US where the aggregate amount is sufficiently material in any given year. Such costs (net of certain deductibles) are recoverable under our rate plans but are expensed as incurred under IFRS. Accordingly, where the total incurred cost (after deductibles) exceeds $100 million in any given year, we exclude the net costs from underlying earnings. In 2020/21, we experienced around double the number of storm events compared to the prior year, resulting in $201 million of deferrable storm costs, which are eligible for future recovery. In 2019/20 we experienced $98 million of deferrable storm costs. This value fell just below the $100 million threshold and as such was not excluded from our underlying results, even though these costs are also eligible for future recovery.

Segmental operating profit

The tables below set out operating profit on adjusted and underlying bases.

Adjusted operating profit

£m	2020/21	2019/20	Change
UK Electricity Transmission	**1,034**	1,320	(22)%
UK Gas Transmission	**342**	348	(2)%
US Regulated	**1,313**	1,397	(6)%
NGV and Other activities	**237**	242	(2)%
Total	**2,926**	3,307	(12)%

Underlying operating profit

£m	2020/21	2019/20	Change
UK Electricity Transmission	**1,122**	1,174	(4)%
UK Gas Transmission	**438**	402	9 %
US Regulated	**1,486**	1,636	(9)%
NGV and Other activities	**237**	242	(2)%
Total	**3,283**	3,454	(5)%

The statutory operating profit increased in the year primarily as a result of the £402 million exceptional charges made in 2019/20, partly offset by adverse movements on timing under-recoveries and higher storm costs. The reasons for the movements in underlying operating profit are described in the segmental commentaries below. Unless otherwise stated, the discussion of performance in the remainder of this financial review focuses on underlying results.

UK Electricity Transmission

£m	2020/21	2019/20	Change
Revenue	**3,992**	3,702	8 %
Operating costs	**(2,965)**	(2,386)	24 %
Statutory operating profit	**1,027**	1,316	(22)%
Exceptional items	**7**	4	75 %
Adjusted operating profit	**1,034**	1,320	(22)%
Timing	**88**	(146)	(160)%
Underlying operating profit	**1,122**	1,174	(4)%
Analysed as follows:			
Net revenue	**1,930**	2,174	(11)%
Regulated controllable costs	**(291)**	(306)	(5)%
Post-retirement benefits	**(45)**	(48)	(6)%
Other operating costs	**(53)**	(31)	71 %
Depreciation and amortisation	**(507)**	(469)	8 %
Adjusted operating profit	**1,034**	1,320	(22)%
Timing	**88**	(146)	(160)%
Underlying operating profit	**1,122**	1,174	(4)%

Although ESO is a separate legal entity from National Grid Electricity Transmission plc, we continue to report these two businesses in aggregate, within our UK Electricity Transmission segment.

UK Electricity Transmission statutory operating profit was £289 million lower in the year, mainly due to timing movements. In 2020/21, there were £7 million of exceptional costs related to establishing our new operating model, compared to £4 million of environmental charges in the prior year. Timing under-recoveries of £88 million in 2020/21 compared to over-recoveries of £146 million in 2019/20 are primarily due to lower half-hourly volumes, lower collection of prior year balances and under-recovery of balancing services costs in ESO due to the Balancing Services Use of System (BSUoS) COVID-19 support scheme.

Adjusted operating profit reduced by £286 million (22%), predominantly driven by £234 million adverse year-on-year timing movements. Underlying operating profit decreased by 4%. Net revenues (adjusted for timing) were relatively flat, with higher incentives income, legal settlements, diversion income and the RPI uplift, being offset by the lower re-opener allowances for cyber and data centres and funding for ESO legal separation in 2019/20. Regulated controllable costs were lower, with efficiency savings and the absence of prior period one-off costs partly offset by higher IT costs and COVID-19-related costs. Other costs were higher, mainly relating to customer diversion costs which are offset by higher revenue.

The increase in depreciation and amortisation charges reflects continued investment including a full year charge for Western Link and a benefit from the release of provisions in 2019/20.

UK Gas Transmission

£m	2020/21	2019/20	Change
Revenue	**904**	927	(2)%
Operating costs	**(567)**	(580)	(2)%
Statutory operating profit	**337**	347	(3)%
Exceptional items	**5**	1	400 %
Adjusted operating profit	**342**	348	(2)%
Timing	**96**	54	78 %
Underlying operating profit	**438**	402	9 %
Analysed as follows:			
Net revenue	**671**	685	(2)%
Regulated controllable costs	**(122)**	(127)	(4)%
Post-retirement benefits	**(18)**	(19)	(5)%
Other operating costs	**(24)**	(20)	20 %
Depreciation and amortisation	**(165)**	(171)	(4)%
Adjusted operating profit	**342**	348	(2)%
Timing	**96**	54	78 %
Underlying operating profit	**438**	402	9 %

UK Gas Transmission statutory operating profit decreased £10 million in the year. In 2020/21 there were £5 million of exceptional costs related to establishing our new operating model, compared to £1 million of environmental charges in the prior year. Timing under-recoveries of £96 million in 2020/21 compared to £54 million in the prior year primarily as a result of under-collections relating to the new gas capacity charging regime and lower demand, partly offset by a lower return of prior period over-recoveries.

Adjusted operating profit reduced by £6 million (2%), including £42 million year-on-year adverse timing under-recoveries. Underlying operating profit increased by 9%. Net revenue (adjusted for timing) was higher, reflecting the impact of prior year return of Fleetwood allowances and the RPI uplift, partly offset by re-opener allowances (in 2019/20) for cyber and data centres and lower incentives income. Regulated controllable costs were £5 million lower, mainly driven by efficiency savings. Other costs were higher principally due to increased asset decommissioning costs.

US Regulated

£m	2020/21	2019/20	Change
Revenue	**9,195**	9,205	— %
Operating costs	**(7,851)**	(8,325)	(6)%
Statutory operating profit	**1,344**	880	53 %
Exceptional items	**3**	392	(99)%
Remeasurements	**(34)**	125	(127)%
Adjusted operating profit	**1,313**	1,397	(6)%
Timing	**23**	239	(90)%
Major storm costs	**150**	—	n/a
Underlying operating profit	**1,486**	1,636	(9)%
Analysed as follows:			
Net revenue	**5,942**	5,745	3 %
Regulated controllable costs	**(1,905)**	(1,871)	2 %
Post-retirement benefits	**(97)**	(95)	2 %
Bad debt expense	**(325)**	(231)	41 %
Other operating costs	**(1,414)**	(1,296)	9 %
Depreciation and amortisation	**(888)**	(855)	4 %
Adjusted operating profit	**1,313**	1,397	(6)%
Timing	**23**	239	(90)%
Major storm costs	**150**	—	n/a
Underlying operating profit	**1,486**	1,636	(9)%

US Regulated statutory operating profit increased by £464 million, partly as a result of the £159 million year-on-year favourable movements in commodity contract remeasurements and adverse exchange rate movements, but mainly from the non-recurrence of exceptional charges booked in the prior year. In 2020/21, exceptional charges were lower comprising £17 million of costs related to establishing our new operating model and transaction costs, mostly offset by a £14 million environmental credit (reversal of cost previously booked as exceptional). In 2019/20, £392 million of exceptional charges were incurred for environmental costs related to the clean up of former manufacturing gas plant facilities. Timing under-recoveries of £23 million in 2020/21 compared to timing under-recoveries of £239 million in 2019/20, driven by revenue decoupling, commodity recoveries, partly offset by a higher return of NYSERDA and transmission wheeling prior period balances. Storm costs (deferrable and non-deferrable) were £142 million higher year-on-year. These factors, along with an adverse impact from COVID-19 disruption and a weaker US dollar, resulted in an overall increase in statutory operating profit, but a decrease in adjusted operating profit.

Adjusted operating profit decreased by £84 million (6%), despite £216 million year-on-year favourable timing under-recoveries. In 2020/21, we experienced higher total storm costs compared to 2019/20. In 2020/21, we incurred £150 million of deferrable storm costs, which exceeded our $100 million threshold to qualify as major and be excluded from our underlying results. In 2019/20 we incurred £76 million of deferrable storm costs, which fell below this threshold. Underlying operating profit decreased by 9%. Net revenues (adjusted for timing) increased by £223 million (at constant currency) from the benefits of rate case increments (including Niagara Mohawk and Mass Electric), capital trackers and higher revenues in wholesale networks, but were offset by a £242 million adverse impact from foreign exchange movements. A weaker US dollar decreased underlying operating profit by £66 million in the year. US Regulated controllable costs increased as a result of higher IT costs, inflation, incremental COVID-19 costs, partly offset by cost mitigations and efficiencies. Provisions for bad and doubtful debts increased by £94 million, driven by a further £179 million (2019/20: £117 million) additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to the growth in assets. Other costs were higher due to increased property taxes and higher non-deferrable storm costs partly offset by lower cost of removal.

NGV and Other activities

£m	2020/21	2019/20	Change
Statutory operating profit	**187**	237	(21)%
Exceptional items	**50**	5	900 %
Adjusted operating profit	**237**	242	(2)%
Timing	**—**	—	n/a
Underlying operating profit	**237**	242	(2)%
Analysed as follows:			
NGV	**298**	269	11 %
Property	**22**	63	(65)%
Corporate and Other activities	**(83)**	(90)	(8)%
Underlying operating profit	**237**	242	(2)%

NGV's statutory operating profits were £29 million higher than 2019/20, with lower depreciation driven by the extension of asset lives at our LNG import terminal at Grain, commencement of operations at our second interconnector (IFA2) between England and France and fair value gains in our US Ventures business. These were partly offset by lower prior year one-off benefits in our legacy French interconnector (IFA1), lower revenues from our declining meter population and a £2 million exceptional charge in relation to establishing our new operating model, compared to a £1 million charge for environmental costs in 2019/20.

In 'other' activities, we incurred an exceptional charge of £25 million related to establishing our new operating model and £24 million of transaction costs for the acquisition of WPD and the sale of NECO, both expected to take place during 2021/22, compared to a £3 million charge for environmental costs in the prior year. In 2020/21, underlying operating profit included net costs of £61 million (including corporate costs), compared to £27 million in 2019/20. The underlying performance of the property business was £41 million lower than prior year reflecting a lower volume of sales compared to 2019/20.

Financing costs and taxation

Net finance costs

Net finance costs (excluding remeasurements) for the year were 10% lower than last year at £942 million, with the £107 million decrease driven by the impact of lower inflation on our RPI-linked debt, new debt issued at lower rates, a higher net debt as a result of asset growth, termination fees incurred in the prior year and favourable foreign exchange movements, partly offset by higher interest on pension and OPEB liabilities and a higher benefit from interest on tax settlements in 2019/20. The effective interest rate of 3.2% on net debt was 90bps lower than the prior year rate of 4.1%.

Joint ventures and associates

The Group's share of net profits from joint ventures and associates reduced by £22 million compared to 2019/20 mainly as a result of lower contributions from BritNed (due to an unplanned outage caused by a cable fault) and lower sales in our St William property joint venture. Our Nemo Link interconnector and National Grid Renewables both showed improved performances.

Tax

The underlying effective tax rate of 21.2% was 130bps higher than last year. The tax charge for 2019/20 benefited from a higher release of reserves following settlement of tax audits relating to earlier years. The Group's tax strategy is detailed later in this review.

Discontinued operations

Last year, we completed the sale of a 39% interest in Quadgas HoldCo Limited (Quadgas), the holding company for Cadent. As described in note 10 to the financial statements, we treated all items of income and expense relating to the disposal of Quadgas within discontinued operations.

Financial review continued

Capital investment, asset growth and Value Added

Value Added is a measure that reflects the value to shareholders of our dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), net of the growth in overall debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making and long-term management incentive arrangements.

A key part of our investor proposition is growth in our regulated asset base. The regulated asset base is a regulatory construct, representing the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulatory asset base over the long term and this in turn contributes to delivering shareholder value. Our regulated asset base comprises our regulatory asset value in the UK, plus our rate base in the US. We also invest in related activities that are not subject to network regulation and this further contributes to asset growth.

Capital investment

Capital investment comprises capital expenditure in critical energy infrastructure, equity investments, funding contributions and loans to joint ventures and associates, the acquisition of Geronimo during 2019/20 and, in the case of National Grid Partners, investments in financial assets.

	At actual exchange rates			At constant currency		
£m	2020/21	2019/20	Change	2020/21	2019/20	Change
UK Electricity Transmission	**1,072**	1,043	3 %	**1,072**	1,043	3 %
UK Gas Transmission	**176**	249	(29)%	**176**	249	(29)%
US Regulated	**3,223**	3,228	— %	**3,223**	3,098	4 %
NGV and Other activities	**576**	885	(35)%	**576**	867	(34)%
Total	**5,047**	5,405	(7)%	**5,047**	5,257	(4)%

Investment in UK Electricity Transmission increased primarily due to Hinkley-Seabank, London Power Tunnels 2 and Smartwires spend. In UK Gas Transmission, investment reduced due to completion of the Feeder 9 gas pipeline replacement project and Peterborough and Huntingdon compressor stations. In the US, investment was up 4% on a constant currency basis, reflecting increased capital expenditure in our US New York electric businesses, mainly damage repair driven by storm activity and accelerated spend in REV (New York's 'Reforming the Energy Vision' programme) and Grid Modernisation; increased investment in wholesale networks (including line and cable relocation in NECO, higher LNG spend and also asset refurbishment in New England Power) and higher IT spend and lease additions, partly offset by reduced investment in downstate New York (gas pipe replacement and mandated gas works) which were impacted by disruptions due to COVID-19. Investment in NGV was significantly lower due to the £209 million acquisition of Geronimo in the prior year, lower investment in IFA2, which became operational this year, reduced cable and converter spend on North Sea Link (Norway), but increased investment in Viking Link (Denmark). In addition, a total amount of £38 million (including joint ventures) was invested by National Grid Partners in 2020/21, compared to £68 million in the prior year.

Asset growth and Value Added

To help readers' assessment of the financial position of the Group, the table below shows an aggregated position for the Group, as viewed from a regulatory perspective. The measures included in the table below are calculated in part from financial information used to derive measures sent to and used by our regulators in the UK and US, and accordingly inform certain of the Group's regulatory performance measures, but are not derived from, and cannot be reconciled to, IFRS.

There are certain significant assets and liabilities included in our IFRS balance sheet, which are treated differently in the analysis below, and to which we draw readers' attention. The UK RAV is higher than the IFRS value of property, plant and equipment and intangibles, principally because of the annual indexation (inflationary uplift) adjustment applied to RAV, compared to the IFRS value of these assets (held at amortised cost). In addition, under IFRS we recognise liabilities in respect of US environmental remediation costs, and pension and OPEB costs. For regulatory purposes, these are not shown as obligations because we are entitled to full recovery of costs through our existing rate plans. The impact of US tax reform in 2017/18 which resulted in a reduction in IFRS deferred tax liabilities, and from a regulatory perspective remains as a future obligation, results in a regulatory liability within US rate base (£1.6 billion at 31 March 2021). In our Value Added calculation, we have recognised an asset to reflect expected future recovery of £282 million COVID-19 related provision for bad and doubtful debts that we have included in 2019/20 and 2020/21. Regulatory IOUs which reflect net over- or under-recoveries compared to our regulatory allowances are treated within this table as obligations but do not qualify for recognition as liabilities (or assets) under IFRS. Adjusted net debt movements exclude the beneficial proceeds from the Cadent disposal in 2019/20 and movements on derivatives which are designated in cash flow hedging arrangements and for which there is no corresponding movement in total assets and other balances. Within our Value Added calculation, total assets and other balances, goodwill and adjusted net debt movement all exclude the impact of reclassifications to held for sale for NECO in 2020/21.

	2020/21			2019/20		
£m	31 March 2021	31 March 2020	Change	31 March 2020	31 March 2019	Change
UK RAV	**20,872**	**20,431**	**2%**	20,431	19,692	4%
US rate base	**20,041**	**18,598**	**8%**	20,644	18,407	12%
Total RAV and rate base	**40,913**	**39,029**	**5%**	41,075	38,099	8%
NGV and Other	**4,458**	**3,942**	**13%**	4,105	3,351	23%
Total assets	**45,371**	**42,971**	**6%**	45,180	41,450	9%
UK other regulated balances[1]	**(160)**	**(368)**		(357)	(302)	
US other regulated balances[2]	**1,974**	**1,613**		1,791	1,987	
Other balances	**(336)**	**(514)**		(514)	(679)	
Total assets and other balances	**46,849**	**43,702**	**3,147**	46,100	42,456	3,644
Increase in goodwill			**—**			81
Cash dividends			**1,413**			892
Adjusted net debt movement			**(2,752)**			(2,577)
Value added			**1,808**			2,040

1. Includes totex-related regulatory IOUs of £310 million (2020: £411 million), under-recovered timing balances of £150 million (2020: £24 million over-recovered) and under-recovered legacy balances related to previous price controls of £nil (2020: £78 million).
2. Includes assets for construction work-in-progress of £1,639 million (2020: £1,510 million), other regulatory assets related to timing and other cost deferrals of £806 million (2020: £642 million) and net working capital liabilities of £471 million (2020: £361 million).

Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2020 and finalisation of US balances.

During 2020/21, our combined regulated asset base and NGV and Other businesses' assets grew by £2.4 billion or 6% on a constant currency basis compared to an increase of 9% in the prior year. UK RAV growth was 2.2% including RPI indexation of 1.5% while US rate base grew strongly by 8%.

Value Added, which reflects the key components of value delivery to shareholders (i.e. dividend and growth in the economic value of the Group's assets, net of growth in net debt) was £1.8 billion in 2020/21. This was slightly lower than last year's £2.0 billion, with lower US returns and the impact of COVID-19 and higher storm costs, offset by lower interest and improved NGV performance. Of the £1.8 billion value added, £1.4 billion was paid to shareholders as cash dividends and £0.4 billion was retained in the business. The 2019/20 measure excluded any benefit arising from the sale of our 39% interest in Quadgas HoldCo Limited. Value Added per share was 51.3p compared with 58.9p in 2019/20.

Cash flow, net debt and funding

Net debt is the aggregate of cash and cash equivalents, borrowings, current financial and other investments and derivatives (excluding commodity contract derivatives) as disclosed in note 29 to the financial statements. 'Adjusted net debt' used for the RCF/adjusted net debt calculation is principally adjusted for pension deficits and hybrid debt instruments. For a full reconciliation see page 255.

The following table summarises the Group's cash flow for the year, reconciling this to the change in net debt.

Summary cash flow statement

£m	2020/21	2019/20	Change
Cash generated from continuing operations	4,618	4,914	(6)%
Cash capital expenditure and acquisition of investments	(4,920)	(5,098)	(3)%
Dividends from joint ventures and associates	80	75	7 %
Business net cash flow from continuing operations	(222)	(109)	104 %
Net interest paid	(819)	(884)	(7)%
Net tax paid	(157)	(199)	(21)%
Ordinary dividends	(1,413)	(892)	58 %
Other cash movements	14	10	40 %
Net cash flow from continuing operations	(2,597)	(2,074)	25 %
Quadgas sale proceeds	—	1,965	n/a
Discontinued operations	—	(91)	n/a
Net cash flows from other investing and financing transactions	2,692	17	n/a
Increase/(decrease) in cash and cash equivalents	95	(183)	(152)%
Reconciliation to movement in net debt			
Increase/(decrease) in cash and cash equivalents	95	(183)	(152)%
Less: net cash flows from other investing and financing transactions	(2,692)	(17)	n/a
Cash and borrowings reclassified to held for sale	1,119	—	n/a
Other non-cash movements in net debt	1,522	(1,387)	(210)%
Increase in net debt	44	(1,587)	(103)%
Net debt at start of year	(28,590)	(26,529)	8 %
Impact of adoption of IFRS 16	—	(474)	n/a
Net debt at end of year	**(28,546)**	(28,590)	(0.2)%

Cash flow generated from continuing operations was £4.6 billion, £296 million lower than last year, mainly due to adverse timing and increased storm costs, lower cash collections, lower revenues and incremental costs as a result of COVID-19, higher spend on provisions, the impact of year-on-year exchange rate movements, offset by favourable working capital inflows on payables. Cash expended on investment activities decreased as a result of lower investment in UK Gas Transmission and NGV (including last year's acquisition of Geronimo) and movements in capex prepayments and accruals. Net interest paid decreased in spite of the growth in net debt as a result of lower rates and hybrid termination fees incurred in 2019/20. The Group made net tax payments of £157 million during 2020/21. A 17% scrip take-up in the year reduced the cash dividend to £1,413 million, but this was £521 million higher than in 2019/20, when the scrip take-up was 46%. In 2019/20, proceeds of £1,965 million (plus £6 million of interest) from the Quadgas HoldCo Limited disposal, were partly offset by outflows for residual provisions and accruals classified within discontinued operations. Non-cash movements primarily reflect changes in the sterling-dollar exchange rate, accretions on index-linked debt, finance lease additions and other derivative fair value movements. Closing net debt of £28.5 billion excludes £1.1 billion of net debt in NECO which was reclassified as held for sale on 31 March 2021.

During the year we raised over £5.6 billion of new long-term senior debt to refinance maturing debt and to fund a portion of our significant capital programme.The new bonds issued include further borrowings under our Green Financing Framework. We also used this framework to agree £539 million of ECA financing for our Viking interconnector. As at 30 April 2021, we have £6.0 billion of undrawn committed facilities available for general corporate purposes, all of which have expiry dates beyond June 2023.

In March 2021, Moody's, S&P and Fitch all downgraded the senior unsecured credit ratings of National Grid plc and the majority of our rated operating subsidiaries by one notch. This action reflected the agencies' assessment that Group cash flow metrics would, for several years, no longer meet the thresholds previously expected. This reflected the combined impacts of the COVID-19 pandemic, increased levels of capital investment, delays to rate increases in our US operations and the cash flow impacts of the new RIIO-2 price control in the UK.

The Board has considered the Group's ability to finance normal operations as well as funding a significant capital programme, in light of the disruption caused by COVID-19. This includes stress-testing of the Group's finances under a 'reasonable worst case' scenario, assessing the impact of the acquisition of WPD (and any penalties if the transaction did not proceed), the timing of the NECO and National Grid Gas plc transactions, and the further levers at the Board's discretion to ensure our businesses are adequately financed. As a result, the Board has concluded that the Group will have adequate resources to do so.

Financial position

The following table sets out a condensed version of the Group's IFRS balance sheet.

Summary balance sheet

£m	31 March 2021	31 March 2020	Change
Goodwill and intangibles[1]	6,031	7,007	(14)%
Property, plant and equipment[1]	47,043	49,762	(5)%
Assets and liabilities held for sale	1,989	—	n/a
Other net assets/(liabilities)	(328)	(414)	(21)%
Tax balances[1]	(4,817)	(4,365)	10 %
Net pension asset/(liabilities)	715	(953)	(175)%
Provisions	(2,227)	(2,654)	(16)%
Net debt	(28,546)	(28,590)	(0.2)%
Net assets	**19,860**	19,793	— %

1. Comparative amounts have been revised as described in note 1F.

Financial review continued

Property, plant and equipment increased as a result of the continuing capital investment programme, offset by foreign exchange losses and reclassifications to held for sale. Assets held for sale comprises assets and liabilities of NECO, which we expect to sell during 2021/22 (see note 10 to the financial statements). Net pension liabilities reduced in the US as a result of higher asset valuations and foreign exchange movements, partly offset by lower net pension assets in the UK as a result of lower discount rates. Provisions decreased principally as a result of continued spend against environmental and other provisions recognised in previous years and foreign exchange movements. Other movements are largely explained by net working capital inflows and changes in the sterling-dollar exchange rate.

Regulatory gearing, measured as net debt as a proportion of total regulatory asset value and other business invested capital, was 65% as at 31 March 2021. This was up from 63% at the previous year-end. Taking into account the benefit of our hybrid debt, adjusted gearing as at 31 March 2021 was 63% and remains appropriate for the current overall Group credit rating of BBB+/Baa1 (S&P/Moody's).

Retained cash flow as a proportion of adjusted net debt was 6.6%. This is slightly below the long-term average level of 7% indicated by Moody's, as consistent with maintaining our current Group rating, although the metric this year has been impacted by a below average level of uptake of the scrip dividend option, alongside increased costs related to the COVID-19 pandemic, timing outflows and high levels of storm costs. The funds from operations to debt metric was 11.7%, in the middle of the target range for the current rating.

Off-balance sheet items

There were no significant off-balance sheet items other than the commitments and contingencies detailed in note 30 of the financial statements.

Economic returns

In addition to Value Added, one of the principal ways in which we measure our performance in generating value for shareholders is to divide regulated financial performance by regulatory equity, to produce Return on Equity (RoE).

As explained on page 255, regulated financial performance adjusts reported operating profit to reflect the impact of the Group's various regulatory economic arrangements in the UK and US. In order to show underlying performance, we calculate RoE measures excluding exceptional items of income or expenditure.

Group RoE is used to measure our performance in generating value for our shareholders by dividing regulated and non-regulated financial performance, after interest and tax, by our measure of equity investment in all our businesses, including the regulated businesses, NGV and Other activities and joint ventures.

Regulated RoEs are measures of how the businesses are performing compared to the assumptions and allowances set by our regulators. US and UK regulated returns are calculated using the capital structure assumed within their respective regulatory arrangements and, in the case of the UK, assuming 3% RPI inflation. As these assumptions differ between the UK and the US, RoE measures are not directly comparable between the two geographies. In our performance measures, we compare achieved RoEs to the level assumed when setting base rate and revenue allowances in each jurisdiction.

Return on Equity

£m	2020/21	2019/20	Change
UK Electricity Transmission	**13.9%**	13.5%	40bps
UK Gas Transmission	**9.6%**	9.8%	-20bps
UK weighted average	**12.6%**	12.4%	20bps
US Regulated	**7.2%**	9.3%	-210bps
Group Return on Equity[1]	**10.6%**	12.0%	-140bps

1. Group RoE in 2019/20 has been recalculated as 12.0% (previously 11.7%), reflecting the revision to decrease the comparative goodwill balance (see note 1F for details).

The overall weighted average RoE for the two UK transmission businesses was 12.6%, representing 250bps outperformance of the base allowed return. Electricity Transmission performance increased in the year with improved incentives performance and legacy recoveries, partly offset by a marginally lower totex performance than in 2019/20. Gas Transmission return decreased by 20bps due to reduced totex performance, with higher than allowed costs incurred for delivering key projects.

During the year, the financial performance of the US regulated business was impacted by additional costs of COVID-19, and a greater number of storms, with our achieved RoE decreasing by 210bps to 7.2% (excluding COVID-19 related bad debts). The achieved RoE represents 76% of the weighted average allowed return across all jurisdictions. US returns are not affected by the COVID-19-related bad debt provisions recognised in 2020/21 and include an adjustment reflecting our expectation for future recovery of these bad debt costs.

Overall Group RoE, which incorporates Property, Corporate and Other, and financing performance was 10.6%, lower than 2019/20.

Tax transparency

As a responsible taxpayer, we have voluntarily included additional tax disclosures, which we believe are of significant interest to many of our stakeholders.

Tax strategy

National Grid is a responsible taxpayer. Our approach to tax is consistent with the Group's broader commitments to doing business responsibly and upholding the highest ethical standards. This includes managing our tax affairs, as we recognise that our tax contribution supports public services and the wider economy. We endeavour to manage our tax affairs so that we pay and collect the right amount of tax, at the right time, in accordance with the tax laws in all the territories in which we operate. We will claim valid tax reliefs and incentives where these are applicable to our business operations, but only where they are widely accepted through the relevant tax legislation such as those established by government to promote investment, employment and economic growth. We do not have operations in tax havens or low tax jurisdictions without commercial purpose.

We have a strong governance framework and our internal control and risk management framework helps us manage risks, including tax risk, appropriately. We take a conservative approach to tax risk. However, there is no prescriptive level or pre-defined limit to the amount of acceptable tax risk.

Our financial statements, including the tax note have been audited. The figures in the tax transparency disclosures in the Annual Report and Accounts have been taken from our financial systems, which are subject to our internal control framework.

We act with openness and honesty when engaging with relevant tax authorities and seek to work with tax authorities on a real-time basis. We engage proactively in developments of external tax policy and engage with relevant bodies where appropriate. Ultimate responsibility and oversight of our tax strategy and governance rests with the Finance Committee, with executive management delegated to our Chief Financial Officer who oversees and approves the tax strategy on an annual basis. For more detailed information, please refer to our published global tax strategy on our website.

Country-by-country reporting summary

We have disclosed in the table below data showing the scale of our activities in each of the countries we operate in. This allows our stakeholders to see the profits earned, taxes paid and the context of those payments.

2020/21	Revenue					
Tax jurisdiction	Unrelated party £m	Related party[1] £m	Total £m	Profit/(loss) before income tax[2] £m	Income tax accrued – current year[3] £m	Tangible assets[4]/(liabilities) other than cash and cash equivalents £m
United Kingdom	5,482	106	**5,588**	1,718	213	20,796
United States	9,297	43	**9,340**	341	3	26,247
Isle of Man	—	15	**15**	23	—	—
Luxembourg	—	—	**—**	1,667	—	—
Netherlands	—	52	**52**	1	—	—
Cross-border consolidation	—	—	**—**	(1,667)	—	—
Total	14,779	216	**14,995**	2,083	216	47,043

2019/20	Revenue					
Tax jurisdiction	Unrelated party £m	Related party[1] £m	Total £m	Profit/(loss) before income tax[2] £m	Income tax accrued – current year[3] £m	Tangible assets[4]/(liabilities) other than cash and cash equivalents £m
United Kingdom	5,282	113	**5,395**	1,821	179	19,940
United States	9,258	82	**9,340**	(82)	(2)	29,822
Ireland	—	—	**—**	—	—	—
Isle of Man	—	16	**16**	3	—	—
Luxembourg	—	—	**—**	—	—	—
Netherlands	—	55	**55**	12	—	—
Total	14,540	266	**14,806**	1,754	177	49,762

1. Related party revenue only includes cross-border transactions.
2. Profit/(loss) before income tax from continuing operations after exceptionals.
3. See the tax charge to tax paid reconciliation below for further information.
4. Tangible assets are comprised of property, plant and equipment.

Our Hong Kong entity is UK tax resident, our entities in Australia and Canada are dormant and our entities in Ireland and Jersey are in liquidation. Therefore, those jurisdictions have not been included in the table above.

Our Isle of Man company is a captive insurance company which is treated as a controlled foreign company for UK tax purposes and as such UK corporation tax is paid on its profits by National Grid. In the Netherlands, we have a finance company which raised external finance for the Group and is taxed on its profits in the Netherlands at the corporate tax rate of 25%.

As part of our response to the Labour Party's proposal to nationalise nearly all of National Grid's UK assets we implemented measures, which included a Luxembourg holding company, in order to strengthen our ability to get a fair value for the assets in the event of a nationalisation. This holding company's profits consist of dividends offset by impairments both of which are not taxable, and these are being eliminated for Group purposes in the row 'cross-border consolidation'.

Transfer pricing is not a significant issue for the Group since there are limited transactions between Group companies, but any transactions between related parties are made on an arm's-length basis and aligned to OECD principles.

Group's total tax charge to tax paid

The total tax charge for the year disclosed in the financial statements in accordance with accounting standards and the equivalent total corporate income tax paid during the year will differ.

The principal differences between these two measures are as follows:

Reconciliation of Group's total tax charge to tax paid

£m	2020/21	2019/20
Total Group tax charge	**442**	480
Adjustment for Group non-cash deferred tax	**(218)**	(348)
Adjustments for Group current tax (charge)/credit in respect of prior years	**(8)**	45
Group current tax charge	**216**	177
Group tax instalment payments payable in respect of the prior year	**—**	78
Group tax instalment payments (repayable)/payable in the following year	**(7)**	5
Tax recoverable offset against current tax payments due[1]	**(55)**	47
Group tax refunds in respect of prior years paid in the current year	**(8)**	(113)
Group tax payments relating to tax disclosed elsewhere in the financial statements	**11**	5
Group tax paid	**157**	199
Profit before income tax[2]	**2,083**	1,754
	%	%
Effective cash tax rate	**7.5**	11.3
Effective tax rate (note 7)	**21.2**	27.4

1. Tax recoverable offset against current tax payments due relates to reduced current year UK instalment payments to utilise overpayments in prior years.
2. Profit/(loss) before income tax from continuing operations after exceptionals.

Effective cash tax rate

The effective cash tax rate for the Group is 7.5%. The difference between this and the accounting effective rate of 21.2% (see note 7 on page 152) is due to the following factors.

National Grid is a capital-intensive business, across both the UK and the US, and as such invests significant sums each year in its networks. In 2020/21 total capital expenditure was £4,931 million. To promote investment, tax legislation allows a deduction for qualifying capital expenditure at a faster rate than the associated depreciation in the statutory accounts. The impact of this is to defer cash tax payments into future years.

In the current period, the US federal taxable income was offset by brought-forward Net Operating Losses which primarily arose from deductions for qualifying capital expenditure incurred by National Grid in earlier years. Hence no significant federal tax payments were made in the current period.

In the current year, we made reduced cash tax payments in the UK (£158 million) to utilise tax recoverable from earlier years.

The Group continued to make significant payments into the UK defined benefit pension schemes, National Grid UK Pension Scheme and National Grid Electricity Group of the Electricity Supply Pension Scheme during the course of the year. These payments have further reduced the overall cash tax paid in the UK.

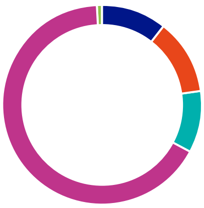
Financial review continued

Group's total tax contribution

The total amount of taxes we pay and collect globally year-on-year is significantly more than just the tax which we pay on our global profits. To provide a full picture we have disclosed the Group's global total tax contribution.

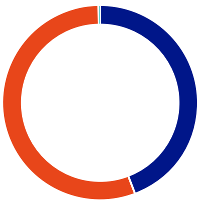
Group's total tax contribution 2020/21 (taxes paid/collected)

Taxes borne



Key:	£m
People	168
Product	189
Profit	157
Property	1,041
Miscellaneous	10
Total	**1,565**

Taxes collected



Key:	£m
People	563
Product	709
Miscellaneous	2
Total	**1,274**

2020/21	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	Total tax contribution £m	Number of employees[2] as at 31 March 2021
United Kingdom	158	225	58	672	**1,113**	6,657
United States	(1)	816	309	602	**1,726**	17,026
Ireland	—	—	—	—	**—**	—
Isle of Man	—	—	—	—	**—**	—
Luxembourg	—	—	—	—	**—**	—
Netherlands	—	—	—	—	**—**	—
Total	157	1,041	367	1,274	**2,839**	23,683

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

2019/20	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	Total tax contribution £m	Number of employees[2] as at 31 March 2020
United Kingdom	306	226	57	586	**1,175**	6,321
United States	(107)	850	303	573	**1,619**	16,748
Ireland	—	—	—	—	**—**	—
Isle of Man	—	—	—	—	**—**	—
Luxembourg	—	—	—	—	**—**	—
Netherlands	—	—	—	—	**—**	—
Total	199	1,076	360	1,159	**2,794**	23,069

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

For 2020/21 our total tax contribution globally was £2,839 million (2019/20: £2,794 million), taxes borne were £1,565 million (2019/20: £1,635 million) and taxes collected were £1,274 million (2019/20: £1,159 million). Our total tax contribution has increased in the year due to higher tax collected in 2020/21 in respect of both people and product taxes. The total taxes borne by the Group have fallen slightly, due to a fall in profit taxes.

Two thirds of the tax borne by the Group continues to be in relation to property taxes, of which £816 million are paid in the US across over 1,100 cities and towns in Massachusetts, New Hampshire, New York, Rhode Island and Vermont. These taxes are the municipalities' principal source of revenue to fund school districts, police and fire departments, road construction and other local services.

In the UK we participate in the 100 Group's Total Tax Contribution Survey. The survey ranks the UK's biggest listed companies in terms of their contribution to the total UK government's tax receipts. The most recent results of the survey for 2019/20 ranks National Grid as the 19th highest contributor of UK taxes (2018/19: 21st), 11th in respect of taxes borne (2018/19: 18th) and 6th in respect of capital expenditure (£1,663 million) on fixed assets (2018/19: 5th). Our ranking in the survey is proportionate to the size of our business and capitalisation relative to the other contributors to the survey.

However, National Grid's contribution to the UK and US economies is broader than just the taxes it pays over to and collects on behalf of the tax authorities.

Both in the UK and the US we employ thousands of individuals directly. We also support jobs in the construction industry through our capital expenditure, which in 2020/21 was £4,931 million, as well as supporting a significant number of jobs in our supply chain.

Furthermore, as a utility we provide a core essential service which allows the infrastructure of the country/states we operate in to run smoothly. This enables individuals and businesses to flourish and contribute to the economy and society.

Development of future tax policy

We believe that the continued development of a coherent and transparent tax policy across the Group is critical to help drive growth in the economy.

We continue to engage on consultations with policymakers where the subject matter of which impacts taxes borne or collected by our business, with the aim of openly contributing to the debate and development of tax legislation for the benefit of all our stakeholders.

To ensure that the needs of our stakeholders are considered in the development of tax policy we are a member of a number of industry groups which participate in the development of future tax policy, such as the Electricity Tax Forum and CBI Employment Taxes Working Group, together with the 100 Group in the UK, which represents the views of Finance Directors of FTSE 100 companies and several other large UK companies. We undertake similar activities in the US, where the Group is an active member in the Edison Electric Institute, the American Gas Association, the Global Business Alliance, the American Clean Power Association, the Energy Storage Association and the Solar Energy Industries Association.

Feedback from these groups, such as the results of the 100 Group Total Tax Contribution survey, and consideration of third party reporting frameworks like the GRI (Global Reporting Initiative) helps to ensure that we consider the needs of our stakeholders and are engaged at the earliest opportunity on tax issues which affect our business.

Pensions

In 2020/21, defined benefits pensions and other post-retirement benefits operating costs remained broadly flat year on year at £197 million (2019/20: £196 million). Employer contributions during the year were £274 million (2019/20: £327 million), including £88 million (2019/20: £86 million) of deficit contributions.

During the year, our pensions and other post-retirement benefit schemes moved from being in a net deficit position of £953 million at 31 March 2020 to a net surplus position of £715 million at 31 March 2021. This was principally the result of actuarial gains on plan assets of £2.6 billion (as a result of higher investment returns), partly offset by actuarial losses on plan liabilities of £1.1 billion (reflecting lower discount rates from corporate bond yields and higher expectations for long-term RPI inflation) and exchange rate movements. As at 31 March 2021, the total UK and US assets and liabilities and the overall net IAS 19 (revised) accounting surplus (2019/20: deficit) is shown below. Further information can be found in note 25 to the financial statements.

Net pension and other post-retirement obligations

	UK	US	Total
Plan assets (£m)	14,680	9,708	24,388
Plan liabilities (£m)	(13,645)	(10,028)	(23,673)
Net surplus/(deficit) (£m)	1,035	(320)	715

As at 31 March 2021, we recognised £1,109 million of UK pension assets, £371 million of US pension assets and £267 million of US other post-retirement benefit plan assets.

In December 2020, the Trustees of the NGUKPS exchanged £0.8 billion (2020: £4.4 billion) of gilts for a buy-in transaction. This follows two similar arrangements entered into in the previous year. These policies provide bulk annuities in respect of some pensioner and dependant members of NGUKPS and were funded by existing assets. All policies are held by the Trustee. For each transaction, the pricing of the policies was highly competitive; however, under IAS 19 the methodology for calculating the value of the buy-ins (as an asset held by the pension plan) differs from the price paid. This resulted in the recognition of actuarial losses on purchase of £0.1 billion (2020: £0.7 billion), recorded within the consolidated statement of other comprehensive income.

Dividend

The Board has recommended an increase in the final dividend to 32.16p per ordinary share ($2.2812 per American Depository Share) which will be paid on 18 August 2021 to shareholders on the register of members as at 4 June 2021. If approved, this will bring the full year dividend to 49.16p per ordinary share, an increase of 1.2% over the 48.57p per ordinary share in respect of the financial year ended 31 March 2020. This is in line with the increase in average UK RPI inflation for the year ended 31 March 2021 as set out in our previous dividend policy. In March 2021, we reconfirmed our dividend policy, but with an amended aim of growing the ordinary dividend per share from 2021/22 at least in line with the rate of CPIH inflation each year.

At 31 March 2021, National Grid plc had £9.9 billion of distributable reserves, which is sufficient to cover more than four years of forecast Group dividends. If approved, the final dividend will absorb approximately £1,141 million of shareholders' funds. This year's dividend is covered approximately 1.2x by underlying earnings.

The Directors consider the Group's capital structure and dividend policy at least twice a year when proposing an interim and final dividend and aim to maintain distributable reserves that provide adequate cover for dividend payments.

New accounting standards

We did not adopt any new accounting standard in 2020/21. Amendments to certain existing accounting standards were adopted during the year, but these had no material impact on the Group's results or financial statement disclosures.

Post balance sheet events

In the period between 1 April 2021 and 19 May 2021, there have been no significant post balance sheet events.

Principal operations – UK

Our UK business performed well in 2020/21 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations.

Our UK performance

Measure	2020/21	2019/20	2018/19
Return on Equity (%)	**12.6**	12.4	12.4
Statutory operating profit (£m)	**1,364**	1,663	1,045
Underlying operating profit (£m)	**1,560**	1,576	1,433
Adjusted operating profit (£m)	**1,376**	1,668	1,318
RIIO-T1 customer savings (£m)	**120**	128	101

Capital expenditure (£m)	**1,248**	1,292	1,233
Asset growth (%)	**2.2**	3.8	3.6

Customer satisfaction: ET
(out of 10)
8.4
(2019/20: 8.2)

Customer satisfaction: ESO
(out of 10)
7.5
(2019/20: 7.6)

Customer satisfaction: GT
(out of 10)
8.2
(2019/20: 8.0)

Highlights

Our UK business performed well in 2020/21 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations.

Our safety ambition is to always do the right thing regarding safety. Our strategy is to be proactive in our safety management by engaging our leaders and employees and implementing a consistent and simple risk-based approach. To support this ambition, we are focusing more on leading indicators that measure our positive efforts on safety management to help prevent incidents, while continuing to track more traditional lagging indicators. Our Safety Survey results demonstrate that we have made excellent progress towards our safety ambition.

As at 31 March 2021, our LTIFR was 0.04. This is better than our UK target of <0.10 and is our best ever LTIFR performance. Our Gas Capital Delivery business worked nearly two years, over two million person hours of complex construction activity, without having an LTI. This outstanding result was driven by a relentless focus on the work we do and commitment to keeping one another safe.

Our operations during the year have taken place against a backdrop of responding to the global COVID-19 pandemic, ensuring that the UK business, at all levels, had the necessary information and safeguards in place. We have enabled our non-operational employees who can work from home to do so and ensured our operational teams are able to work in COVID-secure environments. Working with the government, Public Health England, our health care provider and trade unions, we protected the welfare and health of our workers while maintaining safe networks.

We installed living pods at our Warwick campus and colleagues in our Transmission Network Control Centre moved into the accommodation to minimise the risk of exposure to COVID-19 and to keep the country's power going during the pandemic.

We delivered a good year of returns, with a Return on Equity of 12.6%. Statutory operating profit and underlying operating profit were lower at £1,364 million and £1,560 million respectively.

Enable the energy transition for all

We have committed to reducing our direct emissions to net zero by 2050 and to increase our influence to support the overall industry-wide transition to a low-carbon future. We have developed solutions to enable the rollout of a strategic backbone for electric vehicles throughout the UK and are working in partnership with industry to develop CCUS solutions.

Our original RIIO-2 business plans were developed following our largest ever engagement exercise to date, with customers, industry stakeholders, businesses and household bill payers across the country. Our plans included investment to maintain network reliability and provide flexibility and optionality for the UK to achieve net zero greenhouse gas emissions by 2050. Final Determinations were published by Ofgem in December 2020 and we broadly accepted the majority of the package for the Electricity and Gas Transmission businesses. We have submitted a technical appeal to the Competition and Markets Authority (CMA) regarding Ofgem's proposed cost of equity and outperformance wedge. The CMA has given permission for our appeal on both points and expects to reach a decision later in 2021.

Deliver for our customers efficiently

We work with our customers to meet their needs and deliver successful outcomes for all parties. We were pleased to see continued improvement in our CSAT scores in our ET and GT businesses, achieving scores of 8.4 (2019/20: 8.2) and 8.2 (2019/20: 8.0) respectively. For the ESO, our CSAT score in 2020/21 was 7.5 (2019/20: 7.6).

Gas started flowing through our Feeder 9 pipeline under the Humber Estuary in December 2020. The pipeline is a vital piece of infrastructure, transporting around a quarter of UK gas supplies. It also entered the Guinness Book of Records as the world's longest hydraulically inserted pipeline at 4.96km. Ofgem is minded to approve the vast majority of the funding for our Peak East Visual Impact Provision project, subject to further consultation. This is a project to remove eight pylons and approximately 2km of existing overhead lines.

In November 2019, our ET business awarded a five-year framework agreement to a US power flow control technology company, Smart Wires. We will be the first electricity transmission utility in the world to use this technology. We are working with Smart Wires to install 48 SmartValve devices at three substations on five circuits on the electricity transmission network. This agreement will help to decarbonise the UK electricity network by enabling greater volumes of renewable energy to be efficiently transferred to customers using modular power flow control technology to increase power transfer capability by making better use of its existing network. This is done with minimal impact on communities and the environment. It allows National Grid to deliver more clean and affordable energy to customers, reflecting our efforts to lead the way in supporting net zero ambitions through harnessing innovative solutions.

Grow our organisational capability

We launched ConnectNow, a new innovative online application and project management system, streamlining the process of connection to the grid. We worked closely with customers to build and launch the one stop customer portal for electricity connection customers, providing a clear, intuitive, real-time interface whilst also providing transparency throughout their connection journey.

The Western Link, the submarine HVDC link between England and Scotland operated with our Joint Venture partner Scottish Power Transmission, transmitted 6,245 GWh of green energy with a total energy availability of 92%. The link was unavailable for 653.9 hours as a result of a single onshore transmission cable fault during February 2021. In January 2021, Ofgem announced that it had launched an investigation to review the performance of the Joint Venture in delivering the cable and examine potential breaches relating to the operation of the cable. We continue to fully engage with Ofgem in relation to the investigation.

Scan here to view our story

Green collar jobs: Faris Jaweed – Greening up the gas network

I'm part of the team working on the Gas Ten Year Statement. In it we discuss and set out how we intend to operate the gas transmission network over the next decade, which should lead to changes that will play a part in ensuring a safe, secure and sustainable energy future for Great Britain. It considers ways to use our assets to meet net zero – this is a major focus of the initiative.

You won't find many other careers that offer the same level of satisfaction while being incredibly interesting and challenging, and helping to create a cleaner energy UK.

Faris' green life changes: more cycling and less eating meat and fish.

Empower colleagues for great performance

The wellbeing of our workforce is important to us. 32% of our UK employees have undertaken mental health related training courses to date, an increase of 4% since last year.

Our ONE employee resource group (ERG) was awarded the title of Top Network Group at the 2020 Ethnicity Awards. ONE has been commended for its inclusion and diversity education and training, the many initiatives and events it has organised, and for growth of membership in a difficult year. We were also placed in the top 10 in the Outstanding Employer category. The awards are a prime example of the positive impact our ERGs have. Our Enabling ERG supported the Purple Light Up events, organised by our EmployAbility interns as part of a global effort to highlight the economic contribution of employees with disabilities.

Looking ahead

The Energy White Paper will be critical to providing further policy detail needed to ensure we can get on with the delivery of net zero. We are pleased to see the progression on what is needed to deliver the important ambitions on offshore wind, interconnectors, hydrogen, CCUS heat and transport decarbonisation: delivering ambitious electricity commitments through a commitment to deliver 40 GW of offshore wind by 2030, including 1 GW of floating wind; investing £1 billion in state-of-the-art carbon capture storage by 2030; and kick-starting the hydrogen economy by working with industry to aim for 5 GW of production by 2030, backed up by a new £240m net zero Hydrogen Fund for low-carbon hydrogen production.

We were pleased to receive £9 million of funding through Ofgem's Network Innovation Competition for our FutureGrid programme, which will test the possibilities of using hydrogen on the gas transmission system. The programme aims to build a hydrogen test facility, carry out initial hydrogen testing, explore ways to separate hydrogen from natural gas and demonstrate the impact of hydrogen on compressors.

On 18 March 2021, National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals and that it will commence a process later this year for the sale of a majority stake in National Grid Gas plc, the owner of the national gas transmission system, which would be expected to complete in the second half of 2022.

national**gridESO**

As the legally separate Electricity System Operator (ESO) for Great Britain, we are in a privileged position at the heart of the energy system, balancing electricity supply and demand second by second.

In response to COVID-19, we took a number of measures to protect our control room colleagues in critical roles, introducing new layouts, enforcing social distancing, adding new hygiene measures and new shift patterns with teams permanently split across different sites. Our non-operational colleagues have adapted to working remotely and these steps have further increased the resilience of our operations, meaning that throughout the pandemic we have been able to protect our colleagues and fulfil our critical role.

Societal changes due to COVID-19, coinciding with 2020 having the sunniest spring on record in the UK, led to significant impacts on electricity in Great Britain. At times, demand fell to 20% below expected levels and zero-carbon sources have made up their largest ever share of the power mix, meaning keeping the power system stable required more interventions than ever before. High levels of generation and low demand can raise the risk of oversupply and reduce the system's resilience to sudden changes in frequency. To overcome these challenges, we developed a series of new electricity market services to help balance the system. In May 2020, we launched Optional Downward Flexibility Management – a temporary marketplace to manage reduced demand and in October 2020, Dynamic Containment went live – a new fast frequency response service. In collaboration with industry, we made progress on our Pathfinder projects, identifying how we can replace the voltage, stability and constraint management services provided by fossil fuel generation with new, greener approaches.

2020 was the greenest year on record for the electricity system, with average carbon intensity reaching a new low. Great Britain saw its longest run of generating electricity without using coal since the industrial revolution, almost 68 days (1,630 hours) between 10 April and 16 June 2020. May 2020 was the greenest month on record with average carbon intensity of 143 gCO_2/kWh and the lowest carbon intensity ever seen on the system – 46 gCO_2/kWh on 24 May 2020. The record for highest ever level of wind generation was broken on 13 February 2021 at 17.5 GW, and on 26 August 2020, wind contributed to 59.9% of the electricity mix, the highest ever. On 20 April 2020, solar power set new records for its highest ever level of generation (9.7 GW) and its highest share in the mix (34%).

We are pleased that Ofgem recognised our RIIO-2 business plan as ambitious and agreed to fund us for the activities we want to deliver, approving £504m (98%) of the costs we set out for the first two years. Ofgem has listened to our feedback and our stakeholders' feedback and made changes to the regulatory framework that will set us up to transform our role, deliver our ambitious plans and facilitate the transition to a zero-carbon electricity system. Over the five-year RIIO-2 period, the activities set out in our business plan will generate net benefits of around £2 billion for consumers, lowering average annual consumer bills by around £3.

On 21 January 2021, Ofgem published its Review of GB energy system operation. We are working closely with the government, regulator and industry to explore what changes will be needed to achieve net zero.

Following the closure of the Energy Emergency Executive Committee and Ofgem investigations into the events of 9 August 2019, the ESO has been working to deliver the recommendations outlined by both reports.

In 2017, the ESO did not meet its obligation to provide accurate and unbiased 7-day-ahead electricity demand forecasts. Following an investigation by Ofgem, the ESO made a payment of £1.5 million into Ofgem's voluntary redress fund to support vulnerable energy consumers and innovation.

Principal operations – US

In the US, in 2020/21 we performed well despite the widespread effects of COVID-19, the political divide and social unrest transpiring across the country. We renewed our focus on safety and storm response and progressed toward a clean energy future.

Our US performance

Measure	2020/21	2019/20	2018/19
Return on Equity (£m)	**7.2**	9.3	8.8
Statutory operating profit (£m)	**1,344**	880	1,425
Underlying operating profit (£m)	**1,486**	1,636	1,594
Adjusted operating profit (£m)	**1,313**	1,397	1,724

Capital expenditure (£m)	**3,223**	3,228	2,650
Asset growth (%)	**7.8**	12.2	9.2
Rate base* (£m)	**20,041**	20,644	17,565

* US rate base is as previously reported at historical exchange rates.

US Residential – Customer Trust Advice

66.2%

(2019/20: 59.8%)

Highlights

In the US, in 2020/21 we performed well despite the widespread effects of COVID-19, the political divide and social unrest transpiring across the country. We renewed our focus on safety and storm response, progressed toward a clean energy future, set goals for operating as a responsible business, and reinvested in an inclusive culture and a fully diverse workforce.

We met the challenge of enabling our employees to continue working safely during the pandemic, while providing the energy services our customers depend upon. Implementing COVID-19 safety procedures, technology advances and employee guidance helped employees navigate safely through these unprecedented times. A safe work guide and weekly severity level summaries were provided to safely continue operations throughout the pandemic. Technology improvements were made by deploying programmes like Microsoft Teams, Zscaler and document sharing, which enabled collaborative work environments from the safety of our homes. While many organisations decided not to proceed with their internship and hiring programmes due to the pandemic, we found innovative ways to make virtual hiring, onboarding and internships work.

COVID-19 compelled us to provide more support to the communities we serve. National Grid and The National Grid Foundation collectively provided nearly $3 million in COVID-19 relief throughout the communities where we live and work. We were also able to stimulate the local economy through our Manufacturing Productivity Program, which provided funding to companies across New York helping fight the virus. By awarding over $100,000 in grants to various New York manufacturers like Applied DNA Sciences and Precision Valve and Automation, these producers were able to retool their businesses in order to produce critical equipment, therapeutics and diagnostics for health care workers and patients.

We have experienced some of the most impactful storms we have seen in almost 20 years. Hurricane Isaias and the October Micro-Burst/Tornado/Derecho took their place on the US National Grid Top Ten storm list as some of the most severe weather events to affect our customers. Even after taking into account COVID-19 adjustments made early on to accommodate the Center for Disease Control (CDC) and other restrictions, our storm response performance has remained focused and steady. Our efforts around recovery and response continued to be recognised across the industry, receiving multiple awards in 2020 from the Edison Electric Institute and the North Atlantic Mutual Assistance Group.

Safety continues to be a critical pillar of our daily operations and we are fully committed to the wellbeing and safety of our workforce and customers alike. In order to conduct operations safely during the pandemic, we had to adjust early on to comply with CDC guidelines and other restrictions. We also closely monitored each state's COVID-19 plans, rules, restrictions and re-opening guidelines as they directly impact our efforts as an essential workforce. A tragic incident took the life of one of our contractor employees in November. Safety is our most important responsibility and incidents like this reminded us to continue striving to 'find a better way' to improve our safety culture. We encourage transparency and discussion around incidents that occur both in the US and UK and use these lessons as an opportunity to make the work environment safer. As of 31 March 2021, our LTIFR was 0.12. We have focused safety culture transformation programmes to engage our workers on hazard and risk awareness, and implemented controls to prevent safety incidents. We have asked our employees and contractors to direct their attention to the safety of themselves and their colleagues every day.

We have identified specific actions in the US business to support us reaching net zero by 2050. These are: reducing demand through energy efficiency and demand response; decarbonising the gas network with renewable natural gas and hydrogen; reducing methane emissions from our own gas network while working with the industry to reduce emissions through the entire value chain; integrating innovative technologies to decarbonise heat; interconnecting large-scale renewables with a 21st century grid; enabling and optimising distributed generation; utilising storage; eliminating SF6 emissions; advancing clean transportation; and investing in large-scale carbon management.

Enable the energy transition for all

Ensuring more electric vehicles are on the road is a key part of our net zero by 2050 plan, because we recognise that transport is the single biggest source of greenhouse gas emissions in our US service territory. That is why we will convert to a 100% electric fleet by 2030 for our light-duty vehicles while also pursuing the replacement of our medium- and heavy-duty vehicles with zero-carbon alternatives.

In late 2020, we completed a first-of-its-kind distributed generation interconnection cluster study to evaluate and assess the impacts of unprecedented solar saturation on the network in areas of New England. The study identified the upgrades required to ensure reliability of the system, and we proposed an innovative cost allocation proposal to potentially ease the burden on solar developers in Massachusetts. To date, the Company has interconnected over 2,000 MW of solar across its Northeast US service territory.

We have continued to advance efforts to decarbonise our gas network for a clean energy future. Our belief is that hydrogen can transform the energy industry, and it is time to start the groundwork to integrate hydrogen into the overall energy system – which is why, in New York, we are excited to be participating in a hydrogen blending study, in conjunction with NYSERDA and The Stony Brook Institute. The project will explore the performance and use of our existing gas infrastructure to integrate and store renewable hydrogen into our system. We have also recently helped secure over $12 million in funding from the US Department of Energy (DOE) to facilitate research and accelerate the potential of hydrogen blending. In addition, in 2020/21 we invested $1.77 billion in the gas infrastructure across our US service area, including the replacement of more than 350 miles (563 kilometres) of leak-prone pipe.

Deliver for our customers efficiently

Our customers are at the heart of everything we do, and the Chief Customer Officer role is crucial to our continued success as a business. In November, we appointed our new Chief Customer Officer due to her strong track record of improving and increasing customer satisfaction from the fourth to first quartile. Our new Chief Customer Officer's expertise in leading customer functions at regulated and deregulated energy companies will help make it easier for our customers to work with us.

We conducted more than 32,000 no-cost virtual home energy assessments in New England when in-person home energy assessments were suspended due to COVID-19. Through video chats, phone calls and digital pictures to assess areas for savings opportunities, energy specialists were able to provide energy-saving guidance safely and remotely. After the completed assessment, customers were sent energy-saving products like low-flow shower heads and smart plugs. They were also eligible for offers like 75% or more off approved insulation and air sealing. Our new virtual home assessments allowed us to safely provide this valuable energy efficiency programme to assist our customers with energy savings that are needed now more than ever.

In November, we filed a proposal for review with the Massachusetts Department of Public Utilities to increase gas distribution rates for our Massachusetts gas customers. The total impact of $139 million would be spread across our customer base. This rate case is still underway and if approved, these new rates would be effective from 1 October 2021. However, to avoid customer confusion and billing hold, we will be changing the rates charged to customers on 1 November 2021 to align with our gas rate changes.

Our upstate New York three-year rate agreement expired in April 2021 and in July 2020, we submitted a request for new delivery prices beginning in July 2021. We also proposed up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers as well as businesses that are struggling because of the financial impact of the pandemic. This rate case is still underway.

Grow our organisational capability

Our Customer Experience Products team recently implemented several upgrades to our customer digital channels. My Business Account is an enhanced customer-facing digital billing and payment platform for our large commercial and industrial customers. This platform was built to support our customers to self-serve through digital billing and payment programmes. It provides interactive historical cost comparisons, billing snapshots and allows for bulk payments. This platform went from a mere concept on paper to production in less than a year and is now supporting over 37,000 accounts within its pilot phase.

Our Outage Communications programme has made it easier for customers to check electric outages online or through text message. For Hurricane Isaias, we saw a fundamental shift to digital with 61% of customers reporting and checking on the status of outages online or through text. This reduced contact centre volume by 75% and resulted in higher Outage Communications Satisfaction scores for customers receiving outage information through this programme. These scores are currently above target for 2020/21, with nearly a 10-point increase over 2019/20.

Empower colleagues for great performance

During the early summer of 2020, we were reminded that racism and intolerance still exists throughout the US. This was an opportunity for companies across the country, including National Grid, to take a hard look at how we can recommit ourselves to pursuing long-lasting change. Since then, we have created an Inclusion and Diversity Action Plan with a goal of creating a more inclusive environment for our colleagues, our customers, and the communities where we live and work.

Immediate actions we've taken in the US have been providing increased access to racial dialogue sessions and training for all colleagues, as well as committing to ongoing transparency on diversity metrics. We have dedicated additional full-time resources to support our inclusion and diversity efforts, which included appointing our new Chief Diversity Officer, based in the US. In addition, we've begun to set specific and sustainable targets for diversity across the organisation for the next 5–10 years in order to achieve the inclusive culture and diversity we seek.

In November, we officially unveiled our Grid for Good initiative, which is designed to increase the social mobility and employment opportunities for young people from underserved communities across our regions. Through the Grid for Good programme, colleague volunteers work with young people aged 16 to 24 and teach them basic business skills and technical skills needed in today's competitive job market.

Our Enterprise Change Network was also launched, where colleagues take on leadership roles, creating a feedback loop of all colleague voices, and identifying opportunities for colleague engagement.

Scan here to view our story

Green collar jobs: Ryan Cote – acting to improve the environment

I'm a Senior Program Manager for electric transportation and my role is all about encouraging more people to drive electric in Rhode Island.

Right now, I oversee our Fleet Advisory Services Program that provides business customers with a roadmap on how to electrify their fleets. I also manage a residential 'Off-Peak Charging Rebate' study that incentivises participants to charge their electric vehicles (EVs) at night and I support the roll-out of our EV charging station infrastructure.

Helping our customers realise these benefits and making it easier for people to travel emission-free is at the heart of my green collar job.

Ryan's green life
When I'm not working, I try to promote EVs to friends and family. My family and I recycle whenever possible, have installed all LEDs and smart thermostats at home, and are as efficient as possible in our day-to-day activities.

This group drives awareness and understanding of any changes and supports the Company's purpose-driven journey on behalf of our customers.

Looking ahead

On 18 March, National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals. In parallel, PPL expressed its interest to expand its presence in the US, which led to an agreed sale of NECO, our Rhode Island business, which, conditional on completion of the WPD Acquisition and certain US regulatory approvals, is expected to complete in the first quarter of calendar year 2022. NECO includes our electricity transmission and distribution operations and our gas distribution operations in the state. We are confident that our Rhode Island colleagues, customers, communities and regulators will be well served by PPL. The US remains a critical growth driver of the business and we will continue to make investments in the US that will get us closer to a clean, fair, affordable energy future.

Future efforts to decarbonise our gas network for a clean energy future include being selected as co-participant with the New York Power Authority to build the Northern New York Priority Transmission Project. This project will lead to emissions reductions of 1.2 million tonnes of CO_2 and save $447 million in transmission congestion costs. The project is expected to begin construction next year and be completed by the end of 2025.

The new US operational model is essentially a move to a stronger jurisdictional structure so that we can simplify our business with clear accountabilities and goals aligned to the needs of each region. This change will help us deliver on our vision of achieving a clean, fair, affordable energy future for customers. In addition, by executing our net zero by 2050 Plan, we are doing our part to create a better world for our customers, communities, and for our children who inherit it.

National Grid Ventures and other activities

NGV and other activities performed well despite managing the impacts of COVID-19 and the Brexit transition. We maintained our focus on safety and asset reliability, while developing and delivering new clean energy projects to support the energy transition across the US and UK.

Statutory operating profit
£187m
(2019/20: £237m)

Underlying operating profit
£237m
(2019/20: £242m)

Adjusted operating profit
£237m
(2019/20: £242m)

Interconnector capacity by 2024
7.8 GW

LNG storage capacity by 2025
1.2m cubic metres

Highlights

This section relates to NGV, non-regulated businesses and other commercial operations not included within the business segments.

NGV, which operates separately from our core regulated units, is focused on investment in a broad range of energy businesses that operate in competitive markets across the UK and US. Its portfolio includes electricity interconnectors, LNG storage and regasification, energy metering, large-scale renewable generation and competitive transmission. Our UK metering business will form part of the GT sale process described on page 3.

Our other activities comprise NGP, the venture investment and innovation arm of National Grid plc, as well as UK property, US non-regulated businesses, LNG operations and corporate costs.

Despite challenges presented by COVID-19 in the US and UK, NGV businesses performed well again in 2020/21, including the launch of the IFA2 subsea interconnector between the UK and France, and the start of construction of the Prairie Wolf Solar project in Illinois. NGV also successfully implemented alternative trading arrangements to ensure our interconnector portfolio continued to operate following the UK's exit from the EU's Internal Energy Market as part of Brexit.

The safety and wellbeing of colleagues continues to be a key priority across NGV. As at 31 March 2021, NGV's LTIFR was 0.15. NGV LTIFR has risen from 0.05 in 2019/20, due to three minor site incidents, and the NGV business is working to bring this rate in line with the Group target of 0.10.

In aggregate, the NGV and other segment delivered £187 million of statutory operating profit, £237 million underlying operating profit and accounted for £576 million of continuing investment in 2020/21.

Enable the energy transition for all

NGV plays an important role for the National Grid Group in developing, constructing, operating and investing in infrastructure to support the energy transition in both the UK and the US.

In the UK, NGV is the leading developer and operator of electricity interconnectors, which are high-voltage subsea electricity cables that connect the UK with neighbouring markets. They allow the UK to trade excess power, such as renewable energy created by the sun, wind and water, with other European countries. The UK government in its Energy White Paper has set an ambition for 18 GW of flexible interconnector capacity by 2030 to enable the integration of renewables. NGV already has interconnectors linking the UK to France, Belgium and the Netherlands and each year they power five million homes with clean energy. By 2030, 90% of the energy imported by NGV's interconnectors will be from zero-carbon energy sources.

NGV is part of two consortia developing CO_2 transportation and storage technology. The first consortium, Zero Carbon Humber, is developing what could be the world's first zero-carbon industrial cluster. In addition, NGV is part of the Northern Endurance Partnership, which aims to transport carbon emissions from the Humber and Teesside industrial clusters for storage deep under the Southern North Sea. Combined, these projects can reduce UK industrial emissions up to 40% and protect up to 55,000 jobs across the Humber region, while making the UK a world leader in CCUS.

In the US, NGV completed the launch of its new US large-scale renewables brand, National Grid Renewables, which includes the renewables development company formerly known as Geronimo. Project highlights include the start of construction for the 200 MW Prairie Wolf Solar Project in Illinois, as well as the completion of construction of two portfolios of smaller solar projects – the 40 MW MiSolar Portfolio in Michigan and the 15 MW Nordic Solar III Portfolio in Minneapolis, which brings the Nordic solar portfolio to approximately 70 MW in total.

The National Grid Renewables team achieved a record year of origination activity in 2020/21, with over 2 GW of signed contracts, including power purchase agreements with leading utility and corporate buyers, as well as project sale agreements to enable our utility partners to provide renewable energy for their customers, positioning the business for growth in the years ahead. The business also drove strong performance for its operating wind farms in SPP (Southwest Power Pool) and solar projects in MISO (Midcontinent Independent System Operator), which is now held in a joint venture and operated by National Grid.

NGV is part owner of New York Transco, which operates electricity transmission assets that save money for electricity consumers and offer better access to clean energy, supporting the retirement of traditional power generation. The assets include the Ramapo to Rock Tavern 345 kV Line, Frasers-Coopers Corner 345 kV Line and Staten Island Unbottling. NGV is also a 50-50 joint venture partner with NextEra Energy Resources in two battery energy storage systems on Long Island. These include two 5 MW, 40 MWh battery energy storage systems in East Hampton and Montauk, New York. The batteries, which serve as an alternative to building new transmission or fossil-fired peaking capacity, enable energy peak-shaving during the busy summer months on the eastern end of Long Island.

National Grid established NGP to 'disrupt itself' and advance the energy systems of tomorrow. This includes incubating and investing in startups at the intersection of energy and emerging tech; launching new businesses from scratch; business development; and infusing an entrepreneurial culture into National Grid. NGP's portfolio as at 31 March 2021 comprises 23 companies and 4 fund investments at a fair value of £178 million.

Deliver for our customers efficiently

In 2020/21, a number of COVID-19 measures were put in place to ensure the continued availability of our assets for our customers across the UK and US, while ensuring a safe environment for our colleagues.

In the UK, NGV's interconnector portfolio comprises 5 GW of operational capacity. In January 2021, National Grid and France's Réseau de Transport d'Electricité (RTE) started commercial operations on IFA2, the second interconnector connecting France and Great Britain. The 1 GW HVDC cable stretches 149 miles (240 kilometres) across the English Channel. The England France interconnector (IFA), the first interconnector to France, is a 2 GW HVDC cable with ownership also shared between National Grid and RTE. In 2020/21, IFA's availability was 95.4%. BritNed is an independent joint venture between National Grid and TenneT, the Dutch transmission system operator. It owns and operates a 1 GW HVDC link between GB and the Netherlands. In 2020/21, BritNed's availability was 75.1%. BritNed suffered two offshore cable faults resulting in the asset being offline from December to February and again in March. Nemo Link is an independent joint venture between National Grid and Elia, the Belgian transmission system operator. It owns and operates a 1 GW HVDC link between GB and Belgium. In 2020/21, Nemo Link's availability was 99.2%.

NGV's Brexit contingency planning ensured that its customers were able to continue to buy interconnector capacity following the completion of the Brexit transition period and the UK's exit from Europe's internal energy market on 31 December 2020.

NGV's Grain LNG is one of three LNG importation facilities in the UK. It operates under long-term take or pay contracts with customers and provides importation services of ship berthing, temporary storage, ship reloading and regasification into the NTS. Utilisation of terminal capacity was 20.5% in 2020/21, down from 30.8% in 2019/20. Grain LNG's road tanker loading also offers the UK's transport and off-grid industrial sector a more environmentally friendly alternative to diesel or heavy fuel oil. The facility allows tanker operators to load and transport LNG in bulk across the UK via road or rail.

National Grid Metering (NGM) provides installation and maintenance services to energy suppliers in the UK's regulated market. It maintains an asset base of around 8.4 million domestic, industrial and commercial meters, down from 8.8 million in 2019/20.

In the US, NGV is a part-owner of Millennium Pipeline, which provides consumers in the northeastern US with additional natural gas infrastructure to meet growing consumer demand for cleaner and more reliable energy. It is strategically positioned to serve utility and power plant loads across New York State and into New England.

New York Transco continued to progress its New York Energy Solution (NYES) project, which was selected by the New York Independent System Operator to provide transmission upgrades that will relieve congestion of New York's bulk electric power system, while enhancing reliability and facilitating upstate clean energy resources to the downstate demand centres. The upgrades will take place on an existing 54.5-mile (88-kilometre) utility corridor and on utility-owned land. New York Transco has started construction on the NYES project, which remains on track for a late 2023 service date.

National Grid Property deals with the management and regeneration of National Grid's brownfield surplus estate in the UK. The specialist team works with our communities to return these redundant sites back into beneficial use to provide new homes and employment opportunities across the UK. In 2020/21, National Grid Property disposed of 41 sites and exchanged contracts on a further four land sales, to facilitate the delivery of thousands of new homes across the UK. Its joint venture with Berkeley Group, called St William Homes, has entered its seventh year and recorded a second year of profit in 2020/21 despite the challenges posed by COVID-19. Around 7,000 homes are already under construction across London and the South East.

Grow our organisational capability

NGV businesses introduced a number of measures to grow organisational capability in 2020/21. NGV's interconnector team implemented a new organisational structure to drive value across what will be a portfolio of six interconnectors by 2023/24. National Grid Metering digitised and automated key operational processes, including the deployment of new field engineering commmunications technology. It also entered long-term partnerships for the delivery of field engineering works to provide better service levels for its customers across the UK.

Empower colleagues for great performance

As the COVID-19 pandemic hit, organisations needed to quickly develop new ways of working and support the wellbeing of their colleagues. NGV developed a hub to provide its people across the US and UK with self-help material and signposts to improve confidence, wellbeing and emotional health. The new virtual wellbeing hub draws on a wealth of internal and external resources to support colleagues communicate more effectively with each other, while also providing a range of tools to take better care of themselves and their colleagues.

Looking ahead

In the UK, NGV will grow its interconnector portfolio by 2.8 GW in the next three years, with new subsea power links to Norway and Denmark. North Sea Link (NSL) will connect Great Britain and Norway. Developed between National Grid and the Norwegian transmission system operator Statnett, NSL will be 447 miles (719 kilometres). The 1.4 GW link is expected to be operational in 2021/22. Construction is also underway

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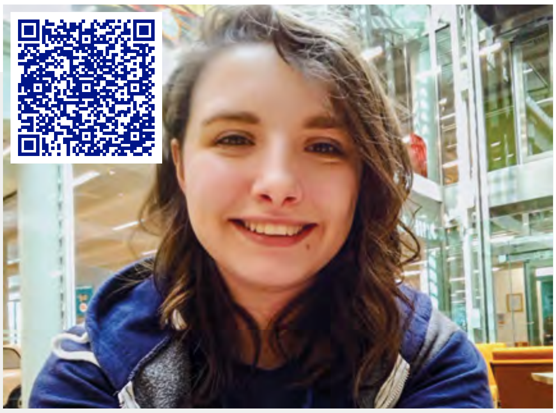


Louise Guthrie – engineering for net zero

I'm a net zero Strategy Lead at National Grid Ventures. Engineering runs in my family – my dad, both grandads and twin brother are all engineers while our younger brother has just started an engineering degree.

There's never been a more exciting time to work in energy, now that we're moving away from traditional processes, looking to the future and actively seeking out new, environmentally conscious technologies.

In my last graduate placement I worked on the Viking Link interconnector project, one of the world's longest electricity interconnectors from Denmark to the UK. In my current job, I'm formulating plans to hit renewable energy targets for 2030 and 2050. One day, I'd like my legacy to be that I've been a leader in an environmentally conscious company – to be able to think 'I helped solve carbon emissions'.

on the Viking Link interconnector. Developed together with Danish transmission system operator Energinet, Viking Link will be a 1.4 GW 475-mile (764-kilometre) long subsea link connecting Great Britain and Denmark. NGV will have 7.8 GW of operational interconnector capacity when Viking Link becomes operational in 2023/24.

In 2020, NGV's Grain LNG and Qatar Terminal Limited (QTL), a subsidiary of Qatar Petroleum, signed a 25-year agreement that will provide the Qatari company with storage and redelivery capacity at Grain LNG from 2025. Grain LNG will expand its storage capacity from 1 million m^3 to 1.2 million m^3 by 2025.

NGV will continue to progress the development of CCUS in the UK through its participation in the Zero Carbon Humber project and the Northern Endurance Partnership. NGV has also signed an agreement with TenneT to develop a vision for multi-purpose interconnectors, which aim to connect clusters of offshore wind farms to neighbouring markets simultaneously with interconnectors.

In the US, National Grid Renewables plans the start of commercial operations for several large-scale renewable energy projects across the country in 2021/22, including the Prairie Wolf Solar Project, as well as the construction of other projects.

NGV and RWE Renewables, one of the world's leading renewable energy companies, signed a joint venture partnership agreement to explore the development of offshore wind projects in the coastal region of the Northeast US. Additionally, NGV is supporting the Revolution Wind offshore wind project, which is being developed by Ørsted and Eversource. Between the two initiatives, NGV is now working with the top two offshore wind developers in the world.

St William, our joint venture with The Berkeley Group, has completed the construction of around 230 new homes across London. St William continues to grow and is expected to deliver around 20,000 new homes across London and the South East. In March 2020, National Grid Property entered into a new joint venture agreement with Places for People, one of the largest regeneration, development, and property management companies in the UK and a registered provider of affordable housing. As part of the venture, called National Places, National Grid Property has identified the first 12 sites that can deliver much-needed housing across the UK.

Our stakeholders

The Board recognises the responsibility to all our different but interrelated stakeholder groups and wider society. We endeavour to ascertain the interests of our stakeholders and reflect them in the decisions that we make. We recognise that in balancing those different perspectives, it isn't always possible to achieve each stakeholder's preferred outcome and that consideration of each stakeholder group varies depending on the subject in question.

You can find out more about our key stakeholders and their interests, how we engaged with them and how this influenced decision-making in our section 172(1) statement that follows. For more details on how our Board operates, including the matters it discussed and debated during the year, see pages 76 – 77.

Engagement with our stakeholders

All of our Directors are briefed on their duties as set out in the Companies Act 2006 during the onboarding process, including their responsibility to promote the success of the Company in accordance with section 172.

In doing so, our Directors must have regard to our stakeholders and the other matters set out in section 172. Pages 46 – 51 comprise our section 172(1) statement, which describes how the Directors have had regard to these matters when performing their duty. In line with the Companies Act 2006, below we provide a high-level summary of the matters of importance to our stakeholders and how our Directors engaged with them and had regard to their interests when setting the Company's strategy and taking decisions concerning the business.

We recognise that effective engagement with a broad range of our stakeholders is essential to the long-term success of the business and we aim to create value for our stakeholders every day by maintaining levels of business conduct that are aligned to our values and our purpose.

Further information on our values can be found on page 18.

Our approach

Our approach to stakeholder engagement has continued in the same format we reported last year as we believe this remains effective; however, it is also shaped by the types of decisions and discussions that need to be made during the year.

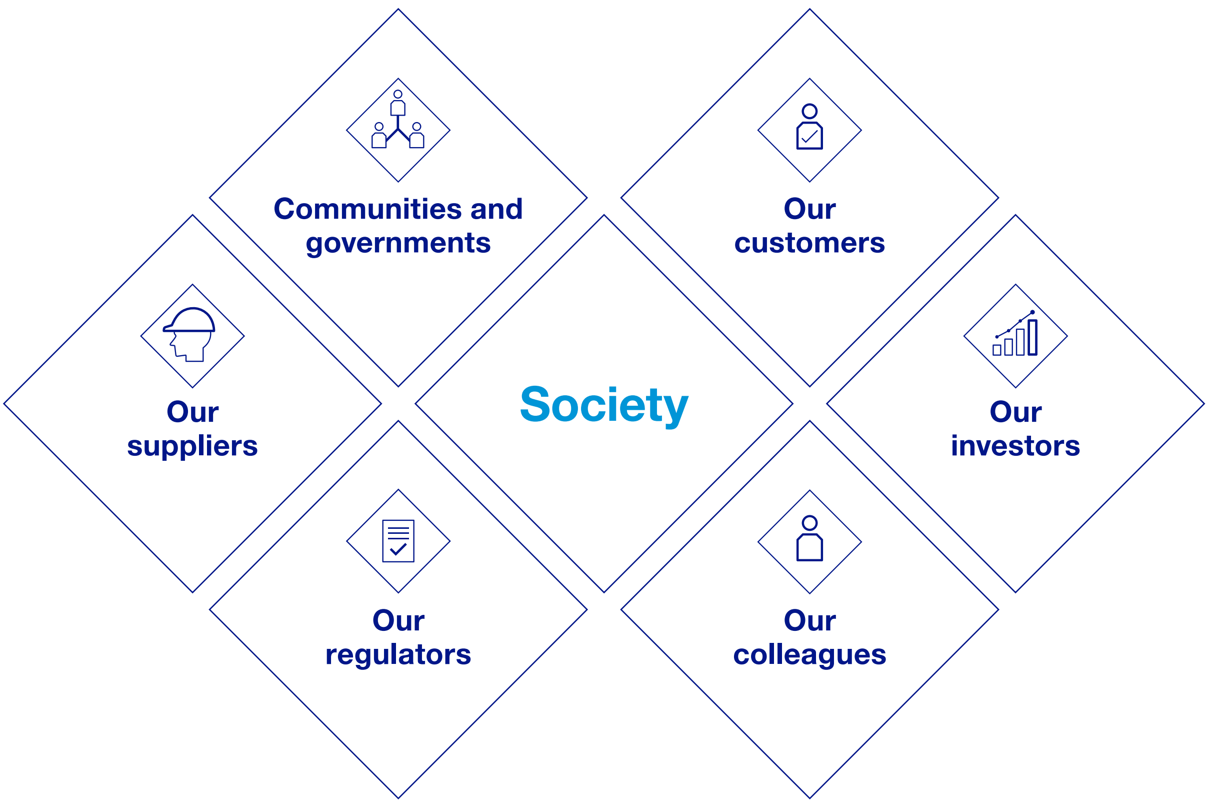
Reporting and monitoring: our engagement has continued to build on existing reporting mechanisms, whereby information on stakeholder interests is collated at a business level, so that informed decisions can be made in the most appropriate forum. An overview of these developments and business-level decisions is reported on a regular basis to the Board or a Board Committee. The cadence of these reports to the Board is considered bi-annually as part of the forward business review by the Chairman, Chief Executive and Group General Counsel & Company Secretary to ensure that sufficient consideration is given to the most pertinent issues and impacted stakeholders.

Direct engagement: our approach to direct engagement has adapted this year due to the COVID-19 pandemic. Although most of our engagement with key stakeholders is carried out by the management teams, the Board engages directly with shareholders, colleagues and investors, and engagement this year has taken place virtually. This has enabled the Non-executive Directors in particular to gain direct exposure to additional business areas and a broader cross section of colleagues. Further information can be found on page 79.

Section 172 statement

Although we recognise there are many ways for the Directors to promote the success of the Company, our section 172(1) statement focuses on stakeholder engagement undertaken this year. On these pages, we have grouped our stakeholders into six categories that the Board considers key. We note that the categories and examples included are not exhaustive in summarising all of our stakeholder considerations. We have integrated our reporting on how these key stakeholders have been considered throughout this report, and our statement should be read in conjunction with the following sections:

- information on our key stakeholders and why they are important to us, see pages 4 – 7;
- matters considered by the Board, see pages 76 – 77; and
- our response to COVID-19, see pages 8 – 9.



COVID-19

The COVID-19 pandemic has impacted on all of our stakeholders. Further information on stakeholder impact and how we have responded as a Company can be found on pages 8 – 9.

Stakeholder group	Stakeholder engagement	Looking ahead
Investors	Having stress-tested the finances of the Company against a number of potential COVID-19 scenarios throughout the year, the Board recommended a final dividend for 2019/20 and interim dividend for 2020/21 in line with its policy. The Finance Committee has held ad hoc meetings to consider the short- and longer-term liquidity of the Company in a range of different COVID-19-related scenarios. Following some delays during the early stages of the pandemic, the Company delivered on its substantial investment programme by investing £5.047 billion across our networks. The Board recognises the importance of the AGM as an opportunity to engage with shareholders. However, due to the government restrictions in place as at the date of the meetings, both the 2020 AGM and the General Meeting in April 2021 took place virtually. Shareholders were invited to watch a live webcast, which included a business presentation from the Chairman and CEO and were able to submit questions via an online portal in advance of the meeting. A full transcript of the Q&As for both the 2020 AGM and April 2021 General Meeting are available to view on our website.	We have renegotiated and/or extended our debt facilities to maintain strong liquidity over the next few years. The Company has now confirmed a policy of growing the dividend per share annually in line with CPIH. We are encouraging shareholders not to attend the 2021 AGM due to the unpredictable circumstances of the COVID-19 restrictions easing. Instead we encourage shareholders to participate via Proxy and to pre-register questions via our website. This year we are seeking shareholder approval to permit hybrid meetings.
Colleagues	From the outset our focus has been on keeping colleagues safe, equipping them well and providing regular communication, whether from senior leadership or through other channels, on the actions being taken. The early stages of the pandemic saw the rapid roll-out of Zscaler and Microsoft Teams to support colleagues working remotely, and we ensured key workers going out on site during lockdown to keep gas and electricity flowing benefitted from enhanced safety protocols. The Company has enhanced mental health programmes and increased employee engagement, for example with virtual wellbeing sessions to minimise any strain caused by virtual working. No pay reductions, furlough or redundancies were implemented for a number of months. Absenteeism as a result of COVID-19 has remained within the norms for UK and US geographies. Employee pulse surveys were carried out to gauge sentiment of employees during the pandemic. The pulse survey showed that 90% of respondents felt supported by team members with 81% confirming that they had the necessary resources in place to do their job properly. 86% felt that the Company shows care and concern for its employees, which represented a 29% increase since the full annual engagement survey carried out pre-pandemic. Colleagues highlighted that further information would be helpful on managing workload while balancing caring responsibilities. The Company has since adopted a flexible working hours policy. While many organisations decided not to carry on internship and hiring programmes due to the pandemic, we found innovative ways to make virtual hiring, onboarding and internships work.	We are monitoring progress of how the Company can accommodate employees returning safely to offices, and how we can build on some of the positive changes in our culture and ways of working as the restrictions are lifted again. Our communications confirm our support for colleagues to take up vaccination, but we recognise there could be circumstances, for example medical or religious reasons, where this is not possible or practicable. Further information on colleague engagement can be found on page 79.
Communities	Our employees have been supporting our communities by volunteering and providing their time and expertise to support charities and the most vulnerable. As part of this we have set up Grid for Good to help play our part in addressing the effects of the economic downturn in the UK and US which has seen youth unemployment double in the wake of the pandemic. In total, National Grid has made donations of £400,000 to National Emergency Fund and £183,000 to Trussell Trust UK. In addition, NGV has made a £100,000 donation to University Hospitals Birmingham for 400 tablet devices. We have provided more than $760,000 of funding in economic development grants to seven Western New York initiatives to grow the regional economy after the COVID-19 pandemic. Financial donations have been made in response to concerns received, which have helped to support hunger relief and human services for people in need and struggling due to the impacts of the pandemic. National Grid US continued to give back to the community, donating a further $100,000 to Feeding America's Hunger Action Month. This was a partnership with Feeding America, who support over 45 food banks across Massachusetts, New York and Rhode Island and is an example of the Company's ongoing efforts to support local communities. More than $2 million in charitable donations has been given in the US since the pandemic began.	National Grid was one of 200 signatories to an open letter from UK business leaders to government calling for the alignment of economic recovery plans with the UK's wider environmental and climate goals, including a quote from John Pettigrew calling for 100,000 jobs to be created in energy sector as we work to net zero. NGP became an official investor partner in 2020 Clean Fight New York with the aim of supporting clean energy startups with goals of building back better after COVID-19 and providing clean energy jobs for the region.
Customers, regulators & suppliers	Throughout the pandemic, the Company has considered ways to help customers manage their bills. In the US we suspended our debt collection and customer terminations resulting in lower customer collections and additional provisioning for doubtful debts. As part of our upstate New York rate plan filing for new delivery prices beginning in July 2021, we proposed up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers as well as businesses that are struggling because of the financial impact of the pandemic. Our response to the COVID-19 pandemic has led to measurable improvements in customer satisfaction. The Cogent Syndicated 2020 Report, a nationally syndicated survey of 140 US utilities' customers scored us 7.22 on a 10-point scale on our response to the pandemic, specifically ranking us fifth out of 25 large electric/combination eastern US utilities. In the UK, we actively supported Ofgem's measures to protect customers by relaxing network charge payment terms for suppliers and shippers facing cash flow challenges as a result of COVID-19. The procurement team have kept in regular contact with our critical suppliers to ensure early identification of potential supply chain issues and to ensure the necessary support is available where required.	We continued the development and tender of future work for our suppliers, giving longer-term visibility and greater certainty of income. We further decided to postpone the filing of the US Niagara Mohawk rate case which could have resulted in bill increases in 2021. In the UK we continue to focus on managing the impacts of COVID-19 on our suppliers and supply chain, looking to ensure the successful delivery of supply contracts to support the RIIO-2 period.

Our stakeholders continued

How we create value for our stakeholders

We have provided some examples of how particular outcomes were considered by the Board below, noting that these examples are not exhaustive in summarising all our stakeholder considerations. Within each example, when outlining how the Board considered the impact on a particular stakeholder group, we also list the broader range of stakeholders the Board considered as part of its discussions.

Stakeholder group | **Stakeholder engagement** | **Outcomes and actions**

Stakeholder group: Investors (individual and institutions)

Stakeholder engagement

How we engage across the Company

In October 2020, we held an ESG virtual seminar event which provided an opportunity for investors to hear from management across our UK, US and NGV businesses on ESG achievements to date and our ambitions for the future. The session covered the five pillars of responsible business activity and showcased activity, commitments and ambitions across the business. The seminar provided an opportunity for two-way interaction via Q&A sessions. The Chairman, two Non-executive Directors and Executive Directors participated in the session, and the recording can be viewed via the investors section of our website.

Engagement has also taken place this year as part of the Company's results announcements and business presentations.

In January 2021, we commenced our annual investor programme with the launch of Grid Guide to the future of gas event. The event was attended by over 500 people with 50% of the share register represented and included large investors, analysts, ESG experts, regulators, government departments, industry bodies and rating agencies. The session provided an update to the market on the progress we have made with different fuel technologies in both the UK and US and how these would help us achieve our net zero ambition, and provided an opportunity for investors to ask questions of those experts involved.

The Company continued with its asset reunification programme to try and engage with our retail shareholders throughout the year.

How we engage at Board level

Regular investor updates are provided to the Board as part of the reporting cycle, which includes feedback on investor perceptions, business strategy and market environment.

In December 2020, the Board received the results of an independent audit of investor perceptions from 20 different institutions, which together represented almost 20% of the Company's share capital. Interviews were carried out with investors to establish their views on performance of the business and management.

Updates from Company-level engagement with shareholders are provided to the Board as appropriate.

The Remuneration Committee Chair is engaged with shareholders throughout the year on key remuneration topics.

Outcomes and actions

The seminar reconfirmed how engaged our investors are in the Company's performance while operating in a responsible way and creating a positive social impact. Questions focused on key areas of our strategy, including the energy transition and decarbonisation of heat. It was clear that looking ahead, our strategy needs to include pathways that are both practical and affordable.

This series of events focuses in on specific topics, across all ESG themes, aiming to give a deeper understanding of the projects the Company is working on, and how we can make a real difference to the energy transition. Since the first future of gas event, there has been a follow up 'future of gas…extra event', as well as our 'Grid Guide to' podcast. The next topic in the series will be focusing on our role in the decarbonisation of transport and is planned for later in the year.

As reported last year, we commenced an asset reunification programme in January 2020 which provided us with an opportunity to re-unite as many shareholders as possible with their unclaimed dividends. As at the date of this report, approximately £40 million was reunited with the relevant shareholders and we have re-engaged approximately 35,000 dormant shareholders. Our Articles permit any unclaimed dividend greater than 12 years to be forfeited and as a Company, we will be looking to put any unclaimed funds towards charitable causes, including Grid for Good.

The investor perception study highlighted that senior management was held in high regard. The results noted that investors were generally comfortable with the Company's approach on ESG issues, but that there was a need for even greater integration of ESG in the Company's communications. The Board noted that the ESG narrative would be embedded further using the momentum from the ESG event. Examples of how this would be actioned include:

- via 'Our Grid Guide to' series already launched;
- via the Responsible Business Report;
- building on our interactions with third-party ESG rating agencies to deliver the information they need to rate the Company accurately; and
- continued investor engagement.

Views of other stakeholder groups considered

Case study: Agreed acquisition of WPD from PPL (subject to certain regulatory approvals) and strategic portfolio repositioning

Stakeholders considered in accordance with s.172

A significant proportion of the Board's time at the latter end of the financial year was spent discussing the Company's strategic repositioning, including the likely consequences of the decision in the long term and ensuring the balance of the needs and expectations of all our stakeholders in its decision to strategically pivot the UK portfolio towards electricity, together with the proposed sale of NECO and majority stake in NGG. This decision is strongly aligned with the Company's net zero ambition and its strategy. See pages 56 – 57 for more details.

Timeline

- **End of 2020 into 2021** – Board, Finance and Audit Committee meetings took place to discuss the strategy. The Board approved the establishment of a sub-committee. See pages 76, 85 and 88 for more detail.
- **March 2021** – Final decision taken by the Board on the strategy and announcement made.
- **22 April 2021** – General Meeting took place and shareholders approved the WPD Acquisition.
- **April 2021 onwards** – Constructive engagement with Ofgem and policymakers to agree on how best to achieve these common goals in the best interests of all our customers and wider stakeholders.

Colleagues – engagement on day of announcement

- three UK town halls took place with circa 1,700 colleagues in attendance, with a similar approach taken in the US. Various other team meetings took place across the Company.
- communications will continue with colleagues to ensure they are kept well informed of the changes.
- in the UK and US, trade unions were notified and management will continue to engage these leaders.

Customers, regulators and suppliers – engagement on day of announcement

- in the UK, approximately 240 stakeholders were engaged, including the government, Ofgem, key MPs, customers and suppliers.
- in the US, management met with the Rhode Island Governor and RIPUC Chair. Extensive regulatory and government stakeholder outreach was completed across Massachusetts and Rhode Island.
- the US customer response team monitored calls.

Investors

- 420 external participants from 23 countries joined the investor call on the morning of the announcement.
- significant engagement continues with investors.
- shareholders had the opportunity to engage with the Board in a shareholder webcast, where Q&As could be submitted and answered by the Board prior to the General Meeting.

Stakeholder group	Stakeholder engagement	Outcomes and actions
Our colleagues Further information on our colleagues can be found on page 59. Information related to our colleagues and COVID-19 can be found on page 47.	**How we engage across the Company** Engagement with our colleagues takes many forms and enables us to create an inclusive company culture and positive working environment. Examples of engagement with our colleagues this year included virtual town halls, leadership calls, operational team meetings, Q&A calls, committee meetings and team hubs. The annual employee Grid:voice survey also provides an invaluable opportunity to gain insights on what is important to employees. Once the results have been collated, action plans are put in place to address any issues raised by our colleagues. We have recently incorporated an inclusion index into the survey. We know there is always more we can do to improve inclusion and diversity, but we are pleased with the great progress made so far. See page 59 for examples of engagement on diversity. The Company also engaged closely with our colleagues following the death of George Floyd in the US to ensure that messages of support were shared and commitment to diversity across the organisation was reaffirmed. This year we also held a live interactive event with the Group Executive Committee. The session provided an opportunity for employees in both the UK and US to ask questions on matters most important to them. Themes included: the new organisational design; the safe return to offices and ways of working going forward; decision making within the business; diversity at senior leadership level; the remit of the Chief Diversity Officer and how meaningful change will be driven; the impact of RIIO-2 in the UK and the role of natural gas in the energy transition. **How we engage at Board level** The annual Grid:voice survey provides senior leadership, the Group Executive Committee and the Board with an insight into how our employees are feeling about the Company and its strategy. Action plans are developed to progress any areas of improvement that are identified. The Non-executive Directors have participated in a wide range of virtual employee engagement opportunities throughout the year, including a US employee resource group session. They also met virtually with employee representatives from trade unions based in the UK and the New England and New York regions of the US.	Employee engagement forms one of our non-financial KPIs – you can read more about this on page 22. 81% of our colleagues completed the 2021 Grid:voice survey and the overall results showed a positive trend. The Enablement Index scored 74% which was a significant 6% improvement on last year. We were pleased to have received positive feedback around people, wellbeing and development, and the response to the COVID-19 pandemic, as colleague wellness has been a priority of the past 12 months. The support for continued flexible working arrangements post pandemic will be considered as our offices start to reopen. Improvement themes included communication, decision-making and resources, all of which are linked to the culture programme and will be a continued area of focus this year. Areas of improvement identified in the 2020 Grid:voice survey included enablement and the challenges around change and decision-making. An important first step towards overcoming these limitations was the introduction of our new value 'make it happen', which together with our values 'do the right thing' and 'find a better way' is shaping the behaviours that will underpin our long-term success in the future. We were pleased to report in January 2021 that we appointed a Chief Diversity Officer, who will lead our newly created Diversity, Equality and Inclusion (DEI) team. A key focus will be to improve the DEI strategy in both the short term and long term. Workforce diversity is another one of our non-financial KPIs – you can read more about this on page 22. Feedback and resulting actions from these sessions were collated and shared with the Executive Directors. Further information on the Board employee engagement programme can be found in the Corporate Governance Report on page 79. **Views of other stakeholder groups considered**
Our regulators	**How we engage across the Company** In the UK, regular interactions with regulators including Ofgem and the Health and Safety Executive (HSE) take place, as delivering for consumers and in particular protecting vulnerable customers is a key area of focus across all sectoral regulators. The Company also organises stakeholder forums and consultations around specific projects. We also work with other networks and organisations outside of the energy industry to identify good practice. Extensive engagement has also taken place this year with BEIS and Ofgem on the proposal for a greater separation of the ESO, as well as the ESO RIIO-2 price control. Details of engagement during the RIIO-2 settlement can be found on page 51. In the US, engagement takes place with both federal and state regulators, and customers on a regular basis as part of the ongoing rate case filing process. Examples include stakeholder engagement in the pre-filing programme, the build up to, and during the rate case process. **How we engage at Board level** The Board receives regular updates on issues impacting our regulators at its meetings and this year, a large amount of time has been spent discussing RIIO-2 and our relationship with Ofgem and on US regulation, including with each State that we operate in and on rate filings. In September 2020 the Board received an update on the execution of the gas supply settlement as a response to the ongoing feedback from the independent monitor on how the Company was addressing the downstate New York (DNY) gas demand and supply imbalance.	In the UK, discussions with our regulators have contributed to a number of business decisions including the decision to appeal two specific aspects of the RIIO-2 Final Determinations. The Board discussed the future direction of the ESO in detail at its meeting in November 2020. In December 2020, the Board considered the outcome of the ESO RIIO-2 Final Determinations and agreed the recommendation not to appeal any part of the package to the CMA. This year engagement has continued in relation to settlement discussions for the KEDNY and KEDLI rate case filings submitted in January 2019. A settlement was reached in April 2021 with the NYPSC staff and certain intervenors for a three-year rate agreement, which started on April 2020, with an option to extend for a fourth year. We have continued to make progress across all elements of the DNY settlement, particularly in relation to winter readiness. The Company has taken the opportunity to show how we are delivering new and innovative ways to serve our customers in DNY and give confidence to demand response and energy efficiency, and non-pipe alternatives. Recommendations from our internal review of Gas Supply Planning following the Board's lessons learnt review are being implemented on process, governance and modelling improvements. Looking forward, these improvements will bring new capabilities to all jurisdictions in the next few years. **Views of other stakeholder groups considered**

Our stakeholders continued

How we create value for our stakeholders continued

Stakeholder group | **Stakeholder engagement** | **Outcomes and actions**

Communities and governments

Stakeholder engagement

How we engage across the Company

Our Policy and Public Affairs team has continued to maintain and build relationships across governments and with wider political stakeholders. Engagement has taken place via discussions and satisfaction surveys. Management has also engaged with the government throughout the year on a range of topics, including COVID-19, RIIO-2, net zero and green recovery.

Engagement with local communities has taken place via consultations, primarily during the construction phases of our projects. Engagement has also taken place with local authorities, who are involved in endorsing our STEM fund among schools and promoting adult skills courses. The local authorities direct us to the area of greatest need and promote the sessions through their job seeker networks.

We also regularly liaise with land owners and wider communities where the Company has assets, and we have established dedicated teams to manage these relationships. For example we had to replace an underground electricity cable at Bredbury, which after 60 years had come to the end of its working life. We worked closely with the council to determine the best access route, balancing factors such as traffic management, community impact and future plans for the area, as well as engineering considerations.

A comprehensive stakeholder mapping exercise was carried out for the Trawsfynydd Transformer Delivery Project to identify key businesses and groups, local MPs, local district and ward councillors, parish councils, and a distribution area of local properties which may have been impacted by the delivery of the transformer.

As a company, we have a critical role to play in enabling the energy transition to a low-carbon future. Following our commitments to reach net zero for our own emissions by 2050, we continue to invest in projects which are aligned to our strategic ambitions and the expectations of the communities in which we operate. Further information on our net zero commitments can be found on page 63.

How we engage at Board level

The Board has received regular updates on a number of key topics this year, including the aftermath of Brexit and the Responsible Business Charter (the RBC). The RBC was created with the goal of applying a Total Societal Impact (TSI) lens to everything the Company does as a business.

Outcomes and actions

We received positive feedback on our response to COVID-19 which was reported as best in class.

Our Hinkley Connection Project Education Fund was named Community Investor at the 2020 Utility Week Virtual Awards. The Fund supports communities impacted by the construction of the Hinkley Connection. So far, the project has:

- supported 213,663 young people, including 41,469 disadvantaged pupils through its STEM education fund with 862 grants to local schools. 49% of the pupils who have benefitted from the STEM education fund are female;
- contributed over £520,000 for community, charity and environmental projects;
- delivered £405,000 worth of training for almost 200 local individuals struggling to find sustainable employment – 49% of trainees have secured employment; and
- reinvested over £3 million in the community by hiring local contractors to work on the project.

Stakeholders were kept informed via letter drops, dedicated information lines, on-site and media support on the day of delivery, contact card dissemination and a real-time text notification service. The engagement activities undertaken supported the delivery to site, and led to positive feedback and coverage of the delivery.

This year we announced our 50:50 joint venture with Places for People, a large UK registered social landlord and property developer taking a commercial approach to delivering social outcomes, including affordable housing.

In the US the 200 MW Prairie Wolf solar project was approved by the Investment Committee and Joint Venture Board. Prairie Wolf is a clean solar energy project which is expected to reduce an estimated 285,000 metric tonnes of carbon dioxide emissions per annum.

Views of other stakeholder groups considered

Our suppliers

Stakeholder engagement

How we engage across the Company

The Company regularly interacts with suppliers via the procurement team. The Company also engages with our top 250 suppliers annually to complete the CDP supply chain climate change disclosure.

Members of our US leadership team meet with our key gas and electricity construction suppliers on a regular cadence to discuss strategic developments in the industry, opportunities for innovation as well as overall performance. In the UK, members of the UK Group Executive Committee meet with our key construction suppliers on a regular cadence, including the CEO forum to discuss similar items.

How we engage at Board level

Annual reports relating to our suppliers were submitted to the Group Executive Committee and to the Board.

The Board also receives an annual update on the approach taken to address the risk of modern slavery on our supply chains and the proposed commitments for the following year.

Outcomes and actions

We strive to work with businesses who comply with our code of conduct and we continue to work closely with our suppliers and peers to build on our knowledge and promote best practice in the industry. For RIIO-2, new framework contracts are being established and to support this, supplier onboarding sessions are taking place throughout our Vendor Management approach.

We held three additional sub-committees of the Board to discuss the Costain and the Peterborough compressor station contract in more detail.

In November 2020, the Board received an update on the London Power Tunnels (Phase 2). The two remaining contracts for Cable Installation and Substations were issued for tender in October 2020. It was announced that a contract was agreed with Murphy Group and HOCHTIEF to deliver Phase 2, a six-year project that will see construction of a 20 mile (32.5 kilometre) tunnel that will house transmission cables 30 metres underground.

The Board approves the Modern Slavery Statement on an annual basis and shows support for the evolving commitments.

Views of other stakeholder groups considered

Stakeholder group | **Stakeholder engagement** | **Outcomes and actions**

Our customers

Stakeholder engagement

How we engage across the Company

US Customers – The 'voice of our customer' feedback is collected throughout the US business via customer surveys. These are conducted on a tracking and an ad hoc basis to measure sentiment across residential, commercial and wholesale customers. Clean energy has remained a key focus for the voice of our customer.

We track customer response to our 'Are we doing the right thing?' belief statement bi-monthly, and insights from this research support our outreach activities.

UK Customers – Engagement with our UK customers takes place via a range of forums including liaison meetings, market research, stakeholder events and interactive customer listening sessions. Customer experience continues to be a top priority and we monitor progress in accordance with our strategy.

NGV Customers – This year customer engagement has taken place via market research and a range of questionnaires assessing overall satisfaction. The survey asked customers to rate key metrics and provide feedback on how further support could be provided. Maintaining effective communications with our customers has been key, and this has been strongly endorsed by our customers.

A virtual event took place in October 2020 which was attended by over 190 customers from 19 different countries. The event included presentations from the IFA team and their partners, a Q&A session with panel guests across Europe, a virtual exhibition hall showcasing the interconnectors and partners, and a networking lounge where attendees could discuss particular topics in focus groups.

How we engage at Board level

This year the Board received bi-annual updates on the UK, US and NGV customer performance, which included progress on deliverables aligned to our strategic priorities. The Group Executive Committee and the Board also received regular updates on the US rate case filings.

Outcomes and actions

Overall customer satisfaction scores for both our electric and natural gas utilities have continued their upward trend of improvement.

We recognise that improving our customer experience and reducing our long-term operating costs will require deployment of new, robust data and customer information systems. We appointed a new Chief Customer Officer in the US in December 2020 and are committed to achieving this goal.

As of 11 November 2020, 79% of our commercial customers and 72% of our residential customers said they agreed that National Grid was doing the right thing during the pandemic. In New England we conducted more than 32,000 virtual home energy assessments when in-person home energy assessments were suspended.

We have received an Honourable Mention (only granted to finalists) in Edison Electric Institute's 2020 Customer Advocacy Awards.

Key learnings from the RIIO-T1 period have included the importance of aligning strategy with customer ambition, looking across end-to-end customer/employee journeys to break down silos and the need to ensure data and technology roadmaps are aligned and coordinated across journeys. Beyond RIIO-T1, we need to reclarify our customer ambition and agree the pace of improvement in line with the RIIO-2 arrangement.

As a result of feedback received, a new customer engagement strategy was developed which included new methods of engaging virtually. This has increased the number of customer meetings per week.

Views of other stakeholder groups considered

Case study: RIIO-2 Final Determinations

Stakeholders considered in accordance with s.172

Timeline

- **Jan – May 2020** – focus on enhancing the understanding and interrogation of our business plan submission through:
  - extensive engagement with Ofgem via meetings and formal supplementary questions; and
  - broad programme of engagement with our stakeholders, including meetings, workshops and newsletters.
- **July – Sept 2020** – focus on responding to Ofgem's Draft Determinations through:
  - analysing the content and producing an evidence-based response across all topics; and
  - engaging with stakeholders to articulate the consequences of the Draft Determinations on our stakeholders' priorities.
- **Sept – Nov 2020** – focus on exploring our Draft Determinations response with Ofgem ahead of Final Determinations through:
  - open meetings to discuss or responses to the Draft Determinations;
  - extensive engagement with Ofgem via meetings and supplementary questions; and
  - engagement with Whitehall and Parliament to ensure that the right framework was in place to support the economic recovery and net zero.
- **Dec 2020** – Final Determinations published.
- **Jan 2021** – recommendations made as to whether to accept or appeal aspects of the price control. The impact of this was considered for each stakeholder group including Ofgem, government, investors and the media.
- **March 2021** – final decision taken by the Board to broadly accept the majority of the package and submit a technical appeal to the CMA regarding cost of equity and outperformance wedge.
- **April 2021** – RII0-2 starts.

Examples of the engagement work

Gas regional workshops to inform our stakeholders of the content of our business plan (Jan – Feb 2020):

- given the extensive stakeholder input to building our plans, this was the opportunity to share the final content of our business plan and how it delivered their priorities with customers, suppliers, local community representatives, consumer representatives, trade bodies, regulators; and
- attended by 85 stakeholders in Edinburgh, London, Cardiff, Hull, St. Fergus and Bacton.

Ofgem engagement and supplementary questions to explore the content of our business plan ahead of the publication of Draft Determinations (Jan – June 2020):

- through an extensive programme of regular meetings and a formal supplementary question process; and
- across GT, ET and ESO we responded to a total of 871 supplementary questions from Ofgem.

Consumer research (July – Aug 2020)

- to ensure our business plan proposals continue to be aligned with the needs of consumers, we undertook a nationally representative survey of 4,018 members of the public; and
- we sought views on the importance of investment or cutting costs with regards to potential priorities in the energy sector; which investment/cost-saving priorities are most important; and the level of support or opposition for changes in energy bills to support investment priorities.

A series of webinars across the year open to all interested parties on: the content of our business plan, the content of the Draft Determinations and our response to the Draft Determinations

- open to our full distribution list of interested parties, attended by customers, suppliers, local community representatives, consumer representatives, trade bodies, regulators and investors;
- separate sessions held with internal colleagues; and
- providing the opportunity to inform stakeholders of the latest developments and the impact on their priorities, coupled with Q&A sessions.

Our commitment to being a responsible business

We have conducted a comprehensive review of our approach to being a responsible business, focusing on where we can create the most positive impact for society.

Responsibility at National Grid

Our purpose is to 'Bring Energy to Life' and we do this through the delivery of the electricity and gas that powers our customers and communities; safely, reliably, fairly and affordably, and this is the core of our role as a responsible citizen. It is also vital to focus on *how* we fulfil our purpose, minimising negative impacts and enhancing our overall contribution to society.

During 2019/20, we undertook a comprehensive review of our approach to responsible business, involving extensive stakeholder engagement and benchmarking. The results of this review reconfirmed priority issues, for example the health, safety and wellbeing of our employees, but also the need to accelerate our programme in other areas. This includes our commitment to achieving net zero by 2050 but also a series of new commitments in our Responsible Business Charter (RBC), published in October 2020, which will be updated on a regular basis. We are embedding the commitments identified in the RBC into our business plans under five headings: the environment, our communities, our colleagues, the economy and our governance. Performance is being assessed regularly.

Our approach to reporting

We have published a separate Responsible Business Report (RBR) for 2020/21 which has been guided by internationally recognised reporting standards. The RBR contains information relating to our material focus areas and provides detail on our management approach, performance, and the new commitments set out in the RBC. Certain metrics are subject to independent external assurance.

This section of our Annual Report provides a high-level summary of our approach to responsible business and meets regulatory requirements with regard to certain responsible business-related topics.

Our principles of responsible business

"We have published our responsible business charter and our first responsible business report."

Our approach to managing responsible business matters

Our overall approach to responsible business can be summarised as:

- identifying our key stakeholders, understanding how they interact with our operations, activities and value chain, and the issues that are relevant to them;
- adopting a logical process for prioritising those issues, to identify the most material matters; and
- responding to the priorities by developing appropriate strategies, policies, programmes, targets and performance indicators, and reporting regularly and transparently on our progress.

In establishing our priorities we are also guided by recognised frameworks such as the United Nations Global Compact Principles and Sustainable Development Goals.

Over the years we have developed a series of processes and policies to ensure responsibility issues are managed effectively, and we are now updating these to ensure we deliver on our new RBC commitments. Our management approach to responsible business includes the following components:

Our policies and related governance

Descriptions of the policies and the outcomes pursued in relation to the matters listed on page 60, are discussed, where material, throughout this section and our RBR. A full list of our policies, and our Code of Ethics, can be found online, at nationalgrid.com/about-us/corporate-governance.

In addition to our policies, we have a suite of Business Management System (BMS) standards. These standards define the minimum requirements for the high value and risk activities most important to our business and deliver benefit by mitigating risk, enhancing best-practice sharing, standardising processes and simplifying our approach to doing business.

A non-exhaustive list of BMS standards, summarised for the purpose of the Non-Financial Information Statement, can be seen below.

Policies and documentation

People

- our Code of Ethics for employees: protects our reputation and helps ensure we maintain stakeholder confidence.
- the Wellbeing and Health BMS Standard: enables our business to manage health risks.
- the Occupational Safety BMS Standard: helps to ensure a consistent and high level of protection for employee and contractor safety.
- the Process Safety BMS Standard: helps to protect people and the environment from the risk of major accidents.
- the Human Resources BMS Standard: sets out expectations of leaders when managing employees across the employment lifecycle.
- the Performance Excellence BMS Standard: sets out how we 'find a better way', supporting continuous improvement.

Environment

- the Environmental Sustainability BMS Standard: establishes environmental compliance and environmental sustainability performance requirements for all operational and non-operational activities.

Society

- the Stakeholder Engagement BMS Standard: defines consistent performance requirements for external stakeholder engagement.
- Code of Ethics and Anti-Financial Crimes Policy.
- Procurement Standard: defines how to improve efficiency within our supply chain expenditure.
- Global Supplier Code of Conduct.

Case study – Grid for Good

Grid for Good will deliver social mobility for disconnected young people in the communities we serve by facilitating upskilling and employment opportunities in our sector. This also helps to address the net zero skills gap and improve workforce diversity.

Grid for Good aims to deliver ambitious upskilling targets in our RBC and focuses on 16–24-year-olds who have left school and face significant barriers to entering the workforce.

Candidates will be provided with opportunities such as peer networking, upskilling and mentorship. Our charity partners will engage and connect young people to the programme and support them through the process. At 31 March 2021, 1,261 young people were progressing along this pathway – made up of 792 in the UK and 469 in the US, and five young people had been employed at National Grid through Grid for Good.

We also encourage employees to volunteer to support the programme and during the year 6,207 hours of volunteering were delivered, mainly relating to mentoring opportunities.

Our commitment to being a responsible business continued

Our communities

Engaging with our communities

We seek regular feedback from our customers and communities and take action to improve performance.

Our approach to responsibility in our communities has been to go beyond providing the safe, resilient energy systems society expects, and work to ensure our economic and social role has the greatest possible impact. This involves developing infrastructure and helping consumers use energy more efficiently but also includes partnering with charity organisations and encouraging employees to volunteer in the community.

Core service delivery

The technological and environmental benefits of the clean energy transition should benefit everyone, and we will play our role in ensuring that no-one is left behind. A fully decarbonised transportation infrastructure, for example, should be accessible by everyone across the communities we serve. Part of this role includes protecting vulnerable customers, and in the US we already do this through low-income programmes, bill discounts and free energy efficiency advice. COVID-19 has brought serious economic hardship to many of our customers and each of our US jurisdictions last year ordered extended moratoria on disconnection for non-payment, which we upheld.

Our RBC commitments

- Deliver energy in a fair and affordable way to the communities we serve.
- Play our role in ensuring no-one is left behind in the transition to clean energy. The associated benefits should be enjoyed by all.
- Continue to reinvest in energy infrastructure at approximately £5 billion each year.
- Report transparently on energy costs throughout the energy transition – on average costs per household for our UK transmission networks and for our US electric and gas distribution businesses.

In the UK, we established a £150 million Warm Homes Fund (WHF) designed to support local authorities and others to help approximately 50,000 households suffering from fuel poverty. At the beginning of the year, approximately £26 million of the WHF remained unallocated, but this has now been earmarked across a range of projects, including programmes with National Energy Action, Connect for Help and the Fuel Bank Foundation.

We are helping customers to manage their energy use better, reducing cost and carbon emissions. We are a leading utility for energy efficiency in the US, and our Massachusetts Electric utility energy efficiency programme was ranked top by the American Council for an Energy-Efficient Economy.

As we transition to an increasingly complex electricity system, managing intermittent renewables and two-way power flows, we must maintain customers' expectations for reliable energy supply. Climate change will place stress on networks, and we will need to be prepared for extreme weather events. In the US, our recovery and response to Hurricane Isaias and the October Micro-Burst/Tornado/Derecho received multiple awards in 2020 from the Edison Electric Institute and the North Atlantic Mutual Assistance Group. You can read more about this on page 42, and find out how we manage our operational risks on pages 24 – 27.

Our UK and US networks continue to maintain excellent reliability, and our performance can be seen on page 21.

Supporting communities to thrive

We partner with community organisations to enhance our programmes. We have engaged with a series of societal issues and support a broad range of causes, relating mainly to educational and environmental programmes in the communities we serve through our core business, or those impacted by our capital projects. In 2020 we sharpened our focus.

Our RBC commitments

- Develop skills for the future, with a focus on lower-income communities, providing access to skills development for 45,000 people by 2030. Through upskilling young people with STEM skills, we will positively impact lives and help to grow the future energy workforce needed to enable the clean energy transition.
- Achieve 500,000 employee volunteering hours by 2030. Through volunteering, our people will help equip the next and future generations to participate in the clean energy transition.

Unemployment and social exclusion amongst young people existed before the COVID-19 pandemic, but the economic downturn in the UK and US has seen youth unemployment rise steeply. At the same time our research indicates a potential skills gap of 400,000 people to complete the clean energy system transition. We have linked these two factors and committed to supporting disadvantaged young people to build careers in the energy sector. We are showing this support for communities in the US and the UK through our flagship programme Grid for Good, described in the case study on page 53.

> **"We have launched our flagship community investment programme – Grid for Good."**

In the UK, we also support communities affected by our infrastructure projects, where grants are available for local projects, which deliver social, economic or environmental benefits. In addition, as part of capital delivery projects, we partner with third-party organisations to deliver community benefits at scale.

In the US, we support the National Grid Foundation, a non-profit charitable organisation. The Foundation awards grants to non-profit organisations to improve the lives of the underserved in the communities where we operate, focused on educational and environmental challenges. The Foundation currently disburses approximately $2 million per annum. The US business also provides funding of approximately $7 million per annum through centrally led programmes in support of organisations such as the Red Cross, City Year and Girls Inc., and programmes led more locally, identified by management teams in New York, Massachusetts and Rhode Island.

During the year, we recorded over 18,050 hours volunteered by our colleagues in support of a variety of causes, including Grid for Good. This is good progress but we are aware we will need to reinforce and innovate our programmes in order to meet our 2030 commitment above.

The economy

We help national and regional governments formulate and deliver their energy policies and commitments. Our approach to regulatory consultation is to seek a framework that puts consumers at the centre of our price control, while enabling the clean energy transition which will be key in protecting future economic growth, safety and wellbeing in society.

Our RBC commitments

- Maintain reinvestment in our infrastructure and demonstrate the social benefits of our capital delivery programmes.
- Continue to invest in developing technologies and innovations that benefit our customers and wider society.
- Work across our supply chains to ensure that, together, we reflect the diversity of the communities we serve and respond to the economic needs of those communities.
- Continue to influence our supply chain to operate as responsible businesses.

Our economic contribution to society comes primarily through the delivery of safe and reliable energy but also through our role as an employer, a tax contributor, a business partner, and community partner.

During the year, we invested £5 billion in our energy infrastructure (see page 19). We published our green financing framework in November 2019, and since then have issued bonds from our UK and US electricity businesses, most recently in June 2020, funding projects to enable the transition to clean energy. We also issued, in April 2020, the first ever multi export credit agency covered green loan in relation to the construction of the Viking Link interconnector. More information is available in our first Green Financing Report.

National Grid Partners ('NGP') is the venture investment and innovation arm of National Grid with a portfolio which comprises 23 companies and four fund investments at a fair value of £178 million at the close of the fiscal year. NGP investments and innovation projects include initiatives which directly support the goals of our RBC. Further details are provided in the RBR and on page 23.

Our approach to tax is part of our commitment to being a responsible business, and is guided by our values. We are committed to a coherent and transparent tax strategy and details of this are set out on page 36.

We aim to build partnerships with small and local businesses, and all suppliers who set clear ambitions related to the environment, diversity, economic wellbeing and governance. We are fair to our suppliers and committed to paying them promptly. In the UK and US, over 90% of supplier payments were made to contractual terms.

We also influence our supply chain to operate as responsible businesses, requiring all suppliers to share our commitment to respecting, protecting and promoting human rights. Through our Global Supplier Code of Conduct we expect our suppliers to comply with all applicable local, state, federal, national and international laws or regulations including the UK Bribery Act 2010 and the US Foreign Corrupt Practices Act 1977. We also require them to adhere to the Principles of the United Nations Global Compact, the International Labour Organisation minimum standards, the Ethical Trading Initiative Base Code, the US Victims of Trafficking and Violence Protection Act 2000 and, for our UK suppliers, the requirements of the Living Wage Foundation.

> **"49% of our top 250 suppliers have set climate change targets."**

We provide specific guidance and briefings for high-risk areas, to reduce the risk that contractors, agents and others who are acting on behalf of National Grid, engage in any illegal or improper conduct. We expect all our suppliers to be compliant with the UK Modern Slavery Act and to publish a Statement. Each year, we update our own Statement and publish this on our Company website in line with the Modern Slavery Act's requirements and this provides details on our relevant policies and processes, such as pre-qualification screening. We continue to actively support the United Nations Global Compact Modern Slavery Working Group, Gangmasters Labour Abuse Authority Construction Protocol, the Supply Chain Sustainability School and the Slave Free Alliance, where we helped to establish the Utilities Sector Modern Slavery Working Group.

Innovation to improve reliability and reduce costs

In the US, before contractors carry out excavations, they must call '811' so that utility operators can identify buried infrastructure and thus prevent damage and injury. Given the potential safety, reliability and cost impacts from excavation damage, National Grid US maintains active 'Damage Prevention' teams to monitor inbound '811 tickets', find contractors who haven't obtained tickets, and stop accidents before they happen.

In downstate New York we reduced the damages for nearly a decade before plateauing. Colleagues had to identify higher-risk excavations by 'feel' as there were insufficient resources to manually assess 600,000 tickets per year.

In 2016, we partnered with Urbint, to drive the rate lower. Urbint's AI-powered software, 'Lens for Damage Prevention', examines historical incident data as well as the age, type, and location of assets. It combines this with a representation of forces that impact underground assets including soil conditions, elevation, weather, population density, and construction and assigns risk scores to 811 tickets.

Results showed most damages were coming from a small percentage of tickets, with one of the strongest predictors being the contractor doing the work. By targeting problem excavators and proactively intervening on risky job sites, we reduced our damage rate by 37% from 2016 to 2020 and improved our relationships with excavators.

Recognising the power of innovation to improve our service capabilities, National Grid Partners, our strategic investment and innovation arm, invested in Urbint in 2019.

Our commitment to being a responsible business continued

The Environment

We recognise that, as a result of our activities, we create negative impacts on the environment and understand that a damaged environment has broader consequences for the health and wellbeing of society. Climate change is the defining challenge of this generation and in our role at the heart of the energy system we understand the critical role we need to play. The markets in which we operate have announced ambitious carbon reduction targets and further legislative actions are anticipated as indicated on page 15.

The biggest contribution we can make is through enabling an economy-wide clean energy transition, but we must also reduce our own impact on the environment.

Supporting the clean energy transition

Our RBC sets out how we aim to play a leading role in enabling and accelerating the transition to a clean energy system; balancing decarbonisation, affordability and reliability of supply. Working closely with government and other stakeholders and partners around the world, we focus on the technical and commercial solutions that will help achieve net zero for the energy sector. Initiatives include:

- electricity – connecting renewables as quickly and efficiently as possible, investing in grid modernisation, enhancing demand-side management through our energy efficiency and demand-side response programmes and continuing to develop interconnectors to bring low-carbon energy to the UK;
- renewables – continuing to grow our renewables business in the US from the foundation provided by our wind and solar generation business, National Grid Renewables;
- transport – supporting development of vehicle charging infrastructure in the UK and US, and low-carbon alternatives, such as hydrogen, for heavy transport;
- heat – working with our customers and regulators on this challenging issue to enable a range of potential solutions, including heat pumps, and renewable natural gas and hydrogen in our networks, as well as helping consumers switch from the most polluting heating fuels, such as oil;
- natural gas – continuing to help develop and deploy new technologies to decarbonise at scale in the years ahead – such as hydrogen networks and carbon capture, utilisation and storage (CCUS).

Reducing our own environmental impacts

In 2012, we developed our environmental sustainability strategy, 'Our Contribution', to set a framework for embedding sustainable decision-making into our business operations. We focused on three key areas – climate change, responsible use of natural resources and caring for the natural environment – and set targets to deliver progress through to the end of 2020. This programme has now been superseded by our new, more ambitious, commitments in the RBC.

Climate change

We generate GHG emissions across Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of gas and electricity) and Scope 3 (other indirect emissions from activities and sources outside of our ownership or control). Our RBC sets out a number of ambitious climate-related commitments, the most significant of which is to achieve net zero by 2050. Through this commitment we will reduce Scope 1 and 2 emissions by 80% by 2030, 90% by 2040, and to net zero by 2050, from a 1990 baseline. A key GHG target from 'Our Contribution' was for a 45% reduction in GHG emissions by 2020, from a 1990 baseline. At the end of 2020/21, we have achieved a 68% reduction.

In recent months, we have worked closely with the Science Based Targets initiative (SBTi) to increase the ambition of our Scope 3 target and this now covers emissions across our entire value chain – not just the energy we sell – with a commitment to reduce the carbon emissions by 37.5% by financial year 2034 (from a financial year 2019 baseline). Our interim Scope 1, 2 and 3 emission reduction targets are verified by the SBTi, demonstrating a clear, credible commitment to deliver our longer-term net zero strategy in line with a well below 2°C pathway. Other commitments, including those relating to reductions in SF_6 emissions and increasing the proportion of electric vehicles in our own fleet, are set out in the RBC.

We have announced our intention to put our climate transition plan before shareholders and seek a non-binding advisory vote on our net zero commitment and associated Scope 3 target, and the action plan to achieve the interim 2030 net zero target. In this way, we will be directly accountable to shareholders for our progress on tackling climate change.

We are working to reduce our business travel emissions by changing to alternative fuel vehicles and reducing business flights. The response required by COVID-19 (see page 8) has resulted in more flexible ways of working and has reduced business travel. We will reduce the energy consumed in our buildings and procure green energy where possible.

Electrification of transport

In the US, we have actively supported transportation electrification for over ten years by installing and managing charging stations, and providing support and incentives for our customers to enable adoption and deployment. By the end of March 2021, we had enabled 2,500 EV charging ports across our jurisdictions. Our main programmes include:

- making sites ready for customers to easily and cheaply install EV charging stations, including all of the infrastructure needed to support EV chargers or EV supply equipment, and in some states we even provide rebates for the charger itself;
- assisting customers to plan for large-scale fleet electrification, including an electricity bill impact analysis, a site feasibility analysis, vehicle assessments, and a comprehensive roadmap to electrification; and
- providing off-peak charging incentives to our residential customers in Massachusetts and Rhode Island to gather information on EV charging behaviour to help us design better charging incentives for future programmes.

We aim to lead by example and have invested more than $1.8 million for Company vehicle electrification in 2020, including heavy equipment such as excavators, forklifts and backhoe diggers. We continue to make progress towards electrification of 100% of the light-duty vehicles by 2030, and project that more than 50% of our fleet passenger cars in the US will be electric within 12 months. Since our EV Central programme launched in April 2018, 484 employees have taken advantage of financial incentives to purchase or lease an EV.

Our Scope 1 emissions were 4,727 ktCO_2e, a 21.1% increase on the prior year (3,903 ktCO_2e). Of this, 86% arose in the US, 14% in the UK. The increase resulted mainly from generation emissions exceeding projected levels due to increased LIPA operating hours, required to replace shortfalls in off-island generation and transmission.

Scope 2 emissions are reported on a market basis and location basis:

- market basis – 2,264 ktCO_2e, a 13.7% reduction on the prior year
- location basis – 2,216 ktCO_2e, a 14.1% reduction on the prior year.

Approximately 61% of Scope 2 emissions (location basis) were generated in the UK, with the remainder through US operations. Reduction in Scope 2 emissions was mainly due to a reduction in emissions from line losses, resulting from a reduction in grid electricity carbon intensity.

Our combined Scope 1 and Scope 2 (location-based) emissions are now 68% below our 1990 baseline.

Our total Scope 3 emissions are calculated as 28,948 ktCO_2e for the year, a reduction of 6.2% on the prior year.

The sources of Scope 1, 2 and 3 emissions are detailed in the RBR. We have also published a document, ‘Reporting Methodology’, which details the methodologies and protocols used for calculating key responsible business metrics.

Strategy in action

Case study – involvement in COP26

National Grid is a principal partner for COP26, the annual global climate change summit to be hosted in the UK in November 2021. COP26 is arguably the most important climate event since the 2015 Paris Agreement, as governments around the world will be reporting back on progress and agreeing new actions to cut carbon emissions. We are working closely with the UK government in planning for COP26, as well as hosting and participating in events and exhibition spaces in the Blue and Green Zones at the two-week summit. We are excited to play our part in supporting the UK government, along with our fellow partners and many others, to deliver a successful COP26 which encourages and inspires ambitious action to tackle climate change in this critical decade.

Understanding National Grid’s greenhouse gas emissions

We monitor and report our greenhouse gas emissions in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol.

Scope 1: Direct Emissions from the operational activities of National Grid.

Scope 2: Indirect Emissions from gas and electricity purchased and used by National Grid.

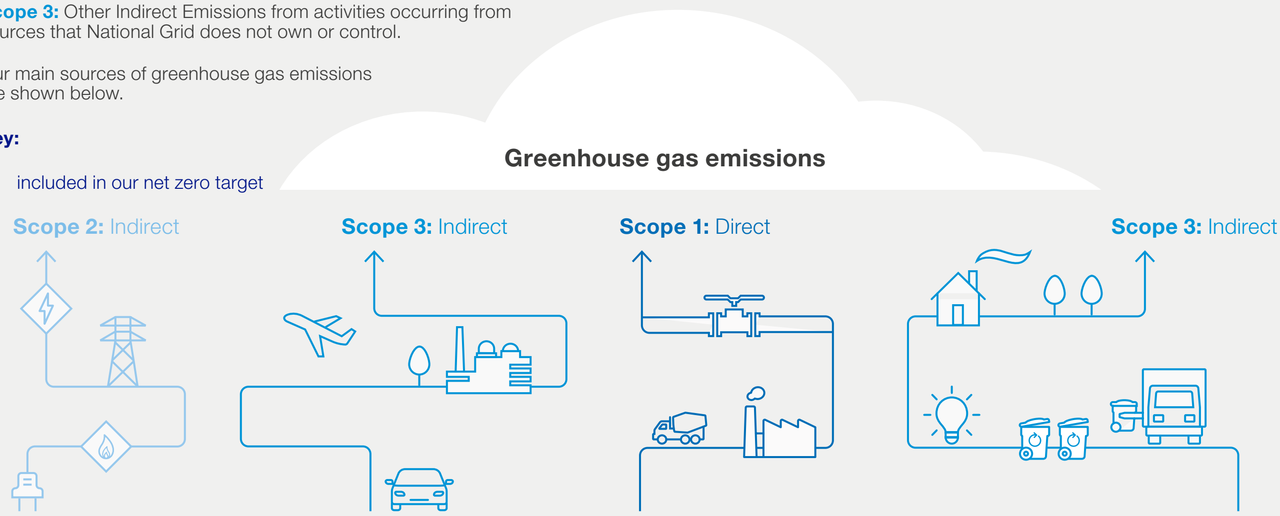
Scope 3: Other Indirect Emissions from activities occurring from sources that National Grid does not own or control.

Our main sources of greenhouse gas emissions are shown below.

We have committed to achieving net zero emissions for our Scope 1 and 2 emissions by 2050. Most of our Scope 3 emissions are emitted from two key business activities: the sale of gas and electricity to customers in the US and the purchase of goods and services.

Key:

◆ included in our net zero target



Upstream →

Scope 2 ◆

- Line losses from our electricity transmission and distribution lines
- Energy purchased for use at our facilities
- Use of electric drive compressors in our gas business

Scope 3

- Purchased goods and services
- Business travel
- Employee commuting

Our operations →

Scope 1 ◆

- LIPA electricity generation
- Leaks and venting from our gas transmission and distribution systems
- SF_6 leaks from our electric equipment
- Fleet vehicle use
- Gas-fired compressor use

Downstream →

Scope 3

- Use of ‘sold product’ or emissions from our customers’ use of the gas and electricity we purchase on their behalf
- Waste management

Our commitment to being a responsible business continued

Energy consumption
Our energy consumption is a key area of focus as this, in turn, drives our carbon emissions.

Our energy consumption consists of both fuel consumed and energy purchased from third parties, including renewable energy. Total energy consumption was 2,602 GWh (9,367,585 Gj), a decrease of 16.5% on the previous year. Of this, 99% was from non-renewable sources, with no significant change from the previous year.

Operational energy use was 1,409 GWh (2019/20 – 1,676 GWh), our transport energy use was 378 GWh (2019/20 – 384 GWh), electricity purchased was 659 GWh (2019/20 – 922 GWh) and heating was 156 GWh (2019/20 – 133 GWh).

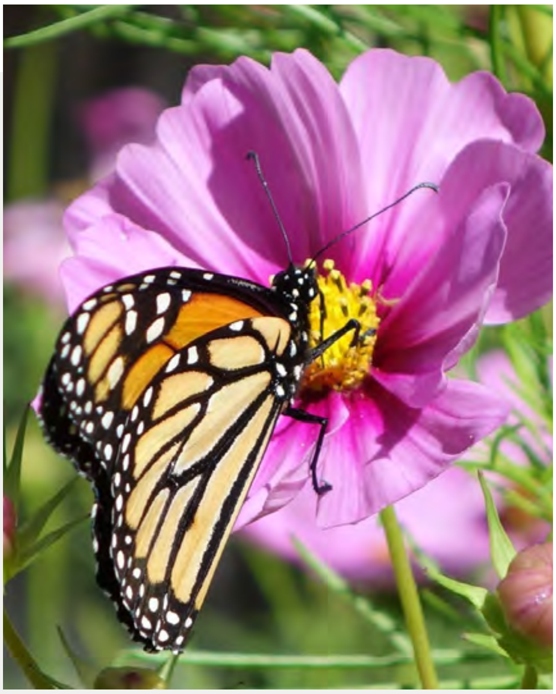
Electricity consumption includes the energy consumed in operating the generation assets in the US. Total energy does not include fuels consumed for power generation on behalf of LIPA, the contracting body, amounting to 16,155 GWh (net of energy required to operate the generation assets), a 28% increase on the prior year. Transport covers business travel, including our own fleet, hire cars and personal car use for business. In addition to energy consumed, we calculate that system losses accounted for a further 11,154GWh, of which 52% occurred in the US. This was a 9% decrease on the previous year.

The comparative data, previously reported in the 2019/20 Annual Report, has been restated to account for a minor misstatement and a change in reporting methodology.

Responsible use of natural resources
Waste is generated from a range of activities and sources, including office and warehouse waste, waste from distribution and transmission gas pipe and electricity line laying, repair and maintenance, some capital project delivery and power generation. Our reporting currently excludes certain predominantly non-hazardous civil wastes managed by contractors as part of large-scale capital projects e.g. tunnelling, where the data cannot yet be captured reliably. We now redirect all office waste from landfill, and almost 80% of the waste we can record is either reused or recycled.

Caring for the natural environment
We must also address the challenge of restoring the natural environment. Using our own land and working with partners, we have an opportunity to cut carbon and restore nature at the same time. We are improving the natural environment on our own land by protecting habitats and increasing biodiversity using best practice methods, such as natural capital evaluation, so we can make sure we create the most benefit. In our RBC we have committed to improve the natural environment by 10% on the land we own, by 2030.

More detailed information on our environmental impacts and programmes are presented in the RBR.



Supporting the monarch butterfly
In the US, we have enrolled in the Monarch Candidate Conservation Agreement with Assurances (CCAA), which is a voluntary conservation programme on energy and transportation lands that will result in a net benefit to monarch butterflies. This is a partnership between the U.S. Fish & Wildlife Service and energy and transportation entities across the country, with a nationwide goal of enrolling up to 26 million acres of land and contributing over 300 million stems of milkweed and 2.3 million acres of monarch foraging habitat. Our commitment relates to conservation measures across over 100,000 acres, include seeding and planting to restore or create habitat and conservation mowing and scrub clearance to enhance floral resource habitat.

Our colleagues

We are reliant on our colleagues to deliver success for the business. We aim to attract and retain the best people by striving to be recognised as an employer of choice. People are attracted to work for businesses which can demonstrate a clear purpose that benefits society. It is important for us to match their aspirations, and we work towards going beyond delivery on the core aspects of the employer/employee relationship, to create a culture focused on the value we can add to society.

Engaging with our colleagues

We engage extensively with our colleagues and conduct an annual independently managed survey, the Grid:voice survey, to help us identify areas that employees believe we need to improve. You can read more about this on pages 22 and 49, and in the RBR.

Health, safety and wellbeing

We have a fundamental duty of care to ensure our employees are kept safe at work, and that their health is not impacted as a result of their employment. The health, safety and wellbeing of employees and contractors is our primary concern. Any safety incident is one too many, and we work to improve our performance through effective policies, standards, procedures and training. It is therefore with deep regret that we report that, in November 2020 in the US, a tragic event took the life of one of our contractor colleagues.

We measure safety performance through a combination of leading and lagging indicators and Lost Time Injury Frequency Rate is one of the core KPIs of the business (see page 22). We take a proactive, risk-based approach to managing health and wellbeing and have documented standards relating to occupational health and safety, process safety and wellbeing and health. Incidents are reported to the highest level, and the SEH Committee of the Board undertakes regular deep dives on safety-related topics (see page 89).

COVID-19 has dominated the year for our employees, and the full story of our response is reported on page 8.

Investing in our colleagues

Responsibility towards our people also means training and (re)skilling them for the evolving needs of our businesses. We have identified the need to enhance skills relating to the clean energy transition, for example, implementing new energy technologies, such as renewables and heat pumps. This need for new skills will be partly met through our community initiatives such as Grid for Good (see page 16). We operate training centres in the US and UK providing specialist technical, safety, refresher and new starter development programmes, and a leadership academy. All training programmes have been affected by the COVID-19 situation, and we have adapted our training approach accordingly. Further information on employee development is provided in our RBR.

Living wage and gender pay gap

We believe that everyone should be appropriately rewarded for their time and effort. In the UK, we are accredited by the Living Wage Foundation, a commitment which extends to our contractors and the work they do on our behalf. We also go above the Living Wage requirements and voluntarily pay our trainees the Living Wage. We undertake a Living Wage review each year to ensure continued alignment and increase individual salaries as required and also promote the commitment to our suppliers.

We review gender and ethnicity pay gaps annually in both the UK and US, and further information is provided in the RBR.

Promoting an inclusive and diverse workforce

Our RBC commits us to be as transparent as possible internally and externally on gender and ethnicity. We have a commitment to achieve 50% diversity, in our Senior Leadership Group and in all our new talent programmes, by 2025. For these purposes a diverse employee is defined as a colleague who identifies as female, as a person with a disability, as gay, bi-sexual or lesbian or from an under-represented ethnic or racially diverse background. We aim for our workforce to reflect the diversity of the communities we serve and are committed to providing an inclusive, equal and fair working environment.

We have appointed a Chief Diversity Officer, who will partner with senior executives across the business to develop a new inclusion and diversity strategy and drive progress. We have 16 Employee Resource Groups (ERGs) (11 in the US; 5 in the UK), which are all highly active and visible across the business.

"Our employee engagement score has increased"

Grid:voice engagement score

81%

(2019/20: 77)

We continue to be recognised in awards and benchmarks including being listed, in the US, as one of the Best Places to Work for LGBTQ Equality (Human Rights Campaign), one of the Best Employers for Diversity 2020 (Forbes) and one of our UK ERGs was awarded 'Top Network Group' at The Ethnicity Awards in 2020. We have close partnerships with external best practice organisations and are active members of sector- and industry-wide groups which ensure we are sharing best practice and campaigning at a sector-wide level for greater inclusion for all.

Our policy is that people who identify as having a disability should be given fair consideration for all vacancies against the requirements for the role. Where possible, we make reasonable accommodations and provide additional resources for employees who identify as having a disability. We are committed to equal opportunity in recruitment, promotion and career development for all colleagues, including those with disabilities.

The gender demographic table below shows the breakdown in numbers of employees by gender at different levels of the organisation. We have included information relating to subsidiary directors, in accordance with the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. 'Senior management' is defined as those managers who are at the same level, or one level below, the Group Executive Committee. Our definition also includes those who are directors of subsidiaries, or who have responsibility for planning, directing or controlling the activities of the Group, or a strategically significant part of the Group, and are employees of the Group. For further, more detailed information and relating to our approach and performance on gender and ethnic diversity, please see our RBR.

Gender demographic as at 31 March 2021

	Our Board[1]	Senior management[2]	Whole company[3]
	number	number	number
Male	8	167	17,737
Female	5	89	5,810
Total	**13**	**256**	**23,547[4]**
Male (%)	61.5%	65.2%	75.3%
Female (%)	38.5%	34.8%	24.7%

1. 'Board' refers to members as defined on the Company website.
2. 'Senior management' refers to Band A/B employees as well as subsidiary directors.
3. This measure is also one of our Company KPIs. For more information, see page 22.
4. Does not include data from our National Grid Renewables business.

Our commitment to being a responsible business continued

Governance

Adopting the right approach to governance is critical to the success of our business. This encompasses everything from adopting the correct structures for Board oversight, to how we listen to the voices of our stakeholders, manage risk and ensure we maintain an appropriate culture and the highest ethical standards. Our RBC commits us to applying a corporate governance model that supports all our responsible business commitments and ambitions and applies our responsible business framework to everything we do.

The gender diversity of our Board is currently 38.5% (see page 72).

> **"Board gender diversity is 38.5%."**

Stakeholder engagement

We prioritise our responsibilities to our different but interrelated stakeholder groups and wider society. We have extensive and detailed processes to ensure we understand the interests of our stakeholders and reflect them in the decisions we make. Stakeholder engagement plays an important role in how our Board ensures responsibility in governance. This includes listening to our stakeholders' views, inviting external guests to meetings, and using independent research to bring the voice of the customer and other stakeholders into the boardroom. Further information is provided on pages 46 – 51, and in our RBR.

Highest ethical standards – ethical business conduct

We regard the potential for bribery and corruption as a significant risk to the business and have established policies and governance that set and monitor our approach to preventing financial crimes, fraud, bribery and corruption, including our Code of Ethics (covering anti-bribery and anti-corruption). We have a Company-wide framework of controls designed to prevent and detect bribery.

Our Code sets out the standards and behaviours we expect from all employees to meet our values of 'do the right thing', 'find a better way' and 'make it happen'. The document is issued to all employees and is supported by a global communication and training programme to promote a strong ethical culture. Our UK and US Ethics and Compliance Committees (ECC) oversee the Code of Ethics and associated awareness programmes. We operate an e-learning course for all employees so they can adequately understand the Company's zero-tolerance approach to fraud, bribery or corruption of any kind.

We also have an Anti-Financial Crimes policy which applies to all employees and those working on our behalf. It sets out our zero-tolerance approach to bribery, fraud, money laundering, tax evasion and other corrupt business practices. To ensure compliance with the UK Bribery Act 2010 and other relevant legislation, we operate an anti-financial crime risk assessment process across the Company to identify higher-risk areas and make sure adequate procedures are in place to address them.

Any cases alleging bribery are referred immediately to the relevant ECC so the members can satisfy themselves that cases are managed effectively, including ensuring any lessons learnt are communicated across the business. We investigate all allegations of ethical misconduct thoroughly and take corrective action and share learnings. We also record trends and metrics relating to such allegations.

Additionally, we provide briefings for high-risk areas of the business, such as procurement. Our Code is reviewed every three years and was last updated in November 2020, and this is supported by our Ethics Business Management Standard which provides a framework around our ethics programme and describes what is expected of the business.

Each of our business areas is required to consider its specific risks and maintain a compliance framework, setting out the controls it has in place to detect and prevent bribery. Business areas self-assess the effectiveness of controls and provide evidence that supports reported compliance. Each year, all function heads are asked to certify the compliance in their area, and to provide details of any exceptions. This culminates in the presentation of a Certificate of Assurance from the Chief Executive to the Board (following consideration by the Audit Committee). You can read more about the Audit Committee's role, including its ongoing assessment of the adequacy of our anti-bribery and anti-corruption policies and processes, on pages 83 – 87. None of our investigations over the last 12 months have identified cases of bribery.

Highest ethical standards – human rights

Respect for human rights is incorporated into our employment practices and our values, which are integral to our Code of Ethics. This is vital in maintaining our reputation as a company that our stakeholders want to do business with, and that our employees want to work for.

Although we do not have specific policies relating to human rights, slavery or human trafficking, we do cover these issues through related policies and procedures such as our approach to diversity, anti-discrimination, privacy, equal opportunity and, in addition, our Global Supplier Code of Conduct integrates human rights into the way we screen and interact with our supply chain. For more information see page 245, and our RBR.

Whistleblowing

We have a confidential internal helpline, and an external 'Speak-Up' helpline that is available at all times in all the regions where we operate. We publicise the contact information to our colleagues and on our external website so concerns can be reported anonymously. Our policies make it clear that we will support and protect whistleblowers and any form of retaliation will not be tolerated.

We have again been recognised by Ethisphere as one of 2020's World's Most Ethical Companies.

Non-financial information

This section provides information as required by regulation in relation to:
- environmental matters – pages 56 – 58;
- our employees – page 59;
- social matters – pages 53 – 55;
- human rights – page 60 and page 245; and
- anti-corruption and anti-bribery – page 60 (see also pages 83 and 86.

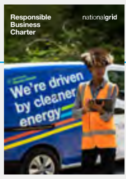
In addition, other information describing the business relationships, products and services which are likely to cause adverse impacts in relation to the matters above, can be found as follows:
- business model – pages 4 – 7;
- KPIs – pages 20 – 22;
- principal risks – pages 25 – 27; and
- Audit Committee Report (our due diligence) – pages 83 – 87.

Task Force on Climate-related Financial Disclosures (TCFD)

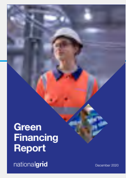
National Grid has committed to implementing the recommendations of the TCFD in full, and this is our fourth disclosure. We are committed to developing a business model that is consistent with the objectives of the Paris Agreement, and therefore set a commitment in November 2019 to reduce our Scope 1 and 2 emissions to net zero by 2050. The details of the interim targets that we have set to achieve this are included in our Responsible Business Charter (RBC) that we published in October 2020. This year, alongside the Annual Report and Accounts (ARA), we are publishing our first Responsible Business Report (RBR) which details our progress against the commitments set out in our RBC.

This year we have continued to make strong progress on full compliance with the recommendations of the TCFD. In last year's disclosure, we outlined actions that we planned to progress during 2020/21. To address those actions, we have progressed our scenario analysis of the physical risks to our assets using updated climate scenarios, developed our RBR and updated our Company strategy to incorporate our net zero commitments. For the fifth consecutive year we received the prestigious climate change 'A' score from CDP Climate Change.

Highlights of the year:



- Publication of Responsible Business Charter
- CDP A rating for 5th year in a row
- Publication of our first Green Financing Report



- Published science-based targets for our Scope 1, 2 and 3 emissions
- Good progress on our physical impacts from climate change scenarios
- Announced acquisition of WPD and proposed disposals of NECO and National Grid Gas plc
- Continued development of net zero strategy throughout the Group and as reflected in RIIO-2 Final Determinations and US rate cases
- Held ESG virtual seminar and session on future of gas; principal partner for COP26

Governance of climate-related risks and opportunities

The Board's oversight

The Board of Directors is responsible for the oversight of climate-related risks and opportunities impacting the Group. They in turn delegate some elements of their responsibility to their various sub-committees, as set out in the diagram below:

Board of Directors: There has been an increased focus on climate-related matters at the Board level as the landscape continues to evolve with further regulatory developments and changes in stakeholder expectations. Board members presented alongside management at environment, social and governance (ESG) investor presentations during the year, including an ESG virtual seminar event in October 2020 and a follow-up session on the future of gas in January 2021. The expertise of the Board on ESG-related matters continues to be enhanced through regular interactions with management, regulators and government bodies on matters such as our net zero strategy. The Board will also be actively involved in COP26 taking place in Glasgow in November, for which National Grid is a principal partner. In addition, the Board was involved in the following discussions relevant to climate change:

- reviewed and approved the climate change principal risk as part of the annual risk review and challenge process. This risk is now owned by Justine Campbell, the Group General Counsel & Company Secretary and a member of the Group Executive Committee, having first been elevated to a principal risk in Autumn 2019;
- RIIO-2 Final Determinations which reflect our investment proposition for supporting the UK energy transition;
- quarterly reviews of performance on our environmental sustainability metrics and targets; and
- approved the acquisition of WPD to achieve a scale position in electricity distribution in the UK, which is expected to see a high level of asset growth as a result of the energy transition.

The **Audit Committee** remains responsible for reviewing and approving the content of our TCFD disclosures. The Audit Committee considered papers in March and May 2021 on the financial reporting and disclosure considerations in respect of climate change. The Audit Committee also oversees the development of the assurance model for our RBR and recommends to the Board the approval of the disclosures in our first RBR.

The **Finance Committee** is responsible for overseeing our financing strategy, including the issuance of our first Green Bonds in National Grid Electricity Transmission and Niagara Mohawk Power Corporation (NMPC). The Finance Committee also considers the financial impact of environmental factors on our credit metrics and relevant considerations with regards to debt investors.

The **Safety, Environment and Health Committee** (SEH Committee) is responsible for assessing the Group environmental sustainability strategy and performance, as well as how the Company adapts its business strategy considering potential climate change risks and opportunities. The SEH Committee monitors our environmental sustainability performance quarterly and approves updates to our environmental sustainability strategy and targets annually.

The **Remuneration Committee** is responsible for determining our remuneration policy, including how ESG factors are considered in the policy, and how they are taken into consideration in determining the final incentive pay decisions. For further detail on how such factors feature in executive remuneration, please refer to the Directors' Remuneration Report on pages 92 – 113.

The **Nominations Committee** is responsible for Board appointments and succession planning. In 2019, the Nominations Committee approved the appointments of Jonathan Silver, whose previous experience included leading the US Federal government's clean energy investment fund and Earl Shipp, who brings significant experience in safety, environmental and sustainability from his executive career.

A **TCFD steering group** comprised of representatives from Group Financial Reporting, Safety, Health and Sustainability, Corporate Strategy and Investor Relations oversees progress against the TCFD recommendations and the publication of our annual disclosure, and reports to the Chief Financial Officer. In addition, a new **Responsible Business steering group**, chaired by the Interim Group Corporate Affairs Director, has been set up to provide oversight of the integration of responsible business into National Grid, including the development of ESG targets and future ESG strategy. The steering group also provides oversight over ESG-related external reporting, including TCFD disclosures and is comprised of the Interim Group Corporate Affairs Director, Chief Financial Officer, Group General Counsel & Company Secretary and the Chief People and Culture Officer. Standing attendees include the Head of Responsible Business, Head of Safety, Sustainability, Health and Environment and the Group Financial Controller.

A **Green Financing Committee** chaired by the Group Treasurer, provides governance over our Green Financing Programme. In December 2020, the Green Financing Committee approved the publication of our first Green Financing Report, which provided an analysis of how we utilised the proceeds from our portfolio of Green Bonds and their environmental impact.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Management's role

Management is responsible for managing on a day-to-day basis the climate-related risks and opportunities faced by the Group and for delivering the roadmaps to achieve the net zero strategy set by the Board.

Responsibility for asset investment and maintenance planning, implementation of the net zero strategy and overseeing the development of the RBC is delegated by the Board to the **Group Executive Committee** which further delegates responsibility to the core operational businesses.

Our businesses are responsible for and held accountable for determining their local roadmaps for achieving net zero, including tracking and monitoring net zero metrics and targets at a local level:

- UK and US core businesses – responsible for managing the impacts of climate change on the assets within their businesses and working with local regulators to develop regulatory frameworks that enable the transition to net zero;
- Electricity System Operator – responsible for working with the energy industry to adapt the Great Britain (GB) electricity system to keep electricity flowing reliably with increasing renewable sources;
- National Grid Ventures (NGV) – responsible for identifying clean energy investment opportunities, such as large-scale renewables like wind and solar. NGV is also responsible for investing in our interconnector portfolio which is expected to import energy that is 90% zero carbon by 2030; and
- National Grid Partners (NGP) – responsible for incubating and investing in technology startups that can help National Grid achieve the energy transformation.

Our functions are responsible for supporting the businesses in achieving their net zero pathways:

- Corporate Affairs – responsible for external communications in regard to our net zero strategy, including the publication of the RBC and RBR;
- Group Finance – responsible for supporting the businesses to understand the financial impacts of net zero plans and producing external ESG metric reporting and disclosures, executing green financing and managing ESG investor communications;
- Safety, Health and Environment – responsible for assessing the Group environmental sustainability strategy and performance, monitoring our environmental sustainability performance quarterly and implementing the annual updates to our environmental sustainability strategy and targets; and
- Group Human Resources – responsible for integrating ESG targets into remuneration frameworks for approval by the Remuneration Committee.

Our role in the energy transition continues to be an area of increasing focus at all levels of the organisation, from Company-wide calls led by the Chief Executive on the commitments published in our RBC, to bespoke sessions run locally to develop and communicate the roadmaps for each business' contribution to achieving net zero. Previous training has been delivered in the US about how our role is changing on the pathway to 80% reduction by 2030. More formal training programmes in the UK which were paused due to the ongoing pandemic are currently being designed for roll-out throughout the business next year. Bespoke training has been delivered to specific roles where they need knowledge and skills to deliver against our targets.

Case Study: ESG virtual seminar

National Grid hosted an ESG virtual seminar on 5 October 2020, led by Chairman Sir Peter Gershon and Chief Executive John Pettigrew. The event provided an opportunity to hear from management across our UK, US and NGV businesses on our ESG achievements to date, and our ambitions for the future in areas such as the decarbonisation of electricity, transport and heat and the hydrogen studies that we are carrying out. Other Board members including Jonathan Dawson and Therese Esperdy also presented.

Following on from this seminar, in January 2021 we launched our 2021 ESG programme, the 'Grid Guide to…' series. These are short, virtual sessions giving the market a deeper understanding of the key themes and the innovative projects we're working on. The first event of the series was held on 21 January 2021 and focused on the future of gas.

Our strategy for responding to climate change

Overview of our climate-related risks and opportunities

The scale of ambition and speed of change required to meet net zero emission targets, along with the changes in temperature and weather patterns present both risks and opportunities to our business. These risks and opportunities, along with a summary of the work we are doing to address them, are presented in the table below. Short-, medium- and long-term timeframes are defined in our risk methodology as one year or less, one to three years and three or more years respectively, and this is reflected in the table below.

Risk/opportunity type and description	Our response
Markets Commercial opportunities from the transition towards net zero will continue to shape our portfolio and strategy. **Timeframe:** Short, medium and long-term **Impacted businesses:** Group-wide	The decarbonisation of transport and expansion of EV-charging infrastructure presents significant growth opportunities and was a driver behind our decision to increase our electricity footprint in the UK. We have also developed a strategy to enable the building of charging stations across our US jurisdictions and UK highways and NGET are looking at the decarbonisation of Heavy Goods Vehicles (HGVs), ensuring that all viable technologies are considered, refining the 2030 pathway for decarbonising transport based on industry feedback. The decarbonisation of heat presents significant opportunities for our electric businesses as electric heating solutions are sought for homes, offices and buildings. While the shift to electric heating provides a downside risk to our gas businesses, there are opportunities for our gas networks to be used to transport hydrogen. With the Committee on Climate Change expecting a 70% increase in UK electricity demand by 2050, our acquisition of WPD will enable us to play a pivotal role in enabling that growth. In both the UK and US, we continue to work with our regulators on decarbonisation plans as described below and have developed a dedicated programme to understand what is required to incorporate hydrogen into the gas supply, and in the UK we have developed a hydrogen trial where we will assess the impact of hydrogen on our existing assets. We also continue to invest in other technology, and in the Humber region in the UK we are leading the development of CCUS technology to support this area to become the first zero-carbon region in the world by 2040. In 2019, we acquired Geronimo, a leading developer of wind and solar generation assets based in Minneapolis, Minnesota. Geronimo was subsequently expanded and rebranded to NG Renewables and will help us to develop and grow a large-scale renewable business in the US. This is strengthened by the constant growth of NGV US Business Development and their investment in battery energy storage and medium- to large-scale renewable projects. We continue to invest in our interconnector portfolio which will form an important part of UK decarbonisation. Once Viking Link becomes commercially operational in 2023/24, NGV will hold 7.8 GW of interconnector capacity and the focus will switch to multi-purpose interconnectors which will increase interconnection and facilitate the construction and expansion of wind farms within the North Sea. We continue to invest in energy technology startups via our venture capital investment and innovation business NGP, having invested over $220 million in 25 companies and four external venture capital funds at the intersection of energy and emerging technologies.
Markets Regulatory outcomes/approval of funding affect our ability to deliver on our investment programme and in turn our net zero commitments. **Timeframe:** Short and medium-term **Impacted businesses:** ET, GT, US Regulated	Our ability to support the energy transition in the jurisdictions that we operate in is dependent on the funding approved by our regulators. We therefore work closely with our regulators and other stakeholders to develop investment plans in line with their net zero commitments while managing the costs to consumers. In the UK, we received a final package from Ofgem for RIIO-2 that will allow the critical investment required to maintain the resilience and reliability of our networks. We were also pleased to see greater flexibility in the mechanisms that will enable further investment required to deliver the energy transition; the suite of net zero and innovation mechanisms provides opportunity to access funding to develop net zero pathways. In the US, we filed for new rates for KEDNY and KEDLI in April 2019, for NMPC in July 2020 and our Massachusetts Gas companies in November 2020. Each case included proposals in support of the respective state's climate objectives, for example our KEDNY and KEDLI filing included a future of heat proposal, which featured expanded energy efficiency and demand response programmes, RNG interconnection investments, and a hydrogen blending study. Our NMPC filing included various investments linked to climate change and the new energy landscape, and in November 2020, the NYPSC approved NMPC's proposal for full deployment of Advanced Metering Infrastructure throughout its service territory which will enable clean energy initiatives and presents an opportunity to align policy goals like those set forth in the NY Climate Leadership and Community Protection Act. For the Massachusetts Gas companies, the rate case focused on both the regulatory frameworks and specific future of heat proposals to start the path of decarbonising our natural gas networks and the heating sector. Massachusetts Electric Company (MECO) will commence the third year of a five-year rate plan on 1 October 2021. The approved rate case order included several paths forward on the state's climate objectives including a climate change mitigation and adaptation plan, off-peak rebate programme for EV owners, approval of up to $50 million in energy storage, and a path forward for a significant investment in EV-charging infrastructure in 2021. In Rhode Island, the Narragansett Electric (and gas) Company (NECO) will continue operating under the third year of a three-year rate plan, and is anticipating the next rate case to be filed in November 2021. As part of the acquisition of WPD, we announced the sale of NECO to PPL which is expected to complete in early 2022.
Markets There is a risk that we are unable to deliver against our net zero targets in the UK and US, impacting our reputation, business model and in turn hindering others' ability to meet net zero targets. **Timeframe:** Short, medium and long-term **Impacted businesses:** Group-wide	The broader economy-wide net zero transition will impact our ability to meet our interim greenhouse gas (GHG) emission goals over the next 10 to 20 years; and equally our ability to rapidly deliver key infrastructure changes directly affects progress against net zero targets in the UK and US. Associated with this is a risk of failure to respond to shifts in societal and political expectations and perceptions of our role in decarbonising the economy and society. Facilitating the transition to a low-carbon economy is central to our purpose as a business and we are taking certain key actions in relation to decarbonisation. These include advocacy on legislative and policy changes that advance decarbonisation (for example the green recovery and a principal partner of COP26), campaigns targeted at relevant areas such as the future of heat and actions in the regions we operate in to accelerate decarbonisation for the public and our customers (for example, supporting renewable generation connections and investment in new and emerging areas).

Task Force on Climate-related Financial Disclosures (TCFD) continued

Risk/opportunity type and description	Our response
Markets Disruptive forces and changes in supply and demand for existing and new technologies may act as competition, require change of business model or services and/or present new opportunities. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	Achieving net zero will depend on new technologies and we are investing in our own transformational innovation capability such as in the UK, the Deeside Innovation Centre (Electricity) and FutureGrid Hydrogen Test Facility (Gas); diversifying our propositions and partners, and working with industry groups and partners to develop and upscale technology. In the US we are aggressively replacing leak-prone pipe in our gas infrastructure, which will reduce GHG emissions by 207 KT CO_2e per year by 2030. Additionally, we are pursuing various initiatives related to hydrogen and renewable natural gas, including the HyBlend initiative of the US Department of Energy that will address technical barriers of hydrogen blending into the gas network and a $50 million investment in the Newtown Creek (New York) renewable natural gas (RNG) project that will utilise wastewater and food waste for the production of RNG. As the transition to renewable generation continues, we will work with the Long Island Power Authority (LIPA) to transform our generation fleet by responding to future requests for proposal (RFPs). Under our existing contracts which extend through 2028, LIPA determines their reliability and sustainability needs and which units are operated, retired or transformed.
Security and reliability Changes to the supply and demand of energy impacts on how we deliver electricity grid and gas grid reliability and year-round operation. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** ESO and UK GT	With growth in renewables increasing intermittency on the network, and electrification of transport and heat likely, we are working with our stakeholders to ensure that grid reliability and operability is understood, managed and planned at appropriate levels. In the UK, the ESO Operability Strategy Reports outline the way in which this is being done, for example last year we launched a new superfast frequency response product called dynamic containment. This is a revolutionary step which will have profound consequences in network operation and is critical to facilitating a decarbonised grid. Further, to facilitate the ESO's ambition to be able to operate the system safely and securely at zero carbon whenever there is sufficient renewable generation online and available to meet the total national load, the ESO has agreed to contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system. Also, our UK Gas transmission business is exploring a range of innovative technologies to investigate how the Gas Transmission network could enable the UK to achieve net zero at least cost and disruption to consumers. This includes investigating whether the NTS could be used to transport hydrogen to customers in the future. This continues to be integral to the future of the gas assets, to demonstrate how existing Gas Transmission assets can be repurposed for hydrogen and will continue after the sale of our UK Gas Transmission business.
Extreme weather Physical impacts from extreme weather events such as storms and flooding. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	We continue to address the physical risks from extreme weather-related events, with a focus on flooding events (in both the UK and US) and storm hardening (in the US). As this work continues, it will be informed by not only the weather patterns we are experiencing, but also the results of the ongoing scenario testing. By the end of RIIO-T1 we will have invested £113 million in flood defences with deferred works of a further £45 million for work to be completed early in RIIO-2 with a total investment in resilience on 52 sites. NGET's RIIO-2 (2021 – 2026) plans aim to protect up to a further 100 sites from surface-level flooding and recommend further investments to manage the risks posed from the secondary impacts of flooding, such as erosion and subsidence to our tower and cable routes.
Changing weather conditions Increased frequency of weather incidents and changing long-term trends leading to asset damage/compromise and operational risks. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	The scenario testing underway is examining trends across seasonal average temperature and precipitation, as well as sea level risk. The businesses will consider whether our design standards are still appropriate under different scenarios, for example, a wider temperature range.
Changing weather conditions Changes in supply of and demand for gas and electricity as a result of changing weather conditions. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	The ESO is undertaking Mapping Impacts and Visualisation of Risks (MIVOR) of extreme weather on system operation to evaluate the impacts of extreme weather events on system operation up to 2050 under Representative Concentration Pathway (RCP) 4.5. The results will enhance the accuracy of energy system impact modelling and will also focus on the impacts of the whole supply chain, renewable generation, network assets, and demand, ensuring that the learnings produced are relevant to the whole energy system.

Impact of the climate-related risks and opportunities on our strategy

Climate change is the defining challenge of this generation and in our role at the heart of the energy system we understand the critical role we need to play. The markets in which we operate have announced ambitious carbon reduction targets and further legislative actions are anticipated. In response, in March 2021 we announced a strategic portfolio repositioning, announcing the acquisition of WPD, the largest electricity distribution network operator in the UK, the sale of NECO in the US and our intention to sell a majority stake in our UK Gas Transmission business. The acquisition of WPD provides a one-off opportunity to gain a scale position in the UK electricity distribution market, enabling National Grid to play a pivotal role in enabling the growing role of electricity in the energy landscape in the UK. Upon successful completion of the announced transactions, the contribution of electricity to National Grid's portfolio will be around 70% of the Group.

Across all of our businesses we aim to play a leading role in enabling and accelerating the transition to a clean energy system, balancing decarbonisation, affordability and reliability of supply. Working closely with governments and other stakeholders and partners around the world and through our work for COP26, we focus on the technical and commercial solutions that will help achieve net zero for the energy sector. While the biggest impact we can have is in enabling the economy-wide clean energy transition, we must also reduce our own direct impact on the environment and strengthen our resiliency to risks that we have less control over. To accomplish this, our RBC commitments to reduce Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of gas and electricity) and Scope 3 (other indirect emissions from activities and sources outside of our ownership or control) emissions align with the requirements of the Paris Agreement and Science Based Targets initiative (SBTi). These commitments, along with our overall suite of environmental sustainability initiatives, are reviewed in accordance with our quarterly business reviews and reported accordingly to the Group Executive Committee and Board.

Our climate change scenario analysis

Transition Risk Analysis

To further understand the risk that climate change could have on our business, we undertook a high-level scenario analysis, where we considered scenarios out to 2030. We used two scenarios:

- The first assumed that the global response to the threat of climate change is enough to limit global average temperature increases to no more than 1.5ºC above pre-industrial levels (as set out in the Paris Agreement) by 2100 **(the 1.5ºC scenario)**. In this scenario, rapid changes are made to progress decarbonisation goals: coordinated policy, regulation and customer behaviour favours bans on polluting technologies, and support for low-carbon solutions. We have assumed that transition impacts in this scenario would be focused around technological shifts to support decarbonisation, with the main impacts being a trend towards more large-scale renewables in the generation mix, a trend towards electrification and public pressure against the use of gas.
- The second scenario assumed that the 1.5ºC target is missed by some margin, comparable to a 4ºC global average temperature increase **(the 4ºC scenario)**. In this scenario, changes are less rapid and less comprehensive, and emissions remain high, so that the physical ramifications of climate change are more apparent by 2030. In rationalising this slower global progress, our 4ºC scenario assumed fragmented and ad hoc policy (within the Group's operating territories and globally). The main impacts of this scenario were increased weather events of escalating severity and frequency, which could increase disruption to our assets and our customers, less coordinated policy and regulation in pursuit of decarbonisation, resulting in an increase in overall system costs and reduced visibility over the network and inequality of access where some decarbonisation activities have the potential to leave some sectors of society behind.

Our analysis showed that, without action, both scenarios presented risks to us. However, while these would need to be managed, some of these changes represent material opportunities. Our next refresh of our scenario analysis will reflect the developments in our strategy as well as advancements in technology and in the wider market.

Physical Risk Scenario Analysis

To further understand the risk that climate change could have on our business, we are undertaking a high-level assessment of the physical climate change risks to assets across our UK and US business under a 2°C and 4°C scenario at future time periods of the 2030s, 2040s, 2050s and 2070s. This is important in order to mirror the longevity of our assets, even if the levels of uncertainty can increase the further ahead in time you look. The exercise is not yet complete (the project start date was delayed due to the COVID-19 pandemic), and therefore only initial results and the approach are shared in this year's disclosure.

Our approach

Our analysis on physical climate risks is aligned with recognised climate scenarios, specifically the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathway (RCP) scenarios which provide a uniform framework for exploring potential climate changes and related impacts. RCPs are used globally for climate modelling and give access to a wide range of peer-reviewed and accepted climate datasets, as well as allowing consistency across our UK and US territories. We prioritised climate data sources according to confidence and readiness for use to support a consistent risk assessment across our UK and US territories. We relied on the most up-to-date and robust data from recognised national or local sources such as UKCP18 and NCA4.

We have considered the full portfolio of assets across our businesses, grouped into 12 asset types to assess vulnerability to these hazards. An assessment of risk, along with indication of confidence, will be provided by the combination of climate hazard, asset vulnerability and asset exposure for each hazard (Figure 1). The hazard assessment is drawn from geospatial analysis of climate model data, which will be co-located with our assets within the full risk assessment during 2021.

Initial insights from the modelling

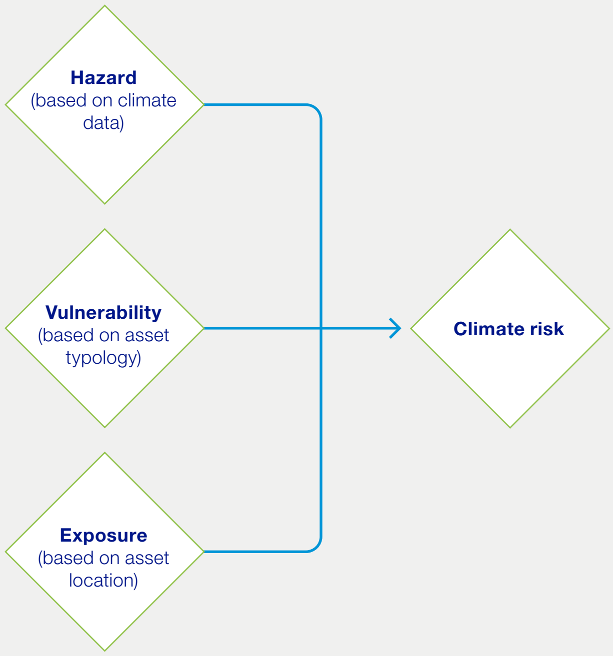
We identified eight priority climate hazards expected to have a material impact on our business, and so have focused on these hazards for this scenario analysis. Table 1 shows the climate indicators we use to represent each of the eight hazards, together with a high-level indication of the overall direction of change across the US and UK under a 4°C scenario.

Alongside the hazard assessment, our asset vulnerability assessment shows that:

- coastal and inland flooding remain the hazards which have potential to impact the widest range of asset types, depending on location.
- temperature-related hazards (very hot or very cold days, and rapid changes) can have significant impacts, but on a smaller range of asset types.
- generation assets have high vulnerability to both flood-related hazards and high temperatures.
- underground assets are protected from the direct impacts of some climate hazards (such as high winds, storms, lightning) but may experience indirect impacts such as erosion and ground movement.

Vulnerability to hazards does not mean that risks will be realised. Whether vulnerability translates into risk depends on the exposure (location) of individual assets relative to projected changes in climate hazards, as well as any site-specific resilience measures in place. The full quantified hazard and risk assessment is due later in 2021 and will provide insights through comparison of scenarios, timeframes and aggregation of results by asset type, territory or business. We are developing an interactive visualisation to allow each business to make more tailored use of the scenario analysis.

Figure 1 Components of climate risk assessment



A key feature of our approach to scenario analysis is ongoing engagement across the Group, with representatives of each National Grid business involved in prioritisation of hazards and vulnerability assessment. In turn, every business has a stake in the outcome and is identifying how the assessment will be used in strategic planning and investment choices. This is supported by an action on our principal climate change risks to develop a climate change adaptation strategy/action plan.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Table 1 Summary of climate hazard assessment

Climate hazard	Indicator	Potential change by 2070s (4°C scenario)	Level of confidence in assessment
Coastal flooding	Extent of flooding for various return period events (e.g. 1-in-30, 1-in-100, 1-in-1000)	Considerable increase in frequency and/or magnitude	Moderate
Inland flooding	Extent of flooding for various return period events (e.g. 1-in-30, 1-in-100, 1-in-1000)	Considerable increase in frequency and/or magnitude	Moderate
Storm	Combinations of high wind speed and precipitation: frequency of days when wind speed above threshold value (e.g. 55 mph) and rainfall daily amount also above threshold value (e.g. 25 mm/day)	Slight increase in frequency and/or magnitude	Low
High wind speeds	Frequency of days with wind speed above threshold value (e.g. 76 mph (34 m/s))	May increase or decrease	Low
Lightning	Frequency of lightning occurrence (qualitative)	Slight increase in frequency and/or magnitude	Low
Increased extreme temperatures	Frequency of days with maximum temperature above 35°C (95°F)	Considerable increase in frequency and/or magnitude	High
Low temperatures (icing)	Frequency of days with maximum temperature below 0°C (32°F)	Slight decrease in frequency and/or magnitude	High
Freeze-thaw cycles	Frequency of days with minimum temperature below 0°C (32°F) and maximum temperature above 0°C (in the same day)	May increase or decrease	Moderate

Risk management of climate-related risks

Process for identifying and managing climate-related risks

In autumn 2019, a Group-level climate change principal risk was developed and added to our Group risk register. The climate change principal risk is underpinned by our enterprise risk management process which is the framework through which the Group identifies, assesses, prioritises, manages, monitors and reports risks. This process, which is described on page 24 of the ARA, includes the identification of a series of Group-wide controls and actions to mitigate the climate change principal risk (this is further described on page 26).

The controls for our climate change principal risk have evolved in line with our strategy and regulatory frameworks and all are in progress. They include controls on governance (for example, Board and Group Executive Committee sign-off on strategy and oversight of delivery against net zero action plans), investment plans (bringing to scale new technologies), leadership and climate adaptation. Controls related to the climate change risk are also reflected throughout other relevant risks, for example disruptive forces, regulatory outcomes, political and societal expectations. Progress has continued against specific UK and US business risks on climate change as well as US risks embedded in climate change threats that support the Group risks. The Secretary of State in the UK requires our UK Electricity Transmission and UK Gas Transmission businesses to report on what we are doing to adapt to climate change. Our most up-to-date report will be published in 2021. This covers a much wider qualitative assessment of potential risks.

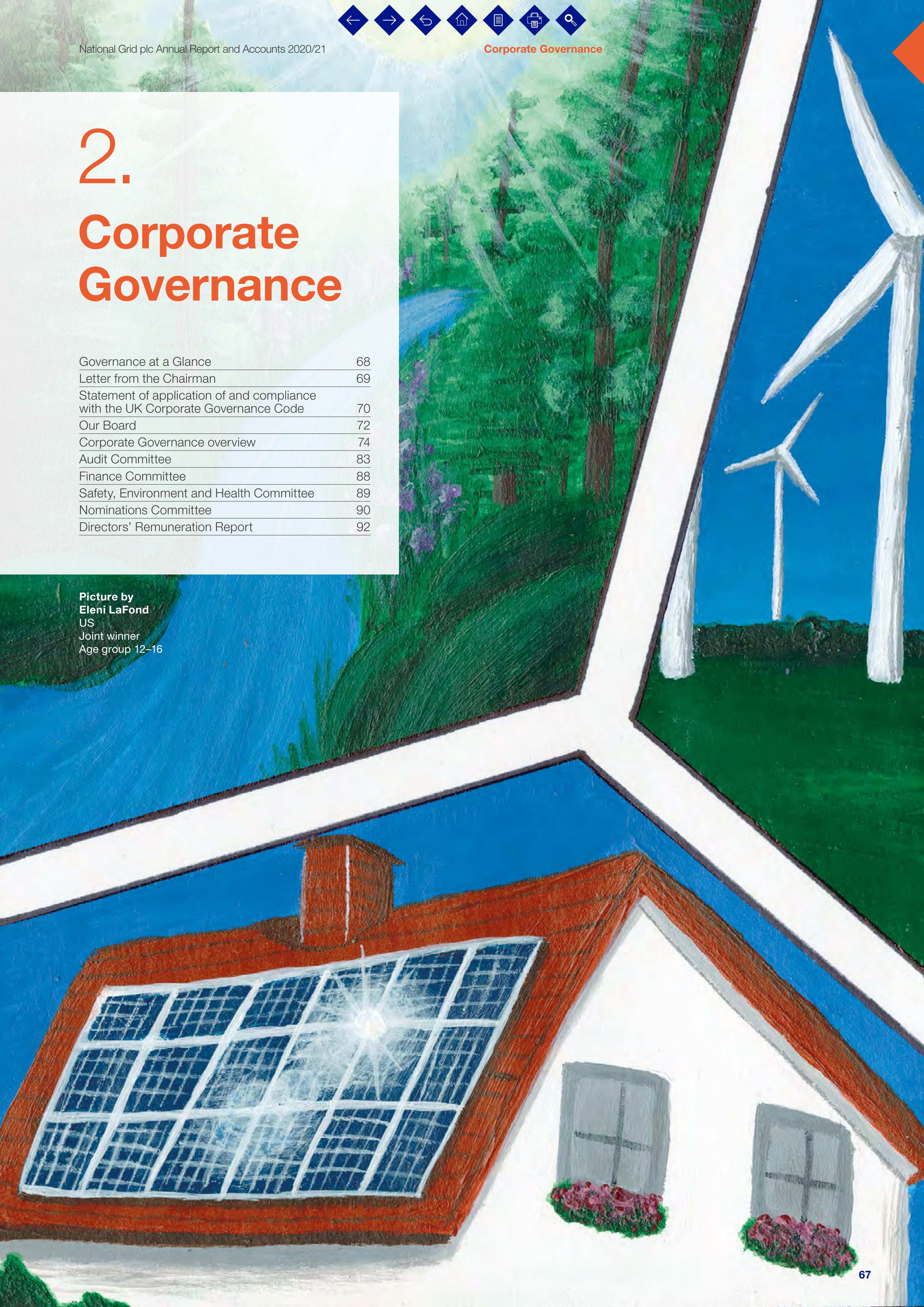
Metrics and targets

We have metrics and targets that allow us to measure our impact on the environment, demonstrate our commitment and monitor our performance. These were published in October 2020 within our RBC and, on an annual basis, our RBR will report our progress against those targets. As previously discussed, the cornerstone of our suite of metrics is our commitment to reducing our impact by achieving net zero for our Scope 1 and 2 emissions by 2050, with interim targets of an 80% reduction by 2030 and a 90% reduction by 2040. Numerous underlying metrics support and complement this goal as part of our broader sustainability ambition, including reducing the carbon footprint of our operating facilities, enhancing the natural value of our properties, recycling and/or reusing our recovered assets and reducing our office waste. These are discussed in more detail on pages 56 – 58 and in our RBR. The metrics are comprised of several business unit level metrics that are then tracked and monitored by business unit, and presented to senior management on a quarterly basis, with accountability at the local level.

We continually review our metrics and targets, as needed, to ensure that the data we are measuring is meaningful, aligns with our strategy, and is providing the information the business and our stakeholders need to effectively monitor our performance and demonstrate our progress. In 2021/22, we will be laying out our pathway to achieve our net zero by 2050 emission reductions. Our GHG emissions reduction targets have been approved by the SBTi criteria, including a more ambitious Scope 3 emissions reduction target of a 37.5% reduction by FY 2034 from a FY 2019 baseline year.

We have also included enhanced disclosures in the financial statements prepared under IFRS to explain how we have considered the financial impacts of climate change, in particular evaluating the impact of new net zero commitments in our territories, and the effect this has had on judgements and estimates such as the useful economic life of our gas assets. See notes 1 and 13 to the financial statements for details. This remains a recurring area of focus for the Audit Committee.

2. Corporate Governance



Picture by
Eleni LaFond
US
Joint winner
Age group 12–16

Governance at a Glance

The Board remains committed to the highest standards of corporate governance and views good governance as key to the long-term success of National Grid. Governance is embedded throughout the business and in the work that we do to generate value for our stakeholders.

Major Board decisions

In accordance with section 172 of the Companies Act 2006 (see page 46) the Board has consistently factored the needs, concerns and potential impacts on our stakeholders into its decision-making process. The Board continues to consider all factors in the decision-making process including the long-term consequences of any decision and the need to maintain high standards of business conduct. Major decisions taken by the Board include:

- approval of the Company's Business Plan and re-affirmed its support for the strategy approved by the Board in 2020;
- approval of the 2020/21 Annual Report and Accounts;
- endorsement of proposed changes to the new organisational design;
- approval of the Company's Responsible Business Charter and Responsible Business Report, to achieve the goal of applying a Total Societal Impact lens to everything National Grid does as a business and approval of the decision to put the Company's climate transition plan before shareholders for a non-binding advisory vote;
- following significant scrutiny, approval of the 2020/21 interim and final dividends and the announcement on growing the dividend in line with UK CPIH from 2021/22 onwards;
- after detailed analysis of Ofgem's RIIO-2 Final Determinations, accepted the overall package for ESO and most of the package for ET and GT with the approval of the submission of a technical appeal to the Competition and Markets Authority in relation to the proposed cost of equity and outperformance wedge;
- approval of the Company's acquisition of WPD from PPL subject to certain regulatory approvals and shareholder circular;
- approval of the sale of NECO to PPL, conditional on completion of the WPD Acquisition; and
- approval to commence the process to sell a majority stake in National Grid Gas plc, expected to commence later this year and complete in the second half of 2022.

Key activities and matters considered by the Board are detailed on pages 76 and 77.

Key governance events

- A General Meeting was held on 22 April 2021 where shareholders approved the proposed acquisition of WPD and an increased borrowing limit. The General Meeting was held as a closed meeting due to COVID-19 restrictions and in line with government guidelines. A shareholder webcast was made available ahead of the General Meeting where the Chairman, Chief Executive and Chief Financial Officer answered questions posed by shareholders.
- A full Group Executive Committee led virtual town hall with the global employee base was held in September 2020. There were 7,150 estimated attendees and the Company announced its new value 'make it happen'.
- The 2020 Annual General Meeting was held on 27 July 2020 as a closed meeting due to COVID-19 restrictions and in line with the Corporate Insolvency and Governance Act 2020.
- A virtual shareholder engagement event was held immediately following the 2020 AGM, including a live Q&A session with the Board.
- Inaugural ESG virtual seminar for investors led by the Chairman and Chief Executive on 5 October 2020.
- Launch of 'Grid Guide To' virtual series for investors focusing on ESG themes. Led by the Chief Executive and subject matter experts.

Key highlights

97%
Board and Committee meeting attendance
for the year ended 31 March 2021

38.5%
Female representation on our Board
As at date of report

1
Board member from non-white ethnic minority
As at date of report

67%
Average % of Issued Share Capital Voted
at 27 July 2020 AGM
(3% increase from 2019)

81%
Employee engagement score for 2020/21

49.16p
Dividend per ordinary share in 2020/21
Increase of 1.21% on prior year

6/13
Board members with less than 4 years' tenure

21
Extra Board and Committee meetings to focus on key priorities: (COVID-19, RIIO-2 and WPD Acquisition)

Letter from the Chairman

Sir Peter Gershon
Chairman

Dear shareholders,

I am pleased to present to you my final Corporate Governance Report as Chairman, for 2020/21.

The year in review

The COVID-19 pandemic has continued to have a significant impact around the world, requiring companies to be versatile and responsive. Good governance through times of crisis is crucial and as a Board we have closely monitored the developments of COVID-19 and the impact on the Company. We have been impressed by the commitment and resilience of our colleagues to continue to operate effectively in such unprecedented circumstances. Despite the restrictions which have prevented meetings in person we have effectively maintained continuity of governance and adapted to work well in a virtual way. As a Board we have utilised the ability to meet virtually ensuring effective engagement and collaboration has continued with each other as well as with our key stakeholders. I have been especially pleased that as a Board we have been able to continue to participate in a number of virtual engagement sessions with a range of different stakeholders to continue the solid progress in this area. In many circumstances holding the event virtually has broadened the diversity and reach of individuals we have been able to engage with where time zones and physical locations may have previously hindered this. Please see pages 79 and 80 to read further about Board engagement activities.

Focus for the Board

Outside of the unprecedented external influences created by the pandemic, it has been an incredibly busy year which has included the Final Determinations from Ofgem on the RIIO-2 price control, review of US strategy and regulatory landscape, a revised Group operating model and the approval of a new dividend policy. The Board also spent significant time discussing strategy and in particular potential strategic opportunities resulting in the proposed acquisition of Western Power Distribution (WPD) and the related sale of our Rhode Island energy business, which was approved by shareholders at a General Meeting (GM) on 22 April 2021.

Culture has been a key focus for the Board over the last few years and the COVID-19 pandemic has brought our purpose, culture and values into sharp focus, requiring the Company and the Board to demonstrate resilience through strong and decisive governance and risk management. The successful execution and implementation of our new operating model and the integration of WPD into the Group over the next year will be crucial in implementing and continuing the desired culture change. To read further about the Board's culture journey go to page 78.

Stakeholders

We devoted additional time to consider the impact of COVID-19 on the Company's stakeholders in its decision-making processes and held additional Board meetings during the year to ensure we were keeping any impact on our stakeholders in view. You can read more about how we have carried out our duties under section 172 of the Companies Act on page 46. We were disappointed to not be able to hold our 2020 AGM or 2021 GM in person; however, we were pleased to be able to offer virtual shareholder engagement sessions for both where shareholders were able to submit questions for answering by the Board. At the time of writing it is uncertain if we will be able to revert to a more 'normal' meeting for 2021; however virtual engagement will be available to ensure shareholders are able to engage with the Board. A resolution to amend our Articles to include the ability to allow for hybrid meetings to take place in the future is also being proposed at the 2021 AGM.

Climate Change

Climate change is an area that we regularly engage with our stakeholders on and has received increased attention year on year. The Company has been working towards an ambitious plan to reach net zero by 2050 and we are proud of the commitment the Company has made in its RBC and the challenging interim targets that have been set. Due to the importance of this area and the significant work that the Company is doing to meet its net zero ambition we wanted to go one step further this year to enable shareholders to have their say on how the Company is tackling this issue. As a result we are pleased to be making a commitment at this year's AGM to bring our climate transition plan to be voted on by shareholders at our 2022 AGM and progress against the plan to be reported annually.

Board succession and diversity

I am delighted that following a thorough search process Paula Rosput Reynolds was identified as my successor as Chair and joined the Board on 1 January 2021 as Non-executive Director and Chair Designate. A comprehensive induction process has been in place and Paula is well prepared to step into the role of Chair following my retirement from the Board on 31 May 2021. For further information on Paula's appointment process see page 91, and, for information on the induction process, page 82.

Maintaining a diverse culture on the Board is crucial and I am pleased that Paula's appointment as Chair will make National Grid one of only a small number of FTSE 100 companies with a female chair. Diversity is crucial to improving effectiveness, encouraging constructive debate, delivering superior performance and enhancing the success of the Company, and with Paula's appointment we have increased our gender diversity to 38.5% women on the Board. We also currently meet the Parker Review target for ethnic diversity on FTSE 100 boards. You can read more on how we strive towards our refreshed Board Diversity Policy objectives on page 91.

There have been a number of Committee changes during the year with Liz Hewitt becoming Chair of the Audit Committee in November 2020 and Earl Shipp becoming Chair of the Safety, Environment and Health Committee from 1 April 2021. As I signalled in last year's report, Paul Golby will not stand for re-election and will retire from the Board at the conclusion of the 2021 AGM, Mark Williamson is also due to retire later in the year upon reaching his nine-year term. I thank Paul and Mark for their significant contributions and the value that they have added to the Board during their tenures. Justine Campbell also joined the Company, succeeding Alison Kay as Group General Counsel & Company Secretary from 1 January 2021.

Looking Forward

It is clear that Paula will be taking over as Chair at a time of considerable activity, with the next 12–18 months a crucial time for the Company. As we enter into the new RIIO-2 regulatory period, start to see the recovery of the economy from the constraints of the COVID-19 pandemic and the integration of WPD into the Group proceeds, the Board will continue to closely monitor the impacts of these events on the Company. With a number of Directors reaching their nine-year term there will also be a period of change for the Board and the opportunity for a refreshed set of skills which will ensure that the Board is well placed to react to the changing needs of the Company and the repositioning of the Company's portfolio to achieve its vision to put National Grid at the heart of a clean, fair and affordable energy future.

Sir Peter Gershon
Chairman

Paula Rosput Reynolds
Chair Designate

I am honoured to be taking over the role of Chair from 31 May 2021. I am looking forward to working with John Pettigrew and the rest of the Board and engaging with National Grid employees and key stakeholders. Sir Peter has given over nine years of devoted Chairmanship to the Company and I will ensure strong continuity of governance while imparting my experience and knowledge to lead a refreshed Board that is able to add significant value and provide effective stewardship over the Company. I look forward to reporting on the progress made in my first year as Chair in next year's Annual Report.

Statement of application of and compliance with the UK Corporate Governance Code

UK Corporate Governance Code – 2020/21 Compliance Statement

The Company is subject to the principles and provisions of the UK Corporate Governance Code (the Code), which have been consistently applied. The table below outlines how the Group has structured the Governance section of the Annual Report around the principles of the Code.

For the year ended 31 March 2021, the Board considers that it has complied in full with the provisions of the Code with the exception of provision 19, which has been a short-term departure from the Code. Provision 19 of the Code outlines that the Chair of a company should not remain in post beyond nine years from the date of first appointment. The Code allows for an extension of the Chair's tenure for a limited time to support effective succession planning and development of a diverse board.

The Company outlined in the 2018/19 and 2019/20 Annual Report that Sir Peter Gershon's tenure would be extended to conclude the RIIO-2 process and allow a smooth transition to the new Chair. Sir Peter will be stepping down on 31 May 2021 at which point we will comply in full with provision 19. Further detail on the Chair succession process can be found on page 91.

Disclosure Guidance and Transparency Rules

We comply with the Corporate Governance Statement requirements pursuant to the FCA's Disclosure Guidance and Transparency Rules by virtue of the information included in this Governance section of the Annual Report together with information contained in the Shareholder Information section on pages 240 – 244.

Principles of the Code

1. Board Leadership and Company Purpose

Company Purpose

National Grid's vision is to be at the heart of a clean, fair and affordable energy future. This vision is intrinsic to our purpose to Bring Energy to Life. National Grid operates at the heart of the energy system, connecting millions of people safely, reliably and efficiently to the energy they use every day. The Board is collectively responsible for the oversight and long-term success of the Company and champions the purpose and vision ensuring consistency with our workforce policies and practices. To deliver our vision, the Board has set its strategy through four key strategic priorities to create long-term value for our stakeholders. This is underpinned by the values and behaviours that shape the culture of National Grid and how we operate. This is detailed on page 18.

Culture

We recognise that how we do things is as vital as what we do. Culture sets the tone and as a result the right culture leads to a motivated and productive workforce. The Board is responsible for influencing and monitoring culture throughout the Company to ensure the desired beliefs and behaviours both in and outside the boardroom are embedded. During the year the Board has continued its journey to mould and implement the right culture across the business. Our culture journey is detailed on page 78.

Engagement

The Board remains committed to engaging with the workforce and view it as a key element of understanding the culture issues and challenges across the business. The COVID-19 pandemic presented some challenges, but engagement has continued effectively due to the ease of virtual sessions and lack of geographical barriers. The Board actively engages with all stakeholders and regularly reviews the type of engagement; further information on this can be found on pages 46 – 51.

2. Division of Responsibilities

The Chairman, who was independent on appointment, is responsible for the leadership and management of the Board and its governance. National Grid has a clear governance framework that is detailed on page 74. The Board supports the separation of the roles of the Chairman and Chief Executive. The key responsibilities are clearly documented and reviewed when appropriate; the matters reserved for the Board schedule is available on our website. The Chairman makes sure the Board is effective in its role by promoting a strong culture of openness and debate. This helps facilitate contribution from all Directors and maintain relations between the Executive and Non-executive Directors.

All of the Non-executive Directors detailed on pages 72 and 73 are considered independent by the Company and the Chair Designate upon appointment was considered independent; this is detailed on page 91. Non-executive Directors are advised of the time commitment and travel expected from them on appointment. External commitments, which may impact existing time commitments, must be agreed with the Chairman prior to appointment and approved by the Board during their tenure.

As part of the Chairman's succession, potential candidates are notified of the expected time commitment at the beginning of the process. Independent of management, our Non-executive Directors bring diverse skills and experience vital to providing strategic guidance, constructive challenge and debate.

The Group General Counsel & Company Secretary ensures that the Board has access to the necessary policies, processes and resources required to operate effectively and efficiently. She is also responsible for ensuring that timely information is provided and advises and supports the Chairman and the Board on all governance matters.

3. Composition, Succession and Evaluation

Composition

The Board believes it operates effectively with an appropriate balance of independent Non-executive and Executive Directors who have the right balance of skills, experience, independence and knowledge of the Company. Details of our Board, their biographies and Committee membership are set out on pages 72 and 73. Board and Committee attendance during the year to 31 March 2021 is set out on page 75.

The size and composition of the Board and its Committees is kept under review by the Nominations Committee to ensure the appropriate balance of skills, experience, independence and knowledge. The Committee also monitors the expertise of the Board and will recommend further appointments. The appointment of Paula Rosput Reynolds in January 2021 ensures the Board has a Non-executive Director and Chair Designate with the required capabilities and expertise to succeed as Chair. The independence of the Non-executive Directors is considered at least annually along with their character, judgement, commitment and performance on the Board and Board Committees. The Board took into consideration the Code and indicators of potential non-independence, including length of service. Following due consideration, the Board determined that all Non-executive Directors were independent in character and judgement. Although Paul Golby reached nine years' tenure on 1 February 2021, the Board determined that the 6 months extension past nine years did not have any effect on his independence and he was therefore determined to remain independent.

Succession

The Nominations Committee, which comprises the Chair Designate and Non-executive Directors, leads the process for Board appointments and makes recommendations to the Board. The Nominations Committee also has responsibility for ensuring that plans are in place for orderly succession to both the Board and senior management positions as well as overseeing the development of the talent pipeline to ensure that the future leadership needs of the Company are considered and these fit the culture and forward-looking strategy of the Company. This has been a key focus in the year and more detail is outlined on page 90.

Following Board approval, Justine Campbell was appointed as Group General Counsel & Company Secretary in January 2021; the detailed process is outlined on page 91.

Each Director is subject to election at the first AGM following their appointment, and re-election at each subsequent AGM. Following recommendations from the Nominations Committee, the Board considers whether all Directors continue to be effective, committed to their roles and have sufficient time available to perform their duties. The Chairman held meetings with each Board member at the end of the year to discuss their contribution and performance. Following these meetings he confirmed to the Nominations Committee that he considered that each Director continued to be effective. In April 2021 it was confirmed that all Directors continued to perform their duties in accordance with the principles of the Code. Succession planning is ongoing for those members of the Board who are approaching the nine-year term.

Evaluation

The 2020/21 performance evaluation of the Board, Board Committees and individual Directors was carried out internally with consideration given to composition, diversity, skills, and effectiveness. You can read more about this on page 81.

4. Audit, Risk and Internal Control

The Company recognises the importance and benefits of the independence of both the internal audit function and the external auditor. The Board is satisfied that the current policies and procedures in place ensure their independence and effectiveness. See pages 83 – 87 for further details.

The Board is responsible for presenting the Annual Report and Accounts that when taken as a whole is considered fair, balanced and understandable in its assessment of the Company's position and prospects. The Audit Committee has a robust process to ensure this is the case, outlined on pages 84 and 86. The statement of Directors' responsibilities is set out on page 116.

The Board delegates responsibility to the Audit Committee which oversees the Group's system of risk management and internal control. The Board considered both principal and emerging risks facing the Company during the year as detailed on pages 24 – 27.

The Company's risk appetite is set by the Board alongside internal controls and the risk management processes. The Audit Committee assists the Board with its responsibilities relating to risk and assurance and these activities are set out on pages 84 – 86.

5. Remuneration

The Remuneration Committee is comprised entirely of independent Non-executive Directors. The Committee is responsible for the development and implementation of the Remuneration Policy and determining the remuneration for Executives and senior management; including alignment to the Company's purpose, culture, values and long-term strategy. Our policy is reviewed against workforce remuneration and performance and is designed to reflect our stakeholders' interests.

The Directors' Remuneration Report on pages 92 – 113 sets out the work of the Remuneration Committee, its activities during the year and further details on how our Remuneration Policy is implemented.

During 2020/21, the Remuneration Committee ran a successful tender and appointed new remuneration consultants. Further detail is set out on page 111.

No Director is involved when determining their own remuneration outcome. Each Director exercises independent judgement and discretion as part of any decision made by the Remuneration Committee.

Our Board

Committee membership key

- A Audit Committee
- F Finance Committee
- N Nominations Committee
- R Remuneration Committee
- S Safety, Environment and Health Committee
- E Group Executive Committee
- Chair of the Committee

Biographies as at 19 May 2021

Other changes during the year:

- Alison Kay stepped down as Group General Counsel & Company Secretary on 31 December 2020

Sir Peter Gershon CBE FREng (74)
Chairman

Appointed: 1 August 2011 as Deputy Chairman and Chairman with effect from 1 January 2012

Tenure: 9 years

Skills and competencies: Sir Peter is an experienced leader, having held senior board-level positions in the computer, defence and telecommunications industries. He has served as a Managing Director in several high-profile organisations and was previously Chairman of Tate and Lyle plc. Sir Peter is committed to engaging with employees, for example, through site visits in the UK and US. He annually hosts the Chairman's Awards, an excellent opportunity to appreciate employees at National Grid; and further engages through the recent employee engagement sessions. Sir Peter brings external insight, understanding of diverse issues and the strong corporate governance expertise required to create and lead an effective Board.

External appointments:

- Chairman of the Dreadnought Alliance Leadership Board;
- Trustee of the Sutton Trust;
- Trustee of the Education Endowment Foundation;
- Advisory Board member of the Reform Research Trust;
- Chairman of Join Dementia Research (JDR) Partnership Board; and
- Board member of the Investor Forum.

E F

John Pettigrew FEI FIET (52)
Chief Executive

Appointed: 1 April 2014 and Chief Executive with effect from 1 April 2016

Tenure: 7 years

Skills and competencies: John joined the Group as a graduate in 1991 and has progressed through many senior management roles. John brings significant know-how and commerciality to his leadership of the executive team and management of the Group's business.

John continues to lead the implementation of the Group's strategy. This year a new group operating model was introduced under John's leadership, in order to improve customer and stakeholder relationships; evolve our ways of working and culture; and to ensure a step change in efficiency and effectiveness. Recently, he led on a strategic pivot, including the WPD Acquisition and to commence the process to sell a majority stake in our UK Gas Transmission business.

External appointments:

- Member of the UK government's Inclusive Economy Partnership;
- Member of the Electric Power Research Institute Board;
- Member of the CBI's President's Committee;
- Member of the Edison Electric Institute Executive Committee; and
- Non-executive Director and Senior Independent Director of Rentokil Initial plc.

R F N

Jonathan Dawson (69)
Non-executive Director; Independent

Appointed: 4 March 2013

Tenure: 8 years

Skills and competencies: Jonathan, through his broad range of expertise within the finance and pensions sector, brings significant in-depth understanding in remuneration and financial matters to his role as Chair of the Remuneration Committee. Jonathan previously held positions as Chairman of the Remuneration Committee and Senior Independent Director of Next plc and Chairman of the Audit & Risk Committee and Senior Independent Director at Jardine Lloyd Thompson Group plc.

As a Non-executive Director, Jonathan brings an innovative perspective, scrutiny, constructive challenge and independent oversight to the Board.

External appointments:

- Chairman of River and Mercantile Group plc; and
- Chairman and a founding partner of Penfida Limited.

E

Nicola Shaw CBE (52)
Executive Director, UK

Appointed: 1 July 2016

Tenure: 4 years

Skills and competencies: Nicola's career, in the UK and overseas, has included several senior operational and commercial roles in regulated businesses. She has a strong leadership track record, which has included Chief Executive Officer of HS1 and Managing Director of the UK Business Division at FirstGroup plc.

Her broad range of experience working with the UK government, the European Commission and Parliament and industry regulators, as well as leading large regulated businesses, enables Nicola to implement Board decisions and lead our UK business with the requisite experience, knowledge and leadership expertise.

External appointments:

- Non-executive Director of International Consolidated Airlines Group, S.A.;
- Director of Major Projects Association;
- Director of Energy Networks Association Limited; and
- Director of Energy UK.

E F

Andy Agg (51)
Chief Financial Officer (CFO)

Appointed: 1 January 2019

Tenure: 2 years

Skills and competencies: Andy trained and qualified as a chartered accountant with PricewaterhouseCoopers and is a member of the ICAEW. He has significant financial experience, having held a number of senior finance leadership roles across the Group, including Group Financial Controller, UK CFO and Group Tax and Treasury Director. Andy brings in-depth knowledge of National Grid, both in the UK and US, and his broad experience across operational and corporate finance roles led to a smooth transition into his role. He contributes broadly on a wide range of topics at Board, Finance and Audit Committee meetings.

External appointment:

- Member of the 100 Group Main Committee and Chair of the Tax Committee.

E

Justine Campbell (50)
Group General Counsel & Company Secretary

Appointed: 1 January 2021

Skills and competencies: Justine has held senior executive positions at several multinational companies and is an experienced lawyer with particular expertise in regulated sectors.

She is responsible for safety, legal, risk, compliance and governance activities across the Group, the effective operating of National Grid plc's Board and Committees and advising on key issues of corporate governance.

External appointment:

- Member of the GC100 Group Executive Committee.

A N S

Amanda Mesler (57)
Non-executive Director; Independent

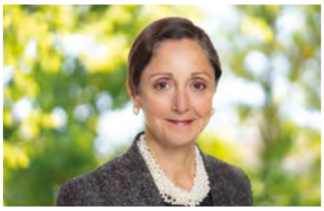
Appointed: 17 May 2018

Tenure: 3 years

Skills and competencies: Amanda brings to the Group extensive international leadership and general management experience from the technology and fintech sectors. She has over 26 years of experience at senior management and Board level at large international companies. She led a $1 billion global practice at Electronic Data Services and has experience sitting on audit, risk and remuneration committees. Amanda provides an entrepreneurial perspective to the Board and valuable insight into the Company's increasingly important technical evolution.

External appointment:

- Chief Executive Officer of CashFlows Europe Limited.



F A N

Therese Esperdy (60)
Non-executive Director; Independent

Appointed: 18 March 2014. Appointed to the Board of National Grid USA from 1 May 2015

Tenure: 7 years

Skills and competencies: Therese has significant international investment banking experience, having held a variety of leadership roles spanning 27 years. Her career began at Lehman Brothers and in 1997 she joined Chase Securities and subsequently JPMorgan Chase & Co., where she held a number of senior positions. With a distinguished career in the investment banking sector, Therese brings significant banking, strategic and international financial management expertise and knowledge of financial markets to the Board and to her role as Chair of the Finance Committee.

Therese's specialist knowledge combined with her sharp and incisive thinking enables her to contribute and constructively challenge on a wide range of Board debates.

External appointments:

- Chair of Imperial Brands PLC; and
- Non-executive Director of Moody's Corporation.

S A N

Dr Paul Golby CBE FREng, FIET, FIMechE, FEI, FCGI (70)
Non-executive Director; Independent

Appointed: 1 February 2012

Tenure: 9 years

Skills and competencies: Paul is a Chartered Engineer and has a lifelong passion for engineering and innovation, having spent his career in the energy and regulatory sectors. He brings a valuable engineering and industry perspective to the Board as well as the attributes of an experienced Chairman and Chief Executive to his role as a Non-executive Director. Paul's deep understanding and specialised experience in safety and risk management combined with his deep insight into regulatory issues faced by the Group, particularly in the UK, is crucial to his role as a member of the Safety, Environment and Health Committee.

External appointments:

- Chairman of Costain Group plc;
- Director of the Electrical Research Association (ERA) Foundation; and
- Chairman of NATS Holdings Limited.

A N S

Liz Hewitt (64)
Non-executive Director; Independent

Appointed: 1 January 2020

Tenure: 1 year

Skills and competencies: Liz qualified as a chartered accountant with Arthur Andersen & Co. In her executive career she worked in private equity for 3i Group plc, Gartmore Investment Management Limited and Citicorp Venture Capital Ltd gaining insights into a wide variety of industries. Her work at Smith & Nephew gave her global insight. She was seconded for a year to HM Government. In November 2020 Liz was appointed as Chair of the Audit Committee. She has extensive experience as an Audit Committee Chair and as a member of nominations and remuneration committees. She is considered to be a financial expert in the context of Audit Committee work. Her broad industrial and global experience and her financial knowledge bring a wide perspective to Board discussions and decision-making.

External appointment:

- Senior Independent Director and Chair of the Audit Committee at Melrose Industries plc.

N

Paula Rosput Reynolds (64)
Chair Designate & Non-executive Director; Independent

Appointed: 1 January 2021 as Chair Designate and Chair with effect from 31 May 2021

Tenure: Less than 1 year

Skills and competencies: Paula's strong business acumen can be demonstrated by her impressive track record of leading complex international businesses. In her board and leadership roles, Paula has demonstrated her decisive and pioneering nature which will be crucial in moving National Grid's vision forward, as it embarks on its journey to clean energy and net zero by 2050. Her knowledge of the energy market and experience supporting organisations through transitional periods will be an asset to the Board as National Grid continues to grow and embrace opportunities. Upon joining the Board, Paula stepped into the role of Chair of the Nominations Committee, which will be pivotal in ensuring that the succession and composition of the Board matches the culture, strategy and leadership needs of the Company. These skills combined with her insight into strategic and regulatory issues will enable her to lead and govern an effective Board.

External appointments:

- Senior Independent Director and Chair of the Remuneration Committee at BP plc;
- Non-executive Director of General Electric;
- President and CEO of PreferWest LLC; and
- Chair of Seattle Cancer Care Alliance.

S N R

Earl Shipp (63)
Non-executive Director; Independent

Appointed: 1 January 2019

Tenure: 2 years

Skills and competencies: With an extensive career in the chemicals industry and having held a senior leadership role in a safety-critical process environment, Earl brings significant safety, project management, environmental, sustainability and strategic expertise to the Board and Committees particularly in relation to safety management. This, along with his innovative way of thinking, enables Earl to contribute on a wide range of issues to Board and Committee debates and to effectively chair the Safety, Environment and Health Committee.

External appointments:

- Non-executive Director of Olin Corporation; and
- Non-executive Director of CHI St. Luke's Health System of Texas.

F N R

Jonathan Silver (63)
Non-executive Director; Independent

Appointed: 16 May 2019

Tenure: 2 years

Skills and competencies: Jonathan has considerable knowledge of the US-regulated energy environment, experience and understanding of integrating public policy and technology into a utility as well as a strong background in finance. Previously, Jonathan was the head of the US government's $40 billion clean energy investment fund. He is currently the Managing Partner of Tax Equity Advisors LLC, which manages investment in large-scale renewable projects and was recognised as one of the 'Top 10 Green Tech Influencers' in the US. Jonathan's strong background in finance and government policy along with his long career at the intersection of policy, technology, finance, and energy brings innovative and positive insight to the Board's policy discussions and to its interaction with management.

External appointments:

- Independent Director of EG Acquisition Corp.;
- Senior Advisor to Guggenheim Partners;
- Non-executive Director of Peridot Acquisition Corp.;
- Director of Plug Power, Inc; and
- Director of Intellihot, Inc.

N R

Mark Williamson (63)
Non-executive Director & Senior Independent Director

Appointed: 3 September 2012

Tenure: 8 years

Skills and competencies: As a qualified chartered accountant, Mark brings considerable financial and general managerial experience to the Company. His previous roles as Chief Financial Officer of International Power plc, Non-executive Director and Senior Independent Director of Alent plc and Chairman of Imperial Brands PLC cement his extensive financial experience and give him a deep understanding of the utilities sector. Mark stepped down as Chair and member of the Audit Committee in November 2020, offering guidance and support to Liz, as she succeeded him as Chair of the Audit Committee. In his role as Senior Independent Director, Mark brings an excellent understanding of investor expectations as well as providing significant insight into managing relationships with investor and financial communities.

External appointment:

- Chairman of Spectris plc.

Corporate Governance overview

Board

Our Board is responsible collectively for the effective oversight of the Company and its businesses. It determines the Company's strategic direction and objectives, business plan, dividend policy, viability and governance structure to help achieve long-term success and deliver sustainable shareholder value. The Board also plays a major role in setting and leading the Company's culture and wider sustainability goals. It considers key stakeholders in its decision-making and, in doing so, ensures that Directors comply with their duty under section 172 of the Companies Act 2006.

To operate efficiently and give the right level of attention and consideration to relevant matters, the Board delegates authority to its Board Committees. Each Committee Chair reports to the Board on their Committee's activities after each meeting.

Key matters considered by the Board include:

- the Company's strategy and long-term strategic objectives;
- risk appetite and determination of principal risks;
- overall corporate governance arrangements, systems of internal control and risk management;
- annual business plan and budget;
- significant changes in capital structure;
- succession planning for Board and senior management;
- half-year and full-year results statements, Annual Report and Accounts and other statutory announcements;
- oversight of the Company's response to major crises and other significant challenges; and
- determination of the framework or policy for the remuneration of the Chairman, Chief Executive, Executive Directors, Group General Counsel & Company Secretary, and direct reports to the Chief Executive, following recommendation from the Remuneration Committee.

Board Committees

Audit Committee:

- Financial reporting.
- Internal controls.
- Processes for risk management.
- Internal audit.
- External auditor.

Nominations Committee:

- Board and Committee composition.
- Succession planning.
- Board appointments.

Remuneration Committee:

- Policy.
- Consideration of exercise of discretion.
- Implementation of policy.
- Incentive design and setting of targets.

Finance Committee:

- Financing policies and decisions.
- Credit exposure.
- Hedging.
- Foreign exchange transactions.
- Tax strategy and policy.
- Guarantees and indemnities.

Safety, Environment and Health (SEH) Committee:

- SEH strategy and policies.
- Performance targets.
- Sustainability.

Group Executive Committee

Led by the Chief Executive, the Committee oversees the safety, operational and financial performance of the Company. It is responsible for making the day-to-day management and operational decisions it considers necessary to safeguard the interests of the Company and to further the strategy, business objectives and targets established by the Board.

The Committee members have a broad range of skills and expertise that are updated through training and development. Some members also hold external non-executive directorships, giving them valuable board experience. Those members of the Committee who are not Directors regularly attend Board and Committee meetings for specific agenda items.

Other management committees

Disclosure Committee; Investment Committee; Share Schemes Sub-Committee.

Our Group Executive Committee

Three Executive Directors are members of the Group Executive Committee, as well as being on the Board. The Group General Counsel & Company Secretary is also a member of the Group Executive Committee. See their biographies on page 72.

Full biographies for the Group Executive Committee are available at: nationalgrid.com

Governance structure

The schedule of matters reserved for the Board and terms of reference for each Board Committee are available in our Board Governance Document at: nationalgrid.com

Reports from each of the Board Committees, together with details of their activities, are set out on pages 83 – 94.

Board attendance and skills

Board and Committee membership and attendance

The table below sets out the Board and Committee attendance during the year to 31 March 2021. Attendance is shown as the number of meetings attended out of the total number of meetings possible for the individual Director during the year.

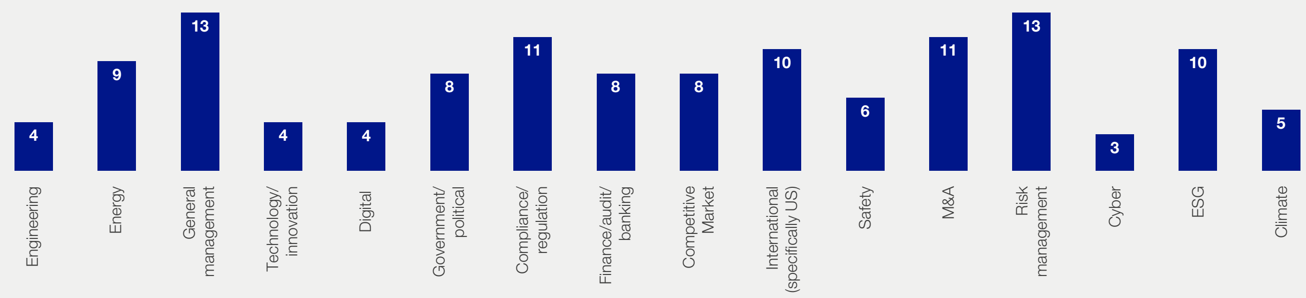
Director	Board	Audit	Finance	Nominations	Remuneration	Safety, Environment and Health
Sir Peter Gershon	◆ 19 of 19	–	–	4 of 4[4]	–	–
John Pettigrew	19 of 19	–	7 of 7	–	–	–
Andy Agg	19 of 19	–	7 of 7	–	–	–
Nicola Shaw	19 of 19	–	–	–	–	–
Jonathan Dawson	19 of 19	–	7 of 7	6 of 6	◆ 10 of 10	–
Therese Esperdy	19 of 19	6 of 6	◆ 7 of 7	5 of 6[1]	–	–
Paul Golby	19 of 19	6 of 6	–	6 of 6	–	◆ 4 of 4
Liz Hewitt	18 of 19[3]	◆ 6 of 6[5]	–	6 of 6	–	3 of 4[3]
Amanda Mesler	17 of 19[1]	6 of 6	–	6 of 6	–	4 of 4
Earl Shipp	19 of 19	–	–	5 of 6[2]	10 of 10	4 of 4
Jonathan Silver	18 of 19[1]	–	7 of 7	6 of 6	9 of 10[1]	–
Mark Williamson	19 of 19	4 of 4[5]	–	6 of 6	9 of 10[1]	–
Paula Rosput Reynolds – Appointed on 1 January 2021	5 of 5	–	–	◆ 1 of 1[4]	–	–

◆ Board/Committee chair

1. A number of meetings this year were ad hoc and held at short notice. The Directors noted were unable to join due to short notice and/or conflicting commitments. Where possible all Board/Committee members who were unable to attend a meeting provided comments to the relevant Chair in advance of the meeting.
2. Earl Shipp was unable to attend the April 2020 Nominations Committee meeting due to a conflicting commitment.
3. Liz Hewitt was unable to attend the September 2020 Board and Safety, Environment and Health Committee meetings due to travel disruption.
4. Sir Peter Gershon stepped down as Chair and member of the Nominations Committee on 1 January 2021 following the appointment of Paula Rosput Reynolds as Chair Designate and Chair of the Nominations Committee with effect from the same date. Sir Peter Gershon was not required to attend one of the Nominations Committee meetings this year as it was held to discuss his succession.
5. Mark Williamson stepped down as Chair and member of the Audit Committee with effect from 10 November 2020. Liz Hewitt stepped into the role as Chair with effect from the same date.

Board skills and experience

This diagram sets out the number of Board members with specific skills and experience as a way of demonstrating the different aspects the Directors bring to the Board.



Corporate Governance overview continued

Examples of Board focus during the year include:

Strategy

Strategy remained a key focus throughout 2020/21. In addition to Board meetings held during the year, the Board participated in an interactive strategy session held in September 2020. Topics of discussion included: recap of the Company's strategy; the next 12 months; decisions needed in the next 6 months to roll out the new operating model by April 2021; and US, UK and NGV strategy delivery.

UK RIIO-2 price control

The Board has continued to scrutinise and challenge the UK regulatory strategy throughout the year, providing feedback, guidance and support for its ongoing development.

The Board spent a considerable amount of time discussing the RIIO-2 price control this year and an additional meeting was held in January 2021. Matters considered included:

- various scenarios for Draft Determination positioning prior to the publication of the Draft Determinations in July 2020;
- how the UK business was responding to the draft proposals, its approach and key arguments;
- the Company's engagement and communications strategy;
- how the RIIO-2 performance plans had evolved, how risk and change impact of the plans was being managed;
- the outcome of the Final Determinations and possible areas of appeal to the Competition and Markets Authority (CMA);
- approval of the two technical areas of appeal to the CMA; and
- regular updates from the Chairman and Chief Executive on conversations with key stakeholders.

In January 2021, the Board agreed the recommendation to accept the overall package for the Electricity System Operator and not to pursue an appeal on any area to the CMA.

US strategy and regulatory landscape

The Board has continued to focus on developing business plans, strategies and advocacies to reposition the Company to align with the new reality. Considerations included:

- designing a simpler, more streamlined business, leading to a more efficient and effective organisation;
- embedding more of a customer focus in core operations;
- improving the way we engage with a broad range of stakeholders;
- focusing on the long-term objectives of implementing innovative regulatory frameworks, including rate plans;
- providing opportunities for investments in clean energy for the US business; and
- working with regulators and external stakeholders to set up new customer assistance programmes and regulatory pathways for recovery of incremental impacts associated with COVID-19.

The implementation action plan was approved by the Board in April 2020 and execution progressed well with two thirds of the actions now complete. The four actions behind track were due to COVID-19.

Agreed acquisition of WPD from PPL (subject to certain regulatory approvals) and strategic portfolio repositioning

This year the Board has spent a significant proportion of time discussing the strategic position of the Company to ensure its net zero ambition and overarching strategy could be achieved. In March 2021, the Board decided to proceed and strategically pivot the UK portfolio towards electricity. The decision was also taken to proceed with the sale of NECO and the majority stake in NGG.

Stakeholder analysis was undertaken during the decision-making process and further information can be found on page 48.

Stakeholders considered

Business Plan and financial performance

Business Plan

The Board discussed the ongoing financial strategy and focused on developing a Business Plan that meets the Group's requirements, aligned to the Company's purpose, vision and values.

The Board received an update on the emerging Business Plan to provide an early view given the interlinked strategic financial decisions required in 2021. In January 2021, the Board supported the suggested amendment to the financing strategy considered by the Finance Committee and approved the delegation of final approval to a sub-committee.

Stakeholder analysis had been undertaken and the impact of the Business Plan on non-investor stakeholders considered. Following a more detailed impact analysis at the March 2021 Board meeting, the Board approved the Company's Business Plan.

Financial performance

The Board receives monthly updates on the Group's financial performance. This year the Board has reviewed and scrutinised the Group trading performance, budget and financing strategy. Share price has also been considered throughout the financial year.

Dividend

The Board considered the dividend policy at its May and June 2020 meetings. The Board approved the proposed interim and final dividend payments and approved the updated dividend policy in January 2021.

The Board also reviewed the Group's dividend policy in light of the decision on Ofgem's RIIO-2 Final Determinations and the Company's Business Plan. It was announced on 2 March 2021 that from FY2021/22 onwards, the policy will aim to deliver annual dividend per share growth in line with UK CPIH inflation.

Stakeholders considered

Organisation and culture

New operating model

Following input from the Nominations Committee, the Board has provided input on the proposed changes to the new operating design. The overarching aim of the project is to build a sustainable operating model to underpin our vision and strategic priorities, and to adapt our business to a rapidly changing external context. Following a clear articulation of the expected outcomes and the impact on the business, the Board endorsed the proposed changes in May 2020.

Diversity

The Board received updates on the ambitious diversity and inclusion targets at the March and April 2021 meetings.

Stakeholders considered

Our Stakeholders

Colleagues
Investors
Regulators
Communities
Customers
Suppliers

COVID-19

The Board has considered the impact of COVID-19 across all areas of the business via Board papers and meeting updates.

Throughout the peak of the pandemic, Board meetings were held weekly to discuss internal and external implications, and particularly the impact on our:

- people;
- operations;
- regulatory developments; and
- financials.

This was supported by the consideration of a number of actions to mitigate any negative impacts.

As the pandemic continued into the summer months, the meetings became fortnightly with weekly briefing notes circulated to the Board.

Our workforce remains a key focus as we continue to navigate the impact of the COVID-19 pandemic. We are pleased to report that none of our employees were furloughed during the period. A survey was conducted across the workplace to gauge both the level of business need, but also personal need, for a priority return to the workplace. The Board recognised the importance to support and prioritise a return for those who were facing the most challenges in working from home. The health and safety of our employees remains paramount and all policies have been in accordance with government guidelines.

Stakeholders considered

Other

The Board has also spent time this year considering the following matters:

- implications of the 2020 US presidential election;
- deep dives on the performance of the business and digital strategy execution;
- the strong performance of the UK and US commercial property portfolio;
- the future of the ESO; and
- culture and the implementation of the new operating model, further details of which can be found on the prior page.

Stakeholders considered

Sustainability

Responsible Business Charter

Following the recommendation last year to develop and implement a new Responsible Business framework for the Company, the Charter was created with the goal of applying a Total Societal Impact lens to everything the Company does as a business.

Extensive internal and external engagement has taken place. The Board reviewed and provided input on the Responsible Business Charter. The Board reviewed and approved the new Responsible Business Report in September 2020. A copy of the report is available at nationalgrid.com/responsibility. See pages 52 – 53 for further information.

COP26

This year the Board was pleased to report that the Company would be a principal partner of COP26. The Board received an update on the Company's aims and objectives for sponsoring COP26, the scope of the Company's campaign and core engagement components and timeline. The Board discussed the Company's ambitions and the engagement of key stakeholders during the campaign. The Board recently approved the addition of climate change as a principal risk. The Group's principal risks are reviewed and discussed by the Board bi-annually. Further information can be found in the TCFD section on page 61.

Following an update on COP26 in January 2021, the Board confirmed its support for the principle of taking a climate change advisory non-binding vote to the Annual General Meeting. In March 2021, the Board noted the climate change action plan and approved the external announcement. The Board received a further update on the Company's environmental, social and governance (ESG) positioning in April 2021.

National Grid Renewables

The Board considered the integration of Geronimo into NGV and the launch of the new National Grid Renewables brand.

Stakeholders considered

Looking forward

The Board's focus for next year is expected to include:

- US and UK regulatory strategy;
- implementation of RIIO-2;
- rate case filings;
- responsible business and ESG strategy;
- future of the ESO;
- organisational culture, bench strength and talent;
- effectiveness of the new operating model;
- stakeholder engagement strategies in the UK and US;
- long-term financing strategy; and
- integration of WPD into the Group and updates on the Rhode Island and NGG sale processes.

Our Stakeholders

Colleagues | Investors | Regulators

Communities | Customers | Suppliers

Corporate Governance overview continued

Our culture journey

Our culture determines how we behave, how we make decisions and our attitude towards risk and how it aligns with the Group's purpose, vision and values. The Board has been on a journey over the last few years to create the right culture throughout the Company, to ensure our workforce are embracing positive and inclusive behaviours and values in everything we do. This year, considerable time was spent reviewing organisational culture as we continue to evolve for the future.

We are pleased to report that the Board has progressed the culture-related activities reported last year. COVID-19 has impacted on the way our colleagues work and new ways of working have accelerated the implementation of our culture change programme following a positive response from our colleagues.

More information on our culture can be found on page 18.

January – March 2020
The Nominations Committee considered the need to evolve our operating model to underpin the delivery of our strategy and to ensure progress was being made towards the Company's goal of being purpose led. It was agreed that there was a need to evolve our culture and ways of working to create substantial change across the organisation and to achieve a results-orientated culture. Following input from the Board, Group Executive Committee, and evaluated learnings from external benchmarks and utility peers, a programme of work was designed and initiated by Human Resources.

April

May

April – May 2020
The Board received the annual culture scorecard update devised to monitor culture at Group level with the aim of providing the Board with the information required to fulfil its role in influencing and monitoring culture. The scorecard had been updated to include additional analysis highlighting the change in culture and ways of working experienced during the COVID-19 pandemic.

A colleague engagement survey had also been undertaken, prior to the pandemic, to gain a more common understanding of the Company's culture and how this impacted behaviours and ways of working within the Company. The survey concluded that the current culture was highly consistent with the Board's view of culture and that 'order' and 'safety' had ranked as two of the top cultural behaviours and the results were also consistent with the themes seen in the annual survey.

The Board received an update on the early stages of the new operating model, considering the key milestone plan and the four key process stages.

The Board considered the culture and colleague engagement survey in May, which had been updated to reflect the feedback on the scale of ambition and provided tangible measures to support the assessment of progress. The Board noted the updated distillation of the new cultural ambition, which was one of the four overarching programme objectives from the wider operating model review. The proposed targets were agreed, which included a 10% increase in the overall organisation outcome score over the next 12 months.

December

September

September – December 2020
The Board considered how the organisational design programme was being rolled out, the progress to date and the forward plan.

Programme momentum continued to accelerate with a strong focus on design and implementation. The Board also received an update on the material progress made on culture initiatives and the design and cascaded communication of the new organisation and operating model. The programme became 'Leading the Energy Future' as it symbolised the transition from running a change programme towards an operationalisation of our strategy across the Group. Each of the objectives are directly linked to our strategic priorities and quantified with programme targets. You can read more about our strategic priorities on page 10.

February

April

February – April 2021
In February 2021, Spencer Stuart facilitated a culture diagnostic survey for the second year, which was completed by the Senior Leadership team, Non-executive Directors and a sample of colleagues from across the business. The aim of the survey was to see if the views of senior leadership corresponded to the views of the wider team and to establish if, from their perspective, any progress had been made on the culture journey.

In March 2021, the Board received an update on our response to the Black Lives Matter movement from the Chief Diversity Officer. Good progress had been made against the 'call to action' commitments and on inclusion and diversity in the Company. The transparency of diversity data had also increased. The Board endorsed the priorities for the next six months in the inclusion and diversity sphere.

In April 2021, an update on the progress of the culture journey was provided to the Board, along with the results of our annual Grid:voice employee survey. Good progress was seen across our organisational and leadership metrics, which exceeded our target outcomes. 81% of our colleagues completed the Grid:voice survey and the overall results were positive and reflected the considerable work we have done this year on developing our culture and our response to the pandemic.

2021 and beyond

2021 and beyond
Our leading indicators on culture change show we have multiple areas of progress being made that point toward a real change being underway. The primary focus for 2021 will be ensuring the successful execution and implementation of our new operating model including the integration of WPD into the Group and managing the proposed sale of a majority stake in Gas Transmission in the UK and the sale of NECO in the US. The acquisition will bring great people and experience to the Group and we will consider how to best incorporate the customer-centric culture. Focus will also be on reviewing and monitoring the impact on culture of the COVID-19 pandemic and ensuring that the improved communications and momentum of change activity continue as colleagues start returning to offices. Looking at the next 6–12 months, the programme will focus on delivering broadly across several initiatives with a key focus across five key priorities:

1. Implement our new organisation across the Group
2. Stand up new components of the operating model
3. Deliver planned/in-flight technology programmes
4. Capture the first wave of functional and business process efficiencies
5. Make key portfolio decisions and incorporate these into target operating design model

Colleague engagement

Throughout the year we have continued with our 'Full Board Employee Voice' approach to workforce engagement, which utilises and enhances existing colleague engagement methods and communication channels to ensure meaningful engagement between the Board and our workforce across all locations.

In April 2020, the Board considered how the COVID-19 pandemic would impact the Board's ability to undertake a significant proportion of the planned activity for 2020/21. The colleague engagement plan was reviewed and updated to include a list of virtual colleague engagement opportunities across our businesses. The virtual colleague engagement sessions, designed to fit around other commitments, have enabled the Non-executive Directors to gain exposure to additional business areas and a broader cross section of employees where previously there may have been logistical constraints. A good example of this was the meeting with the US Trade Unions which would only logistically work virtually given the locations these members are situated in. We will continue to undertake some virtual sessions to ensure this broad engagement continues.

Examples of fuller Board engagement:

Details of the actions can be found below (see page 80).

Employee Resource Group (ERG) Sessions

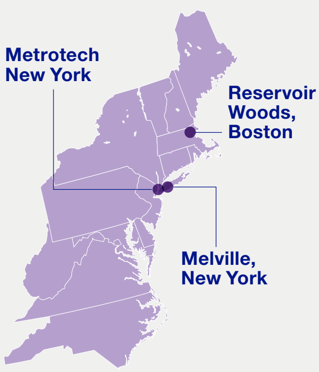
In September 2020, the Non-executive Directors met with nine US ERG Chairs and leads virtually for an informal session. Discussions focused on: inclusion and diversity; communication in middle management; COVID-19; and Board accountability.

Virtual engagement opportunities

Examples of virtual engagement opportunities that took place included:

19 video conference sessions

2,598 participants



Session	Attendees
All NGV call	525
Electricity transmission leadership Q&A call	81
Ethics and psychological safety webinar	189
Finance committee engagement session	12
Interconnector call	7
Investment management meeting	29
NGV leadership call	139
UK finance town hall	160
UK land and property town hall	124
UK leadership call	30
UK town hall	180
UK trade union session	6
US ERG session with NEDs	9
US gas safety performance functional meeting	50
US HR call	150
US leadership calls	600
US strategy & regulation meeting	97
US trade union session with NEDs	10
Virtual Chairman's awards	200

Trade Union Sessions

In October 2020, the Non-executive Directors met virtually with 10 colleagues from the US trade unions who provided a local perspective on the New England, upstate New York, and downstate New York regions. Discussions centred on safety performance; outsourcing; communication; COVID-19; and inclusion and diversity.

In November 2020, the Non-executive Directors met virtually with colleagues from the UK trade unions and discussed COVID-19; the outcome of RIIO-2; health and safety; ethics and business policy; and the protection and integrity of the network.

Communications

A key focus this year and throughout the COVID-19 pandemic has been around maintaining colleague communications across a variety of channels and forums to ensure our workforce were kept informed of the engagement activities being undertaken and the progress of any actions.

Our approach to colleague communications has strengthened and we launched a series of videos of the Non-executive Directors introducing themselves on a Company social media platform. The videos have helped employees to learn more about who our Board members are, their role, and why it is important that they meet and interact with colleagues. These videos combined with the engagement sessions have helped raise the visibility of the breadth of activity undertaken and of the role of Non-executive Directors on the Board. Feedback received confirmed that colleagues valued the Non-executive Directors taking time out to do the videos and to join engagement sessions to meet and talk with our colleagues.

Feedback and decision-making

We continue to track activity, feedback and actions taken. The Board is informed of progress against the actions bi-annually and this provides an opportunity for the Board to consider the arrangements in place. The Board also allocates time at each Board meeting to discuss key outcomes, discussions and any actions from recent engagement activities they have attended.

The Black Lives Matter update to the Board was a positive example of how discussion impacted a Board decision. In July 2020, the Board had the opportunity at a Board meeting to meet with two employees to discuss their views on diversity in the Company and the Black Lives Matter movement. As a result, a 'call to action' campaign document was made available and discussed at a subsequent Board meeting. The campaign identified six areas for the Company's increased focus. In November 2020, the Board received an update on progress and was pleased to see the momentum of change, including the appointment of a new Chief Diversity Officer, increased transparency of diversity data through communications, the roll-out of new leadership training including mandatory unconscious bias training – which was also made available to the Board, and the inclusion of ambitious diversity targets in the Responsible Business Charter which the Board approved. See our website nationalgrid.com/responsibility for more detail.

A further update on diversity was brought back to the Board in March 2021 where the new Chief Diversity Officer presented the progress made against the commitments, what had been done to improve inclusion more broadly, and the areas of focus for the year ahead.

Further information on what we have heard and what we have done can be found below.

Looking ahead

Following the success of the virtual engagement sessions and the continuation of remote working, the number of colleague engagement opportunities continues to grow.

We periodically review the effectiveness of the activity undertaken to ensure our chosen approach remains appropriate and that the engagement continues to evolve following feedback from Board members and colleagues. A more holistic review will be undertaken later this year.

Corporate Governance overview continued

Colleague engagement continued

What we heard in 2020/21:	What have we done?
During the colleague engagement virtual activity, some of the areas we heard about were:	
• commitment to inclusion and diversity within the Company in the long term. Further information was also requested on what was being done to diversify the Board in terms of gender, race and sexuality. Colleagues raised concern that diversity surveys were limited and not shared outside each ERG group.	• Focus remains on our long-term goal of our workforce being representative of the communities we serve. In January 2021, we appointed a new Chief Diversity Officer, who is working with inclusion and diversity managers to create a Global Diversity, Equality and Inclusion (DEI) function. The new function will remain as part of the People function, but will have an elevated reporting line, independence and importance, which is reflective of the Company's commitment to inclusion and diversity. • Aligned to our commitment to improve transparency on gender and race, we now publish data to show the percentage of women and ethnically diverse people against our total population, the communities we serve, by region and global band. In the future, we aim to report on broader diversity measures such as sexual orientation, social mobility and disability, however in order to do so we continue to strongly encourage self-declaration, so we can improve measurement and track progress. • We have also updated our commitments to diversity following the publication of our Responsible Business Charter. Further information can be found within the Nominations Committee Report on page 90. • HR have shared the data from the March 2021 employee diversity survey with the ERG groups. The results have also been shared with the Chief Diversity Officer.
• colleagues suggested that communication could be improved through line managers and safety advocates in relation to safety performance and messaging. Concerns were also raised in relation to a perceived weaker safety performance amongst contractors compared to employees.	• Our internal intranet was piloted to field colleagues in February 2021 and includes a designated space for safety performance. • The Safety, Environment and Health Committee plan to review the safety performance data to see if there is any correlation.

What we heard in 2019/20:	What have we done?
More needs to be done to create ethnic and gender diversity within the Company and to ensure that senior roles are representative.	• Following the introduction of a new inclusion and diversity category at the Chairman's Awards, the winner of the award was the Allyship When it Matters Training. The training was developed in the aftermath of the death of George Floyd and the civil unrest in the US as there was a desire from National Grid colleagues to understand what they could do to support their colleagues from diverse backgrounds further. Many employees wanted to 'do the right thing' but were uncertain as to how to go about it. The US and UK ERGs got together and hosted the virtual webinar Allyship When it Matters. Nearly 2,000 UK and US employees joined the webinar, with an additional 1,500 later viewing the recording. The webinar explained what an ally is, why allies are necessary, allyship best practices and how to go from ally to advocate. The response to the session was overwhelmingly positive with a score of 4.96/5 on the feedback survey. The true value of the webinar was that we offered an opportunity for employees to come together and understand that in acting as an ally they could contribute to addressing the unjustices that have recently been highlighted across the world. Racism and all forms of discrimination were discussed using personal stories of employees to illustrate the devastating impact discrimination causes and educated others on how they can be part of the solution. • When considering the recruitment of new Directors, the Nominations Committee adopts a formal and transparent procedure with due regard to the skills, knowledge and level of experience required, as well as to diversity. All Board appointments are recommended on merit.

Performance evaluation

2020/21 Internal Board evaluation

In accordance with the UK Corporate Governance Code the 2020/21 Board evaluation was conducted internally. Our annual evaluation provides the Board and its Committees with an opportunity to consider and reflect on the quality and effectiveness of their decision-making, and for each member to consider their own contribution and performance. The approach we took this year was to explore further the themes and open questions from last year's evaluation to understand where improvements had been made and where further focus was needed.

Structure

With Paula Rosput Reynolds joining the Board in January 2021 as Chair Designate the evaluation provided an opportunity for feedback to be provided that Paula would be able to review and take forward as appropriate once she stepped into the position of Chair of the Board. In accordance with the Code, National Grid's annual evaluation of Board effectiveness is facilitated by an independent third party at least once every three years; the next externally facilitated evaluation will take place in 2021.

The evaluation process was led by the Chair Designate and supported by the Group General Counsel & Company Secretary. The proposed structure of the evaluation survey and the questions were agreed in December 2020 and presented to the Board for approval in January 2021. The questions were formulated to build on the open questions from last year's evaluation and were largely forward-looking.

Process

In February 2021 the Board received an effectiveness evaluation survey for completion. The questions were focused around the following areas:

- Board effectiveness and information to the Board;
- Committee effectiveness;
- Board dynamics; and
- opportunities/concerns.

Individual performance review meetings were held with the Chairman during the first few months of 2021.

In April 2021, the results of the evaluation survey were presented to the Board and key areas of focus were agreed.

Areas identified to enhance the Board's effectiveness for 2021/22

The Board discussed the results of the evaluation in April 2021 and identified key areas of focus for the coming year including: Board and Committee reporting; and Board dynamics and effectiveness in light of a number of Board member changes. The areas identified in this year's evaluation will feed in to the external evaluation which is due to take place later this year.

Progress against actions for the Board agreed in the 2019/20 internal evaluation

Action	Progress made
More effective discussion and decision-making through streamlined and targeted papers to the Board and its Committees.	• This is an ongoing process. The agenda format and most papers have allowed for more effective discussions and decision-making throughout the year. • Paper templates and information being provided up to the Group Executive Committee and Board will be reviewed again later in the year following an action from the Group Executive Committee to review the content of information going to that forum.
External perspectives to be brought forward to the Board to bolster management expertise including in the areas of cyber, climate change, customer and developments in energy policy and energy technology.	• Unconscious bias training (employee training) rolled out in October 2020 to all Directors. • Digital training – undertaken by the full Board in December 2020. • Proposals for UK/US customer voice are planned to be brought back to the Board at the appropriate time.
Continue with and enhance the effectiveness of employee engagement sessions to ensure a clearer alignment between these sessions and discussions/decisions made by the Board and its Committees.	• Extensive arrangements put in place for 2020/21, including US and UK trade union sessions and a session with our ERGs. The Non-executive Directors have all joined various town halls/leadership meetings/team calls throughout the year and have engaged with a wider variety of employees. • In July 2020, following the Black Lives Matter (BLM) movement, the Board invited two employees to the Board to provide their views on BLM and what more the Company could be doing. The Board discussed a 'call to action' document and has been kept informed of updates to the actions.
Devote more time to the discussion of strategic priorities at Board meetings.	• This year, the Board's focus on strategic items has been appropriate and reflects the strategy and focus of the Board during the year. Approximately 35 hours of the Board's time in 2020/21 was spent on strategic topics, with the top three areas of discussion being: the acquisition of WPD; RIIO-2; financing, dividend and Business Plan. • All 'for information' papers are included in the board packs but only discussed if a member of the Board has specifically asked to raise a concern/comment with the Chairman prior to the meeting.

Corporate Governance overview continued

Directors' induction and training

Directors' induction programme

Following appointment to the National Grid Board, each new Director receives a comprehensive induction programme tailored to their experience, background and the requirements of the role. Consideration is also given to Committee appointments, and the Group General Counsel & Company Secretary assists the Chairman in designing and facilitating the individual programmes. They are primarily designed with the purpose of onboarding and familiarising the new Directors with our business, vision, values, governance and people.

Non-executive Director induction examples

Liz Hewitt and Paula Rosput Reynolds have undertaken a tailored induction programme covering a range of areas of the business including governance, finance, audit and stakeholder matters. They have both met with senior management from key business areas and functions as well as members of the workforce across the UK, US and NGV businesses. They also both separately received a briefing from our legal advisors which included: directors' duties; the Market Abuse Regulation; and listing and disclosure obligations. On appointment both received a comprehensive Director induction pack with important background information on the Company along with corporate information, details on the Board and Committees including up-to-date corporate governance guidance as well as key internal policies and codes.

A detailed summary of Liz Hewitt's and Paula Rosput Reynolds' inductions can be found below.

Liz Hewitt

Due to Liz's position on appointment as successor to Chair of the Audit Committee, focus was given to matters pertinent in preparing Liz to step into her role as Chair of the Audit Committee in November 2020.

Audit Committee	Liz met with Mark Williamson, the outgoing Audit Committee Chair, to gain an understanding of the Company's internal controls and risk management relating to operations as well as an overview of the responsibilities of the Committee. In order for a smooth transition into her role as Chair of the Audit Committee, Mark has provided ongoing support and guidance to Liz to ensure she had access to all the relevant information she needed to effectively chair the Committee.
Colleagues and external advisors	Liz met with several key employees and external advisors in relation to audit and finance including: Deloitte's Lead Audit Partner, which involved an open dialogue in relation to the Company's audit process; and Andy Agg, Chief Financial Officer, who provided an overview of the finance function, the key roles and individuals of our operating model, our Finance Ambition as well as discussing ongoing strategy projects.
Safety, Environment and Health Committee	As part of her induction to the Safety, Environment and Health (SEH) Committee, Liz met with the Group Director of Safety, Health and Environment to discuss our SEH framework and was briefed on the Company's carbon reduction and climate change strategy, wellbeing and sustainability ambitions.
Site visits	Liz visited the central control room in Wokingham, UK; however, due to COVID-19, further planned site visits in the UK and US were postponed. We are planning virtual and in-person site visits this year in line with government guidelines.

Paula Rosput Reynolds

As Chair Designate, Paula's induction aimed to provide a holistic view of National Grid and the environment it operates in. She therefore focused on meeting with the following key external and internal stakeholder groups:

Regulators and governments	National Grid operates in a complex regulatory environment both in the UK and US. To develop her understanding of the intricate nature of our regulatory landscape, Paula held over 20 meetings with key external regulatory, government and system representatives, including with Ofgem, BEIS, Rhode Island Public Utilities and New York Public Service Commission.
Investors, analysts, brokers and technical experts	Before joining the Board, Paula engaged with several investment bankers to gain awareness of their perception and opinions of the Company, including with Morgan Stanley, Robey Warshaw LLP, Guggenheim Partners and Gleacher Shacklock LLP. Further to this, she met with numerous institutional investors including Capital Research, The Olayan Group and Royal London Asset Management. More than 30 meetings were held with analysts, brokers and external technical experts including training from external lawyers at Herbert Smith Freehills, which focused on the legal context for a Chair of a UK listed company, the Listing Rules and the UK Market Abuse Regulations.
Suppliers UK and US trade associates	The external business environment we operate in is changing rapidly and therefore Paula was keen to meet with UK and US trade and other associates. Multiple meetings were held including with Edison Electric Institute, American Gas Association, City and Guilds and RenewableUK.
Colleagues	Individual one-to-one meetings were held with members of the Group Executive Committee along with monthly meetings scheduled for the year with Andy Agg, Chief Financial Officer. Further to this, meetings are being arranged with senior management from a wide variety of functions such as, individuals involved in reporting to the Finance and Audit Committees; individuals who deal with HR, remuneration and safety functions; individuals who head up the legal and risk functions; individuals with senior operational and customer-centric roles; and individuals involved in IT, digital, and cyber security.

Director development and training

The Chairman has overall responsibility for ensuring that our Non-executive Directors receive suitable ongoing training to enable them to remain an effective Board member. Individual training requirements are reviewed and agreed annually on a one-on-one basis. As our internal and external business environment continues to change, it is important to ensure that Directors' skills and knowledge are refreshed and updated regularly. In addition to individual tailored training, updates on corporate governance, legal and regulatory matters are also provided by way of briefing papers and presentations at Board meetings. Non-executive Directors receive details of training and development opportunities offered by external advisors on various topics including cyber security, and climate change and technical updates on a regular basis and we encourage and monitor attendance. During the year, Non-executive Directors attended in-depth training on cyber security in energy, as well as taking part in the Company's unconscious bias training for diversity and fair ethical decision-making. The training received on unconscious bias had also been circulated to employees as a foundation to build on our understanding of how unconscious bias can affect people in the workplace.

Audit Committee

Liz Hewitt
Committee Chair

Key areas of focus in 2020/21:

- Ongoing review and impact of COVID-19 on the half-year and year-end financial statements and internal controls;
- Financial due diligence and circular financial disclosures and assurance for the WPD transaction;
- Alternative Performance Measures (APMs) and Regulatory Performance Measures (RPMs);
- Climate-change-related financial disclosures and responsible business reporting;
- Cyber security and cyber audit outcomes;
- UK regulatory developments and impact on the Committee;
- Audit Committee Chair transition; and
- Finance leadership changes.

Key areas of focus in 2021/22:

- UK regulatory developments and impact on the Committee including Audit Reform;
- WPD Acquisition accounting and integration, including impacts on financial reporting, risk management and internal controls;
- Development of an Audit and Assurance Plan;
- Go-live of new general ledger system in the UK (MyFinance);
- Overall framework for risk management, internal controls and assurance, including the impacts of the new operating model; and
- ESG reporting and related climate and financial disclosures.

Composition of the Audit Committee

The Committee is made up of four independent Non-executive Directors*:

- Liz Hewitt (Committee Chair);
- Therese Esperdy;
- Paul Golby; and
- Amanda Mesler.

*Mark Williamson stepped down as Committee Chair and member of the Audit Committee on 10 November 2020.

The Board is satisfied that the Chair, as a chartered accountant with significant board-level financial and audit experience, is suitably qualified and has recent and relevant financial experience. The Committee as a whole is deemed to have competence relevant to the sector in which the Company operates.

Role of the Committee

The work of the Audit Committee has never been more important: investors, other stakeholders and regulators require ever more informative and reliable reporting, not just of the results and financial position, but of resilience, risk management and the Company's Environmental, Social and Governance (ESG) reporting. The Audit Committee supports the Board in its corporate governance responsibilities by providing oversight of the financial reporting including key accounting judgements and estimates, the effectiveness of internal controls, risk management and compliance frameworks, the Company's governance framework, assurance processes and internal and external audit. The Committee also oversees the appropriate procedures and evaluates the Company's approach to the prevention of fraud and bribery, and oversees the appropriate whistleblowing mechanisms.

In January 2021 management completed a detailed review of the Audit Committee's effectiveness against an overarching framework. Outcomes of the review were discussed with the Committee Chair and it was confirmed that the Audit Committee are operating effectively and in line with external guidance.

Review of 2020/21

During the financial year the Committee met four times as part of the standard schedule of meetings. Following the decision to defer the 2019/20 Group results announcement by a month in light of the COVID-19 pandemic there was an ad-hoc meeting on 15 June 2020 to approve the 2019/20 Annual Report and Accounts and a second ad-hoc meeting on 8 March 2021 to review the WPD Acquisition. The attendance of the meetings by members can be viewed on page 75.

The year-end financial reporting process is a busy period for the Group and 2020/21 presented challenges for management, including judgemental and complex accounting issues, changes in work processes, and continued uncertainty in the regulatory landscape both in the UK and US. In executing their governance and oversight responsibilities, the Committee has regularly engaged with management.

The Committee also performed an active role on the WPD Acquisition, with the Board delegating responsibility to the Committee to oversee that a robust financial due diligence process had been undertaken. The Committee was also delegated responsibility for overseeing the financial disclosures in the shareholder circular, including receiving the assurance report from Deloitte and for reviewing management's Financial Position and Prospects (FPP) procedures risk mitigation plan, which was developed to maintain continued compliance with listing rule requirements, following completion of the transaction.

The Committee oversaw the Company's response to the letter received from the FRC following their review of the Company's Annual Report and Accounts for the year-ended 31 March 2020. The letter, received in February 2021, was responded to within the 28-day deadline with no follow-up questions subsequently received.

The Committee maintains an extensive and detailed agenda focusing on audit, compliance and risk processes within the Company, working closely with management, the external auditor, global internal audit, the finance and legal teams. Key items of business considered during the year are set out on page 85.

Despite restrictions caused by the pandemic I was pleased to hold a virtual question and answer session with members of the Risk and Compliance teams from both the UK and US. This was a key part of the wider stakeholder engagement focus for the Board which is detailed on page 79 and I plan to hold more of these sessions with other key teams and the Audit Committee throughout 2021/22.

Following the 9 November 2020 Committee meeting Mark Williamson stepped down as Committee Chair and member of the Audit Committee. I would personally like to thank Mark Williamson for his service to the Committee and his time spent in ensuring a handover to me during last year. My thanks also to the Finance and Company Secretariat teams for their help and support during a busy year.

Liz Hewitt
Committee Chair

Further reading
You can view the Committee's Terms of Reference here: nationalgrid.com

Statement of compliance with the Competition and Markets Authority (CMA) Order – the Company confirms that it has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 (Article 7.1), including with respect to the Audit Committee's responsibilities for agreeing the audit scope and fees and authorising non-audit services.

Audit Committee continued

Significant issues/judgements relating to the financial statements

In considering the financial results announcements and the financial results contained in the Annual Report and Accounts, the Committee reviewed the significant issues and judgements made by management in determining those results.

The significant issues and judgements considered for the year ending 31 March 2021 are set out in the following table.

In addition, the Committee and the external auditor discussed the significant issues addressed by the Committee during the year. You can read more in the Independent Auditor's Report on pages 117 – 128.

Matter considered	Factors and reasons considered, including financial outcomes
COVID-19-related matters	• The Committee continued its oversight of the accounting, reporting and internal control implications of the COVID-19 pandemic. In particular, the Committee evaluated management's assessment on the recoverability of bad and doubtful debts for our retail customers in the US, evaluating the impact of reduced collection activities as a result of moratoriums issued by state regulators. Other macroeconomic factors were also considered including the impact of unemployment rates and the level and availability of government stimulus and support. During the year ended 31 March 2021, these factors contributed to a total bad debt charge of £326 million, of which an estimated £179 million was considered to be as a result of the pandemic.
Going concern	• In November 2020 and May 2021, the Committee evaluated papers prepared by management setting out the evidence to support the going concern basis of accounting. Management's analysis included a reasonable worst-case scenario and a further stress test. The reasonable worst-case scenario and the stress test assumed further adverse cash flow impacts from the COVID-19 pandemic, for example periods of additional, strict lockdown restrictions, further restrictions on US customer collection activities and additional working capital requirements to fund payment term extensions and charge deferrals in the UK. The Committee evaluated the impact of the scenarios on the level of headroom available to existing cash and debt facilities and evaluated management's analysis of the mitigating actions available to improve the position if the debt capital markets were not accessible. • Having considered management's analysis and the evidence provided to support the availability of debt financing, noting the issuance achieved throughout the year, along with the disclosures made in note 1 to the financial statements, the Committee concluded that adopting the going concern basis of accounting was appropriate in both the half-year and year-end financial statements.
Application of the Group's Exceptional Items Framework	• In September 2020, the Committee approved revisions to the Group's Exceptional Items Framework to reflect updates to IAS 1 Presentation of Financial Statements and the latest guidance from the Financial Reporting Council (FRC) and other regulators. Throughout the year, the Committee considered papers from management setting out how the updated Framework had been applied to certain events and transactions over the period, as set out in note 5 to the financial statements. • For each item, the Committee has considered the judgements made by management, considering each item in isolation as well as the aggregate view of the impact on adjusted profit and adjusted earnings per share. • In line with the revised Framework, the Committee concluded that the release of £14 million of environmental provisions relating to one of our US Superfund sites should be treated as exceptional, in line with the treatment of the original provision. • The Committee further concluded that £55 million of new operating model costs should be treated as exceptional, consistent with the treatment of such costs of a similar nature in prior years, and £24 million of transaction costs related to the WPD Acquisition. Whilst the transaction costs were not sufficiently material to warrant classification as exceptional in isolation, when aggregated with the costs expected to be incurred on completion of the transaction next year, the Committee concluded they should be classified as exceptional in order that all transaction costs were treated in a consistent manner across both years.
Gas Transmission and Gas Distribution asset lives in the context of climate change	• The Committee considered management's judgement, that notwithstanding the regulatory and legislative commitments to net zero in the jurisdictions that we operate in, that there will be a role for our gas networks beyond 2050 in a range of possible scenarios and that nothing at present suggested the asset lives should be shortened at this point. The Committee concurred with management, that consistent with the prior year and in light of the evolving legislative developments and increasing investor attention, additional disclosures should be made in the notes to the financial statements, namely, disclosure of a key judgement in relation to the impact of changes in legislation, disclosure of the useful economic lives of gas assets as a key estimate and appropriate sensitivity analysis on the depreciation charge were shorter asset lives presumed.

Fair, balanced and understandable

It is vital that our financial statements are fair, balanced and understandable. We also place priority on making sure the information provided is necessary for shareholders to assess the Group's position, performance, outlook and strategy. The Committee undertook a full and formal review of the content in the 2020/21 Annual Report and Accounts and recommended the approval of the half- and full-year financial statements and Annual Report and Accounts to the Board. The Company's fair, balanced and understandable statement can be found on page 86.

1. Senior leadership and core reporting team involved throughout the process, including regular steering group meetings of key stakeholders.
2. Clear guidance and instruction to all contributors.
3. Monitoring of regulatory reporting requirements throughout each draft with regard to:
   - The FRC end-of-year letter to CEOs, CFOs and Audit Committee Chairs in November 2020; and
   - FRC's COVID-19 guidance for companies.
4. Validation of management's representations to Deloitte.

   Review and approval of management's assessment of the risk of misstatement in financial reporting.
5. Thorough process of review, evaluation and verification of the information provided by each business unit and contributor, including APMs and RPMs to ensure accuracy of information presented in the 2020/21 Annual Report and Accounts.

   Committee consider and challenge as appropriate.
6. Engagement with the Chair of the Committee who reviews drafts at regular intervals providing comments.

   Committee oversight of the quality and integrity of the Group's financial reporting and accounting policies and practices.

   Committee recommend to the Board.

Key matters considered by the Committee

The key matters considered by the Committee during the course of the year ended 31 March 2021 are set out below:

Matter considered	Factors and reasons considered, including financial outcomes
Financial reporting	• In addition to the matters highlighted on page 84 with regards to matters assessed against the Exceptional Items Framework; the useful economic lives of gas assets in the context of climate change and the provisioning of bad and doubtful debts for our retail customers in the US, the Committee also considered the accounting treatment of the RIIO-2 Draft and Final Determinations; the revision of prior year financial statements; the classification of NECO as held for sale as at 31 March 2021 and management's approach to setting the long-term RPI assumption when valuing our UK pensions liabilities following the UK government's announcement of the change in benchmark rate. • Monitored and reviewed the integrity of the Group's financial information and other formal documents relating to its financial performance, including the appropriateness of accounting policies, going concern and viability. • In September 2020 performed a review of the Group's APMs and RPMs, including the underlying methodologies, process and controls. In March 2021 the Committee agreed an amended policy for changes to methodologies and key judgements taken, and management operated that control for the year ended 31 March 2021. • Recommended to the Board the key accounting judgements and key sources of estimation uncertainty related to pensions and environmental provisions, made by management for the 2020/21 half- and full-year financial statements, going concern and other reports filed with the SEC containing financial information. • Approved the Company's response to the FRC following the FRC's review of the Company's Annual Report and Accounts for the year ended 31 March 2020.
WPD Acquisition	• Held an ad-hoc meeting in March 2021 to consider the WPD Acquisition. • Reviewed and approved the scope and output of the financial due diligence undertaken by third-party advisors, including discussing matters relating to cyber risks and mitigations. • Reviewed and approved the financial disclosures in the shareholder circular, including the pro-forma information, historical financial information and working capital statement. The Committee also received the results of Deloitte's assurance. • Reviewed management's FPP Risk Mitigation Plan and Deloitte's FPP commentary report. • The Chair of the Audit Committee also separately met with members of Deloitte, third-party advisors and the Acquisition sponsor team. Following the announcement of the transaction the Chair further met with management to discuss planning for completion and the oversight to be provided by the Audit Committee.
Internal controls	• Received regular updates on progress towards the Group's annual US regulatory attestation. • In September 2020 and March 2021, the Committee received updates on management's structured programme of work to strengthen the maturity of the Group's risk and controls framework. • In September 2020 the UK Chief Financial Officer presented an update on the UK Finance team, the MyFinance implementation and progress of the roll-out.
Risk and viability statement	• Oversaw risk in relation to the COVID-19 pandemic. As detailed on pages 25 – 27, this became a principal risk in March 2020. • Received regular updates on the actions being taken to manage the risk in line with the Group's risk appetite. • Received confirmation from each of the businesses and functions that risks are managed appropriately and continue to consider external influence and matters outside of the Group's control. • Monitored the internal control processes and reviewed and challenged the going concern and viability statements, including testing for 'reasonable worst-case' scenarios. • Satisfied itself that the Board and management's risk management processes were functioning effectively and provided sufficient assurance.
External auditor	• Received an update report at each meeting, including updates on the status of, and results from, the annual audit process. • Considered the external auditor's report on the 2020/21 half- and full-year results. • Considered throughout the year the external audit plan, including monitoring the approach, scope and risk assessments contained within. This included regular updates regarding the adapted ways of working due to COVID-19. • Assessed the effectiveness and independence of Deloitte, as well as continued review and oversight of non-audit services from Deloitte. • Continued to hold private meetings with Deloitte and maintained dialogue throughout the year. • Engaged with Deloitte regularly on the forward planning and succession planning for the lead Audit Partner. • Received an update from Deloitte on the Company's first 'remote audit'. • Recommended the re-appointment of Deloitte as the Company's external auditor to the Board.
Corporate audit	• Received an update on the new Chartered Institute of Internal Auditors (CIIA) Code of Practice, The IA Code, which included a gap analysis review and a proposed implementation plan. • Received regular updates on the 2020/21 audit plan and the significant findings, and approved the audit plan for 2021/22. • Approved the Corporate Audit Charter which had been updated to reflect best practice and recent corporate governance developments. • Approved the appointment of a new Group Head of Internal Audit, following the incumbent taking up the role of Chief Risk Officer.
Compliance, governance and disclosure matters	• Reviewed and approved the updated Terms of Reference for the Committee. • Received updates on ethics and business conduct, including whistleblowing to support the oversight, management, and mitigation of business conduct issues as part of the controls framework. • Discussed the whistleblowing procedures in place and confirmed internal procedures remained effective, noting the communications during the year to employees and planned communications during 2021. • Received bi-annual updates in September 2020 and March 2021 of compliance with external laws and regulations, including any non-compliance issues and steps being taken to improve compliance across the Group. • Received an update on the key elements of the FRC consultation on the future of corporate reporting including the Brydon, CMA and Kingman reviews and the BEIS consultation. • Received an update on the preparations for the Responsible Business Report and the Company's fourth TCFD disclosure. • Recommended approval of the Responsible Business Report to the Board following review of PwC's external assurance report.

Audit Committee continued

Financial Reporting

Going concern and viability

The Committee, in conjunction with the Finance Committee, reviewed the Group's going concern and viability statements (as set out on pages 28 and 29) and the supporting assessment reports prepared by management. In conjunction with the Finance Committee, during 2020/21 there has been continued review of the Group's going concern and viability in line with the ongoing COVID-19 pandemic.

During 2020/21, significant work was undertaken to consider the Company's viability from additional perspectives. In May and June 2020, the Committee reviewed and challenged the viability statement and considered the period of assessment used, considering COVID-19 events and other external factors including benchmarking the approach adopted by other companies. It also considered individual risk testing, cluster testing and the impact of the Company's response to COVID-19 on business plans and financial models. As the pandemic has continued throughout 2020/21, consideration has continued to be given to going concern and after due consideration by the Committee in May 2021 the going concern and viability statement was recommended to the Board for approval. The financial statements are prepared on a going concern basis such that the Company and the Group have adequate resources to remain in operation as per National Grid's Group Treasury Policy.

Statutory reporting framework policy

The Board has ultimate responsibility for effective management of risk for the Group including determining its risk appetite, identifying key strategic and emerging risks, and reviewing the risk management and internal control framework. The Committee, in supporting the Board to assess the effectiveness of risk management and internal control processes, relies on a number of Company-specific internal control mechanisms to support the preparation of the Annual Report and Accounts and the financial reporting process. This includes both the Board and Committees receiving regular management reports to include analysis of results, forecasts and comparisons against last year's results, and assurance from the external auditor.

With the regulatory environment evolving quickly, the Committee is kept fully informed of all new legislation, FRC advice and best practice and the requirements of the UK Corporate Governance Code 2018 and Disclosure and Transparency Rules. During 2020/21, the Committee has been kept up to date with changes to legislation and regulatory reviews and has had oversight of the potential impacts.

The Audit Committee and Board receives, in advance of the full-year results, a periodic SOX report on management's opinion on the effectiveness of internal control over financial reporting. This report concerns the Group-wide programme to comply with the requirements of SOX and is received directly from the Group SOX and Controls team.

In relation to the financial statements, the Company has specific internal mechanisms that govern the financial reporting process and the preparation of the Annual Report and Accounts. The Committee oversees that the Company provides accurate, timely financial results and implements accounting standards and judgements effectively, including in relation to going concern and viability. Our financial processes include a range of system, transactional and management oversight controls. Our businesses prepare detailed monthly management reports that include analysis of their results, along with comparisons to relevant budgets, forecasts and the previous year's results. Quarterly business reviews, attended by the Chief Executive and Chief Financial Officer, supplement these reports. Each month, the Chief Financial Officer presents a consolidated financial report to the Board.

Risk management and internal control

Risk management

Risk management is the responsibility of the Board and is key to achieving our strategic priorities. The system of risk management is established by the Board, sets risk appetite and maintains the system of internal controls to manage risk within the Group. The Audit Committee has delegated responsibility from the Board for the oversight of the Group's system of internal control and risk management systems. This includes policies, compliance, legislation including compliance with SOX and the UK Bribery Act 2010, appropriateness of financial disclosures, procedures, business conduct and internal audit. As part of the framework across the Group, National Grid's values – 'do the right thing', 'find a better way' and 'make it happen' – continue to communicate and promote a culture of integrity across the business. During the year, the Board reviewed the principal risks facing the Group (as set out on pages 24 – 27). The Committee provided oversight and reviewed the risk management process to ensure that processes are in place to manage risk appropriately.

Internal control and risk management effectiveness

We continually monitor the effectiveness of our internal controls and risk management processes to make sure they continue to be effective, robust and remain fit for purpose. Controls are in place to either reduce the likelihood or impact of any risk once it has occurred. Following the review over the year the Committee recommended to the Board that the processes had the correct authority, expertise and independence and provided sufficient assurance to the Company.

This review includes financial, operational and compliance controls. The Committee also monitors and addresses any business conduct issues or compliance issues. The Certificate of Assurance (CoA) process operates via a cascade system and takes place annually in support of the Company's full-year results.

During the year the Company internally appointed a Chief Risk Officer to lead on the Group's risk management processes. Corporate Audit also supports the Group's risk management and internal controls processes. They deliver an independent and objective approach to evaluate and push forward processes.

The Global Head of Audit has responsibility for the internal audit function, attends all Committee meetings and has access to the Committee Chair as necessary. The appointment of the Global Head of Audit is a matter for the Audit Committee. The Committee received regular updates from the Chief Financial Officer on the process and approved the appointment in May 2021.

At each of the Committee's meetings, progress of the Internal Audit process is reviewed including significant outstanding actions. The Committee notes timelines and where actions are overdue, these are challenged by the Committee. Corporate Audit is responsible for developing the Audit Plan including engaging in major change programmes across the business. The Committee approved the review of the Corporate Audit Charter in November 2020 following agreement from the Safety, Environment and Health Committee. The Committee also approved the plan for the next Internal Quality Assessment to take place in 2021/22 as a further control that Corporate Audit is operating effectively.

Fair, balanced and understandable

The Committee was satisfied that the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the necessary information for shareholders to assess the Company's position and performance, business model and strategy. This was recommended to the Board at its meeting in May 2021. For more information on the assessment of fair, balanced and understandable, see page 84.

External audit

The Committee is responsible for overseeing the relationship with the external auditor. Liz Hewitt meets with the external auditor prior to each meeting and outside the meeting cycle on a regular basis.

- Deloitte is the external auditor to the Company.
- Appointed in 2017 following a formal tender process.
- Reappointed at the 2020 AGM for the year ended 31 March 2021.
- Audit Committee was authorised by shareholders to set Deloitte's remuneration at the 2020 AGM.
- Current lead Audit Partner is Doug King and 2020/21 was the fourth year of his term.

Under the independence requirements, 2021/22 will be the last year where Doug King, Lead Audit Partner, oversees the statutory audit. The Committee is working closely with Deloitte and Doug King, to put in place a clear rotation plan for his successor.

Following consideration of the auditor's independence and objectivity, the audit quality and the auditor's performance, the Committee was satisfied with the effectiveness, independence and objectivity of Deloitte and recommended to the Board its reappointment for the year ended 31 March 2021.

A resolution to reappoint Deloitte and give authority to the Audit Committee to determine their remuneration will be submitted to shareholders at the 2021 AGM. The Committee anticipates that the next competitive tender will be conducted no later than 2026 in accordance with current regulation that requires a tender every 10 years.

Effectiveness, quality and performance

As part of the Committee's responsibilities, consideration is regularly given to the effectiveness of the external auditor to verify that the quality, challenge, and output of the external audit process is sufficient. Throughout the year the Committee also looks at the quality of the auditor's reports and considers its response to accounting, financial control and audit issues as they arise. To maintain high levels of quality the Committee review and challenge where appropriate the external audit plan prior to approval.

The Committee also regularly engages and receives the views of senior management and members of the finance team in forming conclusions on auditor effectiveness. The Committee also meets with Deloitte at least twice a year without management present, providing the external auditor with the opportunity to raise any matters in confidence and have an opportunity for open dialogue. This meeting also gives the Committee a chance to monitor the performance of the lead Audit Partner both inside and outside of Committee meetings.

During the year, the Committee:

- reviewed the quality of audit planning including approach, scope, progress and level of fees;
- reviewed the outcome of recommendations from the Deloitte Management Letter in 2019/20;
- received the Deloitte Management Letter for 2020/21;
- held private meetings with Deloitte where management was not present; and
- confirmed that the external audit process by Deloitte had been delivered effectively.

Auditor independence and objectivity

The independence of the external auditor is essential to the provision of an objective opinion on the true and fair view presented in the financial statements.

The Committee considered the safeguards in place, including the annual review by Corporate Audit, to assess the external auditor's independence. The external auditor reported to the Committee in May 2021 that it had considered its independence in relation to the audit and confirmed that it complies with UK regulatory and professional requirements, SEC regulations and Public Company Accounting Oversight Board (PCAOB) standards and that its objectivity is not compromised. The Committee took this into account when considering the external auditor's independence and concluded that Deloitte continued to be independent for the purposes of the external audit and confirmed that this recommendation was free from third-party influence and restrictive contractual clauses.

Non-audit services

In line with the FRC's Ethical Standard and to maintain the external auditor's objectivity and independence, we have a policy governing Deloitte's provision of non-audit services.

The cap on the total fees that may be paid to the external auditor for non-audit services in any given year is 70% of the average audit fees paid in the last three financial years.

The provision of any non-audit service by the external auditor requires prior approval, with the exception of pre-approved services where we believe there is no threat to the auditor's independence and objectivity, the service has been reviewed by the Chief Financial Officer, and where fees do not exceed £50,000. These services are limited to:

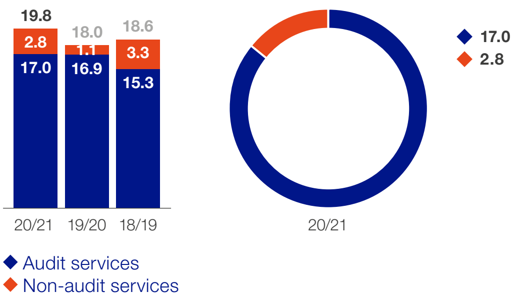
- audit, review or attest services. These are services that generally only the external auditor can provide, in connection with statutory and regulatory filings. They include comfort letters, statutory audits, attest services, consents and assistance with review of filing documents; and
- other areas, such as provision of access to technical publications.

Management present a list of all non-audit work requests to the Committee to ensure the Committee is monitoring all non-audit services provided. Non-audit service approvals during 2020/21 principally related to assurance work performed on the Class 1 Circular for the WPD Acquisition and for comfort letters issued in support of debt issuances.

External auditor fees

The amounts payable to the external auditor, Deloitte, in the past two years were:

Audit and non-audit services (£m)

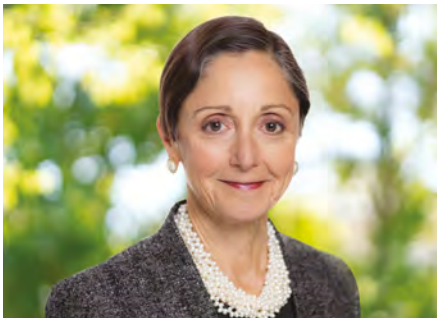


Total billed non-audit services provided by Deloitte during the year ended 31 March 2021 were £2.8 million, representing 14% of total audit and non-audit fees. In 2019/20, non-audit services totalled £1.1 million (7% of total audit and non-audit fees).

Further information on the fees paid to Deloitte for audit, audit-related and other services is provided in note 4 to the financial statements on page 145.

Total audit and non-audit fees include the statutory fee and fees paid to Deloitte for other services that the external auditor is required to perform, such as regulatory audits and SOX attestation. Non-audit fees represent all non-statutory services provided by Deloitte.

Finance Committee



Therese Esperdy
Committee Chair

Key areas of focus in 2020/21:

- Oversight and monitoring of COVID-19 market, financial and balance sheet impacts including scenario planning;
- Financing strategy across the portfolio including updated dividend policy and credit rating strategy – taking account of the impact of RIIO-2 and consideration of strategic opportunities;
- Review of management of financial risk against the Company's financial risk appetite;
- Financing of the WPD Acquisition;
- Green Financing Framework;
- Insurance risk appetite and renewal strategy; and
- Pensions de-risking transactions.

Key areas of focus in 2021/22:

- Continued oversight of market, financial and balance sheet impacts of COVID-19;
- Financial implications of RIIO-2 and US rate case settlements;
- Completion of the WPD Acquisition, sale of NECO and commencement of process to sell majority stake in National Grid Gas plc;
- Bond issuance;
- Implications of proposed changes to UK and US tax legislation;
- Review of management of financial risk against the Company's financial risk appetite; and
- Continued focus on insurance renewal strategy, taking account of the hardening market.

Review of the year

The Committee met on four scheduled occasions during the year to undertake its responsibility of monitoring the financial risk of the Group, focusing on key areas such as treasury, tax, pensions, insurance, investments and commodities. The Committee also convened for two additional meetings in April and May 2020 to discuss the COVID-19 strategic response, financial scenarios and going concern in relation to the delayed results announcement. There was one further ad-hoc meeting in December 2020 to discuss the Company's financing strategy to accompany the portfolio repositioning of the Group.

An area of key focus for the Committee during the year has been on any potential COVID-19 impact on the Company, considering scenarios and risk mitigation. The Committee has kept any possible impact on the Company's going concern under review, considering cash flow outcomes, undrawn borrowing facilities, long-term debt markets, and short-term cash positioning. The Committee will continue to receive regular updates on these areas as the pandemic continues.

Alongside reacting to the evolving pandemic, key focus in the year was given to Ofgem's Final Determinations in relation to RIIO-2 and the Company's financing strategy across the portfolio. This included oversight of the impact on National Grid's credit ratings, the future dividend policy and other potential financial risks such as pension implications.

Throughout the year the Committee received regular updates on the credit rating outlook of the Group, noting the rating agencies' determinations and subsequent rating downgrade linked to the regulatory determinations within the Group in the UK and US.

The Committee also reviewed the financing strategy to enable the portfolio repositioning of the Group, taking account of the Group's successful bid to acquire WPD from PPL and its related bridge financing and the agreed sale of NECO to PPL, both subject to certain regulatory approvals, and the intention to commence a process later this year to sell a majority stake in National Grid Gas plc.

Despite the restrictions on in-person meetings, caused by the pandemic, the Committee was pleased to be able to continue its workforce engagement. In December 2020, the Committee members hosted a virtual informal question and answer session with colleagues from the Tax, Pensions, Treasury and Insurance teams from both the UK and US. This was a key part of the workforce engagement detailed on page 79 and has enhanced the information flow between the Committee and colleagues. We plan to make these sessions regular events alongside the Committee calendar.

Treasury

The Committee has the responsibility for providing oversight of management's decision-making and execution of financial risk. In November, the Committee reviewed the Company's management of the Group's financial risk appetite. This review also took the opportunity to consider how risk appetite had changed as a result of the COVID-19 pandemic.

During the year, the Committee has had oversight of the potential market impacts and outcomes of Brexit and the US Election. Following the outcomes of both, the Committee was updated on the macro-economic events noting minimal impact. In January 2021 the Committee also received an update on the Treasury management system project, the implementation of a new automated and efficient end-to-end process designed to support business efficiencies, which is expected to go live at the start of 2022/23.

The Committee received regular updates from management on the execution of new bonds during the year, recognising that bond markets remained functioning as normal. The Committee was pleased to see the issuances in September 2020 and January 2021 of National Grid plc's first and second senior bond issue since 2011.

Following the launch of the Green Financing Framework in November 2019, there were further updates to the Committee in relation to issuances from the Framework, and the Committee was pleased to see the issuance by NGNA of the first ever multi-ECA green loan in April 2020 and the $600 million green bond issued by NIMO in June 2020. The Committee also noted the publication of National Grid's first Green Financing Report that detailed the allocation of the green bonds' proceeds and their environmental impact.

Insurance

The Committee has received regular insurance updates which considered the current insurance market and the impact that COVID-19 has had on the market approach to premiums and the Company's policy coverage. In November 2020 the Committee focused on the insurance risk appetite and the insurance renewal strategy for 2021, and approved the approach given the hardening market.

The Committee was pleased to receive an update from the Company's insurance brokers on cyber insurance at its January 2021 meeting.

Tax

The Committee continued to monitor any tax impacts on the Company throughout the year. In November 2020 as part of a wider deep dive of Brexit preparedness the Committee noted the impact of Brexit from a tax perspective ahead of the UK's exit from the EU on 31 December 2020. Following the US Election results an update was also received considering any potential impact on the Company's tax position.

Pensions

The Committee remains committed to supporting the long-term strategy of the Company to reduce the level of risk within its pension arrangements, and significant progress has been made in recent years. In April 2020 the Committee considered the Company's UK and US pension arrangements and discussed any impact of COVID-19 on pension schemes. In addition, external advisors presented to the Committee on the US pension landscape, considering ESG in relation to the investment strategy for UK and US pension arrangements.

In November 2020, the Committee reviewed further plans to de-risk the Company's pension arrangements and approved a proposal for the National Grid UK Pension Scheme to enter into a further buy-in arrangement with Rothesay Life, covering £800 million of pension liabilities.

Looking forward

As the global COVID-19 pandemic continues to evolve, the Committee will remain focused on ensuring the Company is effectively managing financial risk while monitoring the Company's response to external regulatory, political and economic impacts, as appropriate.

Thérèse Esperdy

Therese Esperdy
Committee Chair

Safety, Environment and Health Committee

Paul Golby
Committee Chair until 1 April 2021

Key areas of focus in 2020/21:
- The impact of COVID-19, including employee health and wellbeing;
- Safety;
- Gas safety and reliability;
- Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG); and
- Sustainability and climate change.

Key areas of focus in 2021/22:
- The impact of COVID-19, including employee health;
- Gas safety and reliability;
- Group safety performance and safety culture;
- Sustainability and climate change;
- SEH risks and mitigation; and
- Monitor the potential impacts on SEH in relation to the integration of WPD.

Further reading
For more information on the Company's work on Task Force on Climate-related Financial Disclosures (TCFD) requirements see pages 61 – 66.

Review of the year

The Committee met four times during the year to undertake its oversight responsibilities reviewing the strategies, policies, risk exposure, targets and performance of the Company in relation to safety, environment, health and wellbeing.

Employee health and wellbeing and the impacts of COVID-19

The impact of the COVID-19 pandemic on the health and wellbeing of our workforce has been a significant concern for the Committee during the year. The Committee has monitored the approach taken by the Company to pro-actively manage this risk, including the introduction of lateral flow testing; COVID-19 secure workplaces; and the sequestering of Control Room personnel on site contributing to the effective mitigation of COVID-19 transmission and infection risk amongst our people.

In January 2021, the Committee reviewed the Company's health and wellbeing strategy in relation to COVID-19. As a consequence of the move to working from home for the majority of our office-based staff, an increased focus has been given to mental health; chronic disease; and occupational illnesses. New risk areas were identified including continued resilience as well as fatigue.

The Committee is acutely aware of the potential mental health implications of the pandemic and has been pleased with the extent of work being undertaken by the Company in this area, including suicide awareness and mental health crisis response training; developing people management skills and training to spot early signs of mental health issues; Employee Assistance Programme referrals in the UK; and onsite trauma counselling sessions in the US were also closely monitored.

The Committee will continue to exercise oversight in this area to ensure that the Company's strategy in response to COVID-19 remains appropriate.

Safety

The Company's annual safety survey results revealed an improvement within each business area this year, demonstrating the continued progress being made. The survey results highlighted key themes and areas to develop and progress further, particularly around safety leadership and simplification. These themes along with a detailed action plan will be monitored by the Committee as the Company works towards its benchmark target of achieving a proactive safety culture. With the acquisition of WPD and integration into the Group, the Committee will also monitor any potential safety, environmental or health-related impacts from the acquisition and the related transactions as part of its regular reporting as the Company works to ensure cultural alignment and mitigate any SEH risks related to organisational change.

The Committee was pleased to see that the Company maintained its world-class benchmark performance with an injury frequency rate of 0.1 during the year. Despite the strong performance of the Company and the extensive work done to ensure the safety and wellbeing of all our workforce, in November 2020 the Committee was saddened to learn the tragic news that a contractor working on behalf of the Company suffered a fatal injury while working at one of the Company's facilities in New York. An investigation was launched and in January 2021 the Committee reviewed the final report. Although none of the contributing factors or corrective actions identified in the report were attributable to National Grid, the processes and procedures for contractor monitoring were reviewed, resulting in further assurance checks being developed.

Gas safety and reliability

Gas safety and reliability in the US remained a priority this year. The Committee was satisfied with the progress made and was pleased to see improvement across the areas identified for focus in January 2020. There had however been challenges to the rate of progress in certain areas due to COVID-19, in particular around backlogs, which had impacted the ability of the Company to complete work requiring entry to customers' homes. Risks associated with backlogs were being mitigated, and the Committee will continue to monitor progress in this area.

Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG)

During the year, the Committee also received updates on the Company's risk assessment associated with LNG and CNG assets. An update was provided on additional LNG site-specific studies and the Committee discussed the findings and noted the updated LNG investment plan. The Committee will continue to review this subject on an annual basis.

Sustainability and climate change

Climate change and sustainability remain a key focus and the Committee was hugely supportive of the introduction of climate change as a new principal risk to the Company's risk register as well as the Company becoming a principal partner of the COP26 summit in the UK.
The Committee receives reports on this area annually including the Company's sustainability strategy and its greenhouse gas emissions performance. Last year the Company publicly committed to reducing its Group Scope 1 and 2 greenhouse gas (GHG) emissions to net zero by 2050, with ambitious interim targets to reduce its direct emissions by 80% by 2030 and 90% by 2040. The Committee has been pleased to see that the Company has surpassed its 2020 target with a 68% decrease in Scope 1 and 2 GHG emissions from, a 1990 baseline, and is on track to meet both its interim and 2050 targets. The Committee discussed and challenged the timeline of the targets and the commitment in the Responsible Business Charter to reduce Scope 3 GHG emissions of the gas the Company sells to customers and will continue to monitor and challenge the progress being made in relation to net zero.

Looking forward

I will be stepping down from the Board at the conclusion of the 2021 AGM and this is therefore my last report as Chair of the Committee. I am encouraged by the progress made and delighted that Earl Shipp has been appointed to succeed me as Chair of the Committee with effect from 1 April 2021.
I am confident that his significant experience will leave him well placed to lead the Committee into the future.

Paul Golby

Paul Golby
Committee Chair

Nominations Committee

Paula Rosput Reynolds
Committee Chair and Board Chair Designate

Key areas of focus in 2020/21:
- Chair succession and onboarding;
- Succession planning and leadership changes; and
- Board and Committee composition.

Key areas of focus in 2021/22:
- Board Committee governance structure and composition;
- Diversity policy; and
- Senior leadership succession.

This is my first report as Nominations Committee Chair, following my appointment to the Board in January 2021. Since the Committee met four times prior to my arrival, this report covers, in part, the work undertaken under the chairmanship of Sir Peter Gershon. In those meetings, the Committee focused on the appointment of a new Group General Counsel & Company Secretary, executive succession, and Board composition. Since Sir Peter's nine years as Board Chair elapsed during 2021, our Senior Independent Director, Mark Williamson, led the search process for Sir Peter's replacement, a process in which all Directors participated.

Directors' tenure

Sir Peter generously offered me chairmanship of this committee immediately upon my induction. He noted that there were several Directors who were at or near the end of nine years of service and, in line with the UK Corporate Governance Code, they were due to retire. I would have the responsibility and opportunity to refresh the Board, even as I faced the loss of significant knowledge and wisdom with these impending retirements. Sir Peter thus gave me a free hand to work with my colleagues to reconsider the composition of the Board.

COVID-19 has debunked that myth under which we have all operated – namely, that it's essential to meet in person to conduct corporate business. My own appointment to the National Grid Board is emblematic of the fact companies can make leadership changes without rounds of face-to-face meetings. Nevertheless, while individuals may pledge to remain together in cyberspace, the virtual world is not the ideal place to cultivate relationships that are intended to last many years. Thus, to give proper time to identify Board members who can help position National Grid to be at the heart of the energy transition, I've asked those Directors who are at or nearing the ends of the terms to be somewhat flexible about their departure dates. Last year, we reported that Paul Golby would remain on the Board for a limited extension beyond 1 February 2021. Paul, whose deep operating experience and wisdom is truly irreplaceable, has kindly agreed to stay on the Board for several additional months to ease my transition; he will step down at the upcoming AGM. Similarly, Mark Williamson and Jonathan Dawson, both of whom will reach their nine years of service within the upcoming financial year, have agreed to serve until their replacements are appointed.

Board refreshment

It has become standard practice for nominations committees to conduct 'deep dives' into the balance of skills and experience across the Board and its Committees. In January, our Committee considered areas of strength, current gaps and any potential areas of weakness. Having had a robust discussion, we collectively decided that, for the moment, we would not seek new directors using narrow definitions such as 'financial expert' or 'cyber security expert'. While these are important skills, our first priority is to identify a diversity of seasoned and respected leaders with strong commercial skills, whose experience is born of challenging situations, who have led in companies with strong values, and who are deeply engaged in the world at large. The Board is actively in the process of meeting candidates; as I assume the role of Chair of National Grid, I look forward to announcing appointments of individuals who will enrich the deliberations of the Board in the future. Rest assured that we will monitor board and committee effectiveness and effectiveness of Directors on an ongoing basis. As the Company repositions its business model to prosper in the net zero world, we must be mindful that the Board will need to evolve as National Grid's needs change.

Sir Peter commissioned one last Board effectiveness review early in 2021. The results suggest that there are improvements that can be made to our governance processes – among them, making the Board's processes fit for a world in which decisions must be taken with greater urgency and where large amounts of data must be quickly assimilated and presented incisively. I have asked our General Counsel & Company Secretary, Justine Campbell, to undertake a full review of the appropriateness of the Board Committee structure, Committee Terms of Reference, and overall effectiveness, with the intention of refreshing elements of how the Board operates in the upcoming financial year.

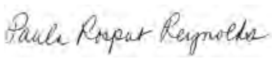
Senior succession planning and leadership changes

The Committee has continued to deepen its understanding of executive talent requirements and the capabilities needed to ensure the effectiveness in driving our culture transformation forward (see page 78 for further information). Attention has focused on the process used to support our succession planning and talent decisions, including the talent bench strength of our senior leadership team; the performance of the senior leadership team; and the risk profile across talent in relation to the likelihood of vacancies and succession options. Succession planning is like painting the Forth Bridge; it's never completed. Thus we will be continuing this work in a meaningful way in the times ahead, and ensuring that the lens of diversity figures prominently in the workforce of the future.

During the course of the year, the Committee affirmed the appointment of Justine Campbell as Group General Counsel & Company Secretary and the appointment of Cordi O'Hara, who has served as Chief Operating Officer of US Gas to the role of President of National Grid Ventures. Both individuals joined the Group Executive Committee. Barney Wyld stepped down as a member of the Group Executive Committee in August 2020.

Board Diversity Policy and objectives

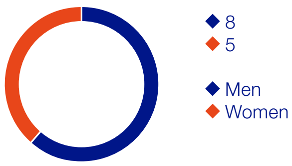
National Grid remains committed to supporting diversity and inclusion throughout our organisation and our policy applies to the Board, Group Executive Committee and direct reports to the Group Executive Committee as well. In April 2021, the Committee refreshed our diversity objectives to align with the Company's Responsible Business Charter, which had been published in October 2020. But more broadly, we are at a crossroads in society at large where the long-postponed demands for social and economic justice must be addressed. Thus, a further detailed review of the Board Diversity Policy and objectives will take place later in the year and we will redouble our efforts to be more representative of and responsive to the world of tomorrow.



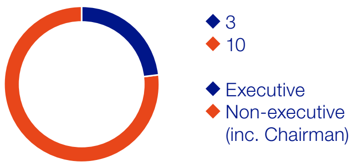
Paula Rosput Reynolds
Committee Chair and Board Chair Designate

Our Board diversity

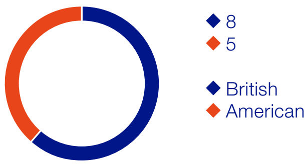
Board gender



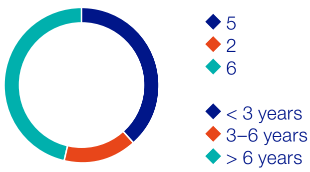
Executive and Non-executive Directors



Board members by nationality



Tenure



Refreshed Diversity Policy objectives – progress update
The Nominations Committee approved the refreshment of the two existing objectives and the addition of an objective to align with the Company's Responsible Business Charter.

Objectives	Progress
The Board aspires to meet and ultimately exceed the target of 33% of Board and the CEO's direct report positions, to be held by women.	There are currently five female Directors on the Board resulting in 38.5% women on the Board. We currently have 51.9% female direct reports to the CEO.
The Board aspires to meet and ultimately exceed the Parker Review target for FTSE 100 boards to have at least one Director from a non-white ethnic minority by 2021.	We currently have one Director from a non-white ethnic minority on the Board and we aspire to exceed this target.
The Board aspires to achieve 50% diversity* on the Board**.	We currently have 46.2% diversity on the Board.

* Diversity of the Board is defined, in this context, as females and non-white ethnic minorities.
** This new objective was approved at the April 2021 Nominations Committee.

As set out in the Policy:

- all Board appointments and succession plans are made on merit and objective criteria, in the context of the skills and experience that are needed for the Board to be effective and to guard against 'group think';
- we will only engage executive search firms who have signed up to the UK Voluntary Code of Conduct on Gender Diversity; and
- we will continue to make key diversity data, both about the Board and our wider employee population, available in the Annual Report and Accounts.

We will continue to review our progress against the Policy annually and report on progress against our objectives (as set out above) in the Annual Report and Accounts.

Examples of the initiatives to support inclusion and diversity throughout our Company are set out on page 59.

Appointment process and talent pipeline

When considering the recruitment of new directors, the Committee adopts a formal and transparent procedure which takes into account the skills, knowledge and level of experience required as well as diversity. The Committee recognises the importance for the Board to anticipate and prepare for the future and to ensure that the skills, experience, knowledge and perspectives of individuals reflect the changing demands of the business.

In January 2020, the Committee discussed succession planning for a new Group General Counsel & Company Secretary to succeed Alison Kay when she stepped down in January 2021. A detailed role specification was formulated, which considered the experience and technical knowledge required for the position. A list of potential candidates from diverse backgrounds was produced which also included internal candidates, who would be benchmarked against the candidates from the external search. Having been interviewed by a number of Non-executive Directors, the Committee agreed the preferred candidate for recommendation to the Board.

We have a strong talent pipeline, which considers the core competencies and capabilities for potential future leaders, with many high-performing individuals. A talent grid was developed which enabled the Committee to differentiate the performance and potential of the talent pipeline within the Company, including strengths and areas for development. The Group Executive Committee continues to meet regularly to discuss the succession pipeline and health of the talent pool further down the organisation.

Mark Williamson
Senior Independent Director

Chair succession

On 30 January 2020, we announced that after nearly nine years at the Company, Sir Peter Gershon had informed the Board of his intention to step down as Chair and that the Board had started the process to find a successor. As we reported last year, the Committee determined that it was in the Company's best interests for Sir Peter to stay beyond the nine-year term identified in the Code in order to maintain continuity of knowledge and experience during the conclusion of the RIIO-2 process.

The Committee developed and agreed a job specification for the role of Chair which included key leadership characteristics, experience in the energy sector and the extensive knowledge required to lead the Board on both UK and US issues. Russell Reynolds, who do not have any other connection with the Company or individual Directors, were appointed to support the recruitment of this role in November 2019. As Senior Independent Director, I led the selection process for the role.

January 2020
The Committee reviewed the longlist of 51 potential candidates, and it was requested that Russell Reynolds broaden the candidate pool. Following feedback from the meeting, John Pettigrew and I met informally with five potential candidates, to gauge the appetite for the role, likely cultural fit, experience and location/availability considerations. The Committee agreed that a sub-group of the Committee members and attendees made up of John Pettigrew, Earl Shipp, Liz Hewitt, Therese Esperdy, Jonathan Dawson and I would form the appointment panel.

July 2020
The panel interviewed the shortlisted candidates throughout the summer months of 2020. In July 2020, the panel recommended three candidates who were taken forward to meet with other members of the Board.

September 2020
Following recommendation from the Committee, the Board approved the appointment of Paula Rosput Reynolds as a Non-executive Director and Chair Designate with effect from 1 January 2021. The Board was pleased to welcome Paula, who brings a wealth of Board-level experience leading global companies in the energy and financial sectors. Her experience within international and US companies and insight into strategic and regulatory issues will be an asset to the Company.

Paula met the independence requirements as set out in the 2018 UK Corporate Governance Code on appointment. In accordance with our external appointment policy, a comprehensive conflicts check was carried out and the Board was satisfied that any potential conflicts, particularly in relation to Paula's appointment at BP, would be manageable and not material. The Board noted that Paula would step down from her role as Non-executive Director at BAE Systems plc on 31 December 2020.

Sir Peter stepped down as Chair of the Nominations Committee with effect from 1 January 2021 and Paula was appointed as Chair of the Committee with effect from the same date. Sir Peter will step down as Chair of the Board and Non-executive Director with effect from 31 May 2021.

Directors' Remuneration Report

Annual statement from the Remuneration Committee Chair

Jonathan Dawson
Committee Chair

Key areas of focus in 2020/21:
- Items related to the appointment of the new Board Chair and Group Executive Committee members;
- Impact of evolving corporate governance standards, including pension arrangement for existing UK-based Executive Directors; and
- Impact of RIIO-2 determinations.

Key area of focus in 2021/22:
- New remuneration policy with focus on latest corporate governance developments and shareholder expectations.

At National Grid's 2020 AGM our Directors' Remuneration Report received 96.92% votes in favour. The Remuneration Committee and the whole Board are grateful to shareholders for their support in respect of our approach to remuneration. As a company, our aim is to ensure transparency with our shareholders and all stakeholders in what we do, particularly with regard to governance and remuneration. The Committee fully recognises the central importance of these areas for National Grid's reputation, and the strong interest of shareholders in our standards and performance. As with last year, we are not seeking approval of a new policy, although through the annual advisory vote we are seeking your support for our implementation of the policy during 2020/21. Our original intention had been to seek approval for a new policy at this AGM but, having reviewed our policy last autumn, we concluded that it remained fit for purpose for its final, third year. We also concluded that we could take the opportunity of the third year to undertake a comprehensive review of our policy to enable us to take account of:
- the impact of RIIO-2 on corporate returns and profitability;
- the extensive business portfolio reshaping that was announced in March and approved by shareholders in a General Meeting held in April;
- the latest developments in investors' thinking around appropriate incentive structures; and
- how best to incorporate appropriate environmental, social and governance (ESG) aspects in our arrangements.

We will therefore be working over the course of this year on our proposals for the next remuneration policy. We will consult with our leading institutional investors towards the end of 2021 and during the first quarter of 2022 and we will put our proposals formally to shareholders at the Company's AGM in July 2022.

The Board continues to engage with the workforce on a variety of topics including remuneration (more details on the 'Full Board Employee Voice' approach that includes our virtual colleague engagement sessions can be found on page 79).

The LTPP rules expire in July 2021 and we are seeking shareholder approval at the 2021 AGM for the new LTPP rules. The new rules are substantially in line with the existing rules, updated to reflect developments in market practice and good governance especially around malus and clawback provisions.

Review of decisions made during the year

Overview
National Grid has again had a successful year in terms of both financial performance and strategic development. Group underlying Profit before Tax was £2,407 million, underlying Earnings per Share (EPS) was 54.2 pence, and Group Return on Equity (RoE) was 10.6%. Despite COVID-19's far-reaching and deep impact across the whole world, National Grid has delivered good operational performance and has initiated a number of major strategic transactions.

As announced in March and subsequently approved by shareholders in April this year National Grid will be acquiring WPD, the UK's largest electricity distribution business, as well as selling our gas and electric businesses in Rhode Island in the US and a majority stake in our UK-based Gas Transmission business. Taken together, these transactions are a significant evolution of the Group's strategy and in the UK a major pivot towards electricity. Whilst the transactions and strategic pivot are key elements in National Grid's future growth and prospects, they have not had any impact on the Group's financial performance in respect of the past year.

Annual Performance Plan (APP)
The Group financial measures for the APP (impacting the CEO and CFO) were 78.9% of maximum and the financial outcome for the Executive Director, UK was 80.1%. APP outcomes are determined by financial results, with technical adjustments made, including, in respect of currency adjustments, unbudgeted pension costs, scrip dividend dilution and storm damage repair costs, in line with past practice. A discretionary adjustment has been applied to Group EPS to exclude the operating profit benefit in NGV linked to lower costs due to COVID-19, reducing the outcome by 0.5 pence.

The performance against individual objectives resulted in outturns ranging from 78.0% to 94.0% of the maximum for the individual portion. Although the Board does not agree with Ofgem's decision to charge a penalty for the RIIO-2 business plans, the Remuneration Committee has decided to reduce the outcomes of the individual component of the APP leading to an adjusted outturn range of 68.0% to 84.0%.

Taking both financial and individual performance together, the overall APP awards to Executive Directors on the Board at 31 March 2021 range from 76.5% to 80.4% of the maximum award, which amounts to awards of 95.6% to 100.5% of salary. In reaching its overall decisions on the APP, the Committee took account of the broader performance of the Company as described above and ESG considerations, noting in particular that, as in 2019/20, no employees have been furloughed, no compulsory redundancies or pay reductions have been made, especially in the context of COVID-19, and trade union agreements have been honoured.

Looking ahead to 2021/22, we have updated within the framework of the current remuneration policy the components of the APP to focus on financial measures (60%), operational/strategic measures (20%) and individual objectives (20%). This compares with the current year's financial and individual weighting of 70% and 30% respectively. The inclusion of the operational/strategic measures is to focus the Group Executive Committee around group-wide non-financial outcomes that are key for the Company, and are leading indicators of sustained performance over the long-term. For 2021/22, these include effectively managing the completion of the WPD transaction and the separation of the RI business to the satisfaction of the Board, and delivering ESG performance that is of strategic importance to National Grid.

Long Term Performance Plan (LTPP)

The performance period for the 2018 LTPP ended on 31 March 2021, with a vesting outcome of 68.0% of the maximum potential (350% of base salary for the CEO and 300% of base salary for other Executive Directors). This outturn was based on our performance measures of Group RoE of 11.3% and Group Value Growth of 12.3% across the three-year period, resulting in outcomes of 36.0% and 100.0% of their maxima, respectively. These outcomes are lower than the actual outcomes of 11.6% and 12.5%, respectively, but the Committee exercised negative discretion in excluding upward adjustments of 30 and 20 basis points to our Group RoE and Group Value Growth respectively, resulting from the revisions described in Note 1F to the consolidated financial statements. As last year, the Group Value Growth outturn includes an element of the value created from the sale of the residual interest in the UK Gas Distribution business in 2019 and revised timing of UK tax payments in 2019/20. For the 2018 LTPP award the weighting was split equally between Group RoE and Group Value Growth.

The Committee reviewed whether there were any factors which might cause it to reduce the vesting levels, including compliance with the dividend policy, but concluded after careful consideration that the vesting levels fairly reflected ESG and broader performance factors over the performance period.

As discussed in last year's report, for the in-flight 2019 award the weighting is one-third Group RoE and two-thirds Group Value Growth; for the in-flight 2020 award the weighting is one-sixth Group RoE and five-sixths Group Value Growth. After reviewing the final RIIO-2 regulatory arrangements for the UK, the Committee decided that for the 2021 LTPP award the weighting would revert to half for Group RoE and half for Group Value Growth.

The Committee set the performance range for the 2020 LTPP to reflect the business outlook. As a result, the Group RoE range is 8.25% to 9.75% and the Group Value Growth range is 8.0% to 10.5%. More details on the performance measures are set out on page 106.

Annual salary review

With regard to Executive Directors' annual salaries, save in respect of Andy Agg, the CFO, the Committee has awarded a salary increase of 2.3% which is the increase budget awarded across the UK employee population. Andy Agg was appointed to his role as CFO in January 2019 and, in line with our normal practice he was awarded a base salary that was set significantly below the assessed market rate for the role and with the intention, as stated in last year's report, of increasing his salary progressively toward the assessed market rate, subject to his performance and growth in his new role. The Committee, with input from the CEO, has assessed Andy Agg's performance as strong and that he has continued through the year to make a significant contribution to the Group. A particular focus has been steering the organisation through implications of the COVID-19 pandemic, providing strong support to the business in the agreement of a new UK regulatory framework, as well as coordinating the substantial work associated with the transactions involving WPD, Rhode Island and UK Gas Transmission. As a result, the Committee has awarded him a salary increase of 6.5%. On the basis of the Committee's assessment of the market rate for his role and based on data input from our advisers, the Committee expects, subject again to performance and progress, to make a further and final additional award to Andy Agg next year after which time he will have broadly achieved the assessed market rate.

As already announced, Paula Rosput Reynolds was appointed Chair Designate on 1 January 2021 and will assume the position of Chair from 31 May 2021 following Sir Peter Gershon stepping down from the role. The Committee has set Paula Rosput Reynolds' annual fee at £700,000 without any benefits following a market review and recruitment process, and taking into consideration that she is US-based.

Environmental, Social and Governance measures

Hitherto we have incorporated some individual objectives that are related to ESG, such as delivery of the Responsible Business Charter and progress on emissions reductions. Additionally, we always consider ESG factors generally before making final reward decisions. For example, we reduced the APP payments following a fatality in 2016/17. We concluded that this year there were no circumstances that should result in any adjustment to outturns in respect of ESG considerations.

For 2021/22, we have strengthened our focus on ESG by incorporating group-wide environmental and diversity measures into the APP.

Pension

As reported last year, our previously appointed UK-based Executive Directors agreed to reduce their pension allowance from 30% of base salary to 20% by the end of 2022, without compensation.

Additionally, I wrote last year that we recognised and acknowledged expectations from leading institutional shareholders to the effect that companies were expected to develop a credible plan to align incumbent directors' pension contribution rates with the majority of the wider UK workforce by the end of 2022. The Committee has been thinking carefully about this issue and confirms that all UK-based Executive Directors' pension contribution rates will be reset to 12% with effect from 1 April 2022 thereby ensuring alignment with the rate available to the majority of the UK workforce, notwithstanding executives' current contractual terms of employment.

What is our remuneration policy seeking to achieve?

We are very clear as to our objectives when setting senior executives' pay and incentives. Our aim is to ensure that how we structure remuneration and how we make decisions on annual and long-term reward plans:

- attract and motivate senior executives;
- ensure we pay our senior executives in a way that incentivises stretching financial and operational performance, within the risk appetite set by the Board;
- are fully aligned to the way National Grid earns its returns for shareholders; and
- actively support our strategy, ethics, values and contribution to society in the territories and communities where we operate.

In addition, in order to ensure internal alignment and common purpose, we apply the same broad architecture to the remuneration of our senior management team below the Executive Directors.

How do we achieve this?

1. Heavy weighting towards share-based pay

Nearly three quarters of John Pettigrew's variable pay opportunity is represented by the LTPP. We continue to put a much higher weight on this element compared with the APP to reflect the nature and duration of National Grid's businesses and asset lives. It is important, therefore, that day-to-day operations and longer-term investment decisions are executed in line with this strategy. Longer-term alignment is also reinforced through:

- some 85–87% of Executive Directors' variable pay potential (both annual and long-term) is delivered in National Grid's shares;
- a two-year holding period for any vested LTPP awards is mandatory;
- a very high minimum shareholding requirement is set for senior executives (500% of salary in the case of John Pettigrew – equivalent to some nine times his after-tax salary); and
- a post-employment shareholding is required for all senior executives.

Directors' Remuneration Report continued

Annual statement from the Remuneration Committee Chair continued

This approach has been the basis of our remuneration strategy since 2014 and the Committee considers that its principles ensure an alignment of interest between senior executives' remuneration, how the Company earns its returns, and the longer-term returns to private and institutional shareholders. Senior executives will therefore gain if the share price increases and share the consequences of share price falls. Moreover, as a company which distributes significant dividend payments, we also believe our senior management, not just Executive Directors, should view the dividends paid on shares they earn as part of their overall remuneration arising from National Grid, rather than focusing solely on the annual capital value.

We have noted recent governance developments and shareholder expectations that the post-employment shareholding requirement should be at the same level as the in-employment shareholding requirement. We also, however, take account of the fact that our in-employment shareholding requirement is at the top end of market practice with at least 500% of salary for the CEO and 400% for other Executive Directors. We will review this matter as part of our consultation for the Directors' remuneration policy vote in 2022.

2. Variable pay is linked directly to performance
At the heart of our approach to remuneration is a simple premise – reward should be aligned to the financial and operational performance of the Company and to shareholder interests. As set out in the Strategic Report, a number of our financial KPIs directly align to our APP and LTPP rewards. In addition, and as referred to above, non-financial KPIs and wider business performance are also taken into account, and discretion applied if appropriate, when determining an executive's performance against individual objectives and in confirming overall final payouts (APP) and/or vesting outcomes (LTPP). This year we provide greater detail on our wider ESG performance in our Responsible Business Report. In our policy review for the 2022 AGM we will be further considering the role that ESG should play in remuneration.

3. We apply our judgement and discretion as a Committee to assess overall remuneration outcomes
Each year the Committee considers carefully whether to apply discretion when assessing remuneration outcomes for Executive Directors. Before approving any payments under either the APP or LTPP, we reflect on:

- the underlying financial and wider business performance of the Company;
- the wider performance of the Company in terms of its societal contribution, relations with regulators, and its overall reputational standing with all our stakeholders; and
- the performance of each Executive Director and members of the Group Executive Committee against their individual objectives set for them at the start of the year and their demonstration of leadership qualities and our values.

Whilst the underlying financial performance of the Company is a material factor in our assessments, the Committee has shown and will continue to demonstrate a willingness to apply discretion to adjust final payments in the light of all factors that we consider relevant.

In addition to applying discretion to final payment levels, the Committee considers whether there might be any basis for applying malus and/or clawback to awards made and/or payments already received by an individual where subsequent events or factors justify taking such steps.

Fair and appropriate
When making remuneration decisions for the Executive Directors and other senior executives, the Remuneration Committee takes account of the remuneration arrangements and outcomes for the wider workforce, statistical information, such as the CEO pay ratio and gender pay gap data, employee views on executive pay as part of our employee voice process, and our Company values.

This year, the median CEO pay ratio for UK-based employees is 81:1, a change from 86:1 last year. Our Group-wide median ratio was 53:1 last year and is 54:1 this year. The lower Group-wide ratio reflects the higher general level of wages in the US compared with the UK, and especially in the regions of the US where the Company operates. It is also important to recognise some three quarters of our employees are in the US.

In terms of the UK gender pay gap, the mean has reduced from 3.7% to 1.5%, with a small increase in the median from 2.6% to 3.2%. This year, we are also voluntarily disclosing in our Responsible Business Report additional data related to pay gaps. More details can be found in the 'Our Colleagues' section of the Annual Report on page 59 and the Responsible Business Report.

Changes to the Committee

There were no changes to the membership of the Committee during the last financial year.

Developments for 2021/22

The key focus for the year will be the development of a new remuneration policy and associated consultation with our major institutional investors and proxy agencies. The key elements of this review will reflect:

- the impact of RIIO-2 on National Grid's returns and therefore our remuneration structure;
- the implications for remuneration of the strategic transactions referred to earlier;
- evolving requirements of our investors, and society more generally, with regard to ESG performance (taking into account National Grid's trajectory along its publicly stated Responsible Business pathway); and
- National Grid's contribution towards enabling the wider societal evolution towards new and renewable energy sources and networks.

Our proposals will be presented to shareholders at the AGM in 2022.

Conclusion

The Committee has carefully reviewed the performance of the senior executive team during the year and the prior three years to assess whether the level of APP and LTPP payments/vesting were aligned with the Company's performance over the period and concluded that the arrangements set out in this Remuneration Report are a fair reflection of their individual and collective performance. Accordingly, on behalf of the Committee, I commend this Directors' Remuneration Report to you and ask for your support at the Annual General Meeting.

Jonathan Dawson

Jonathan Dawson
Remuneration Committee Chair

At a glance – 2020/21

Our 'At a glance' highlights the performance and remuneration outcomes for our Executive Directors for the year ended 31 March 2021. Further detail is provided in the Statement of implementation of remuneration policy in 2020/21.

Annual Report on remuneration

A comparison of the 2020/21 single total figure of remuneration, with the maximum remuneration if variable pay had vested in full, is set out below for the Executive Directors, Andy Agg, John Pettigrew and Nicola Shaw. Each Executive Director is UK-based.

Total remuneration

Executive Director	Maximum if variable pay vested in full £'000	2020/21 single total figure of remuneration £'000	Split by component (%)			
Andy Agg	2,625	2,122	36.8%	29.1%	29.5%	4.6%
John Pettigrew	6,557	5,071	27.9%	20.4%	44.7%	7.0%
Nicola Shaw	3,231	2,490	29.2%	21.6%	42.6%	6.6%

Key: ◆ Fixed ◆ APP ◆ 2018 LTPP – face value ◆ 2018 LTPP – share appreciation and dividend equivalent values

Notes:
1. For each Executive Director the share price has increased between grant date of the LTPP awards in 2018 and the estimated share price value at vesting, being the three months' average preceding 31 March 2021. Comparing the share price at grant of 837.41p versus the estimated average share price for the period 1 January 2021 to 31 March 2021 of 855.04p, there is an increase of 17.63p (2.1%) per share. This results in an estimated increase in value (net of dividend equivalents) of £14,914 in total for Andy Agg, £54,074 for John Pettigrew, and £25,281 for Nicola Shaw. Overall, the percentage growth in value over the three-year period due to dividend income per share is 13%, and this will increase further subject to a final dividend to be included on the vesting date.

	Key features of remuneration policy (adopted 2019)	Implementation of policy in 2020/21
Salary	• Target broadly mid-market against FTSE 11–40 for UK-based Executive Directors and general industry and energy services companies with similar revenue for US-based Executive Directors.	• The Committee decided to exercise restraint against the background of the COVID-19 pandemic and so no salary increases were made with respect to John Pettigrew and Nicola Shaw; and • Salary increase of 6.5% for Andy Agg (July 2020). This increase was awarded in line with the remuneration policy to move his salary closer to the market rate and given strong individual performance.
Annual Performance Plan (APP)	• Maximum opportunity is 125% of salary; • 50% paid in cash, 50% paid in shares which must be retained until the later of two years and meeting the shareholding requirement; and • Subject to both malus and clawback.	• 70% based on financial measures and 30% based on individual objectives; • Financial measures for CEO and CFO comprise 35% underlying EPS and 35% Group Value Added; • Financial measures for Executive Director, UK, comprise 23.3% UK Underlying Operating Profit, 23.3% UK RoE and 23.3% UK Capex; • Individual objectives cover stakeholder/customer engagement, business and finance strategy including delivery on RIIO-2 regulatory framework and risk management, organisation capability including our workforce/culture agenda and external leadership within the energy sector; and • 2020/21 APP payouts as a percentage of maximum opportunity: 79% for Andy Agg, 80% for John Pettigrew and 76% for Nicola Shaw.
Long Term Performance Plan (LTPP)	• Maximum award level is 350% of salary for CEO and 300% for other Executive Directors; • Vesting is subject to long-term performance conditions over a three-year performance period; • Shares must be retained until the later of two years from vesting and meeting the shareholding requirement; and • Subject to both malus and clawback.	• 2020 LTPP award: 16.67% Group RoE and 83.33% Group Value Growth; and • Overall the 2018 LTPP vested at 68.0% of the maximum and is based on the performance of two equally weighted measures of Group RoE and Group Value Growth achieving 36.0% and 100.0% respectively.
Pension and other benefits	• Eligible to participate in a defined contribution plan (or defined benefit if already a member); • Pensionable pay is salary only in UK; and • Other benefits as appropriate.	• UK cash allowance for John Pettigrew and Nicola Shaw, 26.7% of pensionable pay (reducing to 23.4% on 1 April 2021 and 12% on 1 April 2022) and for Andy Agg, 20% of pensionable pay (reducing to 12% on 1 April 2022); • Other benefits include private medical insurance, life assurance, and for UK-based Executive Directors either a fully expensed car or a cash alternative, and a car and driver when required; and • The Committee agreed in November 2019 that newly appointed UK-based Executive Directors will receive pension contributions of up to 12% of base salary for the Defined Contribution plan (or cash supplement in lieu); this is in line with the level for new joiners across the rest of the UK-based workforce.
Shareholding requirement	• 500% of salary for CEO; • 400% of salary for other Executive Directors; and • Post-employment shareholding requirement of 200% of salary for two years.	• Shareholdings for Andy Agg, John Pettigrew and Nicola Shaw are 209%, 718% and 310% respectively; • John Pettigrew has met his shareholding requirement. Nicola Shaw is expected to meet her shareholding requirement in 2021, after the vesting of her 2018 LTPP award. Andy Agg has not met his shareholding requirement due to a relatively short time in role; and • Andrew Bonfield and Dean Seavers have each met their post-employment shareholding requirement as at 31 March 2021.

Directors' Remuneration Report continued

Directors' remuneration policy – approved by shareholders in 2019

Key aspects of the current Directors' remuneration policy, along with elements particularly applicable to the 2020/21 financial year, are shown on pages 96 – 99 for ease of reference only. The current policy was approved for three years from the date of the 2019 AGM, held on 29 July 2019. A shareholder vote on the remuneration policy is not required in 2021. A copy of the full remuneration policy is available within the 2018/19 Annual Report and Accounts on the Company's investor website (nationalgrid.com/investors).

From time to time, the Committee may consider it appropriate to apply some judgement and discretion in respect of the approved policy. This is highlighted where relevant in the policy, and the use of discretion will always be in the spirit of the approved policy.

Our peer group

The Committee reviews its remuneration policy against appropriate peer groups annually to make sure we remain competitive in the relevant markets. The primary focus for reward market comparisons is the FTSE 11–40 for UK-based Executive Directors and general industry and energy services companies with similar levels of revenue for US-based Executive Directors. These peer groups are considered appropriate for a large, complex, international and predominantly regulated business.

Approved policy tables – Executive Directors

Salary

Purpose and link to business strategy: to attract, motivate and retain high-calibre individuals, while not overpaying.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Salaries are generally reviewed annually and are targeted broadly at mid-market of our peer group. However, a number of other factors are also taken into account: • business performance and individual contribution; • the individual's skills and experience; • scope of the role, including any changes in responsibility; and • market data, including base pay and total remuneration opportunity in the relevant comparator group.	No prescribed maximum annual increase although increases are generally aligned to salary increases received by other Company employees and to market movement. Increases in excess of this may be made at the Committee's discretion in circumstances such as a significant change in responsibility, progression if more recently appointed in the role and broad alignment to mid-market.	Not applicable.

Benefits

Purpose and link to business strategy: to provide competitive and cost-effective benefits to attract and retain high-calibre individuals.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Benefits provided include: • company car or a cash alternative (UK only); • use of a car and driver when required; • private medical insurance; • life assurance; • personal accident insurance (UK only); • opportunity to purchase additional benefits (including personal accident insurance for US) under flexible benefits schemes available to all employees; and • opportunity to participate in HMRC (UK) or Internal Revenue Service (US) tax-advantaged all-employee share plans, currently: Sharesave: UK employees may make monthly contributions from net salary for a period of three or five years. The savings can be used to purchase shares at a discounted price, set at the launch of each plan period. Share Incentive Plan (SIP): UK employees may use gross salary to purchase shares. These shares are placed in trust. Employee Stock Purchase Plan (ESPP) (423(b) plan): eligible US employees may purchase ADSs on a monthly basis at a discounted price. Other benefits may be offered at the discretion of the Committee.	The cost of providing benefits will vary from year to year in line with market. Participation in tax-approved all-employee share plans is subject to limits set by the relevant tax authorities from time to time.	Not applicable.

Pension

Purpose and link to business strategy: to reward sustained contribution and assist attraction and retention.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Externally hired Executive Directors will participate in a Defined Contribution (DC) arrangement. UK-based Executive Directors may alternatively choose to receive cash in lieu. In cases of internal promotion to the Board, the Company will recognise legacy DB pension arrangements of existing employees in both the UK and US where these have been provided under an existing arrangement. In line with market practice, pensionable pay for UK-based Executive Directors includes basic salary only and for US-based Executive Directors it includes basic salary and APP award.	UK DC: annual contributions for new appointments of up to 20% of basic salary. Existing Executive Directors may receive annual contributions of up to 30% of basic salary. Executive Directors may take a full or partial cash supplement in lieu. See footnote below the table. Life assurance of four times basic salary and a dependant's pension of one third of basic salary is provided. Executives with HMRC pension protection may be offered lump sum life assurance only, equal to four times basic salary. UK DB: a pension generally payable from age 60 or 63. DB benefits are subject to capped increases in pensionable salary. No enhancement is provided on promotion to the Board. Funded DB benefits are subject to HMRC maximum allowances and limits. On death in service, a lump sum of four times pensionable salary and dependant's pension of two-thirds of the Executive Directors' pension is provided. DB pension plans were closed to new members by April 2006. US DC: annual contributions of up to 9% of basic salary plus APP award with additional 401(k) plan match of up to 4%. US DB: an Executive Supplemental Retirement Plan provides for an unreduced pension benefit at age 62 (this plan is closed to new participants from 1 January 2015). For retirements at age 62 with 35 years of service, the pension benefit would be approximately two thirds of pensionable salary. DB final average pay plan is subject to capped increases in pensionable pay. Upon death in service, the spouse would receive 50% of the pension benefit (100% if the participant died while an active employee after the age of 55).	Not applicable. None of the current Executive Directors are active members of a defined benefit plan.

Pension footnote: The Remuneration Committee agreed in November 2019 (i.e. after the July 2019 AGM Policy vote) that newly appointed Executive Directors would receive annual contributions of up to 12% of basic salary for the DC pension scheme or cash in lieu. The Remuneration Committee further agreed in November 2020 that all existing Executive Directors would receive 12% of basic salary for the DC scheme or cash in lieu effective from 1 April 2022.

Annual Performance Plan (APP)

Purpose and link to business strategy: to incentivise and reward the achievement of annual financial measures and strategic non-financial measures including the delivery of annual individual objectives and demonstration of our Company leadership qualities and values.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
The APP comprises reward for achievement against financial measures and achievement against individual/strategic objectives. Financial performance measures and targets are normally agreed at the start of each financial year and are aligned with strategic business priorities. Targets are set with reference to the budget. Individual objectives and associated targets are normally agreed also at the start of the year. APP awards are paid in June. 50% of the APP award is paid in shares, which (after any sales to pay associated income tax) must be retained until the shareholding requirement is met, and in any event for two years after receipt. Awards are subject to malus and clawback provisions as set out in the paragraph overleaf.	The maximum award is 125% of basic salary in respect of a financial year.	At least 50% of the APP is based on performance against financial measures. The Committee may use its discretion to set financial measures that it considers appropriate in each financial year and has the flexibility to modify the amount payable, to reflect wider financial and business performance, demonstration of leadership qualities and our values, or to take account of a significant event. The payout levels at threshold, target and stretch performance levels are 0%, 50% and 100%, respectively.

APP footnote: For 2021/22, a portion of the APP will be allocated to strategic non-financial measures which are consistent for all Executive Directors.

Directors' Remuneration Report continued

Directors' remuneration policy – approved by shareholders in 2019 continued

Long Term Performance Plan

Purpose and link to business strategy: to drive long-term business performance, aligning Executive Director incentives to key strategic objectives and shareholder interests over the longer term.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
Awards of shares may be granted each year, with vesting subject to long-term performance conditions. The performance measures have been chosen as the Committee believes they reflect the Executive Directors' creation of long-term value within the business. Targets are set for each award with reference to the business plan. Participants may receive ordinary dividend equivalent shares on vested shares, from the time the award was made, at the discretion of the Committee. Participants must retain vested shares (after any sales to pay tax) until the shareholding requirement is met, and in any event for a further two years after vesting. Awards are subject to malus and clawback provisions as set out in the paragraph below.	The maximum award for the CEO is 350% of salary and it is 300% of salary for the other Executive Directors based on salary at the time of the award.	The performance measures are Group Value Growth and Group RoE for all Executive Directors. For awards made in financial year 2019/20: Group Value Growth measured over three years (2019/20, 2020/21 and 2021/22) and Group RoE measured over two years (2019/20 and 2020/21) such that Group Value Growth represents two thirds and Group RoE represents one third of the total vesting outcome. For awards made in financial year 2020/21: Group Value Growth measured over three years (2020/21, 2021/22 and 2022/23) and Group RoE measured over one year (2020/21) such that Group Value Growth represents five sixths and Group RoE represents one sixth of the total vesting outcome. For awards made in 2017 and 2018 which will vest in 2020 and 2021 respectively, the performance measures were Group Value Growth and Group RoE, equally weighted, for all Executive Directors. All awards have a three-year performance period. For each performance measure, threshold performance will trigger only 20% of the award to vest; 100% will vest if maximum performance is attained. Notwithstanding the level of award achieved against the performance conditions, the Committee may use its discretion to modify the amount vesting to reflect wider financial and business performance and take account of a significant event and/or compliance with the dividend policy.

Malus and clawback

The Committee has discretion to determine whether exceptional circumstances exist which justify whether any or all of an award should be forfeited, even if already paid. Examples of exceptional circumstances include, but are not limited to, material misstatement, misconduct of the participant, a significant environmental, health and safety or customer issue, failure of risk management, and if certain other facts emerge after termination of employment. The Committee also has a prescribed process to follow when determining whether and how to apply this discretion.

Approved policy table – Non-executive Directors (NEDs)

Fees for NEDs

Purpose and link to business strategy: to attract NEDs who have a broad range of experience and skills to oversee the implementation of our strategy.

Operation	Maximum levels	Performance metrics, weighting and time period applicable
NED fees (excluding those of the Chairman) are set by the Group Executive Committee in conjunction with the Chairman. The Chairman's fees are set by the Committee. **Fee structure:** • Chairman fee (all inclusive); • Basic fee, which differs for UK- and US-based NEDs; • Committee chair fee; • Committee membership fee; and • Senior Independent Director fee. No additional fees are paid for membership/chair of the Nominations Committee. Fees are reviewed every year taking into account those in companies of similar scale and complexity. The Chairman is covered by the Company's private medical and personal accident insurance plans, and has the use of a car and driver, when required. NEDs do not participate in incentives, pension or any other benefits. However, they are eligible for reimbursement for all Company-related travel expenses. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC. NEDs who also sit on National Grid subsidiary boards may receive additional fees related to service on those boards.	There are no prescribed maximum fee levels although fees are generally aligned to salary increases received by other Company employees and market movement for NEDs of companies of similar scale and complexity. The cost of benefits provided to the Chairman is not subject to a predetermined maximum since the purchase cost will vary from year to year.	Not applicable.

Shareholding requirement – in employment

The requirement of Executive Directors to build up and hold a significant value of National Grid shares ensures they share a significant level of risk with shareholders and aims to align their interests. Executive Directors are required to build up and retain shares in the Company. The level of holding required is 500% of salary for the CEO and 400% of salary for the other Executive Directors. Unless the shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Remuneration Committee.

Shareholding requirement – post employment

The requirement of Executive Directors to continue to hold National Grid shares after leaving ensures they continue to share a risk with shareholders and maintain alignment with shareholders' interests. Executive Directors will be required to hold 200% of base salary calculated at their leave date, or maintain their actual holding percentage if lower, expressed as a number of shares and held for a period of two years. This calculation excludes the value of any awards not yet vested for 'good leavers' that will vest according to the normal schedule and which in any event must be held for a two-year period. The calculation will include recently vested LTPP awards or APP awards paid as shares which are subject to respective two-year holding periods, even after employment. Unless the post-employment shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Remuneration Committee.

Policy on payment for loss of office

The contracts contain provisions for payment in lieu of notice, at the sole and absolute discretion of the Company. Such contractual payments are limited to payment of salary only for the remainder of the notice period. In the UK, such payments would be phased on a monthly basis, over a period not greater than 12 months, and the Executive Director would be expected to mitigate any losses where employment is taken up during the notice period. In the US, for tax compliance purposes, the policy is to make any payment in lieu of notice as soon as reasonably practicable, and in any event within two and a half months of the later of 31 December and 31 March immediately following the notice date.

In the event of a UK Director's role becoming redundant, statutory compensation would apply and the relevant pension plan rules may result in the early payment of an unreduced pension.

On termination of employment, no APP award would generally be payable. However, the Committee has the discretion to deem an individual to be a 'good leaver', in which case a pro-rata discretionary payment could be paid, based on financial performance (as measured at the end of the financial year) and the achievement of individual objectives during the financial year up to termination. In the UK, the discretionary payment would generally be paid at the normal time. In the US, the payment would be made earlier if required for tax compliance purposes, in which case the Committee would apply discretion to determine an appropriate level of financial performance. Examples of circumstances, while not exhaustive, which could trigger 'good leaver' treatment include redundancy, retirement, illness, injury, disability and death. The Committee will apply discretion to determine if the pro-rata discretionary payment should be made sooner than it would normally be paid, for example, in the case of death.

On termination of employment, outstanding awards under the share plans will be treated in accordance with the relevant plan rules approved by shareholders. Unvested share awards would normally lapse. 'Good leaver' provisions apply at the Committee's discretion and in specified circumstances. Examples of circumstances, while not exhaustive, which could trigger 'good leaver' provisions, include: redundancy, retirement, illness, injury, disability and death, where awards will be released to the departing Executive Director or, in the case of death, to their estate. Long-term share plan awards held by 'good leavers' will normally vest subject to performance measured at the normal vesting date and will be reduced pro-rata for each completed month starting on the date of grant. Such awards would vest at the same time as for other participants, apart from circumstances in which the award recipient has died, in which case the awards vest as soon as practicable (based on a forecast of performance).

At the Committee's discretion, the Company may also agree other payments such as an agreed amount for legal fees associated with the departure of the Executive Director and outplacement support.

No compensation is payable to the Chairman or Non-executive Directors if they are required to stand down or are not re-elected at the AGM.

Service contracts/letters of appointment

In line with our policy, all Executive Directors have service contracts which are terminable by either party with 12 months' notice. Non-executive Directors are subject to letters of appointment. The Chairman's appointment is subject to six months' notice by either party; for other Non-executive Directors, notice is one month. Both Executive Directors and Non-executive Directors are required to be re-elected at each AGM.

External appointments

The Executive Directors may, with the approval of the Board, accept one external appointment as a Non-executive Director of another company and retain any fees received for the appointment. Experience as a board member of another company is considered to be valuable personal development, which in turn is of benefit to the Company.

Please refer to the full remuneration policy within the 2018/19 Annual Report and Accounts on the Company's investor website (nationalgrid.com/investors) for our remuneration policy on Directors' recruitment, consideration of remuneration policy elsewhere in the Company, total remuneration opportunity and corporate and share capital events.

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2020/21

Key

AUDITED

Audited Information
Content contained within a blue box highlighted with an 'Audited' tab indicates that all the information in the panel is audited.

Role of Remuneration Committee

The Committee is responsible for recommending to the Board the remuneration policy for the Executive Directors, the other members of the Group Executive Committee and the Chairman, and for implementing this policy. The aim is to align the remuneration policy to the Company strategy and key business objectives, and ensure it reflects our shareholders', customers' and regulators' interests. The Committee receives input on policy implementation within the wider workforce before reaching decisions on matters such as salary increases and annual incentive payouts and closely reviews the appropriateness of pay positioning by reference to external measures (benchmarking remuneration packages) and internal review of Company performance and pay gaps (CEO pay ratios, gender and ethnicity pay gaps) and from this year, the relativity year on year of salary, benefits and annual performance incentives compared with the same for the rest of the workforce.

- **Clarity:** we identify and communicate a range of performance measures in incentives which clearly link to the successful execution of Company strategy; as explained in the Committee Chair's statement, the Board continues to engage with the workforce; we shall consult this year with major institutional investors and proxy agencies on our proposals for the new Directors' remuneration policy.
- **Simplicity:** elements of our remuneration framework and their purpose are clearly articulated within our market-standard remuneration policy and we believe this is understood by all our stakeholders.
- **Risk:** risk is managed in a number of ways and evidenced through our remuneration policy, for example by setting maximum levels for incentive plans; measures that are aligned to Company performance/success and shareholder interests; a focus on the long term and value creation through the LTPP; Remuneration Committee discretion to potentially override formulaic outcomes and malus and clawback provisions; a high shareholding requirement for senior executives.
- **Predictability:** full information on the potential values which could be earned are disclosed; our policy outlines threshold, target and maximum opportunity with varying actual incentive outcomes dependent on performance; all the checks and balances set out above under Risk are disclosed as part of the remuneration policy.
- **Proportionality:** whilst incentive plans reward executives' performance in successfully delivering the business strategy, there is also a focus on sustaining this through holding periods that apply to vested shares and annual incentives that are paid out as shares; all executives are also subject to significant shareholding and post-employment shareholding requirements; the policy does not reward poor performance and the range of potential payouts under the policy is appropriate.
- **Alignment to Culture and Strategy:** our culture recognises how we do things is as vital as what we do and this is reflected in the type of performance conditions used in our incentive plans. Both the measures themselves and the targets which are set aim to reinforce this approach.

Our policy has operated as intended in terms of Company performance and quantum; a review of key considerations and decisions pertaining to its implementation is provided in the Committee Chair's statement on pages 92 – 94. The members of the Remuneration Committee in 2020/21 were Jonathan Dawson (Chair), Earl Shipp, Jonathan Silver and Mark Williamson. Details of the Committee's activities during the year can be found at page 111.

AUDITED

Single Total Figure of Remuneration – Executive Directors

The following table shows a single total figure in respect of qualifying service for 2020/21, together with comparative figures for 2019/20. All figures shown to £'000:

	£'000	Salary	Benefits in kind	Pension	Total fixed pay	APP	LTPP	Total variable pay	Total remuneration
Andy Agg	**20/21**	**624**	**32**	**125**	**781**	**618**	**723**	**1,341**	**2,122**
	19/20	595	23	119	737	525	436	961	1,698
John Pettigrew	**20/21**	**1,029**	**110**	**275**	**1,414**	**1,035**	**2,622**	**3,657**	**5,071**
	19/20	1,017	116	305	1,438	897	2,870	3,767	5,205
Nicola Shaw	**20/21**	**562**	**15**	**150**	**727**	**537**	**1,226**	**1,763**	**2,490**
	19/20	555	15	166	736	387	1,342	1,729	2,465

Notes:
Salary: Salary increases were not awarded for 2019/20 for John Pettigrew or Nicola Shaw in line with the Committee's decision to exercise restraint in light of the COVID-19 pandemic. Andy Agg was appointed as CFO in January 2019 on a salary significantly below the assessed market rate for the job, as explained on page 93, with the intention to increase his salary over a multi-year period subject to performance and progression in the role, and was awarded a 6.5% increase on 1 July 2020. John Pettigrew donated £50,000 to the Prince's Trust in May 2020. Andy Agg donated £20,000 to the Prince's Trust in July 2020.
Benefits in kind: Benefits in kind (BIK) include private medical insurance, life assurance and for UK-based Executive Directors, either a fully expensed car or a cash alternative to a car and the use of a car and a driver when required which, for John Pettigrew, amounted to approximately £89,000 for 2020/21 (and approximately £86,000 for 2019/20). A Sharesave option award was granted to Andy Agg on 24 December 2020 and the benefit (approximately £7,500) of this award is included. There were no Sharesave options granted to any of the other Executive Directors during 2020/21.
Pension: Pension contributions/cash in lieu for John Pettigrew and Nicola Shaw are 30% of salary for 2019/20 and reduced to 26.7% of salary for 2020/21 and for Andy Agg are 20% for both years. Contributions will fall to 23.4% of salary from April 2021 for John Pettigrew and Nicola Shaw and to 12% of salary for all Executive Directors from April 2022.
APP: John Pettigrew donated 20% of his 2019/20 APP (net of tax) to HELP USA, a charity involved in the emergency COVID-19 response in our US service territories.
LTPP: The 2018 LTPP is due to vest in July 2021. The average share price over the three months from 1 January 2021 to 31 March 2021 of 855.04p has been applied and estimated dividend equivalents are included. The 2019/20 LTPP figures have been restated because last year they were estimated using the average share price (January–March 2020) and they now include the actual share price on vesting and all dividend equivalent shares. Due to a lower share price at vesting of 903.8274p versus the estimate of 978.75p (and the additional dividend equivalent shares added for the dividend with a record date of 3 July 2020 with a dividend rate of 32.00p per share), the actual value at vesting was £17,775, £117,064 and £54,728 lower than for the estimate last year for Andy Agg, John Pettigrew, and Nicola Shaw, respectively.
Impact of share price change: The impact of share price appreciation/depreciation, comparing share prices at grant versus the estimated share prices upon vesting, is set out in the notes to the 2018 LTPP (vesting) table on page 105.

AUDITED

Total pension benefits

Andy Agg, John Pettigrew and Nicola Shaw received a cash allowance in lieu of participation in a pension arrangement. There are no additional benefits on early retirement. The values of these benefits, received during this year, are shown in the single total figure of remuneration table.

John Pettigrew has, in addition, accrued defined benefit (DB) entitlements. He opted out of the DB scheme on 31 March 2016 with a deferred pension and lump sum payable at his normal retirement date of 26 October 2031. At 31 March 2021, John Pettigrew's accrued DB pension was £168,991 per annum and his accrued lump sum was £506,973. No additional DB entitlements have been earned over the financial year, other than an increase for price inflation due under the pension scheme rules and legislation. Under the terms of the pension scheme, if he satisfies the ill-health requirements, or he is made redundant, a pension may be payable earlier than his normal retirement date. A lump sum death in service benefit is also provided in respect of these DB entitlements.

AUDITED

Annual Performance Plan (APP)

Performance against targets for APP 2020/21

APP awards are earned by reference to the financial year and this year will be paid in June. Financial measures determine 70% of the APP, and individual objectives determine 30% of the APP.

Payment of the APP award is made in shares (50% of the award) and cash (50%). Shares (after any sales to pay associated tax) must be retained until the shareholding requirement is met, and in any event for two years after receipt.

For financial measures, threshold, target and stretch performance levels are predetermined by the Committee and pay out at 0%, 50% and 100% of the maximum potential for each part and on a straight-line basis in between threshold and stretch performance, with the exception of Group Value Added that has an asymmetric range with a higher stretch target.

Target and stretch performance levels for the individual objectives are also predetermined by the Committee, and an assessment of the performance relative to the target and stretch performance levels is made at the end of the performance year on each objective.

The outcomes of APP awards earned for financial performance are summarised in the table below. Performance against individual objectives is set out on pages 102 and 103.

A discretionary adjustment has been made to Group EPS reducing the outcome by 0.5p. This is to exclude a benefit in operating profit in NGV linked to lower costs due to COVID-19.

Performance measure	Proportion of max opportunity	Threshold	Target	Stretch	Actual	Proportion of max achieved
CEO and CFO						
Underlying EPS (p/share) Ⓐ	35%	47.0	50.5	54.0	53.7	95.7%
Group Value Added (£m) Ⓐ	35%	1,684	1,774	1,914	1,808	62.1%
Executive Director, UK (excluding ESO performance)						
UK Capex (£m) Ⓐ	23.3%	1,249	1,189	1,129	1,160	74.2%
UK RoE (%) Ⓐ (Percentage points above average allowed regulatory return)	23.3%	1.94	2.24	2.54	2.39	75.0%
UK Underlying Operating Profit (£m) Ⓐ	23.3%	1,400	1,450	1,500	1,491	91.0%
All Executive Directors						
Individual objectives (%)	30%		Detail expanded in tables below			68–84%

Ⓐ Denotes an 'Alternative performance measure' as explained on page 250.

Notes:
Underlying EPS: Technical adjustments have been made increasing the target by 0.2p to reflect the net effect of currency adjustments, the impact of deferrable storm costs included in underlying targets but reported outside, US pension assumptions and scrip dividend uptake.
UK Underlying Operating Profit (excluding ESO): Technical adjustments have been made reducing the target by £9m to reflect normalisation of the impact of RPI (£5m) and update of assumptions on allocated costs between UK and ESO (£4m).

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2020/21 continued

Individual Objectives

The individual objectives of the Executive Directors when taken together were designed to deliver against each of our 2020/21 business priorities. The Committee used a two-stage process to agree individual objectives. First it reviewed and provided feedback on the objectives, including consideration of the weighting based on business criticality of the objective, and then, at a second meeting, it completed a final review and approved the objectives. At the end of the year, an overall assessment was made taking account of the weighting and achievement of the respective individual objectives for each Director, and the degree to which each element of the objective was met against specific targets and stretch targets. As with the financial measures, the achievement of 'stretch' performance and 'target' performance overall results in 100% and 50% respectively of the maximum payout.

The below sets out 2020/21 individual objectives which include a focus on strategic operational goals underpinning company performance and ESG objectives together with associated performance commentaries and the Committee's assessment of the performance outcome. The Committee has applied discretion to reduce the total individual performance outcome as explained in the summary line for each Director.

Andy Agg

Individual objective and performance commentary	Weighting	Outcome
Successfully deliver financing strategy despite challenges of COVID-19 pandemic • Achieved financial performance in line with initial guidance to market in June 2020 despite challenges of COVID-19 • Effectively managed the cash and funding implications of COVID-19, with clear guidance to investors • Established and communicated financing strategy including credit ratings approach, with positive reaction from investors	25%	25%
Secure appropriate financial arrangements in key regulatory arrangements • Provided financial plans for RIIO-2 which maintained earnings and protected credit metrics, sustaining strong relationships with stakeholders throughout the process • Delivered significant transaction support as part of rebalancing the portfolio • Supported US rate cases, though work was delayed due to COVID-19 impacts and therefore more work is to be done	25%	17%
Deliver Finance transformation programme • Delivered key Finance transformation programme milestones including operating model changes and leveraging of technology to enable better and more cost-effective delivery • Exhibited excellent leadership of the function through the changes in spite of COVID-19 related challenges	25%	23%
Lead implementation of revised investor proposition • Successfully engaged investors on renewed dividend policy and WPD acquisition, with positive feedback	25%	25%
Summary		
Andy achieved strong performance during the year. He successfully steered the organisation through implications of the COVID-19 pandemic and provided strong support to the business in the agreement of a new UK regulatory framework, and delivered ambitious milestones on the Finance transformation programme. Andy's strong leadership of the function enabled significant progress for the Company and its stakeholders despite challenging circumstances. As referenced in the Committee Chair's statement on page 93, the total outcome has been reduced from 90% to 80% to reflect Ofgem's decision to charge a penalty for the RIIO-2 business plans.	100%	80%

John Pettigrew

Individual objective and performance commentary	Weighting	Outcome
Deliver positive results for stakeholders despite challenges of COVID-19 pandemic • Delivered for our customers, in particular exceeding US customer satisfaction target by +5 points and progressing new construction work in the UK • Managed security of supply for our customers through US storms and low-demand challenges in the UK successfully, leading to positive feedback from members of government in the US and the UK • Delivered +5 point and +6 point increases in colleague engagement and enablement respectively, and demonstrated strong leadership as evidenced by very positive feedback from colleague pulse surveys, including a +14 point increase in care and concern	25%	25%
Execute updated business strategy • Reviewed and confirmed applicability of strategy despite COVID-19 pandemic and communicated and embedded strategy across organisation successfully • Executed acquisition of WPD and disposal of RI business (subject to shareholder vote), resulting in rebalancing to electricity • Delivered good progress on organic growth in non-regulated businesses and developed sound business plans for strong organic asset growth in the regulated businesses (8.2% in the US and 5.3% in Electricity Transmission) • Fostered strong relationships with key external stakeholders to enable continued progress against strategy going forward	25%	25%

John Pettigrew continued

Individual objective and performance commentary continued	Weighting	Outcome
Grow organisational capabilities through new operating model and culture change • Implemented new operating framework successfully with new ways of working, resulting in positive internal and external feedback • Made progress towards cultural ambitions as evidenced through 17.6% improvement in colleague culture diagnostic survey • Enhanced senior leadership capability and diversity through recruitment and new development programmes; more to achieve in diversity organisation-wide	25%	22%
Demonstrate organisational leadership in energy sector • Published Responsible Business Charter on 1 October, with positive feedback received internally and externally including an ESG day held on 5 October, and embedded processes for tracking Responsible Business measures • Made progress against emissions reductions including plan for 'well-below 2°C' pathway, partnered with COP26, announced plan for advisory vote at AGM on climate transition plan, and promoted electric vehicles in the UK, with £950m allocated to the charging infrastructure on the strategic road network • Demonstrated thought leadership in the UK and the US through specific policy actions and initiatives, including gas decarbonisation, a successful FutureGrid Network Innovation Competition Bid to better understand the role H2 has to play in the future of the UK Energy System, a US research programme to reduce gas emissions, and a 'multi-purpose interconnector' concept	25%	22%
Summary		
John's excellent performance over the year and strong leadership led to the Company progressing some significant strategic priorities and delivering for our stakeholders in spite of the COVID-19 pandemic. In particular, he delivered increases in customer and colleague scores, fostered strong relationships, communicated and embedded an updated business strategy and operating framework, progressed cultural ambitions, and demonstrated progress in organisational capabilities and leadership in the energy sector. As referenced in the Committee Chair's statement on page 93, the total outcome has been reduced from 94% to 84% to reflect Ofgem's decision to charge a penalty for the RIIO-2 business plans.	100%	84%

Nicola Shaw

Individual objective and performance commentary	Weighting	Outcome
Deliver positive results for stakeholders despite challenges of COVID-19 pandemic • Successfully adapted processes quickly to ensure reliability and resilience for our customers • Intensified communications and health and wellbeing support to colleagues and communities given the COVID-19 pandemic	25%	25%
Establish effective risk management controls and compliance framework • Successfully delivered milestones, including a thorough risk assessment and review of emerging risks, and implementation of a new risk committee	25%	20%
Successfully execute on UK business regulation priorities • Achieved RIIO-2 framework agreement that provides the right levels of capital expenditure and adjustment mechanisms required • Although all aspects of Ofgem's Final Determinations were accepted, apart from two technical aspects which are being appealed to the CMA, the outcome did not quite satisfy the Board's aspirations	25%	10%
Grow organisational capability • Strengthened succession pipeline • Increased diversity of leaders with females now representing more than half of leaders, and 62.5% of all colleagues self-identified as diverse for gender, ethnicity, disability and/or sexual preference • Significantly increased the number of chartered engineers and fellowships in the business with 30 new designations completed and 20 nearing designation at the end of the year	25%	23%
Summary		
Overall, Nicola has had a good year delivering on most of her objectives. In particular, Nicola showed strong leadership during COVID-19 with world-class safety and reliability delivered as well as the overall capital investment programme. During the year she has successfully led changes in the organisation to position the business for the energy transition and the new regulatory price control. With regards to RIIO-2, she was able to deliver a framework that provides the right levels of capital expenditure and adjustment mechanisms to meet the challenges ahead. As referenced in the Committee Chair's statement on page 93, the total outcome has been reduced from 78% to 68% to reflect Ofgem's decision to charge a penalty for the RIIO-2 business plans.	100%	68%

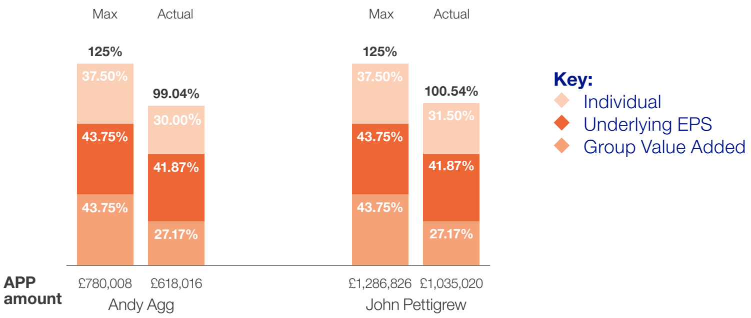
Directors' Remuneration Report continued

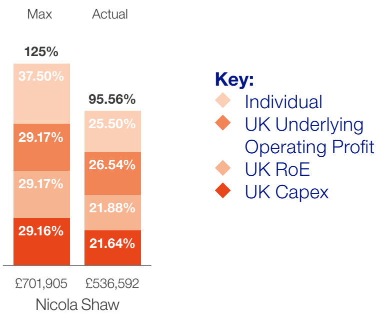
Statement of implementation of remuneration policy in 2020/21 continued

2020/21 APP as a proportion of base salary

The overall APP award and its composition based on financial performance and individual performance for each Executive Director is shown as a proportion of salary.

Executive Directors at 31 March 2021





AUDITED

LTPP performance

The LTPP value included in the 2020/21 single total figure relates to anticipated vesting in July 2021 of the conditional LTPP awards granted in 2018.

2018 LTPP

The 2018 award is determined by performance over the three years ended 31 March 2021 of Group RoE (50% weighting) and Group Value Growth (50% weighting), which is expected to vest on 1 July 2021. The financial components and weightings for this year's vesting, i.e., the 2018 LTPP awards, are the same for all Executive Directors.

The Group Value Growth outturn includes an amount to reflect the value added from the sale of the residual interest in the UK Gas Distribution business in 2019 and to adjust for revised timing of UK cash tax payments in 2019/20; both adjustments fall during the three-year performance period measured 2018–2021.

The Committee decided not to reflect the upward adjustments to Group RoE and Group Value Growth resulting from the revisions described in Note 1F to the consolidated financial statements.

The Committee considered the wider financial and business performance for the financial year including taking into account ESG performance and has decided not to apply any discretion for these factors.

Performance measure	Threshold – 20% vesting	Maximum – 100% vesting	Actual/expected vesting	Actual/expected proportion of maximum achieved
Group RoE (50% weighting) Ⓐ	11.0%	12.5% or more	11.3%	36.0%
Group Value Growth (50% weighting) Ⓐ	10.0%	12.0% or more	12.3%	100.0%

Ⓐ Denotes an 'Alternative performance measure' as explained on page 250

Note:
1. Based on the above financial results the overall vesting outcome for participants is 68.0%

AUDITED

2018 LTPP (vesting)

The 2018 LTPP is expected to vest on 1 July 2021. The amounts expected to vest under the 2018 LTPP for the performance period ended on 31 March 2021 and included in the 2020/21 single total figure are shown in the table below. The share price valuation is an estimate based on the average share price over the three months from 1 January 2021 to 31 March 2021 of 855.04p; the final dividend to be paid in August 2021 is excluded.

	Original number of share awards in 2018 LTPP	Overall vesting percentage (as % of max.)	Number of awards vesting	Number of dividend equivalent shares	Total value of awards vesting and dividend equivalent shares (£'000)
Andy Agg	109,886	68.0%	74,722	9,867	723
John Pettigrew	398,398	68.0%	270,910	35,774	2,622
Nicola Shaw	186,263	68.0%	126,658	16,725	1,226

Notes:
The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period.
Andy Agg: Andy Agg was interim CFO at the time of receiving his 2018 LTPP award. The award is subject to the same performance conditions, performance period and vesting percentage/dividend equivalents estimates as other Executive Directors.
Impact of share price change: The 2018 LTPP awards were granted on 28 June 2018 with a share price of 837.4083p. The impact of share price change for the 2018 LTPP, comparing share price at grant versus the average share price for the period 1 January 2021 to 31 March 2021 of 855.04p, for each Executive Director is an increase of 17.63p (2.1%) per share. This results in an estimated increase in value (including dividend equivalents) of: £14,914 for Andy Agg; £54,074 for John Pettigrew; and £25,281 for Nicola Shaw. The impact of share price change is not included in the expected amounts to vest shown in the table above.

AUDITED

Single total figure of remuneration – Non-executive Directors

The following table shows a single total figure in respect of qualifying service for 2020/21, together with comparative figures for 2019/20:

	Fees £'000		Other emoluments £'000		Total £'000	
	2020/21	**2019/20**	**2020/21**	**2019/20**	**2020/21**	**2019/20**
Jonathan Dawson	**112**	111	**1**	0	**113**	111
Therese Esperdy	**142**	141	**0**	19	**142**	160
Sir Peter Gershon	**540**	538	**82**	86	**622**	624
Paul Golby	**104**	104	**1**	5	**105**	109
Liz Hewitt	**99**	23	**0**	1	**99**	24
Amanda Mesler	**91**	91	**0**	2	**91**	93
Paula Rosput Reynolds	**21**	n/a	**0**	n/a	**21**	n/a
Earl Shipp	**104**	103	**0**	17	**104**	120
Jonathan Silver	**104**	91	**0**	11	**104**	102
Mark Williamson	**122**	134	**0**	6	**122**	140
Total	**1,439**	1,336	**84**	147	**1,523**	**1,483**

Notes:
Receiving the US-based Board fee: Therese Esperdy, Earl Shipp, Paula Rosput Reynolds and Jonathan Silver.
Receiving the UK-based Board fee: Jonathan Dawson, Paul Golby, Liz Hewitt, Amanda Mesler and Mark Williamson.
Therese Esperdy: Fees include £25,000 for serving on the National Grid USA Board.
Sir Peter Gershon: Other emoluments comprise private medical insurance of approximately £1,000 and the use of a car and driver when required of approximately £81,000. Sir Peter will step down from the Board on 31 May 2021.
Paula Rosput Reynolds: Paula Rosput Reynolds joined the Board on 1 January 2021 as a Non-executive Director and will be appointed as Chair of the Board from 31 May 2021. She is not eligible for any benefits.
Other emoluments: In accordance with the Company's expenses policies, Non-executive Directors receive reimbursement for their reasonable expenses for attending Board meetings. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC and these costs are included in the table above. For 2020/21 due to COVID-19 travel restrictions, most of the NEDs have not incurred travel-related expenses.

The total emoluments paid to Executive and Non-executive Directors in the year was £11.2 million (2019/20: £10.9 million).

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2020/21 continued

AUDITED

Other remuneration disclosures

2020 LTPP (conditional award) granted during the financial year

The face values of the awards are calculated using the volume weighted average share price at the date of grant. For the 2020 LTPP, due to the uncertainty in the context of COVID-19, the Committee decided to delay the usual LTPP award timing from late June to late August. The share price at the date of grant on 17 August 2020 was 889.18p per share. The number of awards were not adjusted downwards in the context of COVID-19 impact. As a utility business the Company continued to maintain operations, noting in particular that no employees have been furloughed, no compulsory redundancies or pay reductions have been made, and trade union agreements have been honoured.

	Basis of award	Face value £'000	Proportion vesting at threshold performance	Number of shares	Performance period end date
Andy Agg	300% of salary	1,901	20%	213,795	31 March 2023
John Pettigrew	350% of salary	3,603	20%	405,217	31 March 2023
Nicola Shaw	300% of salary	1,685	20%	189,452	31 March 2023

Note:
The 2020 LTPP grant will vest on 3 July 2023. The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period.

AUDITED

Performance conditions for 2020 LTPP awards granted during the financial year

	Conditional share awards granted – 2020		
Performance measure	Weighting for all Executive Directors	Threshold 20% vesting	Maximum 100% vesting
Group RoE (A)	16.67%	8.25%	9.75% or more
Group Value Growth (A)	83.33%	8.00%	10.50% or more

Notes:
Group RoE: As disclosed in the Committee Chair's statement for 2018/19, Group RoE is measured during the first year of the three-year performance period and will contribute one-sixth of the total vesting outcome. Vesting between threshold and maximum will be on a straight-line basis.
Group Value Growth: Group Value Growth is measured over the entire three-year performance period and will contribute five-sixths of the total vesting outcome. Vesting between threshold and 9% will be on a straight-line basis, 9% achievement will result in 60% vesting, and vesting between 9% and 10.5% or more will be on a straight-line basis.
Performance measures have not been adjusted in the context of COVID-19.

AUDITED

Payments for loss of office and payments to past Directors

There have been no payments made during 2020/21 for loss of office. This year we settled a payment of approximately £1,400 on a net of tax basis for a gift to Andrew Bonfield in recognition of his contributions to National Grid during his eight years of service which, Andrew had not been able to redeem until this year. There have been no other payments to past Directors during 2020/21.

Shareholder dilution

The Company has a number of all-employee share plans that provide employees with the opportunity to become, and to think like, a shareholder. These plans include Sharesave and the Share Incentive Plan (SIP) in the UK and the 401(k) and Employee Stock Purchase Plan in the US.

Where shares may be issued or treasury shares reissued to satisfy incentives, the aggregate dilution resulting from executive share-based incentives will not exceed 5% in any 10-year period. Dilution resulting from all incentives, including all-employee incentives, will not exceed 10% in any 10-year period. The Committee reviews dilution against these limits regularly and under these limits the Company, as at 31 March 2021, had headroom of 3.9% and 7.9% respectively.

AUDITED

Statement of Directors' shareholdings and share interests

The Executive Directors are required to build up and hold a shareholding from vested share plan awards. The following table shows how each Executive Director complies with the shareholding requirement and also the number of shares owned by the Non-executive Directors, including connected persons. The shareholding is as at 31 March 2021 and the salary used to calculate the value of the shareholding is the gross annual salary as at 31 March 2021.

John Pettigrew has met his shareholding requirement. Andy Agg is still relatively new in post and has not yet met his shareholding requirement but is expected to do so in 2023. Nicola Shaw is expected to meet her shareholding requirement in 2021, after the vesting of her 2018 LTPP award. These projections assume on-target performance/vesting outcomes. They will not be allowed to sell shares, except for covering associated tax liabilities, until their individual shareholding requirements are met. Non-executive Directors do not have a shareholding requirement.

Further shares have been purchased in each of April and May 2021 on behalf of each of Andy Agg, John Pettigrew and Nicola Shaw via the Share Incentive Plan (an HMRC tax-advantaged all-employee share plan), thereby increasing each of their beneficial interests by 33 shares. There have been no other changes in Directors' shareholdings between 1 April 2021 and 19 May 2021.

The expected vesting dates for the conditional share awards subject to performance conditions are 1 July 2021, 1 July 2022 and 3 July 2023 for the 2018 LTPP, 2019 LTPP and 2020 LTPP respectively.

Directors	Share ownership requirements (multiple of salary)	Number of shares owned outright (including connected persons)	Value of shares held as multiple of current salary	Number of options held under the Sharesave Plan	Conditional share awards subject to performance conditions (2018, 2019 & 2020 LTPP)
Executive Directors					
Andy Agg	400%	153,047	209%	4,316	537,680
John Pettigrew	500%	856,053	718%	4,219	1,235,584
Nicola Shaw	400%	201,737	310%	4,070	577,674
Non-executive Directors					
Jonathan Dawson	–	43,350	–	–	–
Therese Esperdy (ADSs)	–	1,587	–	–	–
Sir Peter Gershon	–	113,148	–	–	–
Paul Golby	–	2,291	–	–	–
Liz Hewitt	–	2,500	–	–	–
Amanda Mesler	–	1,500	–	–	–
Paula Rosput Reynolds (ADSs)	–	2,000	–	–	–
Earl Shipp (ADSs)	–	1,000	–	–	–
Jonathan Silver (ADSs)	–	0	–	–	–
Mark Williamson	–	47,460	–	–	–

Notes:
Andy Agg: On 31 March 2021 Andy Agg held 4,316 options granted under the Sharesave Plan with an exercise price of 695 pence per share and they can, subject to their terms, be exercised at 695 pence per share between 1 April 2026 and 30 September 2026. These options are discounted by 20%. The number of conditional share awards subject to performance conditions is as follows: 2018 LTPP: 109,886; 2019 LTPP: 213,999; 2020 LTPP: 213,795.
John Pettigrew: On 31 March 2021 John Pettigrew held 4,219 options granted under the Sharesave Plan with an exercise price of 711 pence per share and they can, subject to their terms, be exercised at 711 pence per share between 1 April 2025 and 30 September 2025. These options are discounted by 20%. The number of conditional share awards subject to performance conditions is as follows: 2018 LTPP: 398,398; 2019 LTPP: 431,969; 2020 LTPP: 405,217.
Nicola Shaw: On 31 March 2021 Nicola Shaw held 4,070 options granted under the Sharesave Plan with an exercise price of 737 pence per share and they can, subject to their terms, be exercised at 737 pence per share between 1 April 2022 and 30 September 2022. The number of conditional share awards subject to performance conditions is as follows: 2018 LTPP: 186,263; 2019 LTPP: 201,959; 2020 LTPP: 189,452.
Paula Rosput Reynolds: joined the Board on 1 January 2021.
Therese Esperdy, Paula Rosput Reynolds and Earl Shipp: Holdings are shown as ADSs and each ADS represents five ordinary shares.

Post-employment shareholding requirements

Past Executive Directors are required to continue to hold their shares/ADSs in line with our Directors' remuneration policy agreed at the AGM in 2019.

To enforce this the Executive Directors have agreed to give permission for the Company to periodically check with its third-party share scheme administrator whether the minimum shareholding requirement is being maintained. The Executive Directors have acknowledged that if they breach their post-employment shareholding requirement for any reason, the Company may enforce at its discretion one or more of the following processes: to request they repay to the Company an amount equivalent in value to the shareholding requirement that has not been met; the Company may withdraw/vary the vesting of any future shares granted under the LTPP; the Company may publish a public statement in a form as the Company may decide that the Director has failed to comply with the post-employment shareholding requirement. Executive Directors are reminded annually, when employed, of the post-employment shareholding requirement. At termination the minimum shareholding requirement is confirmed to the Director and checks are made by the Company at the 12-month and 24-month anniversary of leaving and at the financial year-end 31 March to ascertain if their post-employment shareholding requirement has been met.

At 31 March 2021, Andrew Bonfield and Dean Seavers, who stood down from the Board on 30 July 2018 and 5 November 2019 respectively, have each continued to meet their post-employment shareholding requirements.

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2020/21 continued

External appointments and retention of fees

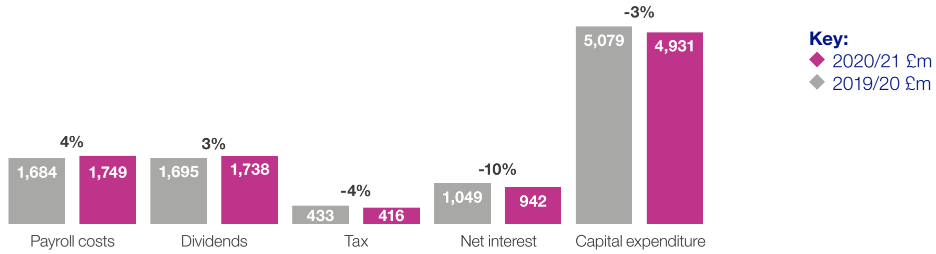
Experience as a board member of another company is considered to be valuable personal development, which in turn is of benefit to the Company. The table below details the Executive Directors (at 31 March 2021) who served as Non-executive Directors in other companies during the year ended 31 March 2021:

	Company	Retained fees
John Pettigrew	Rentokil Initial plc	£63,875
Nicola Shaw	International Consolidated Airlines Group S.A.	£85,609 (€100,500)

Note: For Nicola Shaw, fees have been converted using an exchange rate of 1EUR:0.85183GBP.

Relative importance of spend on pay

The chart below shows the relative importance of spend on pay compared with other costs and disbursements (dividends, tax, net interest and capital expenditure). Given the capital-intensive nature of our business and the scale of our operations, these costs were chosen as the most relevant for comparison purposes. All amounts exclude exceptional items and remeasurements.

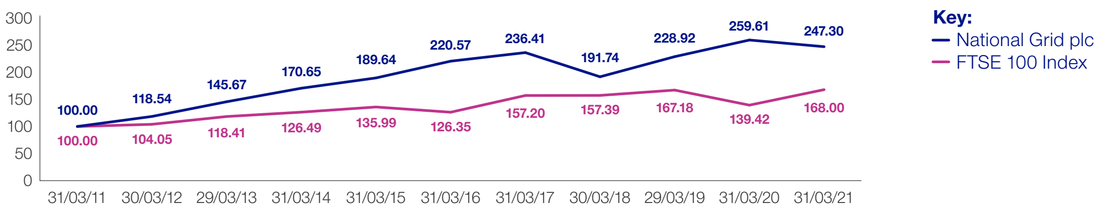


Notes:
1. The Dividends figure for 2019/20 has been restated at £1,695m (from £1,699m) to reflect the actual value of dividends paid.
2. Percentage increase/decrease of the costs between years is shown.

Performance graph

This chart shows National Grid plc's 10-year annual Total Shareholder Return (TSR) performance against the FTSE 100 Index since 31 March 2011 and illustrates the growth in value of a notional £100 holding invested in National Grid on 31 March 2011, compared with the same invested in the FTSE 100 Index. The FTSE 100 Index has been chosen because it is a widely recognised performance benchmark for large companies in the UK. The TSR level shown at 31 March each year is the average of the closing daily TSR levels for the 30-day period up to and including that date. It assumes dividends are reinvested.

Total shareholder return



Data source: Datastream by Refinitiv

Chief Executive's pay in the last ten financial years

Steve Holliday was CEO throughout the five-year period from 2011/12 to 2015/16. John Pettigrew became CEO on 1 April 2016.

	Steve Holliday					John Pettigrew				
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Single total figure of remuneration (£'000)	3,539	3,170	4,801	4,845	5,151	4,623	3,648	4,651	5,205	5,071
Single total figure of remuneration including only 2014 LTPP (£'000)						3,931				
APP (proportion of maximum awarded)	68.67%	55.65%	77.94%	94.80%	94.60%	73.86%	82.90%	84.20%	70.58%	80.43%
PSP/LTPP (proportion of maximum vesting)	49.50%	25.15%	76.20%	55.81%	63.45%	90.41%	85.20%	84.20%	84.90%	68.00%

Notes:
Single total figure 2020/21: The figure for 2020/21 for John Pettigrew is explained in the single total figure of remuneration table for Executive Directors.
Single total figure 2019/20: The figure for 2019/20 has been restated to reflect actual share price for 2017 LTPP vesting in 2020 and all dividend equivalent shares, consistent with comparative figures shown in this year's single total figure of remuneration table.
2014 LTPP: The 2016/17 single total figure of remuneration includes both the 2013 LTPP award and the 2014 LTPP award due to a change in the vesting period of four years (2013 LTPP) to three years (2014 LTPP).
PSP/LTPP plans: Prior to 2014, LTPP awards were made under a different LTI framework which incorporated a four-year performance period for the RoE element of the awards. The last award under this framework was made in 2013 and was fully vested in 2017. Awards made from 2014 are subject to a three-year performance period. The first of these awards vested in 2017.

Percentage change in remuneration for Executive Directors, Non-executive Directors and employee average

In previous years, we have shown the percentage change in the CEO's remuneration for salary, taxable benefits and APP with the average (mean) of each of those components of remuneration for our selected comparator group of non-unionised employees in the UK and the US. This year we have expanded our reporting to meet the requirements of the revised Shareholder Rights Directive (2019) and have included each Executive Director and Non-executive Director at 31 March 2021 to show the percentage changes for 2020/21 versus last year. The regulations cover employees of the Parent Company only and not across the group, and since we have very few people employed by our Parent Company (National Grid plc), we have voluntarily chosen a comparator group of all employees in the UK and the US to provide a representative comparison. In line with the regulations, we shall build this information to display a five-year history.

The Total Shareholder Return performance of National Grid plc over the last year and prior years is shown on page 108.

Percentage change in remuneration

	% change on last year for 2020/21		
	Salary	Benefits	Bonus
Executive Directors			
Andy Agg	4.9%	40.6%	17.7%
John Pettigrew	1.3%	-4.7%	15.4%
Nicola Shaw	1.3%	1.1%	38.8%
Non-executive Directors			
Jonathan Dawson	0.5%	37.1%	n/a
Therese Esperdy	0.4%	-100.0%	n/a
Sir Peter Gershon	0.5%	-5.5%	n/a
Paul Golby	0.5%	-87.5%	n/a
Liz Hewitt	334.8%	-100.0%	n/a
Amanda Mesler	0.5%	-100.0%	n/a
Paula Rosput Reynolds	n/a	n/a	n/a
Earl Shipp	0.5%	-100.0%	n/a
Jonathan Silver	14.3%	-100.0%	n/a
Mark Williamson	-8.6%	-100.0%	n/a
Employee median	2.8%	6.1%	40%

Notes:
Salary: Salaries for Executive Directors, and fees for Non-executive Directors, have been used. Overtime and allowances are excluded from the employee average base salary calculation.
Benefits: For Executive Directors and Non-Executive Directors the taxable benefits reported in the respective single total figure table of remuneration have been used and includes the benefit value of Sharesave options for John Pettigrew in 2019/20 of £7,475 and for Andy Agg in 2020/21 of £7,461. Excluding the benefit of Sharesave options, the percentage change on last year for benefits would be 8.1% and 1.9% for Andy Agg and John Pettigrew respectively. For all employees where eligible, taxable benefits include PMI and car allowance/job requirement cars and commercial vans (private use) pertaining to the UK employees and for the US, taxable insurance premiums and taxable portion of student loan repayment (this year only). Pension is excluded.
Bonus: For Executive Directors, APP values have been used. Non-executive Directors do not receive bonus payments. For all employees APP/annual performance payments relating to the prior year (2019/20) and APP/annual performance payment estimates for this year (2020/21) consistent with our CEO pay ratio analysis have been used. Long-term incentives are excluded.
Rounding: In all cases actual non-rounded numbers have been used rather than values rounded to nearest £'000 as expressed in the respective single total figure of remuneration tables.
Liz Hewitt: Joined the Board on 1 January 2020 and therefore fees received over 12 months for this year are compared with fees received over 3 months last year. In addition, Liz was appointed to the role of Committee Chair for the Audit Committee on 10 November 2020 and her fees were increased accordingly at this time.
Paula Rosput Reynolds: Joined the Board on 1 January 2021 and therefore a comparison with prior year fees is not applicable.
Jonathan Silver: Joined the Board on 16 May 2019 and therefore fees received over 12 months for this year are compared with fees received over 10.5 months last year.
Mark Williamson: Stepped down from the role of Committee Chair for the Audit Committee on 10 November 2020 and his fees were reduced accordingly at this time.
Employee median: Represents the percentage change in the median remuneration for each component on last year for 2020/21. Calculations are based on approximately 23,000 employees located in the UK and the US. Remuneration of Executive Directors and Non-executive Directors is excluded.
Exchange rate: US pay data has been converted based on the exchange rate of $1.341:£1

The percentage change data for salary/fees reflects that, other than for Andy Agg, there were no salary/fee increases for Directors during 2020/21. In contrast, the majority of managers and all those covered by trade union agreements were eligible to receive an annual salary increase during 2020/21. The average salary increase budget for the UK and the US employees, subject to performance review was 2.3% and 2.5% respectively. Budgets vary for employees covered by collective agreements depending on arrangements agreed with the respective trade unions. The Committee takes account of the general salary increase budgets available for managers/non-unionised employees when reviewing Directors' salaries/fees. Further alignment between Executive Director pay and arrangements available to the wider workforce is evidenced by the approach that all employees have the opportunity to receive a bonus which is linked to either a combination of individual and Company/business performance measures, or Company/business performance measures only, thus enabling employees as well as the Executive Directors to benefit in the Company's success annually.

Directors' Remuneration Report continued

Statement of implementation of remuneration policy in 2020/21 continued

CEO pay ratio

We have disclosed our CEO pay ratios comparing the CEO single total figure of remuneration to the equivalent pay for the lower quartile, median and upper quartile UK employees (calculated on a full-time equivalent basis), as well as the median Group-wide pay ratio.

		UK			Group-wide
Year	**Method**	**25th percentile pay ratio**	**Median pay ratio**	**75th percentile pay ratio**	**Median pay ratio**
2018/19 – voluntary	Option A	96:1	76:1	58:1	48:1
2019/20	Option A	111:1	86:1	66:1	53:1
2020/21	Option A	104:1	81:1	62:1	54:1

The comparison with UK employees is specified by the Companies (Miscellaneous Reporting) Regulations 2018 (as amended). US employees represent approximately 72% of our total employees. Our median pay ratio on a Group-wide basis is 54:1, calculated on the same basis as the UK pay ratios and an exchange rate of $1.341:£1.

Salaries at 31 March 2021 and estimated performance-based annual payments for 2020/21 have been annualised to reflect full-time equivalents. Performance payments have not been further adjusted to compensate where new employees have not completed a full performance year.

The CEO pay ratio has decreased to 81:1 at the median. The reduction is explained by the single total figure of remuneration for the CEO being approximately 5% lower compared with last year's calculation, broadly due to a lower estimated 2018 LTPP vesting outcome and a lower cash in lieu of pension allowance, as well as a salary freeze for the CEO. The pay and benefits of the median employee has increased by approximately 2%.

This year the 2018 LTPP vesting represents almost 52% (last year 56%) of the CEO's single total figure of remuneration. Excluding estimated 2018 LTPP vesting, our UK median pay ratio is 39:1. None of the employees for whom pay ratios apply are eligible for LTPP. Overall, approximately 2% of our UK employees are expected to receive 2018 LTPP vested awards this year and these all fall in the upper quartile of our ranked list. As employees advance through the Group, there will be the opportunity to receive higher rewards commensurate with increased accountability.

On a Group basis the median pay ratio has marginally increased to 54:1 which is driven mostly by an exchange rate difference versus last year. The lower Group median pay ratio versus the UK reflects the higher general level of wages in the US compared with the UK, and especially in the regions of the US where we operate. Almost three-quarters of our employees are US-based. Excluding LTPP the Group-wide median pay ratio is 26:1. The ratio of the pay of our Executive Director, UK, to the median UK employees is 40:1 and excluding LTPP is 20:1.

The total pay and benefits and the salary component of total pay and benefits for this year is set out below.

Pay data 2020/21	**Base salary**	**Total pay & benefits**
CEO remuneration	£1,029,461	£5,071,666
UK employee 25th percentile	£33,413	£48,657
UK employee 50th percentile	£57,000	£62,867
UK employee 75th percentile	£63,555	£81,548

Flexibility is provided to adopt one of three methods for calculating the ratios. We have chosen Option A, which is a calculation based on the pay of all UK employees on a full-time equivalent basis, as this option is considered to be more statistically robust. The ratios are based on total pay and benefits inclusive of short-term and long-term incentives applicable for the respective financial year 1 April – 31 March. The reference employees at the 25th, 50th and 75th percentile have been determined by reference to pay and taxable benefits as at the last day of the respective financial year, 31 March, though estimates have been used for the respective APP payouts and performance outcomes of the LTPP and dividend equivalents.

All employees are eligible for a performance-based annual payment. Our principles for pay setting and progression in our wider workforce are the same as for our executives – mid-market approach to total reward, being sufficiently competitive to attract and retain high-calibre individuals without over-paying and providing the opportunity for individual development and career progression. The pay ratios reflect how remuneration arrangements differ, as accountability increases for more senior roles within the organisation, and in particular the ratios reflect the weighting towards long-term value creation and alignment with shareholder interests for the CEO.

We are satisfied that the median pay ratio reported this year is consistent with our wider pay, reward and progression policies for employees. The median reference employee falls within our collectively bargained employee population and has the opportunity for annual pay increases, annual performance payments and career progression and development opportunities. While the CEO did not receive a pay increase during 2020/21 (due to restraint being exercised in the context of the COVID-19 pandemic) most managers and all those covered by trade union agreements did receive an annual salary increase.

The Committee's activities during the year

Meeting	Main areas of discussion
April	2019/20 individual objectives scoring for the Group Executive Committee Discussion on 2020/21 objectives for the Group Executive Committee Discussion on 2019/20 expected incentive plan outcomes Performance update for outstanding LTPP awards Discussion on remuneration alternatives in light of COVID-19
May	Provisional approval, in light of COVID-19, of 2020 salary increases and prior and future incentive awards Provisional approval of 2019/20 APP financial metrics Provisional approval of expected 2017 LTPP outcomes; performance update for outstanding LTPP awards Discussion on 2020 LTPP financial targets Final approval of 2019/20 individual APP outcomes and 2020/21 individual objectives for the Group Executive Committee
June	Final approval of pay decisions for the Group Executive Committee Review and approval of Chairman fees
July	Approval of 2020/21 APP targets and update on 2020 LTPP targets
September	Debrief of AGM season and remuneration trends Discussion on remuneration policy and incentive plan design Approval of one-year Group RoE targets for 2020 LTPP Approval of Chair fees for new appointment
November	Discussion on remuneration policy and incentive plan design Review of gender and ethnicity pay gaps Items related to new Group Executive Committee appointment
December	Items related to new Group Executive Committee role
January	Discussion on Group Value Growth target range for the 2020 LTPP Performance updates for outstanding LTPP awards and 2020/21 APP
February	Approval of Group Value Growth targets for the 2020 LTPP
March	Market data review of the Group Executive Committee remuneration and initial proposals for base salary increases Discussion on 2021/22 APP measures

Advisors to the Remuneration Committee

The Committee received advice during 2020/21 from independent consultants as follows: Willis Towers Watson provided advice until stepping down at the end of July 2020, and following a competitive tendering process, PricewaterhouseCoopers LLP (PwC) was selected by the Committee to become its independent advisor from 3 August 2020.

Both Willis Towers Watson and PwC are members of the Remuneration Consultants Group and have signed up to that group's code of conduct. The Committee is satisfied that any potential conflicts were appropriately managed.

Work undertaken by Willis Towers Watson and PwC in its role as independent advisor to the Committee has incurred fees of £22,895 and £88,917 respectively, on the basis of time charged to perform services and deliverables.

The Committee reviews the objectivity and independence of the advice it receives from its advisors each year. It is satisfied that both Willis Towers Watson and PwC provided credible and professional advice. Both Willis Towers Watson and PwC have provided general and technical remuneration services in their respective areas to the wider Company, in relation to employees below Board and Group Executive Committee level. This has included benchmarking support provided by Willis Towers Watson and benchmarking and data assurance services provided by PwC.

The Committee considers the views of the Chairman on the performance and remuneration of the Chief Executive Officer, and of the Chief Executive Officer on the performance and remuneration of the other members of the Group Executive Committee. The Committee is also supported by the Group General Counsel and Company Secretary, who acts as Secretary to the Committee; the Chief People and Culture Officer; the HR Director – Reward; and, as required, the Group Head of Pensions and Group Financial Controller. No other advisors have provided significant services to the Committee in the year.

Voting on Directors' Remuneration Policy adopted at the 2019 AGM

The voting figures shown refer to votes cast at the 2019 AGM and represent 63.86% of the voting share capital. In addition, shareholders holding 28.6 million shares abstained.

	For	Against
Number of votes	2,116,131,831	64,718,198
Proportion of votes	97.03%	2.97%

Voting on 2019/20 Directors' Remuneration Report at the 2020 AGM

The voting figures shown refer to votes cast at the 2020 AGM (in respect of the 2019 remuneration policy adopted at the 2019 AGM) and represent 66.76% of the voting share capital. In addition, shareholders holding 29.0 million shares abstained.

	For	Against
Number of votes	2,273,916,544	72,165,518
Proportion of votes	96.92%	3.08%

Directors' Remuneration Report continued

How our remuneration policy will be implemented in 2021/22

The remuneration policy adopted at the 2019 AGM will be implemented during 2021/22 as described below.

Salary

Salary increases will normally be in line with the increase awarded to other employees in the UK and the US, subject to performance. Higher salary increases may also be awarded for a change in responsibility. Additionally, in line with the policy on recruitment remuneration, salaries for new directors may be set below market level initially and aligned to market level over time (provided the increase is merited by the individual's contribution and performance).

As explained in the Remuneration Committee Chair's statement, for 2021 a salary increase of 6.5% for Andy Agg and 2.3% for each of John Pettigrew and for Nicola Shaw will be awarded, effective from July.

	From 1 July 2021	From 1 June 2020	Increase
Andy Agg	£675,000	£633,675	6.5%
John Pettigrew	£1,053,000	£1,029,461	2.3%
Nicola Shaw	£574,500	£561,524	2.3%

Pensions

The remuneration policy approved at the July 2019 AGM stated that new appointments would receive pension/cash in lieu contributions of up to 20% of base salary. In addition to this, John Pettigrew and Nicola Shaw agreed progressive reductions from 30% to 20% of base salary. The second year of implementing this agreement was effective 1 April 2021, resulting in cash in lieu of pension contributions for each of John Pettigrew and Nicola Shaw reducing to 23.4%. A further reduction to 20.0% was originally planned to take place at 1 April 2022; however, this has been reviewed and contributions will reduce instead to 12% at this time, without compensation, thereby ensuring alignment with the rate available to the majority of the UK workforce.

Andy Agg currently receives contributions of 20%, which was the approved policy maximum at the time of his appointment. Subsequently, the Committee agreed in November 2019 that newly appointed Executive Directors would receive annual contributions of up to 12% of basic salary for the DC pension scheme, or a cash supplement in lieu. Contributions for Andy Agg will reduce to 12% with effect from 1 April 2022, without compensation, thereby ensuring alignment with the rate available to the majority of the UK workforce.

APP measures for 2021/22

The APP measures and weightings for each Executive Director are shown in the table below. As explained in the Remuneration Committee Chair's statement, for 2021/22 the APP measures will be split across financial measures, operational/strategic measures (with an emphasis on ESG) and individual objectives, weighted 60%, 20% and 20% respectively. The APP targets are considered commercially sensitive and consequently will be disclosed in the 2021/22 Directors' Remuneration Report.

Andy Agg and John Pettigrew	Weighting
Group RoE	30%
Underlying EPS	30%
Operational/strategic measures	20%
Individual objectives	20%

Nicola Shaw	Weighting
UK RoE	20%
UK Underlying Operating Profit	20%
UK Regulated Controllable Costs	20%
Operational/strategic measures	20%
Individual objectives	20%

Performance measures for LTPP to be awarded in 2021

The 2021 LTPP performance measures and weightings, for all Executive Directors, are Group RoE (50%) and Group Value Growth (50%), each measured over the entire three-year performance period, 1 April 2021 – 31 March 2024. Awards are expected to be made towards the end of June. In light of the transactions involving Western Power Distribution, UK Gas Transmission and Rhode Island businesses, the Committee has opted not to finalise the threshold and maximum vesting targets at this time and will confirm these later in the year.

The LTPP rules expire in July 2021 and so we are seeking shareholder approval at the 2021 AGM for the new LTPP rules. The new rules are substantially in line with the existing rules, updated to reflect developments in market practice and good governance especially around malus and clawback provisions.

Fees for NEDs

Therese Esperdy was appointed as Non-executive Director to the National Grid USA Board in 2015 with an annual fee of £25,000 in addition to her current NED fees.

Paula Rosput Reynolds will assume the position of Chair from 31 May, with an annual fee of £700,000 without any benefits. This fee was set during the recruitment process and takes into account the market data and reflects the candidate being recruited from within the US market.

From this year, fee increases will be effective from 1 July 2021 to align with the annual salary review date applicable to the majority of our employees.

Role	1 July 2021 £'000	1 June 2020 £'000	Increase vs 2020
Chair (new fee level from 31 May 2021)	700.0	540.2	29.6%
Senior Independent Director	23.6	23.1	2.2%
Board fee (UK-based)	71.1	69.5	2.3%
Board fee (US-based)	84.4	82.1	2.8%
Chair Audit Committee	31.9	31.2	2.2%
Chair Finance Committee	24.4	23.9	2.1%
Chair Remuneration Committee	31.9	31.2	2.2%
Chair Safety, Environment and Health	24.4	23.9	2.1%
Committee membership fee	11.0	10.8	1.9%

Notes:
Other than for the Chair role, fees were last increased on 1 June 2019.
Chair/Committee fees are not applicable with respect to the Nominations Committee.

The Directors' Remuneration Report has been approved by the Board and signed on its behalf by:

Jonathan Dawson

Jonathan Dawson
Committee Chair
19 May 2021

3.
Financial Statements

Picture by
Hadeeja Khan
UK
Runner-up
Age group 6 and under


ABC
DEF
GHI
JK
SOLAR TREE
OWL SCHOOL

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and Accounts, including the Group financial statements and the Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law, the Directors are required to prepare the Group financial statements in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No. 1606/2002 as it applies in the European Union. The financial statements also comply with IFRS as issued by the IASB. In addition, the Directors have elected to prepare the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 'Reduced Disclosure Framework'. Under company law, the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group and Parent Company for that period.

In preparing the Group financial statements, International Accounting Standard 1 requires that Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Group's ability to continue as a going concern.

In preparing the Parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Parent Company on a consolidated and individual basis, and to enable them to ensure that the Group financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Parent Company and its subsidiaries and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Having made the requisite enquiries, so far as the Directors in office at the date of the approval of this Report are aware, there is no relevant audit information of which the auditors are unaware and each Director has taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

Each of the Directors, whose names and functions are listed on pages 72 – 73, confirms that:

- to the best of their knowledge, the Group financial statements and the Parent Company financial statements, which have been prepared in accordance with IFRS as issued by the IASB and IFRS as adopted by the European Union and UK GAAP FRS 101 respectively, give a true and fair view of the assets, liabilities, financial position and profit of the Company on a consolidated and individual basis;
- to the best of their knowledge, the Strategic Report contained in the Annual Report and Accounts includes a fair review of the development and performance of the business and the position of the Company on a consolidated and individual basis, together with a description of the principal risks and uncertainties that it faces; and
- they consider that the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

This Responsibilities Statement was approved by the Board and signed on its behalf.

Directors' Report

The Directors' Report, prepared in accordance with the requirements of the Companies Act 2006 and the UK Listing Authority's Listing Rules, and Disclosure Rules and Transparency Rules, comprising pages 1 – 113 and 224 – 268, was approved by the Board and signed on its behalf.

Strategic Report

The Strategic Report, comprising pages 1 – 66, was approved by the Board and signed on its behalf.

By order of the Board

Justine Campbell
Group General Counsel
& Company Secretary

19 May 2021

Company number: 4031152

Independent auditor's report
to the members of National Grid plc

Report on the audit of the financial statements

1. Opinion

In our opinion:
- the financial statements of National Grid plc (the 'Parent Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 March 2021 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006, International Financial Reporting Standards (IFRS) as adopted by the European Union and IFRS as issued by the International Accounting Standards Board (IASB);
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard (FRS) 101 'Reduced Disclosure Framework'; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

Group:
- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated statement of changes in equity;
- the consolidated statement of financial position;
- the consolidated cash flow statement; and
- the related notes 1 to 39 to the consolidated financial statements.

Parent Company:
- the Parent Company accounting policies;
- the Parent Company balance sheet;
- the Parent Company statement of changes in equity; and
- the related notes 1 to 10 to the Parent Company financial statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law, International Accounting Standards in conformity with the requirements of the Companies Act 2006 and IFRS as adopted by the European Union and as issued by the IASB. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 'Reduced Disclosure Framework' (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in section 10 of our report.

We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group and Parent Company for the year are disclosed in note 4(e) to the financial statements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent Company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: • impact of COVID-19 including the recoverability of US trade and other receivables; • impact of climate change on property, plant and equipment; and • treasury derivative transactions. The following items were identified as key audit matters in the prior year but not in the current year: • environmental provisions has not been deemed to be a key audit matter in the current year, as unlike in the prior year, there has been no significant change in the provisions and the judgements used to derive them. Specifically, there is less judgement regarding the most significant of the three US former sites that represent more than half of the total provision and were identified by the Environmental Protection Agency (EPA) as sites of significant contamination (Superfund sites). This is due to the finalisation of design works in the period which has reduced the uncertainty in the expected cash outflows; • classification of exceptional items has not been deemed to be a key audit matter this year due to the low level of exceptional items and the reduced level of judgement in determining the FY21 exceptional items when compared to the prior year; • IT user access controls have not been deemed a key audit matter this year as the remediation programme in respect of the deficiencies in user access management was largely completed in the prior year. The remaining deficiencies have not prevented us from adopting a controls based approach this year; and • in the prior year, we identified net pension obligations as a key audit matter in part due to the increased uncertainty in relation to the valuation of unquoted assets, specifically the Schemes' property and alternative investment portfolios, with the latter having been based upon valuations performed prior to the significant economic impacts of the COVID-19 pandemic becoming fully clear. In addition, in the prior year the Group entered into two pension buy-in transactions of £2.8 billion and £1.6 billion involving a transfer of certain pension assets in the form of gilts and cash, in return for a bulk annuity policy. In the current year, we note that market volatility in respect of these portfolios has reduced, resulting in lower uncertainty in relation to their valuation. In addition, although the Group entered into one further buy-in policy, the quantum is much smaller and the accounting is consistent with the treatment for the prior year buy-ins. On the basis of these considerations, in FY21 we have not identified a key audit matter in respect of net pension obligations.
Materiality	The materiality that we used for our audit of the Group financial statements was £120 million which represents 5.9% of adjusted profit before tax (profit before tax excluding the impact of reported exceptional items and remeasurements) and 5.8% of statutory profit before tax.
Scoping	Our scope covered seven components of the Group in addition to procedures performed at the Group level. Of these, three were subjected to a full-scope audit whilst the remaining four were subject to specific procedures on certain account balances. Our scoping covered 98% of the Group's revenue; 99% of the Group's property, plant and equipment; and 99% of the Group's gross liabilities.

Independent auditor's report
to the members of National Grid plc continued

4. Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Our evaluation of the Directors' assessment of the Group's and Parent Company's ability to continue to adopt the going concern basis of accounting included:
- assessing the financing facilities including the nature of facilities, repayment terms and covenants;
- enquiring of management regarding the assumptions used in the going concern models;
- testing the clerical accuracy and appropriateness of the model used to prepare the forecasts;
- assessing the assumptions used in the forecasts;
- assessing management's identified potential mitigating actions and the appropriateness of the inclusion of these in the going concern assessment;
- assessing the historical accuracy of forecasts prepared by management;
- reperforming management's sensitivity analysis; and
- evaluating whether the Group's disclosures in respect of going concern within the financial statements, meet the requirements of IAS 1.

The impact of National Grid's commitment to acquire Western Power Distribution (WPD) and to dispose of The Narragansett Electric Company (NECO) was considered in management's assessment. All of our work outlined above, addressed the implication of this commitment.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

Throughout the course of our audit, we identify risks of material misstatement ('risks'). We consider both the likelihood of a risk and the potential magnitude of a misstatement in making the assessment. Certain risks are classified as 'significant' or 'higher' depending on their severity. The category of the risk determines the level of evidence we seek in providing assurance that the associated financial statement item is not materially misstated.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1. Impact of COVID-19 including the recoverability of US trade and other receivables

Key audit matter description	**Account balances: Trade and other receivables. Refer to note 19 to the financial statements.** The COVID-19 pandemic has had a significant impact on the UK and US economies with consequences to the judgements and estimates made by the Group, principally in relation to the recoverability of US customer receivables. Refer to note 1 to the financial statements and the Audit Committee's discussion on pages 83 – 87. The scale and impact of the COVID-19 pandemic on the markets in which the Group operates remains significant. The various lockdowns imposed throughout the year by the UK government and the US states in which the Group operates had a direct and severe impact on those economies as consumer spending decreased and unemployment rose. As set out on page 9 of the Annual Report and Accounts, this has impacted the FY21 results of the Group. At the beginning of the financial year, management reassessed their controls framework, which encompassed a review of the ability to operate existing controls remotely and consideration of whether existing controls were suitable for addressing areas of new or increased risk. As a result of this assessment a COVID-19 entity-level control was implemented to assess the completeness of accounting considerations across the Group. Management's assessment determined that the primary risk that arose from the COVID-19 pandemic related to the valuation of provisions for bad and doubtful debts in the US due to the increased uncertainty over customers' ability to settle amounts when they fall due. In calculating bad and doubtful debts, the key judgement relates to the requirement to incorporate 'expected credit losses' into the provision. This requires management to make forward-looking estimates of the expected level of losses which will be incurred on any outstanding receivables. In the US, unlike in the UK, the Group has retail customers. Management has used the experience of cash collections since the start of the pandemic to inform their expected credit loss calculations. Although a small proportion of US collection activities resumed in the year, for the most part regulator moratoriums continued to be enforced, prohibiting utilities from shutting off customer access to gas and electricity for non-payment, as well as introducing requirements to extend payment plans and waive late fees. The level of estimation uncertainty related to the bad debt calculation in respect of US trade receivables continues to be high and accordingly, we have identified this as an area of 'higher' audit risk.

Independent auditor's report
to the members of National Grid plc continued

5. Key audit matters continued

5.1. Impact of COVID-19 including the recoverability of US trade and other receivables

How the scope of our audit responded to the key audit matter	We assessed whether management appropriately considered the related impact of COVID-19 and remote working on existing controls and tested the incremental COVID-19 entity level control, and where there was a change in a control due to remote working, we challenged the appropriateness of the change and assessed the operating effectiveness of the control in light of the change. Further, we held discussions with our component engagement teams, with management and within the wider Deloitte network to identify the areas of risk to the financial statements as a result of the wider impacts of the pandemic. We used the outcome of these discussions to update our audit risk assessment and challenge management's impact assessment. In challenging management's assumptions related to the impact of the COVID-19 pandemic on the provision for bad and doubtful debts on US retail customers, we assessed the trend of cash collections during the year and specifically considered the cash received in respect of the balances recorded at 31 March 2020. We considered the economic outlook, including when disconnection moratoria are expected to be eased, forecast unemployment rates and government stimulus packages. We challenged management's judgement as to the point in the range of calculated possible outcomes which management determined to be their best estimate.
Key observations	Our testing confirmed the incremental COVID-19 specific control operated effectively. We concluded that management's judgements and estimates made in determining the incremental level of expected credit losses as a consequence of the COVID-19 pandemic are reasonable. We concluded that management's disclosures included in note 1E to the financial statements in respect of the key judgements and areas of estimation uncertainty are appropriate.

5.2. The impact of climate change on property, plant and equipment

Key audit matter description	**Account balance: Property, plant and equipment. Refer to notes 1E and 13 to the financial statements and the Audit Committee's discussion on pages 83 – 87.** The UK government and certain US states in which the Group operates have enacted legislation and established targets in respect of net zero carbon emissions by 2050. Accordingly climate change represents a strategic challenge for the Group, which has also set targets for reducing direct greenhouse gas emissions by the same date. Natural gas, when burned, emits carbon dioxide and is considered a greenhouse gas. Therefore, the strategic challenge relates to the potential future use of the Group's assets used to facilitate gas transmission services in the UK and gas distribution services in the US in the period approaching 2050 and beyond. The remaining useful economic life of the Group's gas assets is up to 50 years in the UK and 80 in the US, extending well beyond the 2050 net zero commitment date. As described in note 13 to the financial statements, the impact of changing the useful economic lives of all of the Group's gas assets, such that they would be fully depreciated by 2050, would be an increase in the annual depreciation expense of £195 million, and such that they would be fully depreciated by 2060, would be an increase in the annual depreciation expense of £82 million. As the continued use of natural gas as a primary energy source beyond 2050 appears to be in conflict with net zero targets and the impact of shortening the useful lives of the gas assets to 2050 has a material impact on annual depreciation, we identified a 'higher' risk related to the financial statement impact of those commitments, specifically pinpointed to management's judgement in determining the useful lives of gas assets in the context of the net zero commitments. As described in note 13 to the financial statements and in the Audit Committee Report (page 85), management performed a detailed assessment of the potential uses for the Group's gas assets as part of their consideration around whether developments in the UK and US towards binding carbon reduction targets should trigger any changes to National Grid's estimates, judgements or disclosures, especially regarding gas asset lives. Management's assessment included an overview of the legislative changes in the UK and US, and an evaluation of the possible future use of National Grid's networks in a net zero carbon energy system. Management's best estimate of the useful economic lives of US gas assets, across all states in which it operates, is based on the depreciable life identified through depreciation studies for each asset and are approved by the respective state regulator. Accordingly, in the US, the IFRS asset depreciable lives are identical to those agreed by the Group's regulators for regulatory purposes. Management concluded it is probable that there will be a role for its US gas networks post 2050 under a range of possible scenarios, and there is nothing at present to suggest that asset lives should be shortened at this point. In the UK, National Grid Gas Transmission (NGGT) owns and operates the National Transmission System (NTS). Pipelines represent the vast majority of the value that will be undepreciated by 2050. Having analysed the potential decarbonisation pathways, management has identified numerous potential uses for the Group's UK gas pipeline assets in a net zero energy system including for the continued transmission of natural gas as a back-up fuel or in order for the transmission of hydrogen or other low or zero carbon gases. Management concluded that the National Transmission System (NTS) pipeline assets in the UK will continue to have an economic use until 2070. Management operated an entity level control to assess the accounting and disclosure impacts associated with the transitional and reputational risks of climate change to ensure these are considered and reflected appropriately in external reporting. Management determined that disclosure of a key judgement in relation to the potential future use of the Group's gas assets post-2050 and disclosure of the gas asset lives as a key estimate (note 1E to the financial statements), with appropriate sensitivity analysis (note 13 to the financial statements), was appropriate.

5.2. The impact of climate change on property, plant and equipment continued

How the scope of our audit responded to the key audit matter	We tested management's internal control over the accounting for and disclosure of the potential impacts associated with the energy transition and climate change. We challenged management's judgement that the useful lives of the Group's gas assets extend beyond 2050 in light of the different goals, commitments and legislation relating to net zero in the UK and the US states in which the Group operates by: • assessing potential strategic pathways to achieve net zero targets; • obtaining and reading government plans in the US and UK for achieving net zero which we compared to the potential strategic pathways; • evaluating information from the Group's regulators, including price controls in the UK and rate cases in the US, to consider whether they presented any contradictory evidence; • performing an assessment of the likelihood of occurrence of alternative scenarios for achieving net zero targets; • considering the potential for re-purposing the Group's gas networks for alternative uses, and in particular for transporting hydrogen; and • reading a number of external reports including: The Sixth Carbon Budget, produced by the Committee on Climate Change; the UK's Climate Change White Paper, produced by the Department for Business, Energy & Industrial Strategy; and searching for contradictory evidence in respect of management's judgements. We utilised our sustainability specialists to review management's key assumptions and to challenge the viability of some of the technological advances presented within the strategic pathways. We also consulted with Deloitte specialists in other countries regarding the suitability of existing gas infrastructure for transporting hydrogen. We assessed the disclosures set out in note 1 to the financial statements and the sensitivity analysis set out in note 13 to the financial statements regarding the carrying value of the useful economic lives of the Group's gas assets.
Key observations	Our testing confirmed that the relevant controls over management's assessment of the impact of the energy transition and climate change operated effectively. We observe that whilst some indicators do exist suggesting that the useful economic lives of the Group's gas assets may be limited to 2050, these are mitigated by other statements by governments and advisory bodies which suggest gas, and therefore gas transmission and distribution assets, will continue to have a role beyond 2050. Furthermore, the emergence of a substantial hydrogen infrastructure could introduce another potential longer term role for National Grid gas assets past 2050, if technological developments allow the utilisation of existing assets in this infrastructure. Whilst the targets, goals and ambitions in respect of net zero have now been formalised in legislation in all jurisdictions in which the Group operates, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways. We note that whilst state energy policy in the US states in which the Group operates is codified by the legislature, it is the regulators who are charged with implementing state energy policies. We concluded it was reasonable to assume that there will be a valuable use for the Group's US gas assets beyond 2050 and in the absence of any determination by the Group's regulators, it continues to be reasonable to use the regulatory asset lives for the calculation of depreciation in accordance with IFRS. In the UK, we note that there is no alignment between the useful lives of the Group's gas assets for IFRS depreciation purposes, and the period of recovery of the regulatory asset value under regulation. Nevertheless, we conclude that it is reasonable to assume that there will be a valuable use for these assets until 2070. We consider the disclosures in note 1 to the financial statements and the sensitivity analysis in note 13 to the financial statements to be appropriate. We are satisfied that management's other disclosures in the Annual Report and Accounts relating to the uncertainty surrounding the future use of the Group's gas assets are consistent with the financial statements and our understanding of the business.

Independent auditor's report
to the members of National Grid plc continued

5. Key audit matters continued

5.3. Treasury derivative transactions

Key audit matter description	**Account balances: Derivative financial assets and derivative financial liabilities. Refer to notes 17 and 32 to the financial statements.** The Group mitigates the exposure to commodity, interest rate and foreign exchange rate risks with risk management activities including the use of derivatives such as forwards, cross-currency swaps and interest rate swaps. The Group designates derivatives in hedge relationships where they judge this to meet the requirements of IFRS 9. Due to the technical nature of this assessment, we have identified it as a 'higher' audit risk. At 31 March 2021 the Group had derivative financial assets of £999 million (31 March 2020: £1,342 million) and derivative financial liabilities of £899 million (31 March 2020: £1,334 million). The valuation of the derivative portfolio requires management to make certain assumptions and judgements in particular around the valuation methodologies adopted and the discount rate to be applied to forecast cash flows. The portfolio also includes net 'level 3' derivative financial liabilities of £195 million (31 March 2020: £233 million) for which unobservable inputs that are significant to the fair value measurement must be used in the valuation models. This results in management having to make estimates in relation to unobservable inputs, which increase the complexity and level of estimation uncertainty, and there is judgement involved in determining the methodology used to fair value these derivatives. Accordingly, we have identified this as an area of 'higher' audit risk.
How the scope of our audit responded to the key audit matter	We have tested the controls over the recording and valuation of derivative financial instruments. This has included testing of the review controls performed by management over the valuations and its challenge of the estimates made. In conjunction with our treasury specialists we have tested a sample of the valuation models used by management, including a challenge of the assumptions therein, to confirm the appropriateness of the valuation methodology adopted and the assumptions applied. Additionally, we have performed independent valuations. We have obtained third party confirmations to test the completeness and accuracy of the information held within the Group's treasury management system. We have assessed the appropriateness of the hedge documentation, eligibility of designations, hedge effectiveness testing performed by management and tested the disclosures within the financial statements.
Key observations	Our testing confirmed that the relevant controls over the recording and valuation of derivative financial instruments were effective. We concluded that the valuation of derivatives and the Group's use of hedge accounting is appropriate.

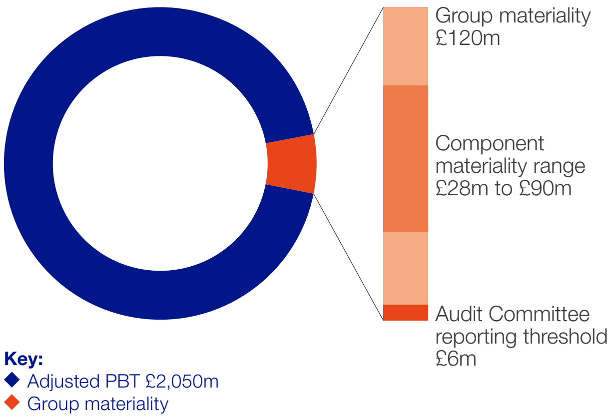
6. Our application of materiality

6.1. Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent Company financial statements
Materiality	Materiality has been set at £120 million for the current year (2020: £120 million).	Materiality has been set at £100 million for the current year (2020: £100 million).
Basis for determining materiality	Our determined materiality represents 5.9% (2020: 5.1%) of adjusted profit before tax and 5.8% (2020: 6.8%) of statutory profit before tax. Adjusted profit before tax is profit before tax, exceptional items and remeasurements as disclosed in the consolidated income statement. Prior year materiality was determined on a similar basis.	We determined materiality for our audit of the Parent Company financial statements using 0.68% of net assets (2020: 1.17%). A significant increase in intercompany receivables accounts for most of the increase in net assets. Despite the increase in net assets, we have maintained the materiality consistent with prior year.
Rationale for the benchmark applied	We consider adjusted profit before tax to be an important benchmark of the performance of the Group. We consider it appropriate to adjust for exceptional items and remeasurements as these items are volatile and not reflective of the underlying performance of the Group. We conducted an assessment of which line items we understand to be the most important to investors and analysts by reviewing analyst reports and National Grid's communications to shareholders and lenders, as well as the communications of peer companies. This assessment resulted in us considering the financial statement line items above. Profit before tax is the benchmark ordinarily considered by us when auditing listed entities. It provides comparability against other companies across all sectors, but has limitations when auditing companies whose earnings are impacted by items which can be volatile from one period to the next, and therefore may not be representative of the volume of transactions and the overall size of the business in a given year, or where the impact of volatility may result in the recognition of material income or charges in a particular year. Whilst not an IFRS measure, adjusted profit is one of the key metrics communicated by management in National Grid's results announcements. It excludes some of the volatility arising from changes in fair values of financial assets and liabilities as well as exceptional items. It was also the key measure applied in the prior year.	As the Company is non-trading, operates primarily as a holding company for the Group's trading entities, and is not profit orientated, we believe the net asset position is the most appropriate benchmark to use.



Independent auditor's report
to the members of National Grid plc continued

6. Our application of materiality continued

6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at £96 million (2020: £92 million) or 80% of Group materiality (2020: 77%). We set performance materiality for our audit of the Parent Company financial statements at £80 million or 80% of Parent Company materiality, consistent with prior year. In determining performance materiality, we considered the following factors:

- our cumulative experience from prior year audits;
- the level of corrected and uncorrected misstatements identified;
- our risk assessment, including our understanding of the entity and its environment; and
- our assessment of the Group's overall control environment.

Notwithstanding the significant changes in the business environment due to the COVID-19 pandemic, we increased the percentage from that of our 2020 audit to reflect the improving control environment and the continuing low level of adjustments identified by our audit.

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £6 million (2020: £6 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

7.1. Identification and scoping of components

Our audit was scoped by obtaining an understanding of the Group and its environment and assessing the risks of material misstatements at the Group level. We used data analytics tools and specialists to help inform our understanding of the business, identify key risk areas and evaluate the level of audit coverage required.

The UK Electricity Transmission (including National Grid Electricity System Operator), UK Gas Transmission and US Regulated were subject to a full-scope audit for Group reporting purposes, completed to the individual component materiality levels set out below.

In addition to the above components subject to full scope audit procedures by the component teams, we have identified four other business units which form part of National Grid Ventures and Other, within which there are specific balances identified for audit procedures to be performed. Our audit planning identified the following non-significant components where we consider there to be a reasonable possibility of material misstatement in specific items within the financial statements: Grain LNG, Metering, Interconnectors and UK Property. Accordingly, we have directed component auditors to perform specific audit procedures in relation to material account balances and analytical procedures on the respective income statements and statements of financial position for these components. The work on these components is carried out by the same component audit team as for the UK Electricity Transmission and UK Gas Transmission components. The Grain LNG, Metering and Interconnectors businesses are part of National Grid Ventures. The Property business is part of 'Other'.

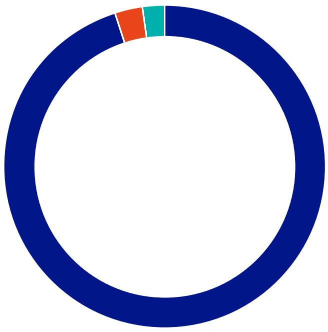
7.1. Identification and scoping of components continued

Business unit	Audit scope	Component materiality
UK Electricity Transmission (including National Grid Electricity System Operator)	Full scope audit	£52.8 million
UK Gas Transmission	Full scope audit	£48 million
US Regulated	Full scope audit	£90 million
Grain LNG	Audit of specified account balances	£28.8 million
Metering	Audit of specified account balances	£28.8 million
Interconnectors	Audit of specified account balances	£28.8 million
Property	Audit of specified account balances	£28.8 million

In addition to the work performed at a component level the Group audit team also performed audit procedures on the Parent Company financial statements, including but not limited to corporate activities such as treasury and pensions as well as on the consolidated financial statements themselves, including entity-level controls, litigation provisions, the consolidation, financial statement disclosures and risk assessment work on components not included elsewhere in the scope of our audit. The Group audit team also led the work in connection with the impact of climate change on the useful lives of the Group's gas assets and co-ordinated certain procedures performed on key areas, such as environmental provisions, where audit work is performed by both the Group and component audit teams as well as analytical reviews on out-of-scope components.

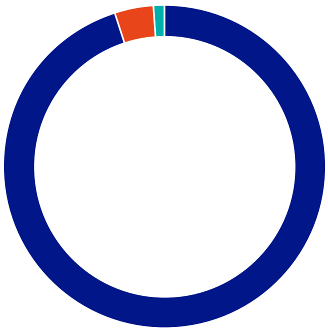
The scope and risk assessment of our audit is consistent with the prior year and our audit coverage of 'Revenue', 'Property, plant and equipment' and 'Gross liabilities' is materially the same as in the prior year.

Revenue (%)



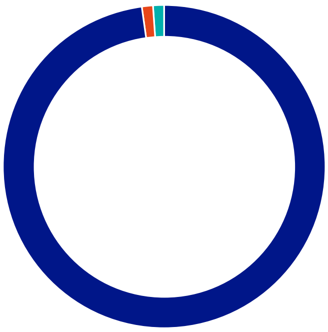
- Full audit scope 95%
- Specified audit procedures 3%
- Review at group level 2%

Property, plant and equipment (%)



- Full audit scope 95%
- Specified audit procedures 4%
- Review at group level 1%

Gross liabilities (%)



- Full audit scope 98%
- Specified audit procedures 1%
- Review at group level 1%

Independent auditor's report
to the members of National Grid plc continued

7. An overview of the scope of our audit continued

7.2. Our consideration of the control environment

Our audit approach was generally to place reliance on management's relevant controls over all business cycles affecting in scope financial statement line items. We tested controls through a combination of tests of inquiry, observation, inspection and re-performance.

In limited situations where we were not able to take a controls reliance approach due to controls being deficient and there not being sufficient mitigating or alternative controls we could rely on instead, we adopted a non-controls reliance approach. All control deficiencies which we considered to be significant were communicated to the Audit Committee. All other deficiencies were communicated to management. For all deficiencies identified, we considered the impact and updated our audit plan accordingly.

The Group's financial systems environment relies on a high number of UK and US applications. In the current year, we scoped 42 IT systems as relevant to the audit. These systems are all directly or indirectly relevant to the entity's financial reporting process.

We planned to rely on the General IT Controls (GITCs) associated with these systems, where the GITCs were appropriately designed and implemented, and these were operating effectively. To assess the operating effectiveness of GITCs, our IT audit specialists performed testing on access security, change management, data centre operations and network operations.

7.3. Working with other auditors

The Group audit team are responsible for the scope and direction of the audit process and provide direct oversight, review and coordination of our component audit teams.

As each of the financially significant components maintains separate financial records we have engaged component auditors from the Deloitte member firms in the US or the UK to perform procedures at these components on our behalf. This approach allows us to engage local auditors who have appropriate knowledge of local regulations to perform this audit work. We issued detailed instructions to the component auditors and directed and supervised their work.

We interacted regularly with the component Deloitte teams during each stage of the audit and reviewed key working papers. We maintained continuous and open dialogue with our component teams in addition to holding formal meetings to ensure that we were fully aware of their progress and results of their procedures.

Our oversight of component auditors focused on the planning of their audit work and key judgements made. In particular, our supervision and direction focused on the work performed in relation to key estimates and judgements made by management. As part of our monitoring of component auditors, we participated in key local audit meetings.

Due to the COVID-19 pandemic and the travel restrictions in place during the year, the senior statutory auditor and other Group audit partners were unable to conduct visits to meet in person with the component teams responsible for the full scope locations. As a result of this, we performed alternative virtual procedures which included attending planning meetings, discussing the audit approach and any issues arising from the component team's work, meetings with local management, and reviewing key audit working papers on higher and significant-risk areas to drive a consistent and high-quality audit. We are satisfied that the level of involvement of the lead audit partner and team in the component audits has been extensive, despite the restrictions from COVID-19 and the impact of remote working, and has enabled us to conclude that sufficient appropriate audit evidence has been obtained in support of our opinion on the Group financial statements as a whole.

8. Other information

The other information comprises the information included in the Annual Report and Accounts, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the Annual Report and Accounts. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

9. Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;
- the Group's own assessment of the risks that irregularities may occur either as a result of fraud or error;
- results of our enquiries of management, internal audit and the Audit Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations.
- the matters discussed among the audit engagement team including significant component audit teams and relevant internal specialists, including tax, valuations, pensions, IT and treasury specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. The engagement team includes audit partners and staff who have extensive experience of working with companies in the same sectors that National Grid operates in, and this experience was relevant to the discussion about where fraud risks may arise. The discussion was also carried out across the engagement team specific to the potential fraud implications of COVID-19 in relation to added financial pressures as well as in relation to increases in remote working.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act, UK Corporate Governance Code, IFRS as issued by the IASB and adopted by the EU, FRS 101, Listing Rules, pensions and tax legislation, US Securities Exchange Act 1934 and relevant SEC regulations, as well as laws and regulations prevailing in each country in which we identified a full scope component.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Group's operating licences and environmental regulations.

11.2. Audit response to risks identified

As a result of performing the above, we did not identify any key audit matters related to the potential risk of fraud or non-compliance with laws and regulations.

Our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- reading minutes of meetings of those charged with governance, internal audit reports and reviewing correspondence with relevant regulatory authorities.

In addressing the risk of fraud through management override of controls our procedures included:

- making inquiries of individuals involved in the financial reporting process about inappropriate or unusual activity relating to the processing of journal entries and other adjustments;
- using our data analytics tools, we selected and tested journal entries and other adjustments made at the end of a reporting period or which identified activity that exhibited certain characteristics of audit interest;
- assessing whether the judgements made in making accounting estimates are indicative of a potential bias, and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- considering whether there were any significant transactions that are outside the normal course of business, or that otherwise appear to be unusual due to their nature, timing or size.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Independent auditor's report
to the members of National Grid plc continued

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the Parent Company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

13. Corporate Governance Statement

The Listing Rules require us to review the directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- the directors' statement with regards to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 135;
- the directors' explanation as to its assessment of the Group's prospects, the period this assessment covers and why the period is appropriate set out on pages 28 – 29;
- the directors' statement on fair, balanced and understandable set out on pages 84 and 86;
- the board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 25 – 27 and 29;
- the section of the Annual Report and Accounts that describes the review of effectiveness of risk management and internal control systems set out on page 24 – 27; and
- the section describing the work of the Audit Committee set out on pages 83 – 87.

14. Matters on which we are required to report by exception

14.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. Other matters which we are required to address

15.1. Auditor tenure

We became independent and commenced our audit transition on 1 January 2017. Following the recommendation of the Audit Committee, we were appointed by the Shareholders at the Annual General Meeting on 31 July 2017 to audit the financial statements for the year ending 31 March 2018 and subsequent financial periods.

The period of total uninterrupted engagement including previous renewals and reappointments of the firm is four years, covering the years ending 31 March 2018 to 31 March 2021.

15.2. Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

16. Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Douglas King FCA (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
London, United Kingdom
19 May 2021

Consolidated income statement

for the years ended 31 March

2021	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	**14,779**	**–**	**14,779**
Provision for bad and doubtful debts	4	**(326)**	**–**	**(326)**
Other operating costs	4,5	**(11,527)**	**(31)**	**(11,558)**
Operating profit/(loss)	2(b)	**2,926**	**(31)**	**2,895**
Finance income	5,6	**35**	**23**	**58**
Finance costs	5,6	**(977)**	**49**	**(928)**
Share of post-tax results of joint ventures and associates	5,16	**66**	**(8)**	**58**
Profit before tax	2(b),5	**2,050**	**33**	**2,083**
Tax	5,7	**(416)**	**(26)**	**(442)**
Total profit for the year		**1,634**	**7**	**1,641**
Attributable to:				
Equity shareholders of the parent		**1,633**	**7**	**1,640**
Non-controlling interests from continuing operations		**1**	**–**	**1**
Earnings per share (pence)				
Basic earnings per share (continuing)	8			**46.6**
Diluted earnings per share (continuing)	8			**46.3**
Basic earnings per share (continuing and discontinued)	8			**46.6**
Diluted earnings per share (continuing and discontinued)	8			**46.3**

2020	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	14,540	–	14,540
Provision for bad and doubtful debts	4	(234)	–	(234)
Other operating costs	4,5	(10,999)	(527)	(11,526)
Operating profit/(loss)	2(b)	3,307	(527)	2,780
Finance income	5,6	70	(16)	54
Finance costs	5,6	(1,119)	(48)	(1,167)
Share of post-tax results of joint ventures and associates	5,16	88	(1)	87
Profit/(loss) before tax	2(b),5	2,346	(592)	1,754
Tax	5,7	(433)	(47)	(480)
Profit/(loss) after tax from continuing operations	5	1,913	(639)	1,274
Profit/(loss) after tax from discontinued operations	10	5	(14)	(9)
Total profit/(loss) for the year (continuing and discontinued)		1,918	(653)	1,265
Attributable to:				
Equity shareholders of the parent		1,917	(653)	1,264
Non-controlling interests from continuing operations		1	–	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			36.8
Diluted earnings per share (continuing)	8			36.6
Basic earnings per share (continuing and discontinued)	8			36.5
Diluted earnings per share (continuing and discontinued)	8			36.3

Consolidated income statement

for the years ended 31 March continued

2019	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	14,933	—	14,933
Provision for bad and doubtful debts	4	(181)	—	(181)
Other operating costs	4,5	(11,310)	(572)	(11,882)
Operating profit/(loss)	2(b)	3,442	(572)	2,870
Finance income	5,6	73	15	88
Finance costs	5,6	(1,066)	(91)	(1,157)
Share of post-tax results of joint ventures and associates	10	40	—	40
Profit/(loss) before tax	2(b),5	2,489	(648)	1,841
Tax	5,7	(488)	149	(339)
Profit/(loss) after tax from continuing operations	5	2,001	(499)	1,502
Profit/(loss) after tax from discontinued operations	10	57	(45)	12
Total profit/(loss) for the year (continuing and discontinued)		2,058	(544)	1,514
Attributable to:				
Equity shareholders of the parent		2,055	(544)	1,511
Non-controlling interests from continuing operations		3	—	3
Earnings per share (pence)				
Basic earnings per share (continuing)	8			44.3
Diluted earnings per share (continuing)	8			44.1
Basic earnings per share (continuing and discontinued)	8			44.6
Diluted earnings per share (continuing and discontinued)	8			44.4

Consolidated statement of comprehensive income

for the years ended 31 March

	Notes	2021 £m	2020 £m	2019 £m
Profit after tax from continuing operations		**1,641**	1,274	1,502
Other comprehensive income from continuing operations				
Items from continuing operations that will never be reclassified to profit or loss:				
Remeasurement gains/(losses) on pension assets and post-retirement benefit obligations	25	**1,408**	(724)	68
Net gains/(losses) on equity instruments designated at fair value through other comprehensive income		**46**	(9)	—
Net (losses)/gains on financial liability designated at fair value through profit and loss attributable to changes in own credit risk		**(11)**	(3)	7
Net losses in respect of cash flow hedging of capital expenditure		**(14)**	(17)	(13)
Tax on items that will never be reclassified to profit or loss	7	**(422)**	212	(15)
Total items from continuing operations that will never be reclassified to profit or loss		**1,007**	(541)	47
Items from continuing operations that may be reclassified subsequently to profit or loss:				
Exchange adjustments[1]		**(1,347)**	561	361
Net gains/(losses) in respect of cash flow hedges		**70**	(128)	(40)
Net gains/(losses) in respect of cost of hedging		**14**	(78)	(66)
Net gains/(losses) on investment in debt instruments measured at fair value through other comprehensive income		**80**	(15)	2
Share of other comprehensive income/(losses) of associates, net of tax		**1**	(5)	1
Tax on items that may be reclassified subsequently to profit or loss	7	**(8)**	35	12
Total items from continuing operations that may be reclassified subsequently to profit or loss		**(1,190)**	370	270
Other comprehensive (loss)/income for the year, net of tax from continuing operations		**(183)**	(171)	317
Other comprehensive income for the year, net of tax from discontinued operations[2]	10	**–**	6	36
Other comprehensive (loss)/income for the year, net of tax		**(183)**	(165)	353
Total comprehensive income for the year from continuing operations		**1,458**	1,103	1,819
Total comprehensive (loss)/income for the year from discontinued operations	10	**–**	(3)	48
Total comprehensive income for the year		**1,458**	1,100	1,867
Attributable to:				
Equity shareholders of the parent				
From continuing operations		**1,459**	1,101	1,815
From discontinued operations		**–**	(3)	48
		1,459	1,098	1,863
Non-controlling interests				
From continuing operations		**(1)**	2	4

1. Comparative amounts have been revised as described in note 1F.
2. The other comprehensive income from discontinued operations relates to the items of other comprehensive income of Cadent (investment through Quadgas HoldCo Limited). Refer to note 10 for details.

Consolidated statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Retained earnings £m	Other equity reserves[1] £m	Total shareholders' equity £m	Non-controlling interests £m	Total equity £m
At 31 March 2018 (as previously reported)	452	1,321	21,599	(4,540)	18,832	16	18,848
Prior year adjustment[2]	—	—	185	—	185	—	185
Impact of transition to IFRS 9 and IFRS 15	—	—	(268)	72	(196)	—	(196)
At 31 March 2018 (as restated)	452	1,321	21,516	(4,468)	18,821	16	18,837
Profit for the year	—	—	1,511	—	1,511	3	1,514
Other comprehensive income for the year	—	—	89	263	352	1	353
Total comprehensive income for the year	—	—	1,600	263	1,863	4	1,867
Equity dividends	—	—	(1,160)	—	(1,160)	—	(1,160)
Scrip dividend-related share issue[3]	6	(7)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	18	—	18	—	18
Purchase of own shares	—	—	(2)	—	(2)	—	(2)
Share-based payments	—	—	27	—	27	—	27
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(18)	(18)	—	(18)
At 1 April 2019	458	1,314	21,999	(4,223)	19,548	20	19,568
Profit for the year	—	—	1,264	—	1,264	1	1,265
Other comprehensive (loss)/income for the year	—	—	(509)	343	(166)	1	(165)
Total comprehensive income for the year	—	—	755	343	1,098	2	1,100
Equity dividends	—	—	(892)	—	(892)	—	(892)
Scrip dividend-related share issue[3]	12	(13)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(6)	—	(6)	—	(6)
Share-based payments	—	—	19	—	19	—	19
Tax on share-based payments	—	—	3	—	3	—	3
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(15)	(15)	—	(15)
At 1 April 2020	470	1,301	21,895	(3,895)	19,771	22	19,793
Profit for the year	—	—	1,640	—	1,640	1	1,641
Other comprehensive income/(loss) for the year	—	—	1,001	(1,182)	(181)	(2)	(183)
Total comprehensive income/(loss) for the year	—	—	2,641	(1,182)	1,459	(1)	1,458
Equity dividends	—	—	(1,413)	—	(1,413)	—	(1,413)
Scrip dividend-related share issue[3]	4	(5)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(2)	—	(2)	—	(2)
Share-based payments	—	—	27	—	27	—	27
Tax on share-based payments	—	—	(2)	—	(2)	—	(2)
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(17)	(17)	—	(17)
At 31 March 2021	**474**	**1,296**	**23,163**	**(5,094)**	**19,839**	**21**	**19,860**

1. For further details of other equity reserves, see note 28.
2. Comparative amounts have been revised as described in note 1F.
3. Included within the share premium account are costs associated with scrip dividends.

Consolidated statement of financial position

as at 31 March

	Notes	2021 £m	2020 £m	2019 £m
Non-current assets				
Goodwill[1]	11	**4,588**	5,712	5,372
Other intangible assets	12	**1,443**	1,295	1,084
Property, plant and equipment[1]	13	**47,043**	49,762	44,859
Other non-current assets	14	**293**	354	264
Pension assets	25	**1,747**	1,849	1,567
Financial and other investments	15	**755**	543	667
Investments in joint ventures and associates	16	**867**	995	608
Derivative financial assets	17	**542**	1,249	1,045
Total non-current assets		**57,278**	61,759	55,466
Current assets				
Inventories and current intangible assets	18	**439**	549	370
Trade and other receivables	19	**2,919**	2,986	3,153
Current tax assets		**67**	102	126
Financial and other investments	15	**2,342**	1,998	1,981
Derivative financial assets	17	**457**	93	108
Cash and cash equivalents	20	**157**	73	252
Assets held for sale	10	**3,557**	—	1,956
Total current assets		**9,938**	5,801	7,946
Total assets		**67,216**	67,560	63,412
Current liabilities				
Borrowings	21	**(3,737)**	(4,072)	(4,472)
Derivative financial liabilities	17	**(145)**	(380)	(350)
Trade and other payables	22	**(3,517)**	(3,602)	(3,769)
Contract liabilities	23	**(66)**	(76)	(61)
Current tax liabilities		**(75)**	(86)	(161)
Provisions	26	**(260)**	(348)	(316)
Liabilities held for sale	10	**(1,568)**	—	—
Total current liabilities		**(9,368)**	(8,564)	(9,129)
Non-current liabilities				
Borrowings	21	**(27,483)**	(26,722)	(24,258)
Derivative financial liabilities	17	**(754)**	(954)	(833)
Other non-current liabilities	24	**(843)**	(891)	(808)
Contract liabilities	23	**(1,094)**	(1,082)	(933)
Deferred tax liabilities[1]	7	**(4,815)**	(4,446)	(4,215)
Pensions and other post-retirement benefit obligations	25	**(1,032)**	(2,802)	(1,785)
Provisions	26	**(1,967)**	(2,306)	(1,883)
Total non-current liabilities		**(37,988)**	(39,203)	(34,715)
Total liabilities		**(47,356)**	(47,767)	(43,844)
Net assets		**19,860**	19,793	19,568
Equity				
Share capital	27	**474**	470	458
Share premium account		**1,296**	1,301	1,314
Retained earnings[1]		**23,163**	21,895	21,999
Other equity reserves[1]	28	**(5,094)**	(3,895)	(4,223)
Total shareholders' equity		**19,839**	19,771	19,548
Non-controlling interests		**21**	22	20
Total equity		**19,860**	19,793	19,568

1. Comparative amounts have been revised as described in note 1F.

The consolidated financial statements set out on pages 129 to 216 were approved by the Board of Directors on 19 May 2021 and were signed on its behalf by:

Sir Peter Gershon Chairman
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Consolidated cash flow statement

for the years ended 31 March

	Notes	2021 £m	2020 £m	2019 £m
Cash flows from operating activities				
Total operating profit from continuing operations	2(b)	**2,895**	2,780	2,870
Adjustments for:				
Exceptional items and remeasurements	5	**31**	527	572
Other fair value movements		**(22)**	—	—
Depreciation, amortisation and impairment		**1,672**	1,640	1,588
Share-based payments		**27**	19	27
Changes in working capital		**312**	269	40
Changes in provisions		**(195)**	(169)	(110)
Changes in pensions and other post-retirement benefit obligations		**(55)**	(92)	(123)
Cash flows relating to exceptional items		**(47)**	(60)	(400)
Cash generated from operations – continuing operations		**4,618**	4,914	4,464
Tax paid		**(157)**	(199)	(75)
Net cash inflow from operating activities – continuing operations		**4,461**	4,715	4,389
Net cash used in operating activities – discontinued operations	10	**—**	(97)	(71)
Cash flows from investing activities				
Acquisition of financial investments		**(99)**	(108)	(89)
Acquisition of National Grid Renewables (formerly Geronimo) and Emerald	38	**(26)**	(139)	—
Investments in joint ventures and associates		**(81)**	(82)	(143)
Loans to joint ventures and associates		**—**	—	(31)
Disposal of financial investments		**66**	63	18
Disposal of interests in Quadgas HoldCo Limited	10	**—**	1,965	—
Purchases of intangible assets		**(426)**	(317)	(306)
Purchases of property, plant and equipment		**(4,362)**	(4,583)	(3,635)
Disposals of property, plant and equipment		**8**	68	38
Dividends received from joint ventures and associates		**80**	75	68
Interest received		**16**	73	68
Net movements in short-term financial investments		**(436)**	7	822
Cash inflows on derivatives		**225**	58	17
Cash outflows on derivatives		**(81)**	(281)	(429)
Net cash flow used in investing activities – continuing operations		**(5,116)**	(3,201)	(3,602)
Net cash flow used in investing activities – discontinued operations	10	**—**	6	156
Cash flows from financing activities				
Proceeds from issue of treasury shares		**16**	16	17
Purchase of own shares		**(2)**	(6)	(2)
Proceeds received from loans	29(c)	**5,645**	4,218	2,932
Repayment of loans	29(c)	**(1,663)**	(3,253)	(1,969)
Payments of lease liabilities	29(c)	**(112)**	(121)	(70)
Net movements in short-term borrowings	29(c)	**(759)**	(424)	179
Cash inflows on derivatives	29(c)	**58**	62	221
Cash outflows on derivatives	29(c)	**(185)**	(249)	(186)
Interest paid	29(c)	**(835)**	(957)	(914)
Dividends paid to shareholders		**(1,413)**	(892)	(1,160)
Net cash flow from/(used in) financing activities – continuing operations		**750**	(1,606)	(952)
Net increase/(decrease) in cash and cash equivalents	29(b)	**95**	(183)	(80)
Reclassification to held for sale	10,29(b)	**(4)**	—	—
Exchange movements		**(7)**	4	3
Cash and cash equivalents at start of year		**73**	252	329
Cash and cash equivalents at end of year	20	**157**	73	252

Notes to the consolidated financial statements

1. Basis of preparation and recent accounting developments

Accounting policies describe our approach to recognising and measuring transactions and balances in the year. The accounting policies applicable across the financial statements are shown below, whereas accounting policies that are specific to a component of the financial statements have been incorporated into the relevant note.

This section also shows areas of judgement and key sources of estimation uncertainty in these financial statements. In addition, we have summarised new International Accounting Standards Board (IASB) and EU endorsed accounting standards, amendments and interpretations and whether these are effective for this year end or in later years, explaining how significant changes are expected to affect our reported results.

National Grid's principal activities involve the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited liability company incorporated and domiciled in England and Wales, with its registered office at 1–3 Strand, London WC2N 5EH.

The Company, National Grid plc, which is the ultimate parent of the Group, has its primary listing on the London Stock Exchange and is also quoted on the New York Stock Exchange.

These consolidated financial statements were approved for issue by the Board on 19 May 2021.

These consolidated financial statements have been prepared in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) and related interpretations as issued by the IASB and IFRS as adopted by the EU. They are prepared on the basis of all IFRS accounting standards and interpretations that are mandatory for periods ended 31 March 2021 and in accordance with the Companies Act 2006 applicable to companies reporting under IFRS adopted pursuant to Regulation (EC) No. 1606/2002 as it applies in the European Union. The comparative financial information has also been prepared on this basis.

The consolidated financial statements have been prepared on a historical cost basis, except for the recording of pension assets and liabilities, the revaluation of derivative financial instruments and certain commodity contracts and certain financial assets and liabilities measured at fair value.

These consolidated financial statements are presented in pounds sterling, which is also the functional currency of the Company.

The notes to the financial statements have been prepared on a continuing basis unless otherwise stated.

Our income statement and segmental analysis separately identify financial results before and after exceptional items and remeasurements. We continue to use a columnar presentation as we consider it improves the clarity of the presentation, and is consistent with the way that financial performance is measured by management and reported to the Board and the Executive Committee, and assists users of the financial statements to understand the results. The inclusion of total profit for the period from continuing operations before exceptional items and remeasurements is used to derive part of the incentive target set annually for remunerating certain Executive Directors and accordingly we believe it is important for users of the financial statements to understand how this compares to our results on a statutory basis and period on period.

A. Going concern

As part of the Directors' consideration of the appropriateness of adopting the going concern basis of accounting in preparing these financial statements, the Directors have considered both the impact of COVID-19 on the Group's operations alongside the impact of the acquisition of PPL WPD Investments Limited (WPD) (see note 38) and subsequent disposal of The Narragansett Electric Company (NECO) (see note 10) and the expected planned disposal of a majority stake of National Grid Gas plc. The Directors have assessed the principal risks discussed on pages 24 – 27, including by modelling both a base case and a reasonable worst case scenario.

Reasonable worst-case: The reasonable worst-case scenario covers the materially adverse cash flow impact associated with a further year of COVID-19 disruption across both the UK and US, with a subsequent phased return to normal operations, increased cash outflows from higher costs (e.g. storms), while still delivering our planned capital investment programme for the year ended 31 March 2022. The continuing economic impact of COVID-19 and the consequential impact on cash collections and capital programmes is the key judgement applied in the analysis. The main cash flow impacts identified in the reasonable worst-case scenario are:

- a significant reduction in cash collections driven by lower customer demand and increased bad debt in our US businesses;
- additional working capital required to fund payment term extensions and charge deferrals in the UK electricity market, intended to help customers and end-user consumers; and
- further increases in other costs such as cleaning, safety equipment and IT; offset by a continued reduction in discretionary spend across all areas (e.g. recruitment, travel and consultancy spend).

Impact of WPD acquisition: The cash flows associated with WPD have been based on historic actuals alongside information obtained as part of the financial due diligence process and associated discussions with WPD management. The Directors noted the impact of the transaction on the Group's financing position as below:

- a new bridge facility of £8.25 billion to finance the acquisition, with the first repayment of the bridge expected to be from the proceeds of the announced planned business disposals in 2022; and
- c.£1.1 billion of committed facilities to fund WPD working capital.

As part of their analysis, the Board also considered the following potential levers at their discretion to improve the position identified by the analysis if the debt capital markets are not accessible:

- the payment of dividends to shareholders;
- significant changes in the phasing of the Group's capital programme with elements of non-essential works and programmes delayed; and
- a number of further reductions in operating expenditure across the Group primarily related to workforce cost reductions in both the UK and the US.

Having considered the reasonable worst-case scenario, the impact of the acquisition of WPD (and any penalties if the transaction did not proceed), the timing of the NECO and National Grid Gas plc transactions, and the further levers at the Board's discretion, the Group continues to have headroom against the Group's committed facilities identified in note 33 to the financial statements.

In addition to the above, the ability to raise new financing was separately included in the analysis, and the Directors noted the c.£5.6 billion debt issuances completed in the period from 1 April 2020 to 31 March 2021 (disclosed in note 21 to the financial statements) as evidence of the Group's ability to continue to have access to the debt capital markets if needed. Other factors considered by the Board as part of their Going Concern assessment included the final determinations of the UK RIIO-2 price controls process, the Group's various ongoing rate case determinations in the US alongside inherent uncertainties in cash flow forecasts (such as the impact of storms in our US business).

Based on the above, the Directors have concluded the Group is well placed to manage its financing and other business risks satisfactorily and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least 12 months from the signing date of these consolidated financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Notes to the consolidated financial statements continued

1. Basis of preparation and recent accounting developments continued

B. Basis of consolidation

The consolidated financial statements incorporate the results, assets and liabilities of the Company and its subsidiaries, together with a share of the results, assets and liabilities of joint operations.

A subsidiary is defined as an entity controlled by the Group. Control is achieved where the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the power to affect those returns through its power over the entity.

The Group accounts for joint ventures and associates using the equity method of accounting, where the investment is carried at cost plus post-acquisition changes in the share of net assets of the joint venture or associate, less any provision for impairment. Losses in excess of the consolidated interest in joint ventures and associates are not recognised, except where the Company or its subsidiaries have made a commitment to make good those losses.

Where necessary, adjustments are made to bring the accounting policies used in the individual financial statements of the Company, subsidiaries, joint operations, joint ventures and associates into line with those used by the Group in its consolidated financial statements under IFRS. Intercompany transactions are eliminated.

The results of subsidiaries, joint operations, joint ventures and associates acquired or disposed of during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Acquisitions are accounted for using the acquisition method, where the purchase price is allocated to the identifiable assets acquired and liabilities assumed on a fair value basis and the remainder recognised as goodwill.

C. Foreign currencies

Transactions in currencies other than the functional currency of the Company or subsidiary concerned are recorded at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Non-monetary assets are not retranslated unless they are carried at fair value.

Gains and losses arising on the retranslation of monetary assets and liabilities are included in the income statement, except where the application of hedge accounting requires inclusion in other comprehensive income (see note 32(e)).

On consolidation, the assets and liabilities of operations that have a functional currency different from the Company's functional currency of pounds sterling, principally our US operations that have a functional currency of US dollars, are translated at exchange rates prevailing at the reporting date. Income and expense items are translated at the average exchange rates for the period where these do not differ materially from rates at the date of the transaction. Exchange differences arising are recognised in other comprehensive income and transferred to the consolidated translation reserve within other equity reserves (see note 28).

D. Disposal of The Narragansett Electric Company

As described further in note 10, on 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, The Narragansett Electric Company (NECO). The sale is expected to complete in early 2022 once all regulatory approvals are obtained.

As the sale is considered highly probable and is expected to complete within a year, the associated assets and liabilities have been presented as held for sale in the consolidated statement of financial position. However, the transaction has not met the criteria for classification as a discontinued operation and therefore its results for the period are not separately disclosed on the face of the income statement.

E. Areas of judgement and key sources of estimation uncertainty

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates. Information about such judgements and estimations is in the notes to the financial statements, and the key areas are summarised below.

Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are as follows:

- categorisation of certain items as exceptional items or remeasurements and the definition of adjusted earnings (see notes 5 and 8). In applying the Group's exceptional items framework, we have considered a number of key matters, as detailed in note 5;
- the judgement that notwithstanding legislation enacted and targets committing the UK, New York State and Massachusetts to achieving net zero greenhouse gas emissions by 2050, these do not trigger a reassessment of the remaining useful economic lives of our gas network assets (see estimate below and note 13); and
- following the legal separation of the Electricity System Operator on 1 April 2019, we concluded that the Electricity System Operator acts as an agent in respect of certain Transmission Network Use of Service revenues, principally those collected on behalf of the Scottish and Offshore transmission operators, as detailed in note 3.

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are as follows:

- the valuation of liabilities for pensions and other post-retirement benefits (see note 25); and
- the cash flows applied in determining the environmental provisions, in particular relating to three US Superfund sites (see note 26).

In light of the current ongoing impact of the COVID-19 pandemic, valuations of certain assets and liabilities are necessarily more subjective. The main impact at 31 March 2021 is the consideration of the recoverability of customer receivables, particularly in relation to US retail customers, in light of the suspension of debt collection activities and customer termination activities (see note 19), which is an area of estimation uncertainty impacting the Group's position as at 31 March 2021.

In addition, we also highlight the estimates made regarding the useful economic lives of our gas network assets due to the length over which they are being depreciated, the potential for new and evolving technologies over that period, and the range of potential pathways for meeting net zero targets (see note 13 for details and sensitivity analysis).

In order to illustrate the impact that changes in assumptions for the valuation of pension assets and liabilities and cash flows for environmental provisions could have on our results and financial position, we have included sensitivity analyses in note 35. Information on what we believe a reasonably possible range of outcomes to be on the recoverability of customer receivables are included in note 19.

1. Basis of preparation and recent accounting developments continued

F. Comparative period revisions

During the year, we have revised the comparative balances primarily to reflect adjustments between property, plant and equipment and goodwill related to the accounting performed for acquisitions made by our US business between 2000 and 2007. The adjustments related to the treatment of certain regulatory liabilities recognised under US GAAP on the acquisition balance sheets under UK GAAP and IFRS. This resulted in an overstatement of goodwill and an understatement of property, plant and equipment. The adjustments had a resulting impact on the deferred tax balances that were recognised at the time of the acquisitions and therefore, these have also been updated for all periods presented, also taking into account any subsequent changes in tax rates. The translation reserve on consolidation of these subsidiaries was also updated.

There have been no income statement impacts (and therefore no impact on the previously reported earnings per share) for any of the periods presented. Opening retained earnings have increased to correct the income statement impact of amortising the overstated goodwill from the period after acquisition until the adoption of IFRS in 2005 and for the impact on deferred tax of the tax rate changes noted above. Any foreign exchange impacts are recorded within the translation reserve within other equity reserves.

Below we set out the impacted line items and the adjustments to our opening statement of financial position as at 1 April 2018. In addition, we set out the adjustments to previously presented balances as at 31 March 2019 and 31 March 2020 (with the only movement each period being as a result of foreign exchange movements):

	1 April 2018 £m	31 March 2019 £m	31 March 2020 £m
Goodwill	(460)	(497)	(521)
Property, plant and equipment	877	946	992
Deferred tax liability	232	250	262
Retained earnings	185	185	185
Translation reserve	–	14	24

G. Accounting policy choices

IFRS provides certain options available within accounting standards. Choices we have made, and continue to make, include the following:

- Presentational formats: we use the nature of expense method for our income statement and aggregate our statement of financial position to net assets and total equity. In the income statement, we present subtotals of total operating profit, profit before tax and profit after tax from continuing operations, together with additional subtotals excluding exceptional items and remeasurements as a result of the three columnar presentation described earlier. Exceptional items and remeasurements are presented in a separate column on the face of the income statement.
- Financial instruments: we normally opt to apply hedge accounting in most circumstances where this is permitted (see note 32(e)).

H. New IFRS accounting standards and interpretations effective for the year ended 31 March 2021

The UK's Financial Conduct Authority announced that the London Inter-bank Offered Rate (LIBOR) will cease to exist by the end of 2021, and will be replaced by alternative reference rates. In September 2019, the IASB amended IFRS 9 and IFRS 7 by issuing Phase I of Interest Rate Benchmark Reform, which modified certain hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the hedged items or hedging instruments were amended as a result of the change in the reference rate. The amendments were endorsed in January 2020 for adoption in the EU. The Group early-adopted these changes to IFRS 9 and IFRS 7 with effect from 1 April 2019. Phase II was issued in August 2020 and endorsed in January 2021 for adoption in the EU, resulting in amendments to IFRS 9, IFRS 7 and IFRS 16. The Group has early-adopted these amendments with effect from 1 April 2020 as they enable the Company and its subsidiaries to reflect the effects of transitioning from LIBOR to alternative benchmark interest rates without giving rise to accounting impacts that would not provide useful information to users of the financial statements. There were no transition adjustments on adoption of either phase and the Group has not restated the prior period, but instead has applied the amendments prospectively. Refer to note 32(d) for further details on the contracts to be transitioned to the new alternative benchmark interest rate and for details of our migration project.

The Group has also adopted the following amendments to standards, which have had no material impact on the Group's results or financial statement disclosure:

- amendments to IFRS 16 'Leases – COVID-19 Related Rent Concessions';
- amendments to IFRS 3 'Business Combinations';
- amendments to IAS 1 and IAS 8 'Definition of Material'; and
- amendments to the References to the Conceptual Framework.

I. New IFRS accounting standards and interpretations not yet adopted

With effect from the period commencing 1 April 2021, the consolidated financial statements will be prepared in accordance with IAS and IFRS and related interpretations as adopted by the UK, instead of those adopted by the EU. As both sets of accounting standards are currently aligned, there will be no transitional adjustments required and comparative amounts will not be required to be restated.

The following new accounting standards and amendments to existing standards have been issued but are not yet effective or have not yet been endorsed by the EU:

- IFRS 17 'Insurance Contracts';
- amendments to IFRS 3 'Business Combinations';
- amendments to IAS 16 'Property, Plant and Equipment';
- amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets';
- amendments to IAS 1 'Presentation of Financial Statements';
- amendments to IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors'; and
- annual improvements to IFRS standards 2018-2020.

Effective dates will be subject to the UK endorsement process.

The Group is currently assessing the impact of the above standards, but they are not expected to have a material impact. The Group has not adopted any other standard, amendment or interpretation that has been issued but is not yet effective.

Notes to the consolidated financial statements
continued

2. Segmental analysis

This note sets out the financial performance for the year split into the different parts of the business (operating segments). The performance of these operating segments is monitored and managed on a day-to-day basis. Revenue and the results of the business are analysed by operating segment, based on the information the Board of Directors uses internally for the purposes of evaluating the performance of each operating segment and determining resource allocation between them. The Board is National Grid's chief operating decision maker (as defined by IFRS 8 'Operating Segments') and assesses the profitability of operations principally on the basis of operating profit before exceptional items and remeasurements (see note 5). As a matter of course, the Board also considers profitability by segment, excluding the effect of timing. However, the measure of profit disclosed in this note is operating profit before exceptional items and remeasurements as this is the measure that is most consistent with the IFRS results reported within these financial statements.

The results of our three principal businesses are reported to the Board of Directors and are treated as reportable operating segments. The following table describes the main activities for each reportable operating segment:

UK Electricity Transmission	The high-voltage electricity transmission networks in England and Wales and independent Great Britain system operator.
UK Gas Transmission	The high-pressure gas transmission networks in Great Britain and system operator in Great Britain.
US Regulated	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New York and New England and electricity generation facilities in New York.

The UK Electricity Transmission segment also includes the independent Electricity System Operator (ESO). Although there is a separate governance structure (including a separate Executive Committee), the Board receives financial information on an aggregated UK Electricity Transmission basis, which includes the results of the ESO, and accordingly the ESO is included within the reportable segment.

National Grid Ventures (NGV) is our only other operating segment. It does not currently meet the thresholds set out in IFRS 8 to be identified as a separate reportable segment and therefore its results are not required to be separately presented. Instead, NGV's results are reported alongside the results of all other operating businesses on an aggregated basis as 'NGV and Other', with certain additional disclosure included in footnotes.

NGV represents our key strategic growth area outside our regulated core business in competitive markets across the US and the UK. The business comprises all commercial operations in metering, LNG at the Isle of Grain in the UK, electricity interconnectors and our investments in National Grid Renewables (formerly Geronimo) and Emerald Energy Venture LLC (Emerald).

Other activities that do not form part of any of the segments in the above table or NGV primarily relate to our UK property business together with insurance and corporate activities in the UK and US and the Group's investments in technology and innovation companies through National Grid Partners.

The segmental information is presented in relation to continuing operations only.

(a) Revenue

Revenue primarily represents the sales value derived from the generation, transmission and distribution of energy, together with the sales value derived from the provision of other services to customers. Refer to note 3 for further details.

Sales between operating segments are priced considering the regulatory and legal requirements to which the businesses are subject. The analysis of revenue by geographical area is on the basis of destination. There are no material sales between the UK and US geographical areas.

	2021			2020			2019		
	Total sales £m	**Sales between segments £m**	**Sales to third parties £m**	Total sales £m	Sales between segments £m	Sales to third parties £m	Total sales £m	Sales between segments £m	Sales to third parties £m
Operating segments – continuing operations:									
UK Electricity Transmission	**3,992**	**(10)**	**3,982**	3,702	(8)	3,694	3,351	(20)	3,331
UK Gas Transmission	**904**	**(16)**	**888**	927	(16)	911	896	(12)	884
US Regulated	**9,195**	**—**	**9,195**	9,205	—	9,205	9,846	—	9,846
NGV and Other[1]	**715**	**(1)**	**714**	736	(6)	730	876	(4)	872
Total revenue from continuing operations	**14,806**	**(27)**	**14,779**	14,570	(30)	14,540	14,969	(36)	14,933
Split by geographical areas – continuing operations:									
UK			**5,482**			5,282			5,045
US			**9,297**			9,258			9,888
			14,779			14,540			14,933

1. Included within NGV and Other is £636 million (2020: £608 million; 2019: £597 million) of revenue relating to NGV.

2. Segmental analysis continued

(b) Operating profit

A reconciliation of the operating segments' measure of profit to profit before tax from continuing operations is provided below. Further details of the exceptional items and remeasurements are provided in note 5.

	Before exceptional items and remeasurements			After exceptional items and remeasurements		
	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Operating segments – continuing operations:						
UK Electricity Transmission	**1,034**	1,320	1,015	**1,027**	1,316	778
UK Gas Transmission	**342**	348	303	**337**	347	267
US Regulated	**1,313**	1,397	1,724	**1,344**	880	1,425
NGV and Other[1]	**237**	242	400	**187**	237	400
Total operating profit from continuing operations	**2,926**	3,307	3,442	**2,895**	2,780	2,870
Split by geographical area – continuing operations:						
UK	**1,612**	1,925	1,695	**1,550**	1,915	1,422
US	**1,314**	1,382	1,747	**1,345**	865	1,448
	2,926	3,307	3,442	**2,895**	2,780	2,870

Below we reconcile total operating profit from continuing operations to profit before tax from continuing operations. Total operating exceptional items and remeasurements of £31 million charge (2020: £527 million charge; 2019: £572 million charge) are detailed in note 5. This is comprised of a £7 million charge (2020: £4 million charge; 2019: £237 million charge) attributable to UK Electricity Transmission; £5 million charge (2020: £1 million charge; 2019: £36 million charge) to UK Gas Transmission; £31 million gain (2020: £517 million charge; 2019: £299 million charge) to US Regulated; and £50 million charge (2020: £5 million charge; 2019: £nil) to NGV and Other.

	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Reconciliation to profit before tax:						
Operating profit from continuing operations	**2,926**	3,307	3,442	**2,895**	2,780	2,870
Finance income	**35**	70	73	**58**	54	88
Finance costs	**(977)**	(1,119)	(1,066)	**(928)**	(1,167)	(1,157)
Share of post-tax results of joint ventures and associates	**66**	88	40	**58**	87	40
Profit before tax from continuing operations	**2,050**	2,346	2,489	**2,083**	1,754	1,841

1. Included within NGV and Other is £298 million (2020: £269 million; 2019: £263 million) of operating profit before exceptional items and remeasurements and £296 million of operating profit after exceptional items and remeasurements (2020: £268 million; 2019: £263 million), relating to NGV.

(c) Capital expenditure

Capital expenditure represents additions to property, plant and equipment and non-current intangibles but excludes additional investments in and loans to joint ventures and associates.

	Net book value of property, plant and equipment and other intangible assets			Capital expenditure			Depreciation, amortisation and impairment		
	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Operating segments:									
UK Electricity Transmission	**14,379**	13,788	13,288	**1,072**	1,043	925	**(507)**	(469)	(628)
UK Gas Transmission	**4,531**	4,513	4,412	**176**	249	308	**(165)**	(171)	(181)
US Regulated[1,2]	**27,128**	30,615	25,488	**3,223**	3,228	2,650	**(888)**	(855)	(700)
NGV and Other[2,3]	**2,448**	2,141	2,755	**460**	559	438	**(112)**	(145)	(226)
Total from continuing operations[2]	**48,486**	51,057	45,943	**4,931**	5,079	4,321	**(1,672)**	(1,640)	(1,735)
Split by geographical area – continuing operations:									
UK	**21,352**	20,427	19,343	**1,708**	1,847	1,584	**(783)**	(784)	(931)
US[2]	**27,134**	30,630	26,600	**3,223**	3,232	2,737	**(889)**	(856)	(804)
Total from continuing operations[2]	**48,486**	51,057	45,943	**4,931**	5,079	4,321	**(1,672)**	(1,640)	(1,735)
Asset type:									
Property, plant and equipment[2]	**47,043**	49,762	44,859	**4,510**	4,727	4,015	**(1,476)**	(1,464)	(1,560)
Non-current intangible assets	**1,443**	1,295	1,084	**421**	352	306	**(196)**	(176)	(175)
Total from continuing operations[2]	**48,486**	51,057	45,943	**4,931**	5,079	4,321	**(1,672)**	(1,640)	(1,735)

1. In 2020, we transferred certain software assets and properties which are held outside the US rate base and operate for the benefit of our US Regulated businesses, that were previously included within the NGV and Other segment, to the US Regulated segment. These assets were included within NGV and Other in 2019, and had a net book value of £1,062 million, capital expenditure of £87 million and depreciation, amortisation and impairment of £102 million.
2. Comparative amounts have been revised as described in note 1F.
3. Included within NGV and Other are assets with a net book value of £2,396 million (2020: £2,080 million; 2019: £1,635 million), capital expenditure of £431 million (2020: £550 million; 2019: £317 million) and depreciation, amortisation and impairment of £92 million (2020: £124 million; 2019: £114 million) relating to NGV.

Notes to the consolidated financial statements
continued

3. Revenue

Revenue arises in the course of ordinary activities and principally comprises:
- transmission services;
- distribution services; and
- generation services.

Transmission services, distribution services and certain other services (excluding rental income but including metering) fall within the scope of IFRS 15 'Revenue from Contracts with Customers', whereas generation services (which solely relate to the contract with the Long Island Power Authority (LIPA) in the US) are accounted for under IFRS 16 'Leases' as rental income, also presented within revenue. Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties and value added tax. The Group recognises revenue when it transfers control over a product or service to a customer.

Below, we include a description of principal activities, by reportable segment, from which the Group generates its revenue. For more detailed information about our segments, see note 2.

(a) UK Electricity Transmission
The UK Electricity Transmission segment principally generates revenue by providing electricity transmission services (both as transmission owner in England and Wales and independent system operator in Great Britain). Our business operates as a monopoly regulated by Ofgem, which has established price control mechanisms that set the amount of annual allowed returns our business can earn (along with the Scottish and Offshore transmission operators amongst others). The IFRS revenues we record are principally a function of volumes and price. Price is determined prior to our financial year-end with reference to the regulated allowed returns and estimated annual volumes. Where revenue received or receivable exceeds the maximum amount permitted by our regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery. As part of our regulatory agreements we are entitled to recover certain costs directly from customers (pass-through costs). These amounts are included in the overall calculation of allowed revenue as stipulated by regulatory agreements.

The System Operator earns revenue for balancing supply and demand of electricity on the transmission system, where it acts as principal. Revenue is recognised as the service is provided. The System Operator also collects revenues on behalf of transmission operators, principally National Grid Electricity Transmission plc and the Scottish and Offshore transmission operators, from users who connect to or use the transmission system. In this context, there is a judgement about whether the System Operator acts as a principal or agent in respect of the transmission network revenues collected on behalf of the Scottish and Offshore transmission operators (as set out in note 1). These amounts are paid to the transmission operators before the System Operator has collected payment from the users (electricity suppliers) and therefore the System Operator does hold some exposure to credit losses with electricity suppliers. However, the System Operator must set the charges paid by electricity suppliers by reference to the price control mechanism described above. That mechanism does not grant the System Operator with discretion to deviate from that mechanism. In addition, the transmission operators own and maintain the electricity network and receive direct feedback from electricity suppliers on the quality of the network they provide. As a result, we have concluded that the System Operator acts as an agent in respect of these transmission revenues and therefore records the attributable revenue net of operating costs.

The transmission of high-voltage electricity encompasses the following principal services:
- the supply of high-voltage electricity (including both transmission and system operator charges); and
- construction work (principally for connections).

For the supply of high-voltage electricity, revenue is recognised based on capacity and volumes. Our performance obligation is satisfied over time as our customers make use of our network. We bill monthly in arrears and our payment terms are up to 60 days.

For construction work relating to connections, customers can either pay over the useful life of the connection or upfront. Revenue is recognised over time, as we provide access to our network, and where the customer pays upfront, revenues are deferred as a contract liability and released over the life of the asset.

For other construction where there is no consideration for any future services, for example diversions (being the re-routing of network assets at our customers' request), revenues are recognised as the construction work is completed.

(b) UK Gas Transmission
The UK Gas Transmission segment of the Group principally generates revenue by providing gas transmission services to our customers (both as transmission owner and as system operator) in Great Britain. Similar to our UK Electricity Transmission business, our business operates as a monopoly regulated by Ofgem. The price control mechanism in place that determines our annual allowances is also similar, as is the way in which revenue is recorded.

The transmission of gas encompasses the following principal services:
- the supply of high-pressure gas (including both transmission and system operator charges); and
- construction work (principally for connections).

For the supply of high-pressure gas, revenue is recognised based on capacity and volumes. Our performance obligation is satisfied over time as our customers make use of our network, and we bill monthly in arrears with payment terms of up to 45 days.

For construction work relating to connections, customers pay for the connection upfront. Revenue is recognised over time, as we provide access to our network. As revenues are received upfront, they are deferred as a contract liability and released over the life of the connection.

For other construction where there is no consideration for any future services (such as diversions), revenues are recognised when the construction work is completed.

3. Revenue continued

(c) US Regulated

The US Regulated segment of the Group principally generates revenue by providing gas and electricity distribution services in New York and New England, high voltage electricity transmission services in New York and New England, and electricity generation in New York.

Distribution services

Provision of gas and electricity distribution services in New York and New England. This comprises the following principal services:

- Gas and electricity distribution: revenue is recognised based on usage by customers (over time) and billed monthly. Payment terms are 30 days; and
- Connections: revenue is recognised over time, as we provide access to our network. Where payments are made upfront, they are deferred as contract liabilities or customer contributions (where they relate to government entities) and released over the life of the connection.

Transmission services

Provision of electricity transmission services to customers and operation of electricity transmission facilities. Our principal services are:

- Electricity transmission: revenue is recognised based on usage by customers (over time) and billed monthly. Payment terms are 30 days; and
- Connections: revenue is recognised over time, as we provide access to our network. Where payments are made upfront, they are deferred as contract liabilities or customer contributions (where they relate to government entities) and released over the life of the connection.

Electricity generation

Provision of energy services and supply capacity to produce energy for the use of customers of the Long Island Power Authority (LIPA) through a power supply agreement where LIPA receives all of the energy and capacity from the asset until at least 2025. The arrangement is treated as an operating lease within the scope of the leasing standard, where we act as lessor with rental income being recorded as other income, which forms part of total revenue. Lease payments (capacity payments) are recognised on a straight-line basis and variable lease payments are recognised as the energy is generated.

(d) NGV and Other

NGV and Other generates revenue from electricity interconnectors, LNG at the Isle of Grain, National Grid Renewables, metering, our UK commercial property business, rental income and insurance.

The Group recognises revenue from transmission services through interconnectors and LNG at the Isle of Grain by means of customers' use of capacity and volumes. Revenue is recognised over time and is billed monthly. Payment terms are up to 30 days.

Other revenue in the scope of IFRS 15 principally includes revenues from our UK metering business and sales of renewables projects from National Grid Renewables to Emerald (see note 38). Revenue is recognised as it is earned. In the case of the UK metering business, revenue is billed monthly and payment terms are up to 30 days.

Other revenue, recognised in accordance with standards other than IFRS 15, includes property sales by our UK commercial property business (including sales to our St William joint venture) and rental income. Property sales are recorded at a point in time (when the sale is legally completed) and rental income is recorded over time.

(e) Disaggregation of revenue

In the following tables, revenue is disaggregated by primary geographical market and major service lines. The table reconciles disaggregated revenue with the Group's reportable segments (see note 2).

Revenue for the year ended 31 March 2021	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
Transmission	1,814	603	403	316	3,136
Distribution	–	–	8,317	–	8,317
System Operator	2,076	240	–	–	2,316
Other	67	12	15	302	396
Total IFRS 15 revenue	3,957	855	8,735	618	14,165
Other revenue					
Generation	–	–	376	–	376
Other	25	33	84	96	238
Total other revenue	25	33	460	96	614
Total revenue from continuing operations	3,982	888	9,195	714	14,779

Geographical split for the year ended 31 March 2021	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
UK	3,957	855	–	553	5,365
US	–	–	8,735	65	8,800
Total IFRS 15 revenue	3,957	855	8,735	618	14,165
Other revenue					
UK	25	33	–	59	117
US	–	–	460	37	497
Total other revenue	25	33	460	96	614
Total revenue from continuing operations	3,982	888	9,195	714	14,779

Notes to the consolidated financial statements
continued

3. Revenue continued
(e) Disaggregation of revenue continued

Revenue for the year ended 31 March 2020	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
Transmission	1,992	649	425	309	3,375
Distribution	—	—	8,319	—	8,319
System Operator	1,610	214	—	—	1,824
Other	69	15	12	296	392
Total IFRS 15 revenue	3,671	878	8,756	605	13,910
Other revenue					
Generation	—	—	369	—	369
Other	23	33	80	125	261
Total other revenue	23	33	449	125	630
Total revenue from continuing operations	3,694	911	9,205	730	14,540

Geographical split for the year ended 31 March 2020	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
UK	3,671	878	—	567	5,116
US	—	—	8,756	38	8,794
Total IFRS 15 revenue	3,671	878	8,756	605	13,910
Other revenue					
UK	23	33	—	110	166
US	—	—	449	15	464
Total other revenue	23	33	449	125	630
Total revenue from continuing operations	3,694	911	9,205	730	14,540

3. Revenue continued

(e) Disaggregation of revenue continued

Revenue for the year ended 31 March 2019	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
Transmission	1,909	661	370	313	3,253
Distribution	—	—	8,941	—	8,941
System Operator	1,416	172	—	—	1,588
Other	—	—	—	284	284
Total IFRS 15 revenue	3,325	833	9,311	597	14,066
Other revenue					
Generation	—	—	367	—	367
Other	6	51	168	275	500
Total other revenue	6	51	535	275	867
Total revenue from continuing operations	3,331	884	9,846	872	14,933

Geographical split for the year ended 31 March 2019	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	NGV and Other £m	Total £m
Revenue under IFRS 15					
UK	3,325	833	—	585	4,743
US	—	—	9,311	12	9,323
Total IFRS 15 revenue	3,325	833	9,311	597	14,066
Other revenue					
UK	6	51	—	245	302
US	—	—	535	30	565
Total other revenue	6	51	535	275	867
Total revenue from continuing operations	3,331	884	9,846	872	14,933

Contract liabilities (see note 23) represent revenue to be recognised in future periods relating to contributions in aid of construction of £1,160 million (2020: £1,158 million; 2019: £994 million). Revenue is recognised over the life of the asset. The asset lives for connections in UK Electricity Transmission, UK Gas Transmission, NGV and US Regulated are 40 years, 36 years, 15 years and up to 51 years respectively. The weighted average amortisation period is 19 years.

Future revenues in relation to unfulfilled performance obligations not yet received in cash amount to £4.8 billion (2020: £3.1 billion; 2019: £3.5 billion). £1.6 billion (2020: £1.5 billion; 2019: £1.6 billion) relates to connection contracts in UK Electricity Transmission which will be recognised as revenue over 26 years and £3.0 billion (2020: £1.5 billion; 2019: £1.8 billion) relates to revenues to be earned under Grain LNG contracts until 2045. The remaining amount will be recognised as revenue over 9 years.

The amount of revenue recognised for the year ended 31 March 2021 from performance obligations satisfied (or partially satisfied) in previous periods, mainly due to the changes in the estimate of the stage of completion, is £nil (2020: £nil; 2019: £nil).

Notes to the consolidated financial statements
continued

4. Operating costs

Below we have presented separately certain items included in our operating costs from continuing operations. These include a breakdown of payroll costs (including disclosure of amounts paid to key management personnel) and fees paid to our auditors.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Depreciation, amortisation and impairment	**1,672**	1,640	1,588	**—**	—	147	**1,672**	1,640	1,735
Payroll costs	**1,749**	1,684	1,703	**21**	—	149	**1,770**	1,684	1,852
Purchases of electricity	**1,181**	1,318	1,504	**(51)**	85	(50)	**1,130**	1,403	1,454
Purchases of gas	**1,233**	1,276	1,644	**17**	40	(2)	**1,250**	1,316	1,642
Property and other taxes	**1,193**	1,191	1,108	**—**	—	—	**1,193**	1,191	1,108
Balancing Services Incentive Scheme	**1,875**	1,317	1,196	**—**	—	—	**1,875**	1,317	1,196
Other	**2,624**	2,573	2,567	**44**	402	328	**2,668**	2,975	2,895
Other operating costs	**11,527**	10,999	11,310	**31**	527	572	**11,558**	11,526	11,882
Provision for bad and doubtful debts	**326**	234	181	**—**	—	—	**326**	234	181
Total operating costs	**11,853**	11,233	11,491	**31**	527	572	**11,884**	11,760	12,063
Operating costs include:									
Inventory consumed							**316**	328	415
Research and development expenditure							**17**	14	19

(a) Payroll costs

	2021 £m	2020 £m	2019 £m
Wages and salaries[1]	**2,282**	2,188	2,084
Social security costs	**172**	168	156
Defined contribution scheme costs	**77**	75	72
Defined benefit pension costs	**136**	135	232
Share-based payments	**27**	19	27
Severance costs (excluding pension costs)	**11**	1	76
	2,705	2,586	2,647
Less: payroll costs capitalised	**(935)**	(902)	(795)
Total payroll costs	**1,770**	1,684	1,852

1. Included within wages and salaries are US other post-retirement benefit costs of £43 million (2020: £45 million; 2019: £48 million). For further information refer to note 25.

(b) Number of employees

	31 March 2021	**Monthly average 2021**	31 March 2020	Monthly average 2020	31 March 2019	Monthly average 2019
UK	**6,657**	**6,517**	6,321	6,151	5,962	6,227
US	**17,026**	**16,821**	16,748	16,679	16,614	16,669
Total number of employees	**23,683**	**23,338**	23,069	22,830	22,576	22,896

4. Operating costs continued

(c) Key management compensation

	2021 £m	2020 £m	2019 £m
Short-term employee benefits	**7**	7	7
Compensation for loss of office	**—**	1	—
Post-employment benefits	**1**	1	1
Share-based payments	**4**	3	3
Total key management compensation	**12**	12	11

Key management compensation relates to the Board, including the Executive Directors and Non-executive Directors for the years presented.

(d) Directors' emoluments

Details of Executive Directors' emoluments are contained in the Remuneration Report on page 100 and those of Non-executive Directors on page 105.

(e) Auditors' remuneration

Auditors' remuneration is presented below in accordance with the requirements of the Companies Act 2006 and the principal accountant fees and services disclosure requirements of Item 16C of Form 20-F:

	2021 £m	2020 £m	2019 £m
Audit fees payable to the Parent Company's auditors and their associates in respect of:			
Audit of the Parent Company's individual and consolidated financial statements[1]	**2.5**	1.9	1.6
The auditing of accounts of any associate of the Company[2]	**8.1**	8.7	8.5
Other services supplied[3]	**6.4**	6.3	5.2
	17.0	16.9	15.3
Total other services[4]			
All other fees:			
Other assurance services[5]	**0.8**	0.6	1.1
Other non-audit services not covered above[6]	**2.0**	0.5	2.2
	2.8	1.1	3.3
Total auditors' remuneration	**19.8**	18.0	18.6

1. Audit fees in each year represent fees for the audit of the Company's financial statements and regulatory reporting for the years ended 31 March 2021, 2020 and 2019.
2. The 2019 comparative was updated in 2020 following finalisation of the 2019 audit fee with the Audit Committee in 2020.
3. Other services supplied represent fees payable for services in relation to other statutory filings or engagements that are required to be carried out by the auditors. In particular, this includes fees for reports under section 404 of the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley), audit reports on regulatory returns and the review of interim financial statements for the six-month periods ended 30 September 2020, 2019 and 2018 respectively.
4. There were no tax compliance or tax advisory fees and no audit related fees as described in Item 16C(b) of Form 20-F.
5. In all years, principally relates to assurance services provided in relation to comfort letters for debt issuances and, in 2021, also includes amounts related to capacity market auction monitoring services.
6. For 2021, includes the class 1 Circular in respect of the acquisition of WPD announced on 18 March 2021. In 2020, other assurance services include auction monitor work on Contracts for Difference, a review of controls over our data on New York customers and IT project assurance. In 2019, non-audit services primarily related to the UK Commercial Property business in respect of the evaluation of possible options for the use of property assets.

The Audit Committee considers and makes recommendations to the Board, to be put to shareholders for approval at each AGM, in relation to the appointment, re-appointment, removal and oversight of the Company's independent auditors. The Committee also considers and approves the audit fees on behalf of the Board in accordance with the Competition and Market Authority Audit Order 2014. The auditors' remuneration is then put to shareholders at each AGM. Details of our policies and procedures in relation to non-audit services to be provided by the independent auditors are set out on page 87 of the Corporate Governance Report.

Certain services are prohibited from being performed by the external auditors under the Sarbanes-Oxley Act. Of the above services, none were prohibited.

Notes to the consolidated financial statements
continued

5. Exceptional items and remeasurements

To monitor our financial performance, we use a profit measure that excludes certain income and expenses. We call that measure 'adjusted profit'. Adjusted profit (which excludes exceptional items and remeasurements as defined below) is used by management to monitor financial performance as it is considered that it aids the comparability of our reported financial performance from year to year. We exclude items from adjusted profit because, if included, these items could distort understanding of our performance for the year and the comparability between periods. This note analyses these items, which are included in our results for the year but are excluded from adjusted profit.

Exceptional items and remeasurements from continuing operations

	2021 £m	2020 £m	2019 £m
Included within operating profit			
Exceptional items:			
Changes in environmental provisions	14	(402)	–
New operating model implementation costs	(55)	–	–
Transaction costs	(24)	–	–
Cost efficiency and restructuring programmes	–	–	(204)
Massachusetts Gas labour dispute	–	–	(283)
Impairment of nuclear connection development costs	–	–	(137)
	(65)	(402)	(624)
Remeasurements – commodity contract derivatives	34	(125)	52
	(31)	(527)	(572)
Included within finance income and costs			
Remeasurements:			
Net (losses)/gains on financing derivatives	(41)	1	(40)
Net gains/(losses) on financial assets at fair value through profit and loss	23	(16)	15
Net gains/(losses) on financial liabilities at fair value through profit and loss	90	(49)	(51)
	72	(64)	(76)
Included within share of post-tax results of joint ventures and associates			
Remeasurements:			
Remeasurements – net losses on financial instruments	(8)	(1)	–
Total included within profit before tax	33	(592)	(648)
Included within tax			
Exceptional items – movements arising on items not included in profit before tax:			
Deferred tax charge arising on the reversal of the reduction in UK corporation tax rate	–	(192)	–
Tax on exceptional items	8	103	144
Tax on remeasurements	(34)	42	5
	(26)	(47)	149
Total exceptional items and remeasurements after tax	7	(639)	(499)
Analysis of total exceptional items and remeasurements after tax			
Exceptional items after tax	(57)	(491)	(480)
Remeasurements after tax	64	(148)	(19)
Total exceptional items and remeasurements after tax	7	(639)	(499)

5. Exceptional items and remeasurements continued

Exceptional items

Management uses an exceptional items framework that has been discussed and approved by the Audit Committee. This follows a three-step process which considers the nature of the event, the financial materiality involved and any particular facts and circumstances. In considering the nature of the event, management focuses on whether the event is within the Group's control and how frequently such an event typically occurs. In determining the facts and circumstances, management considers factors such as ensuring consistent treatment between favourable and unfavourable transactions, the precedent for similar items, the number of periods over which costs will be spread or gains earned, and the commercial context for the particular transaction.

Items of income or expense that are considered by management for designation as exceptional items include significant restructurings, write-downs or impairments of non-current assets, significant changes in environmental or decommissioning provisions, integration of acquired businesses, gains or losses on disposals of businesses or investments and significant debt redemption costs as a consequence of transactions such as significant disposals or issues of equity, and the related tax, as well as deferred tax arising on changes to corporation tax rates.

Costs arising from restructuring programmes include redundancy costs. Redundancy costs are charged to the consolidated income statement in the year in which a commitment is made to incur the costs and the main features of the restructuring plan have been announced to affected employees.

Set out below are details of the transactions against which we have considered the application of our exceptional items framework in each of the years for which results are presented.

2021

We have considered certain costs incurred in the period against our Exceptional Items Framework, and concluded £55 million of costs associated with the implementation of our new operating model, the £14 million release of environmental provisions for which the original provision was treated as exceptional and the £24 million of transaction costs associated with the acquisition of Western Power Distribution (WPD) and the sale of NECO should be treated as exceptional items in the current year.

New operating model implementation costs: The Group incurred £55 million of costs in relation to the design and implementation of our new operating model that is built on a foundation of six business units as described further in the Strategic Review. The costs recognised in the year ended 31 March 2021 primarily relate to professional fees incurred in designing the new operating model, alongside the redundancy provisions accrued in relation to those employees where announcements have been made that they will be leaving the organisation as a result of the changes. Whilst the costs incurred this year do not meet the quantitative threshold to be classified as exceptional on a standalone basis, we have concluded that the costs should be classified as exceptional in line with our exceptional items policy, in order to ensure that the costs are treated in a consistent manner with similar costs incurred previously. The total cash outflow for the year was £33 million.

Transaction costs: £24 million of transaction costs were incurred to date in relation to the acquisition of WPD (see note 38) and the sale of NECO (see note 10). The costs relate to legal fees, bankers' fees and professional fees. Whilst the costs incurred in the current year in isolation are not sufficiently material to warrant classification as an exceptional item, we are expecting further costs to be incurred next year, for example, in regards to success fees on completion of the acquisition. When taken in aggregate, the costs incurred over both years will be sufficiently material to be classified as exceptional in line with our policy. The total cash outflow for the year was £14 million.

Changes in environmental provision: In the US, the most significant component of our £1.5 billion environmental provision relates to several Superfund sites, and arose from former manufacturing gas plant facilities, formerly owned or operated by the Group or its predecessor companies. The sites are subject to both State and Federal law in the US. Under Federal and State Superfund laws, potential liability for the historical contamination may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred. The provisions and the Group's share of estimated costs are re-evaluated at each reporting period.

We have recognised an exceptional gain of £14 million relating to the release of environmental provisions relating to one of our US Superfund sites, for which the original provision was treated as an exceptional item. The reduction in the provision arose as a result of the re-evaluation of the Group's share of estimated costs following the finalisation of discussions on the scope of certain remediation work with government authorities. The release has been recorded as an exceptional item in line with the treatment of the original provision.

2020

We concluded that the increase in costs associated with the changes in our environmental provisions (£402 million) and the additional deferred tax charge reflecting the impact of the remeasurement of the Group's deferred tax liabilities as a result of a change in the substantively enacted UK corporation tax rate (£192 million) meet the criteria to be classified as exceptional.

A further £10 million of COVID-19 related costs incurred in the year ended 31 March 2020 were similarly not classified as exceptional in view of the quantum involved and all costs associated with the settlement reached with the State of New York in respect of the Downstate New York Gas Moratorium were also treated as part of adjusted profit.

Changes in environmental provisions: As a result of notices issued by governmental authorities and newly developed cost estimates prepared by third-party engineers in relation to our US Superfund sites, we re-evaluated our estimates of total costs and cost sharing allocations borne by the Company, and accordingly increased our provision by £326 million. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers, but under IFRS no asset can be recognised for this recovery.

Also included in the total environmental charge was the £76 million impact of the change in the real discount rate applied to the environmental provisions across the Group, of which £66 million related to the US and £10 million to the UK. Given the substantial and sustained change in gilts and corporate bond yields, we concluded it was appropriate to reduce the real discount rate from 1% to 0.5%. The weighted average remaining duration of our cash flows is now around 10 years.

Notes to the consolidated financial statements
continued

5. Exceptional items and remeasurements continued

2019

In assessing certain items of income and expenditure against our exceptional items framework, we concluded that the costs associated with the Massachusetts Gas labour dispute (£283 million), our cost efficiency and restructuring programme (£204 million) and impairments relating to two nuclear connection cancellations (£137 million) should be treated as exceptional (as described further below). We also considered whether the £95 million income from two legal settlements received in the period should be classified as exceptional. However, we concluded it was appropriate to recognise the income in earnings before exceptional items (within NGV and Other), in line with the treatment of the original costs.

Cost efficiency and restructuring programmes: Our UK and US businesses incurred restructuring charges as we reviewed organisational structures, operational activities and relevant roles and responsibilities to ensure we are able to operate more efficiently and to continue to drive outperformance for customers and shareholders. The cash outflow for the year was £93 million.

Massachusetts Gas labour dispute: Between June 2018 and January 2019, National Grid implemented a workforce contingency plan across its Massachusetts Gas business following the expiration of contracts for the 1,250 members of the existing workforce. The net incremental cost of the experienced contractors working alongside supervisors and workers from other areas of the business was £283 million, reflecting the financial performance of the US regulated business had the workforce contingency plan not been implemented. The total cash outflow related to the labour dispute was £320 million for the year.

Impairment of nuclear connection development costs: In 2018, Toshiba announced the cancellation of its NuGen project to build a new nuclear power station at Moorside in Cumbria, and NuGen terminated its connection agreement with UK Electricity Transmission. In February 2019, Hitachi terminated its connection agreements in respect of its Horizon projects at Wylfa and Oldbury. As there was no realistic prospect of these schemes continuing in their present form, we concluded that it was appropriate to impair the assets we had been developing for over 10 years. After deducting cash inflows relating to termination fees received of £13 million, the net impairment charge was £137 million.

Remeasurements

Remeasurements comprise unrealised gains or losses recorded in the consolidated income statement arising from changes in the fair value of certain of our financial assets and liabilities accounted for at fair value through profit and loss (FVTPL). Once the fair value movements are realised (for example, when the derivative matures), the previously recognised fair value movements are then reversed through remeasurements and recognised within earnings before exceptional items and remeasurements. These assets and liabilities include commodity contract derivatives and financing derivatives to the extent that hedge accounting is not available or is not fully effective.

The unrealised gains or losses reported in profit and loss on certain additional assets and liabilities treated at FVTPL are also classified within remeasurements. These relate to financial assets (which fail the ‘solely payments of principal and interest test’ under IFRS 9), the money market fund investments used by Group Treasury for cash management purposes and certain financial liabilities which we elected to designate at FVTPL. In all cases, these fair values increase or decrease because of changes in foreign exchange, commodity or other financial indices over which we have no control.

We report unrealised gains or losses relating to certain discrete classes of financial assets accounted for at FVTPL within adjusted profit. These comprise our portfolio of investments made by National Grid Partners, our investment in Sunrun Neptune 2016 LLC and the contingent consideration arising on the acquisition of National Grid Renewables (all within NGV and Other). The performance of these assets (including changes in fair value) are included in our assessment of adjusted profit for the relevant business units.

Remeasurements excluded from adjusted profit are made up of the following categories:

i. Net gains/(losses) on commodity contract derivatives represent mark-to-market movements on certain physical and financial commodity contract obligations in the US. These contracts primarily relate to the forward purchase of energy for supply to customers, or to the economic hedging thereof, that are required to be measured at fair value and that do not qualify for hedge accounting. Under the existing rate plans in the US, commodity costs are recoverable from customers although the timing of recovery may differ from the pattern of costs incurred;

ii. Net gains/(losses) on financing derivatives comprise gains and losses arising on derivative financial instruments used for the risk management of interest rate and foreign exchange exposures. These exclude gains and losses for which hedge accounting has been effective, and have been recognised directly in the consolidated statement of other comprehensive income or are offset by adjustments to the carrying value of debt (see notes 17 and 32);

iii. Net gains/(losses) on financial assets measured at FVTPL comprise gains and losses on the investment funds held by our insurance captives which are categorised as FVTPL (see note 15);

iv. Net gains/(losses) on financial liabilities measured at FVTPL comprise the change in the fair value (excluding changes due to own credit risk) of a financial liability that was designated at FVTPL on transition to IFRS 9 to reduce a measurement mismatch (see note 21); and

v. Unrealised net gains/(losses) on derivatives and other financial instruments within our joint ventures and associates.

Items included within tax

2020

The Finance Act 2016, which was enacted on 15 September 2016, reduced the main UK corporation tax rate to 17% with effect from 1 April 2020. Deferred tax balances were calculated at this rate for the years ended 31 March 2017 to 2019. On 17 March 2020, the UK Government utilised the Provisional Collection of Taxes Act 1968 to substantively enact a reversal of the reduction in the main UK corporation tax rate to 17% with effect from 1 April 2020, resulting in the rate remaining at 19%. Deferred taxes at 31 March 2020 were measured using enacted tax rates and reflected in these financial statements, resulting in a £192 million deferred tax charge, principally due to the remeasurement of deferred tax liabilities. The treatment of this charge as exceptional was consistent with the treatment for the year ended 31 March 2017 when the original reduction in the tax rate was substantively enacted, resulting in the recognition of an exceptional tax credit of £94 million.

6. Finance income and costs

This note details the interest income generated by our financial assets and interest expense incurred on our financial liabilities, primarily our financing portfolio (including our financing derivatives). It also includes the net interest on our pensions and other post-retirement assets. In reporting adjusted profit, we adjust net financing costs to exclude any net gains or losses on financial instruments included in remeasurements (see note 5).

Finance income and costs remeasurements include unrealised gains and losses on certain assets and liabilities now treated at FVTPL. The interest income, dividends and interest expense on these items are included in finance income and finance costs before remeasurements, respectively.

	Notes	**2021 £m**	2020 £m	2019 £m
Finance income				
Interest income on financial instruments:				
Bank deposits and other financial assets		**33**	48	54
Dividends received on equities held at fair value through other comprehensive income (FVOCI)		**2**	2	2
Other income		**—**	20	17
		35	70	73
Finance costs				
Net interest on pensions and other post-retirement benefit obligations	25	**(38)**	(23)	(22)
Interest expense on financial liabilities held at amortised cost:				
Bank loans and overdrafts		**(72)**	(73)	(72)
Other borrowings[1]		**(854)**	(997)	(970)
Interest expense on financial liabilities held at fair value through profit and loss (FVTPL)		**(20)**	(22)	(20)
Interest on derivatives		**7**	(39)	(43)
Unwinding of discount on provisions	26	**(78)**	(77)	(74)
Other interest		**(53)**	(10)	—
Less: interest capitalised[2]		**131**	122	135
		(977)	(1,119)	(1,066)
Remeasurements – Finance income				
Net gains/(losses) on FVTPL financial assets		**23**	(16)	15
		23	(16)	15
Remeasurements – Finance costs				
Net gains/(losses) on FVTPL financial liabilities		**90**	(49)	(51)
Net gains/(losses) on financing derivatives[3]:				
Derivatives designated as hedges for hedge accounting		**44**	(13)	(37)
Derivatives not designated as hedges for hedge accounting		**(85)**	14	(3)
		49	(48)	(91)
Total remeasurements – Finance income and costs		**72**	(64)	(76)
Finance income		**58**	54	88
Finance costs		**(928)**	(1,167)	(1,157)
Net finance costs from continuing operations		**(870)**	(1,113)	(1,069)

1. Includes interest expense on lease liabilities (see note 13 for details).
2. Interest on funding attributable to assets in the course of construction in the current year was capitalised at a rate of 3.1% (2020: 3.6%; 2019: 3.9%). In the UK, capitalised interest qualifies for a current year tax deduction with tax relief claimed of £13 million (2020: £15 million; 2019: £19 million). In the US, capitalised interest is added to the cost of plant and qualifies for tax depreciation allowances.
3. Includes a net foreign exchange gain on borrowing activities of £172 million (2020: £66 million gain; 2019: £264 million gain) offset by foreign exchange losses and gains on financing derivatives measured at fair value.

Notes to the consolidated financial statements
continued

7. Tax

Tax is payable in the territories where we operate, mainly the UK and the US. This note gives further details of the total tax charge and tax liabilities, including current and deferred tax. The current tax charge is the tax payable on this year's taxable profits. Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future due to differences in the accounting and tax bases.

The tax charge for the period is recognised in the income statement, the statement of comprehensive income or directly in equity, according to the accounting treatment of the related transaction. The tax charge comprises both current and deferred tax.

Current tax assets and liabilities are measured at the amounts expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amounts are those that have been enacted or substantively enacted by the reporting date.

The Group operates internationally in territories with different and complex tax codes. Management exercises judgement in relation to the level of provision required for uncertain tax outcomes. There are a number of tax positions not yet agreed with the tax authorities where different interpretations of legislation could lead to a range of outcomes. Judgements are made for each position having regard to particular circumstances and advice obtained.

Deferred tax is provided for using the balance sheet liability method, and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases.

Deferred tax liabilities are generally recognised on all taxable temporary differences, and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences arise from the initial recognition of goodwill or from the initial recognition of other assets and liabilities in a transaction (other than a business combination) that affects neither the accounting nor the taxable profit or loss.

Deferred tax liabilities are recognised on taxable temporary differences arising on investments in subsidiaries and joint arrangements except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same tax authority and the Company and its subsidiaries intend to settle their current tax assets and liabilities on a net basis.

Tax charged/(credited) to the consolidated income statement – continuing operations

	2021 £m	2020 £m	2019 £m
Tax before exceptional items and remeasurements	**416**	433	488
Exceptional tax on items not included in profit before tax (note 5)	**–**	192	–
Tax on other exceptional items and remeasurements	**26**	(145)	(149)
Total tax reported within exceptional items and remeasurements	**26**	47	(149)
Total tax charge from continuing operations	**442**	480	339

Tax as a percentage of profit before tax

	2021 %	2020 %	2019 %
Before exceptional items and remeasurements – continuing operations	**20.3**	18.5	19.6
After exceptional items and remeasurements – continuing operations	**21.2**	27.4	18.4

7. Tax continued

The tax charge for the year can be analysed as follows:

	2021 £m	2020 £m	2019 £m
Current tax:			
UK corporation tax at 19% (2020: 19%; 2019: 19%)	**213**	179	132
UK corporation tax adjustment in respect of prior years	**23**	(4)	(12)
	236	175	120
Overseas corporation tax	**3**	(2)	8
Overseas corporation tax adjustment in respect of prior years	**(15)**	(41)	(40)
	(12)	(43)	(32)
Total current tax from continuing operations	**224**	132	88
Deferred tax:			
UK deferred tax	**63**	269	27
UK deferred tax adjustment in respect of prior years	**(26)**	6	2
	37	275	29
Overseas deferred tax	**174**	64	208
Overseas deferred tax adjustment in respect of prior years	**7**	9	14
	181	73	222
Total deferred tax from continuing operations	**218**	348	251
Total tax charge from continuing operations	**442**	480	339

Tax charged/(credited) to the consolidated statement of comprehensive income and equity

	2021 £m	2020 £m	2019 £m
Current tax:			
Cash flow hedges, cost of hedging and own credit reserve	**6**	–	3
Deferred tax:			
Investments at fair value through other comprehensive income	**12**	(1)	–
Cash flow hedges, cost of hedging and own credit reserve	**(2)**	(40)	(12)
Remeasurements of pension assets and post-retirement benefit obligations	**414**	(206)	12
Share-based payments	**2**	(3)	–
	432	(250)	3
Total tax recognised in the statements of comprehensive income from continuing operations	**430**	(247)	3
Total tax relating to share-based payments recognised directly in equity from continuing operations	**2**	(3)	–
	432	(250)	3

Notes to the consolidated financial statements
continued

7. Tax continued

The tax charge for the year after exceptional items and remeasurements, for the continuing business, is higher (2020: higher tax charge; 2019: lower tax charge) than the standard rate of corporation tax in the UK of 19% (2020: 19%; 2019: 19%):

	Before exceptional items and remeasurements 2021 £m	After exceptional items and remeasurements 2021 £m	Before exceptional items and remeasurements 2020 £m	After exceptional items and remeasurements 2020 £m	Before exceptional items and remeasurements 2019 £m	After exceptional items and remeasurements 2019 £m
Profit before tax from continuing operations						
Before exceptional items and remeasurements	2,050	2,050	2,346	2,346	2,489	2,489
Exceptional items and remeasurements	–	33	–	(592)	–	(648)
Profit before tax from continuing operations	2,050	2,083	2,346	1,754	2,489	1,841
Profit before tax from continuing operations multiplied by UK corporation tax rate of 19% (2020: 19%; 2019: 19%)	390	396	446	334	473	350
Effect of:						
Adjustments in respect of prior years[1]	(9)	(11)	(30)	(30)	(36)	(36)
Expenses not deductible for tax purposes	19	30	26	29	22	28
Non-taxable income[2]	(9)	(9)	(18)	(18)	(36)	(36)
Adjustment in respect of foreign tax rates	42	42	53	18	78	56
Deferred tax impact of change in UK tax rate	–	–	–	192	(3)	(3)
Adjustment in respect of post-tax profits of joint ventures and associates included within profit before tax	(15)	(12)	(17)	(17)	(8)	(8)
Other[3]	(2)	6	(27)	(28)	(2)	(12)
Total tax charge from continuing operations	416	442	433	480	488	339
	%	%	%	%	%	%
Effective tax rate – continuing operations	20.3	21.2	18.5	27.4	19.6	18.4

1. The prior year adjustments are primarily due to agreement of prior period tax returns.
2. Includes tax on chargeable disposals after the offset of capital losses.
3. Other primarily comprises the movement in the deferred tax asset on previously unrecognised capital losses and claims for land remediation relief.

Factors that may affect future tax charges

In the Spring Budget 2021, the UK government announced an increase in the main corporation tax rate from 19% to 25% with effect from 1 April 2023. Since this had not been substantively enacted at the balance sheet date, deferred tax balances as at 31 March 2021 have been calculated at the current main UK corporation tax rate of 19%.

We expect our future deferred tax liabilities to increase reflecting the impact of the rate change. If the amended tax rate of 25% had been used, the deferred tax liability would have been approximately £560 million higher.

US government and US states are also considering changes to federal and state tax rates respectively, but as no changes have been substantively enacted at the balance sheet date deferred tax balances as at 31 March 2021 have been calculated at the prevailing tax rates.

We will continue to monitor the developments driven by Brexit, the OECD's Base Erosion and Profit Shifting (BEPS) project and European Commission initiatives including fiscal aid investigations. At this time, we do not expect this to have any material impact on our future tax charges. Governments across the world including the UK and the US have introduced various stimulus/reliefs for businesses to cope with the impact of the COVID-19 pandemic, from which we do not currently expect there to be a material impact on our future tax charges.

7. Tax continued

Tax included within the statement of financial position

The following are the major deferred tax assets and liabilities recognised, and the movements thereon, during the current and prior reporting periods:

	Accelerated tax depreciation £m	Share-based payments £m	Pensions and other post-retirement benefits £m	Financial instruments £m	Other net temporary differences[1] £m	Total £m
Deferred tax liabilities/(assets)						
At 1 April 2019[2]	5,727	(9)	(170)	7	(1,340)	4,215
Exchange adjustments and other[2,3]	222	(30)	(28)	(3)	(27)	134
Charged/(credited) to income statement	613	(7)	44	(13)	(287)	350
(Credited)/charged to other comprehensive income and equity	—	(2)	(206)	(46)	1	(253)
At 1 April 2020[2]	6,562	(48)	(360)	(55)	(1,653)	4,446
Exchange adjustments and other[3]	(501)	4	51	4	174	(268)
Charged/(credited) to income statement	373	—	(12)	1	(147)	215
Charged to other comprehensive income and equity	—	2	414	6	—	422
At 31 March 2021	**6,434**	**(42)**	**93**	**(44)**	**(1,626)**	**4,815**

1. The deferred tax asset of £1,626 million as at 31 March 2021 (2020: £1,653 million) in respect of other net temporary differences primarily relates to net operating losses of £455 million (2020: £547 million), US environmental provisions of £453 million (2020: £529 million) and US bad debt provision of £184 million (2020: £124 million).
2. Comparative amounts have been revised as described in note 1F.
3. Exchange adjustments and other comprises foreign exchange arising on translation of the US dollar deferred tax balances. In 2020, it also included reclassification of £29 million from other temporary differences to share-based payments.

Deferred tax assets and liabilities are only offset where there is a legally enforceable right of offset and there is an intention to settle the balances net. The deferred tax balances (after offset) for statement of financial position purposes consist solely of deferred tax liabilities of £4,815 million (2020: £4,446 million). This balance is after offset of a deferred tax asset of £455 million (2020: £547 million) which has been recognised in respect of net operating losses (£440 million) and capital losses (£15 million).

Deferred tax assets in respect of some capital losses as well as trading losses and non-trade deficits have not been recognised as their future recovery is uncertain or not currently anticipated. The total deferred tax assets not recognised are as follows:

	2021 £m	2020 £m
Capital losses	**1,620**	1,626
Non-trade deficits	**1**	1
Trading losses	**7**	6

The capital losses arose in the UK on disposal of certain businesses or assets. They are available to carry forward indefinitely but can only be offset against future capital gains. The UK non-trade deficits arose prior to 1 April 2017 and therefore can only be offset against future non-trade profits.

At 31 March 2021 and 31 March 2020, there were no recognised deferred tax liabilities for taxes that would be payable on the unremitted earnings of the Group's subsidiaries or its associates as there are no significant corporation tax consequences of the Group's UK, US or overseas subsidiaries or associates paying dividends to their parent companies. There are also no significant income tax consequences for the Group from the payment of dividends by the Group to its shareholders.

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8. Earnings per share (EPS)

EPS is the amount of profit after tax attributable to each ordinary share. Basic EPS is calculated on profit after tax for the year attributable to equity shareholders divided by the weighted average number of shares in issue during the year. Diluted EPS shows what the impact would be if all outstanding share options were exercised and treated as ordinary shares at year end. The weighted average number of shares is increased by additional shares issued as scrip dividends and reduced by shares repurchased by the Company during the year. The earnings per share calculations are based on profit after tax attributable to equity shareholders of the Company which excludes non-controlling interests.

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the adjusted profit sub-totals used by the Company. We have included reconciliations from this additional EPS measure to earnings for both basic and diluted EPS to provide additional detail for these items. For further details of exceptional items and remeasurements, see note 5.

(a) Basic EPS

	Earnings 2021 £m	**EPS 2021 pence**	Earnings 2020 £m	EPS 2020 pence	Earnings 2019 £m	EPS 2019 pence
Adjusted earnings from continuing operations	**1,633**	**46.4**	1,912	55.2	1,998	59.0
Exceptional items and remeasurements after tax from continuing operations	**7**	**0.2**	(639)	(18.4)	(499)	(14.7)
Earnings from continuing operations	**1,640**	**46.6**	1,273	36.8	1,499	44.3
Adjusted earnings from discontinued operations	**–**	**–**	5	0.2	57	1.7
Exceptional items and remeasurements after tax from discontinued operations	**–**	**–**	(14)	(0.5)	(45)	(1.4)
Earnings from discontinued operations	**–**	**–**	(9)	(0.3)	12	0.3
Total adjusted earnings	**1,633**	**46.4**	1,917	55.4	2,055	60.7
Total exceptional items and remeasurements after tax (including discontinued operations)	**7**	**0.2**	(653)	(18.9)	(544)	(16.1)
Total earnings	**1,640**	**46.6**	1,264	36.5	1,511	44.6

	2021 millions	2020 millions	2019 millions
Weighted average number of ordinary shares – basic	**3,523**	3,461	3,386

(b) Diluted EPS

	Earnings 2021 £m	**EPS 2021 pence**	Earnings 2020 £m	EPS 2020 pence	Earnings 2019 £m	EPS 2019 pence
Adjusted earnings from continuing operations	**1,633**	**46.1**	1,912	55.0	1,998	58.8
Exceptional items and remeasurements after tax from continuing operations	**7**	**0.2**	(639)	(18.4)	(499)	(14.7)
Earnings from continuing operations	**1,640**	**46.3**	1,273	36.6	1,499	44.1
Adjusted earnings from discontinued operations	**–**	**–**	5	0.1	57	1.7
Exceptional items and remeasurements after tax from discontinued operations	**–**	**–**	(14)	(0.4)	(45)	(1.4)
Earnings from discontinued operations	**–**	**–**	(9)	(0.3)	12	0.3
Total adjusted earnings	**1,633**	**46.1**	1,917	55.1	2,055	60.5
Total exceptional items and remeasurements after tax (including discontinued operations)	**7**	**0.2**	(653)	(18.8)	(544)	(16.1)
Total earnings	**1,640**	**46.3**	1,264	36.3	1,511	44.4

	2021 millions	2020 millions	2019 millions
Weighted average number of ordinary shares – diluted	**3,540**	3,478	3,401

(c) Reconciliation of basic to diluted average number of shares

	2021 millions	2020 millions	2019 millions
Weighted average number of ordinary shares – basic	**3,523**	3,461	3,386
Effect of dilutive potential ordinary shares – employee share plans	**17**	17	15
Weighted average number of ordinary shares – diluted	**3,540**	3,478	3,401

9. Dividends

Interim dividends are recognised when they become payable to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

	2021			2020			2019		
	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m
Interim dividend in respect of the current year	**17.00**	**348**	**249**	16.57	335	241	16.08	450	94
Final dividend in respect of the prior year	**32.00**	**1,065**	**54**	31.26	557	517	30.44	710	319
	49.00	**1,413**	**303**	47.83	892	758	46.52	1,160	413

The Directors are proposing a final dividend for the year ended 31 March 2021 of 32.16p per share that will absorb approximately £1,141 million of shareholders' equity (assuming all amounts are settled in cash). It will be paid on 18 August 2021 to shareholders who are on the register of members at 4 June 2021 (subject to shareholders' approval at the AGM). A scrip dividend will be offered as an alternative.

10. Discontinued operations and assets held for sale

The results and cash flows of significant assets or businesses sold during the year are shown separately from our continuing operations, and presented within discontinued operations in the income statement and cash flow statement. Assets and businesses are classified as held for sale when their carrying amounts are recovered through sale rather than through continuing use. They only meet the held for sale condition when the assets are ready for immediate sale in their present condition, management is committed to the sale and it is highly probable that the sale will complete within one year. Depreciation ceases on assets and businesses when they are classified as held for sale and the assets and businesses are impaired if the proceeds less sale costs fall short of the carrying value.

The Narragansett Electric Company

On 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, The Narragansett Electric Company (NECO). NECO is part of our US Regulated segment and is a retail distribution company providing electricity and gas to customers in Rhode Island. The expected sale proceeds are £2.8 billion ($3.8 billion), and the sale is expected to complete in March 2022 once all regulatory approvals are obtained.

As the sale is considered highly probable and is expected to complete within a year, the associated assets and liabilities have been presented as held for sale in the consolidated statement of financial position. However, as NECO does not represent a separate major line of business or geographical operations, it has not met the criteria for classification as a discontinued operation and therefore its results for the period are not separately disclosed on the face of the income statement.

The following assets and liabilities of NECO were classified as held for sale at 31 March 2021:

	2021 £m
Goodwill	**562**
Intangible assets	**3**
Property, plant and equipment	**2,713**
Trade and other receivables	**237**
Cash and cash equivalents	**4**
Other assets	**38**
Total assets held for sale	**3,557**
Borrowings	**(1,123)**
Pension liabilities	**(49)**
Other liabilities	**(396)**
Total liabilities held for sale	**(1,568)**
Net assets held for sale	**1,989**

No impairment losses were recognised upon remeasurement of the assets and liabilities prior to classification as held for sale. NECO generated profit after tax of £104 million (2020: £31 million; 2019: £137 million) for the year ended 31 March 2021. Current and deferred tax balances relating to NECO have not been included as held for sale on the basis that those balances will be retained by National Grid rather than transferring with the other assets and liabilities of NECO.

The Group also announced its intention to sell a majority stake in the UK Gas Transmission business. However, as the process is still at an early stage and is not expected to be marketed until later in the year, the business has not been classified as held for sale and has not met the criteria for classification as a discontinued operation as at 31 March 2021.

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10. Discontinued operations and assets held for sale continued

Quadgas HoldCo Limited

In June 2019, the Group sold its remaining 39% interest in Cadent (held through its holding in Quadgas HoldCo Limited (Quadgas)). This interest had been classified as held for sale from 30 June 2018 until the date of disposal, as detailed in the Annual Report and Accounts for the year ended 31 March 2019.

The aggregate carrying value of our investment in Quadgas at the disposal date was £1,956 million. This was comprised of the carrying value of the Group's equity interest in Quadgas of £1,494 million, a shareholder loan to Quadgas of £352 million and a derivative financial asset with a fair value of £110 million. The total sales proceeds were £1,965 million. The gain on disposal was £9 million.

We considered the disposal of our 39% investment in Quadgas as the final stage of the plan to dispose of our interest in the UK Gas Distribution business first announced in 2015, and accordingly treated the results and cash flows arising from Quadgas as a discontinued operation on the basis that the sale formed the final part of a 'single coordinated plan' to dispose of UK Gas Distribution. As a consequence, we classified the various elements of income, expense and cash flows within discontinued operations as set out below. Once the assets were treated as 'held for sale', equity accounting ceased for our investment in our associate. We therefore ceased to record our share of profits from 30 June 2018.

The summary income statement for discontinued operations is as follows:

	2020 £m	2019 £m
Revenue	–	–
Operating costs[1]	(23)	(1)
Operating loss	(23)	(1)
Net finance income	6	23
Share of post-tax results of joint ventures and associates[2]	–	(5)
(Loss)/profit before tax from discontinued operations	(17)	17
Tax from discontinued operations	(1)	(5)
(Loss)/profit after tax from discontinued operations	(18)	12
Gain on disposal	9	–
Total (loss)/profit after tax from discontinued operations[3]	(9)	12

1. Operating costs for the year ended 31 March 2020 related to final transaction costs and other expenses in relation to Quadgas.
2. For the year ended 31 March 2019, the amount presented is the net of £43 million impairment charge against the investment in Quadgas and £38 million share of Quadgas post-tax profits recognised prior to classification as held for sale.
3. For the year ended 31 March 2020, the £23 million of operating expenses and the £9 million gain on disposal are treated as exceptional. For the year ended 31 March 2019, the £43 million impairment charge against the investment in Quadgas, net operating costs of £1 million and the tax thereon are classified as exceptional items.

The summary statement of comprehensive income for discontinued operations is as follows:

	2020 £m	2019 £m
(Loss)/profit after tax from discontinued operations	(9)	12
Other comprehensive income		
Items that will never be reclassified to profit or loss:		
Share of other comprehensive income of associate, net of tax	–	36
Total items from discontinued operations that will never be reclassified to profit or loss	–	36
Items that may be reclassified subsequently to profit or loss:		
Net gains in respect of cash flow hedges	6	–
Total items from discontinued operations that may be reclassified subsequently to profit or loss	6	–
Other comprehensive income for the year, net of tax from discontinued operations	6	36
Total comprehensive (loss)/income for the year from discontinued operations	(3)	48

The summary cash flows for discontinued operations are as follows:

Cash flows used in operating activities of £97 million in 2020 (2019: £71 million) primarily related to cash outflows in respect of voluntary contributions totalling £66 million paid to the Warm Homes Fund, the utilisation of provisions and the payment of the final transaction fees incurred in the period.

Cash inflows from investing activities of £6 million in 2020 (2019: £156 million) were comprised of dividends received and interest received on the shareholder loan.

There were no cash flows for financing activities in 2020 or 2019.

11. Goodwill

Goodwill represents the excess of what we paid to acquire businesses over the fair value of their net assets at the acquisition date. We assess whether goodwill is recoverable by performing an impairment review annually or more frequently if events or changes in circumstances indicate a potential impairment.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rate. Goodwill is allocated to cash-generating units and this allocation is made to those cash-generating units that are expected to benefit from the acquisition in which the goodwill arose.

Impairment is recognised where there is a difference between the carrying value of the cash-generating unit and the estimated recoverable amount of the cash-generating unit to which that goodwill has been allocated. Any impairment is recognised immediately in the income statement and is not subsequently reversed. Any impairment loss is first allocated to the carrying value of the goodwill and then to the other assets within the cash-generating unit. Recoverable amount is defined as the higher of fair value less costs to sell and estimated value-in-use at the date the impairment review is undertaken. Value-in-use represents the present value of expected future cash flows, discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

	Total £m
Net book value at 1 April 2019[1]	5,372
Exchange adjustments[1]	259
Acquisition of National Grid Renewables (note 38)	81
Net book value at 1 April 2020	5,712
Exchange adjustments	(562)
Reclassification to held for sale (note 10)	(562)
Net book value at 31 March 2021	**4,588**

1. Comparative amounts have been revised as described in note 1F.

There is no significant accumulated impairment charge as at 31 March 2021 or 31 March 2020.

The amounts disclosed above as at 31 March 2021 relate to the following cash-generating units: New York £3,004 million (2020: £3,334 million); Massachusetts £963 million (2020: £1,069 million); Rhode Island £nil (2020: £438 million); Federal £544 million (2020: £790 million); and National Grid Renewables £77 million (2020: £81 million). Following the announcement of the sale of NECO (see note 10), goodwill balances relating to the Rhode Island cash generating unit and a portion of the goodwill relating to the Federal cash generating unit were reclassified as held for sale in the period.

Goodwill is reviewed annually for impairment and the recoverability of goodwill has been assessed by comparing the carrying amount of our operations described above (our cash-generating units) with the expected recoverable amount on a value-in-use basis. In each assessment, the value-in-use has been calculated based on five-year plan projections that incorporate our best estimates of future cash flows, customer rates, costs (including changes in commodity prices), future prices and growth. Such projections reflect our current regulatory rate plans taking into account regulatory arrangements to allow for future rate plan filings and recovery of investment. The projections also take account of the costs associated with our net zero plans and the associated regulatory arrangements. Our plans have proved to be reliable guides in the past and the Directors believe the estimates are appropriate.

The future economic growth rate used to extrapolate projections beyond five years is 2.1% (2020: 2.1%). The growth rate has been determined having regard to data on projected growth in US real gross domestic product (GDP). Based on the position of our business in the underlying US economy, it is appropriate for the terminal growth rate to be based upon the overall growth in real GDP and, given the nature of our operations, to extend over a long period of time. Cash flow projections have been discounted to reflect the time value of money, using a post-tax discount rate of 5.0% (2020: 4.5%). The equivalent pre-tax discount rate is 5.3% (2020: 4.5%). The discount rate represents the estimated weighted average cost of capital of these operations.

In assessing the carrying value of goodwill, we have sensitised our forecasts to factor in a reduction in revenues and lower tax costs into our cash flow forecasts, but we have not reflected the impact of additional rate base growth on future earnings. While it is possible that a key assumption in the calculation could change, the Directors believe that no reasonably foreseeable change would result in an impairment of goodwill, in view of the long-term nature of the key assumptions and the margin by which the estimated value-in-use exceeds the carrying amount. This remains the case even after taking into account the short-term effects of COVID-19, the most significant of which is an increase in bad debt charges in the short term.

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12. Other intangible assets

Other intangible assets mainly comprise software which is written down (amortised) over the period we expect to receive a benefit from the asset. An amortisation expense is charged to the income statement to reflect the reduced value of the asset over time. Amortisation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

Identifiable intangible assets are recorded at cost less accumulated amortisation and any provision for impairment. Other intangible assets are tested for impairment only if there is an indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the consolidated income statement and are disclosed separately. Any assets which suffered impairment in a previous period are reviewed for possible reversal of the impairment at each reporting date.

Internally generated intangible assets, such as software, are recognised only if: i) an asset is created that can be identified; ii) it is probable that the asset created will generate future economic benefits; and iii) the development cost of the asset can be measured reliably. Where no internally generated intangible asset can be recognised, development expenditure is recorded as an expense in the period in which it is incurred.

Other intangible assets are amortised on a straight-line basis over their estimated useful economic lives. Amortisation periods for other intangible assets are:

	Years
Software	3 to 10

	Software £m	Assets in the course of construction £m	Total £m
Cost at 1 April 2019	1,784	384	2,168
Exchange adjustments	45	18	63
Additions	38	314	352
Reclassifications	159	(159)	—
Cost at 1 April 2020	2,026	557	2,583
Exchange adjustments	(102)	(43)	(145)
Additions	7	414	421
Disposals	(47)	(2)	(49)
Reclassifications[1]	255	(240)	15
Reclassification to held for sale (note 10)	(19)	—	(19)
Cost at 31 March 2021	2,120	686	2,806
Accumulated amortisation at 1 April 2019	(1,084)	—	(1,084)
Exchange adjustments	(28)	—	(28)
Amortisation charge for the year	(176)	—	(176)
Accumulated amortisation at 1 April 2020	(1,288)	—	(1,288)
Exchange adjustments	61	—	61
Amortisation charge for the year	(196)	—	(196)
Accumulated amortisation of disposals	44	—	44
Reclassification to held for sale (note 10)	16	—	16
Accumulated amortisation at 31 March 2021	(1,363)	—	(1,363)
Net book value at 31 March 2021[2]	**757**	**686**	**1,443**
Net book value at 31 March 2020	738	557	1,295

1. Reclassifications includes amounts transferred from property, plant and equipment (see note 13).
2. The Group has capitalised £298 million (2020: £240 million) in relation to the Gas Business Enablement system in the US, of which £82 million (2020: £30 million) is in service and is being amortised over 10 years, with the remainder included within assets in the course of construction. A further £117 million (2020: £59 million) in relation to our new UK general ledger system is also included within assets in the course of construction as at 31 March 2021, and is expected to be amortised over 10 years once it is commissioned in July 2021.

13. Property, plant and equipment

Property, plant and equipment are the physical assets controlled by us. The cost of these assets primarily represents the amount initially paid for them. This includes both their purchase price and the construction and other costs associated with getting them ready for operation. A depreciation expense is charged to the income statement to reflect annual wear and tear and the reduced value of the asset over time. Depreciation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

We operate an energy networks business and therefore have a significant physical asset base. We continue to invest in our networks to maintain reliability, create new customer connections and ensure our networks are flexible and resilient. Our business plan envisages these additional investments will be funded through a mixture of cash generated from operations and the issue of new debt.

Property, plant and equipment is recorded at cost, less accumulated depreciation and any impairment losses. Cost includes the purchase price of the asset; any payroll and finance costs incurred which are directly attributable to the construction of property, plant and equipment; and the cost of any associated asset retirement obligations.

Property, plant and equipment includes assets in which the Group's interest comprises legally protected statutory or contractual rights of use. Additions represent the purchase or construction of new assets, including capital expenditure for safety and environmental assets, and extensions to, enhancements to, or replacement of, existing assets. All costs associated with projects or activities which have not been fully commissioned at the period end are classified within assets in the course of construction.

Items within property, plant and equipment are tested for impairment only if there is some indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the income statement and if immaterial are included within the depreciation charge for the year.

(a) Asset useful economic lives

No depreciation is provided on freehold land or assets in the course of construction. Other items of property, plant and equipment are depreciated, on a straight-line basis, at rates estimated to write off their book values over their estimated useful economic lives. In assessing estimated useful economic lives, consideration is given to any contractual arrangements and operational requirements relating to particular assets. The assessments of estimated useful economic lives and residual values of assets are performed annually.

Unless otherwise determined by operational requirements, the depreciation periods for the principal categories of property, plant and equipment are, in general, as shown in the table below split between the UK and US, along with the weighted average remaining UEL for each class of property, plant and equipment (which is calculated by applying the annual depreciation charge per class of asset to the net book value of that class of asset).

	Years		
	UK	US	Weighted average remaining UEL
Freehold and leasehold buildings	up to 60	up to 100	9
Plant and machinery:			
Electricity transmission plant and wires	15 to 100	45 to 80	30
Electricity distribution plant	n/a	35 to 85	33
Electricity generation plant	n/a	20 to 93	10
Interconnector plant and other	5 to 60	5 to 50	16
Gas plant – mains, services and regulating equipment	10 to 65	47 to 95	45
Gas plant – storage	5 to 40	12 to 65	12
Gas plant – meters	7 to 30	14 to 40	20
Motor vehicles and office equipment	up to 10	up to 26	4

(b) Gas asset lives

The role that gas networks play in the pathway to achieving the greenhouse gas emissions reductions targets set in the jurisdictions in which we operate is currently uncertain. However, we believe the gas assets which we own and operate today will continue to have a crucial role in maintaining security, reliability and affordability of energy beyond 2050, although the scale and purpose for which the networks will be used is dependent on technological developments and policy choices of governments and regulators.

- In the UK, the useful economic life of gas mains, services and regulating assets relating to the National Transmission System (NTS) are frequently reviewed throughout the year and subject to a detailed review at the year end. The most material components of these are our pipeline assets, which are due to be fully depreciated by 2070, with other assets being depreciated over various periods between now and then. Those reviews considered a number of scenarios, which consider the implications of the UK's net zero by 2050 legislation for the NTS. Our most recent review concluded that the most likely outcome was for the NTS network assets to remain in use beyond 2050, including in those scenarios where the greenhouse gas emissions of gas networks were largely eliminated.
- With respect to our US gas distribution assets, asset lives are assessed as part of detailed depreciation studies completed as part of each separate rate proceeding. Depreciation studies consider the physical condition of assets and the expected operational life of an asset. We believe these assessments are our best estimate of the UEL of our gas network assets in the US.

  The weighted average remaining UEL for our US gas distribution fixed asset base is circa 50 years, however a sizeable proportion of our assets are assumed to have UELs which extend beyond 2080. We continue to believe the lives identified by rate proceedings are the best estimate of the assets' UELs, although we continue to keep this assumption under review as we learn more about possible future pathways towards net zero. Whilst the targets, goals and ambitions have now been formalised in legislation in the states in which we operate, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways. We continue to actively engage and support our regulators to enable the clean energy transition in a safe, reliable and affordable way.

  Asset depreciation lives feed directly into our US regulatory recovery mechanisms, such that any shortening of asset lives and regulatory recovery periods as agreed with regulators should be recoverable through future rates, subject to agreement, over future periods, as part of wider considerations around ensuring the continuing affordability of gas in our service territories.

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13. Property, plant and equipment continued

Given the uncertainty described relating to the UELs of our gas assets, below we provide a sensitivity on the depreciation charge for our UK and US regulated segments were a shorter UEL presumed:

	Increase in depreciation expense for the year ended 31 March 2021		Increase in depreciation expense for the year ended 31 March 2020	
	UK regulated £m	US regulated £m	UK regulated £m	US regulated £m
UELs limited to 2050	**35**	**160**	37	151
UELs limited to 2060	**12**	**70**	13	66
UELs limited to 2070	**1**	**28**	—	26

Note that this sensitivity calculation excludes any assumptions regarding the residual value for our asset base and the effect shortening asset depreciation lives would be expected to have on our regulatory recovery mechanisms.

(c) Analysis of property, plant and equipment

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Cost at 1 April 2019 (before transition to IFRS 16)[1]	3,338	53,829	5,049	930	63,146
Right-of-use assets recognised on transition to IFRS 16[2]	381	67	—	20	468
Cost at 1 April 2019 (as restated)	3,719	53,896	5,049	950	63,614
Exchange adjustments[1]	98	1,484	83	33	1,698
Additions	130	464	4,029	104	4,727
Disposals	(79)	(486)	(9)	(65)	(639)
Reclassifications[3,4]	29	4,251	(4,381)	14	(87)
Cost at 1 April 2020	3,897	59,609	4,771	1,036	69,313
Exchange adjustments	(213)	(3,308)	(130)	(73)	(3,724)
Additions	89	328	4,023	70	4,510
Disposals	(6)	(344)	(26)	(48)	(424)
Reclassifications[3]	96	3,007	(3,243)	77	(63)
Reclassification to held for sale (note 10)	(111)	(3,231)	(174)	(44)	(3,560)
Cost at 31 March 2021	3,752	56,061	5,221	1,018	66,052
Accumulated depreciation at 1 April 2019[1]	(778)	(16,918)	—	(591)	(18,287)
Exchange adjustments[1]	(16)	(329)	—	(20)	(365)
Depreciation charge for the year	(92)	(1,252)	—	(120)	(1,464)
Disposals	36	464	—	58	558
Reclassifications[3]	3	(7)	—	11	7
Accumulated depreciation at 1 April 2020	(847)	(18,042)	—	(662)	(19,551)
Exchange adjustments	37	698	—	46	781
Depreciation charge for the year	(90)	(1,270)	—	(116)	(1,476)
Disposals	—	339	—	48	387
Reclassifications[3]	2	(5)	—	6	3
Reclassification to held for sale (note 10)	22	798	—	27	847
Accumulated depreciation at 31 March 2021	(876)	(17,482)	—	(651)	(19,009)
Net book value at 31 March 2021	**2,876**	**38,579**	**5,221**	**367**	**47,043**
Net book value at 31 March 2020	3,050	41,567	4,771	374	49,762

1. Comparative amounts have been revised as described in note 1F.
2. On 1 April 2019, £468 million of additional right-of-use assets were recognised on transition to IFRS 16. See note 37 for details.
3. Represents amounts transferred between categories, (to)/from other intangible assets (see note 12), from inventories and reclassifications between cost and accumulated depreciation.
4. In 2020, comprised an £87 million reduction in the gross cost of assets in the course of construction in our UK Electricity Transmission business for costs previously capitalised and accrued as due to a supplier, that were subsequently no longer payable.

	2021 £m	2020 £m
Information in relation to property, plant and equipment		
Capitalised interest included within cost	**2,233**	2,118
Contributions to cost of property, plant and equipment included within:		
Trade and other payables	**138**	84
Non-current liabilities	**400**	428
Contract liabilities – current	**66**	76
Contract liabilities – non-current	**1,093**	1,082

13. Property, plant and equipment continued

(d) Right-of-use assets

The Group leases various properties, land, equipment and cars. With effect from 1 April 2019, new lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group (see note 37). The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term. The lease payments include fixed payments, any variable lease payments dependent on an index or a rate, and any break fees or renewal option costs that we are reasonably certain to incur. The discount rate applied is the rate implicit in the lease or, if that is not available, then the incremental rate of borrowing for a similar term and similar security (which is determined based on observable data for borrowing rates for the specific group entity that has entered into the lease, with specific adjustments for the term of the lease and any lease-specific risk premium). The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

The table below shows the net book value of right-of-use assets included within property, plant and equipment at 31 March 2021 and 31 March 2020, split by category. The associated lease liabilities are disclosed in note 21.

31 March 2021	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Net book value at 31 March 2021	**365**	**81**	**—**	**184**	**630**
Additions	**60**	**6**	**—**	**64**	**130**
Depreciation charge for the year	**(29)**	**(16)**	**—**	**(68)**	**(113)**

31 March 2020	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Net book value at 31 March 2020	364	95	—	225	684
Additions	10	1	—	73	84
Depreciation charge for the year	(29)	(16)	—	(72)	(117)

The following balances have been included in the income statement for the years ended 31 March 2021 and 31 March 2020 in respect of right-of-use assets:

	2021 £m	2020 £m
Included within net finance income and costs:		
Interest expense on lease liabilities	**(21)**	(26)
Included within revenue:		
Lease income[1]	**390**	404
Included within operating expenses:		
Expense relating to short-term and low-value leases	**(13)**	(12)

1. Included within lease income is £376 million (2020: £353 million) of variable lease payments, the majority of which relates to the power supply arrangement entered into with LIPA (see note 3).

The total of future minimum sublease payments expected to be received under non-cancellable subleases is £104 million (2020: £94 million).

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14. Other non-current assets

Other non-current assets include assets that do not fall into any other non-current asset category (such as goodwill or property, plant and equipment) where the benefit to be received from the asset is not due to be received until after 31 March 2022.

	2021 £m	2020 £m
Other receivables	**45**	35
Non-current tax assets	**6**	65
Prepayments	**5**	19
Accrued income[1]	**237**	235
	293	354

1. Includes accrued income in relation to property sales to the St William joint venture.

15. Financial and other investments

The Group holds a range of financial and other investments. These investments include short-term money market funds, quoted investments in equities or bonds of other companies, investments in our venture capital portfolio (National Grid Partners), bank deposits with a maturity of greater than three months, and investments that can not be readily used in operations, principally collateral deposited in relation to derivatives.

The classification of each investment held by the Group is determined based on two main factors:

- its contractual cash flows – whether the assets cash flows are solely payments of the principal and interest on the financial asset on pre-determined dates or whether the cash flows are determined by other factors such as the performance of a company; and
- the business model for holding the investments – whether the intention is to hold onto the investment for the longer term (collect the contractual cash flows), or to sell the asset with the intention of managing any gain or loss on sale or to manage any liquidity requirements.

The four categories of financial and other investments are as follows:

- Financial assets at amortised cost – debt instruments that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is to collect contractual cash flows, are held at amortised cost. This category includes our receivables in relation to deposits and collateral;
- FVOCI debt and other investments – debt investments, such as bonds, that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is both to collect the contractual cash flows and to sell the debt instruments, are measured at fair value through other comprehensive income (FVOCI), with gains or losses recognised in the consolidated statement of comprehensive income instead of through the income statement. On disposal, any gains or losses are recognised within finance income in the income statement (see note 6). Other investments include insurance contracts, measured at fair value, and held to back the present value of unfunded pension liabilities in note 25;
- FVOCI equity instruments – the Group has elected to measure equity instruments that are shares held as part of a portfolio of financial instruments which back some long-term employee liabilities at FVOCI on the basis that they are not held for trading and so recognising gains and losses on these investments in the income statement would not be representative of performance in the year. On disposal, any realised gains and losses are transferred to retained earnings (see note 28); and
- FVTPL investments – other financial investments are subsequently measured at fair value with any gains or losses recognised in the income statement (FVTPL). This primarily comprises our money market funds, insurance company fund investments and corporate venture capital investments held by National Grid Partners.

Financial and other investments are initially recognised on trade date. Subsequent to initial recognition, the fair values of financial assets that are quoted in active markets are based on bid prices. When independent prices are not available, fair values are determined using valuation techniques used by the relevant markets using observable market data where possible (see note 32(g) for further details).

15. Financial and other investments continued

	2021 £m	2020 £m
Non-current		
FVOCI debt and other investments	**416**	352
FVOCI equity investments	**99**	83
FVTPL investments	**240**	108
	755	543
Current		
FVTPL investments	**1,768**	1,278
Financial assets at amortised cost	**574**	720
	2,342	1,998
	3,097	2,541
Financial and other investments include the following:		
Investments in short-term money market funds	**1,412**	951
Investments held by National Grid Partners	**136**	97
Other investments	**103**	11
Balances that are restricted or not readily used in operations:		
Collateral[1]	**540**	685
Insurance company and non-qualified plan investments	**589**	542
Cash surrender value of life insurance policies	**283**	220
Other investments	**34**	35
	3,097	2,541

1. The collateral balance includes: £480 million (2020: £685 million) of collateral placed with counterparties with whom we have entered into a credit support annex to the International Swaps and Derivatives Association (ISDA) Master Agreement; £42 million (2020: £nil) of collateral paid by operating companies as required security deposits under the Connection and Use of System Code; and £18 million (2020: £nil) of restricted amounts allocated for specific projects within the National Grid Electricity System Operator.

FVTPL and FVOCI investments are recorded at fair value. The carrying value of current financial assets at amortised cost approximates their fair values, primarily due to short-dated maturities. The exposure to credit risk at the reporting date is the fair value of the financial investments. For further information on our credit risk, refer to note 32(a).

For the purposes of impairment assessment, the investments in bonds are considered to be low risk as they are investment grade securities; life insurance policies are held with regulated insurance companies; and deposits, collateral receivable and other financial assets at amortised cost are investment grade. All financial assets held at FVOCI or amortised cost are therefore considered to have low credit risk and have an immaterial impairment loss allowance equal to 12-month expected credit losses.

In determining the expected credit losses for these assets, some or all of the following information has been considered: credit ratings, the financial position of counterparties, the future prospects of the relevant industries and general economic forecasts.

No FVOCI or amortised cost financial assets have had modified cash flows during the period. There has been no change in the estimation techniques or significant assumptions made during the year in assessing the loss allowance for these financial assets. There were no significant movements in the gross carrying value of financial assets during the year that contribute to changes in the loss allowance. No collateral is held in respect of any of the financial investments in the above table. No balances are more than 30 days past due, and no balances were written off during the year.

16. Investments in joint ventures and associates

Investments in joint ventures and associates represent businesses we do not control but over which we exercise joint control or significant influence. They are accounted for using the equity method. A joint venture is an arrangement established to engage in economic activity, which the Group jointly controls with other parties and has rights to a share of the net assets of the arrangement. An associate is an entity which is neither a subsidiary nor a joint venture, but over which the Group has significant influence.

	2021			2020		
	Associates £m	Joint ventures £m	Total £m	Associates £m	Joint ventures £m	Total £m
Share of net assets at 1 April	**341**	**654**	**995**	291	317	608
Exchange adjustments	**(22)**	**(36)**	**(58)**	20	12	32
Additions	**6**	**75**	**81**	16	156	172
Capitalisation of shareholder loan to Nemo Link Limited	**—**	**—**	**—**	—	176	176
Share of post-tax results for the year	**30**	**28**	**58**	40	47	87
Share of other comprehensive income of associates, net of tax	**1**	**—**	**1**	1	—	1
Dividends received	**(31)**	**(49)**	**(80)**	(41)	(34)	(75)
Other movements[1]	**(96)**	**(34)**	**(130)**	14	(20)	(6)
Share of net assets at 31 March	**229**	**638**	**867**	341	654	995

1. Within associates, the other movements for the year primarily relates to the reclassification of an investment in an associate to financial investments.

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16. Investments in joint ventures and associates continued

A list of joint ventures and associates including the name and proportion of ownership is provided in note 34. Transactions with and outstanding balances with joint ventures and associates are shown in note 31. The joint ventures and associates have no significant contingent liabilities to which the Group is exposed, and the Group has no significant contingent liabilities in relation to its interests in the joint ventures and associates. The Group has capital commitments of £141 million (2020: £240 million) in relation to joint ventures.

At 31 March 2021, the Group had three material joint ventures, being its 50% equity stakes in BritNed and Nemo Link Limited (Nemo) and its 51% stake in Emerald Energy Venture LLC (Emerald). The Group has one material associate, being its 26.25% investment in Millennium Pipeline Company LLC. BritNed is a joint venture with the Dutch transmission system operator, TenneT, and operates the subsea electricity link between Great Britain and the Netherlands, commissioned in 2011. Nemo is a joint venture with the Belgian transmission operator, Elia, and is a subsea electricity interconnector between the UK and Belgium, which became operational on 31 January 2019. BritNed and Nemo have reporting periods ending on 31 December with monthly management reporting information provided to National Grid. Emerald is a joint venture with Washington State Investment Board and builds and operates wind and solar assets. Emerald was acquired on 11 July 2019. Millennium Pipeline Company LLC is an associate that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.

Summarised financial information as at 31 March, together with the carrying amount of the investments, is as follows:

	BritNed Development Limited		Millennium Pipeline Company LLC		Nemo Link Limited		Emerald Energy Venture LLC	
	2021 £m	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m
Statement of financial position								
Non-current assets	**409**	399	**795**	910	**536**	582	**559**	435
Cash and cash equivalents	**47**	54	**27**	33	**31**	26	**112**	66
All other current assets	**24**	4	**24**	26	**8**	5	**12**	6
Non-current liabilities	**(81)**	(45)	**(256)**	(315)	**(30)**	(29)	**(286)**	(232)
Current liabilities	**(22)**	(16)	**(38)**	(43)	**(19)**	(10)	**(27)**	(2)
Net assets	**377**	396	**552**	611	**526**	574	**370**	273
Group's ownership interest in joint venture/associate	**189**	198	**145**	160	**263**	287	**189**	139
Group adjustment: elimination of profits on sales to joint venture	**–**	–	**–**	–	**–**	–	**(23)**	(10)
Carrying amount of the Group's investment	**189**	198	**145**	160	**263**	287	**166**	129

	BritNed Development Limited		Millennium Pipeline Company LLC		Nemo Link Limited		Emerald Energy Venture LLC	
	2021 £m	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m
Income statement								
Revenue	**72**	80	**199**	206	**66**	45	**28**	19
Depreciation and amortisation	**(15)**	(14)	**(43)**	(46)	**(24)**	(23)	**(14)**	(7)
Other costs	**(15)**	(10)	**(21)**	(20)	**(6)**	(8)	**(22)**	(10)
Operating profit/(loss)	**42**	56	**135**	140	**36**	14	**(8)**	2
Net interest expense	**(1)**	–	**(18)**	(22)	**–**	–	**–**	(3)
Profit/(loss) before tax	**41**	56	**117**	118	**36**	14	**(8)**	(1)
Income tax expense	**(11)**	(10)	**–**	–	**(14)**	(2)	**–**	–
Profit/(loss) for the year	**30**	46	**117**	118	**22**	12	**(8)**	(1)
Group's share of profit/(loss)	**15**	23	**31**	31	**11**	6	**(4)**	(1)
Group adjustment: tax charge	**–**	–	**(9)**	(9)	**–**	–	**1**	–
Group's share of post-tax results for the year	**15**	23	**22**	22	**11**	6	**(3)**	(1)

17. Derivative financial instruments

Derivatives are financial instruments that derive their value from the price of an underlying item such as interest rates, foreign exchange rates, credit spreads, commodities, equities or other indices. In accordance with policies approved by the Board, derivatives are transacted generally to manage exposures to fluctuations in interest rates, foreign exchange rates and commodity prices. Our derivatives balances comprise two broad categories:

- financing derivatives: These are used to manage our exposure to interest rates and foreign exchange rates. Specifically, we use these derivatives to manage our financing portfolio, holdings in foreign operations and contractual operational cash flows; and
- commodity contract derivatives: These are used to manage our US customers' exposure to price and supply risks. Some forward contracts for the purchase of commodities meet the definition of derivatives. We also enter into derivative financial instruments linked to commodity prices, including index futures, options and swaps, which are used to manage market price volatility.

Derivatives are initially recognised at fair value and subsequently remeasured to fair value at each reporting date. Changes in fair values are recorded in the period they arise, in either the consolidated income statement or other comprehensive income. Where the gains or losses recorded in the income statement arise from changes in the fair value of derivatives to the extent that hedge accounting is not applied or is not fully effective, these are recorded as remeasurements, detailed in notes 5 and 6. Where the fair value of a derivative is positive it is carried as a derivative asset, and where negative as a derivative liability.

The fair value of derivative financial instruments is calculated by taking the present value of future cash flows, primarily incorporating market observable inputs. The various inputs include foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate and inflation curves, the forward rate curves of underlying commodities, and for those positions that are not fully cash collateralised the credit quality of the counterparties.

Certain clauses embedded in non-derivative financial instruments or other contracts are presented as derivatives because they impact the risk profile of their host contracts and they are deemed to have risks or rewards not closely related to those host contracts.

Further information on how derivatives are valued and used for risk management purposes is presented in note 32. Information on commodity contracts and other commitments not meeting the definition of derivatives is presented in note 30.

The fair values of derivatives by category are as follows:

	2021			2020		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current	**457**	**(145)**	**312**	93	(380)	(287)
Non-current	**542**	**(754)**	**(212)**	1,249	(954)	295
	999	**(899)**	**100**	1,342	(1,334)	8
Financing derivatives	**942**	**(767)**	**175**	1,267	(1,134)	133
Commodity contract derivatives	**57**	**(132)**	**(75)**	75	(200)	(125)
	999	**(899)**	**100**	1,342	(1,334)	8

(a) Financing derivatives

The fair values of financing derivatives by type are as follows:

	2021			2020		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Interest rate swaps	**325**	**(159)**	**166**	556	(337)	219
Cross-currency interest rate swaps	**601**	**(351)**	**250**	643	(514)	129
Foreign exchange forward contracts[1]	**16**	**(74)**	**(58)**	58	(39)	19
Inflation-linked swaps	**—**	**(183)**	**(183)**	—	(234)	(234)
Equity options	**—**	**—**	**—**	10	(10)	—
	942	**(767)**	**175**	1,267	(1,134)	133

1. Included within the foreign exchange forward contracts balance are £32 million (2020: £3 million) of derivative liabilities in relation to the hedging of capital expenditure and a deal-contingent foreign exchange forward contract liability of £9 million (2020: £nil) in relation to the disposal of NECO (see note 10).

Notes to the consolidated financial statements continued

17. Derivative financial instruments continued

(a) Financing derivatives continued

The maturity profile of financing derivatives is as follows:

	2021 Assets £m	2021 Liabilities £m	2021 Total £m	2020 Assets £m	2020 Liabilities £m	2020 Total £m
Current						
Less than 1 year	**428**	**(70)**	**358**	62	(254)	(192)
	428	**(70)**	**358**	62	(254)	(192)
Non-current						
In 1 to 2 years	**10**	**(14)**	**(4)**	480	(51)	429
In 2 to 3 years	**24**	**(12)**	**12**	13	(5)	8
In 3 to 4 years	**62**	**(80)**	**(18)**	20	(28)	(8)
In 4 to 5 years	**4**	**(42)**	**(38)**	31	(109)	(78)
More than 5 years	**414**	**(549)**	**(135)**	661	(687)	(26)
	514	**(697)**	**(183)**	1,205	(880)	325
	942	**(767)**	**175**	1,267	(1,134)	133

The notional contract amounts of financing derivatives by type are as follows:

	2021 £m	2020 £m
Interest rate swaps	**(2,259)**	(3,101)
Cross-currency interest rate swaps	**(8,389)**	(8,097)
Foreign exchange forward contracts	**(4,651)**	(3,284)
Inflation-linked swaps	**(500)**	(500)
Equity options	**—**	(800)
	(15,799)	(15,782)

Derivatives with a notional value of £2,810 million, pay or receive cash flows that reference GBP LIBOR of £2,041 million (maturing between 2023 and 2040) or USD LIBOR of £769 million (maturing between 2023 and 2026). LIBOR is being replaced as an interest rate benchmark by alternative reference rates and therefore negotiations are underway to amend these contracts, with any related hedge documentation then being amended. At 31 March 2021, none of the contracts had yet been amended.

(b) Commodity contract derivatives

The fair values of commodity contract derivatives by type are as follows:

	2021 Assets £m	2021 Liabilities £m	2021 Total £m	2020 Assets £m	2020 Liabilities £m	2020 Total £m
Commodity purchase contracts accounted for as derivative contracts						
Forward purchases of gas	**44**	**(94)**	**(50)**	64	(108)	(44)
Derivative financial instruments linked to commodity prices						
Electricity capacity	**2**	**—**	**2**	—	—	—
Electricity swaps	**10**	**(33)**	**(23)**	4	(83)	(79)
Electricity options	**—**	**(1)**	**(1)**	—	—	—
Gas swaps	**1**	**(3)**	**(2)**	7	(8)	(1)
Gas options	**—**	**(1)**	**(1)**	—	(1)	(1)
	57	**(132)**	**(75)**	75	(200)	(125)

17. Derivative financial instruments continued

(b) Commodity contract derivatives continued

The maturity profile of commodity contract derivatives is as follows:

	2021			2020		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current						
Less than one year	**29**	**(75)**	**(46)**	31	(126)	(95)
	29	**(75)**	**(46)**	31	(126)	(95)
Non-current						
In 1 to 2 years	**7**	**(24)**	**(17)**	8	(35)	(27)
In 2 to 3 years	**7**	**(16)**	**(9)**	9	(24)	(15)
In 3 to 4 years	**7**	**(7)**	**—**	8	(12)	(4)
In 4 to 5 years	**6**	**(5)**	**1**	7	(1)	6
More than 5 years	**1**	**(5)**	**(4)**	12	(2)	10
	28	**(57)**	**(29)**	44	(74)	(30)
	57	**(132)**	**(75)**	75	(200)	(125)

The notional quantities of commodity contract derivatives by type are as follows:

	2021	2020
Forward purchases of gas[1]	**36m Dth**	102m Dth
Electricity swaps	**12,321 GWh**	12,836 GWh
Gas swaps	**47m Dth**	89m Dth
Gas options	**40m Dth**	26m Dth

1. Forward gas purchases have terms up to five years (2020: four years). The contractual obligations under these contracts are £104 million (2020: £128 million).

18. Inventories and current intangible assets

Inventories represent assets that we intend to use in order to generate revenue in the short term, either by selling the asset itself (for example, fuel stocks) or by using it to fulfil a service to a customer or to maintain our network (consumables).

Inventories are stated at the lower of weighted average cost and net realisable value. Where applicable, cost comprises direct materials and direct labour costs as well as those overheads that have been incurred in bringing the inventories to their present location and condition.

Emission allowances, principally relating to the emissions of carbon dioxide in the UK and sulphur and nitrous oxides in the US, are recorded as intangible assets within current assets. They are initially recorded at cost and subsequently at the lower of cost and net realisable value. A liability is recorded in respect of the obligation to deliver emission allowances, and emission charges are recognised in the income statement in the period in which emissions are made.

	2021 £m	2020 £m
Fuel stocks	**94**	151
Raw materials and consumables	**253**	265
Current intangible assets – emission allowances	**92**	133
	439	549

There is a provision for obsolescence of £10 million against inventories as at 31 March 2021 (2020: £21 million).

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19. Trade and other receivables

Trade and other receivables include amounts which are due from our customers for services we have provided, accrued income which has not yet been billed, prepayments, contract assets where certain milestones are required to be fulfilled and other receivables that are expected to be settled within twelve months.

Trade and other receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate allowances for estimated irrecoverable amounts.

	2021 £m	2020 £m
Trade receivables	**1,503**	1,571
Accrued income	**863**	849
Prepayments	**387**	408
Contract assets	**13**	—
Other receivables	**153**	158
	2,919	2,986

Trade receivables are non-interest-bearing and generally have a 30 to 90 days term. Due to their short maturities, the fair value of trade and other receivables approximates their carrying value. The maximum exposure of trade receivables to credit risk is the gross carrying amount of £2,152 million (2020: £2,063 million).

Provision for impairment of receivables

A provision for credit losses is recognised at an amount equal to the expected credit losses that will arise over the lifetime of the trade receivables and accrued income.

	2021 £m	2020 £m
At 1 April	**512**	394
Exchange adjustments	**(57)**	20
Charge for the year, net of recoveries	**326**	234
Uncollectible amounts written off	**(59)**	(136)
Reclassification to held for sale (note 10)	**(50)**	—
At 31 March	**672**	512

The trade receivables balance, accrued income balance and provisions balance split by geography are as follows:

	As at 31 March 2021			As at 31 March 2020		
	UK £m	**US £m**	**Total £m**	UK £m	US £m	Total £m
Trade receivables	**227**	**1,925**	**2,152**	227	1,836	2,063
Accrued income	**547**	**339**	**886**	461	408	869
Provision for impairment of receivables and accrued income	**(23)**	**(649)**	**(672)**	(40)	(472)	(512)

There are no retail customers in the UK businesses. A provision matrix is not used in the UK as an assessment of expected losses on individual debtors is performed, and the provision is not material.

In the US, £1,852 million (2020: £1,852 million) of the trade receivables and accrued income balance is attributable to retail customers. For non-retail US customer receivables, a provision matrix is not used and expected losses are determined on individual debtors.

The provision for retail customer receivables in the US is calculated based on a series of provision matrices which are prepared by regulated entity and by customer type. The expected loss rates in each provision matrix are based on historical loss rates adjusted for current and forecasted economic conditions at the balance sheet date. The inclusion of forward-looking information in the provision matrix setting process under IFRS 9 resulted in loss rates that reflect expected future economic conditions and the recognition of an expected loss on all debtors even where no loss event has occurred.

In March 2020, the Group's US distribution businesses ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimise risk to the Group's employees as a result of COVID-19. The Group also ceased customer termination activities as requested by relevant local authorities. Certain collection activities did resume during the year where permitted, but this was a small proportion compared to normal levels.

In calculating our provision for impairment of receivables at 31 March 2021, we were able to incorporate the actual cash collection levels experienced since the start of the pandemic to determine the expected loss rates per category of outstanding receivable by operating company, which is summarised in the provision matrix shown below. For the year ended 31 March 2020, there was limited cash collection data available with regards to the impact that COVID-19 would have on collection of receivables. Therefore, in order to reflect the impact of COVID-19 into our calculation of the charge for the year, we considered the macroeconomic data including unemployment levels and our previous experience regarding debtor recoverability during and in the aftermath of the 2008/09 financial crisis (which impacted all of our service territories) and that following Superstorm Sandy in 2012 which impacted our downstate New York gas business specifically.

19. Trade and other receivables continued

Based on our review of these factors, we concluded that a reasonable range for the provisions recognised in the current year would be £320 million to £342 million ($440 million to $470 million), which considered the continued application of our previous experience regarding debtor recoverability in the aftermath of historical impactful events, as well as the collections experience seen since the start of the pandemic, and concluded that a total charge of £326 million represented our best estimate based on the information available. For the year ended 31 March 2020, we determined that the additional provision recognised in light of the cessation of customer terminations and collections following the moratoriums introduced would lie between £81 million and £161 million ($100 million and $200 million), and concluded an additional COVID-19 related charge of £117 million represented our best estimate based on the information available, primarily as this represented an impact twice as severe as Superstorm Sandy, adjusted to incorporate all service territories impacted.

The average expected loss rates and gross balances for the retail customer receivables in our US operations are set out below:

	2021 %	2021 £m	2020 %	2020 £m
Accrued income	7	322	5	395
0 – 30 days past due	7	580	5	651
30 – 60 days past due	24	155	14	194
60 – 90 days past due	36	108	29	109
3 – 6 months past due	52	140	47	121
6 – 12 months past due	66	180	63	105
Over 12 months past due	71	367	79	277
		1,852		1,852

US retail customer receivables are not collateralised. Trade receivables are written off when regulatory requirements are met. Write-off policies vary between jurisdictions as they are aligned with the local regulatory requirements, which differ between regulators. There were no significant amounts written off during the period that were still subject to enforcement action. Our internal definition of default is aligned with that of the individual regulators in each jurisdiction.

For further information on our wholesale and retail credit risk, refer to note 32(a).

20. Cash and cash equivalents

Cash and cash equivalents include cash balances, together with short-term investments with an original maturity of less than three months that are readily convertible to cash. Bank overdrafts are only shown net within cash and cash equivalents when there is a legal right to offset unconditionally and an intention to settle net has been demonstrated by the physical movement of cash.

Net cash and cash equivalents reflected in the cash flow statement are net of bank overdrafts, which are reported in borrowings. The carrying amounts of cash and cash equivalents and bank overdrafts approximate their fair values.

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for periods varying between one day and three months, depending on the immediate cash requirements, and earn interest at the respective short-term deposit rates.

Cash and cash equivalents held in currencies other than sterling have been converted into sterling at year-end exchange rates. For further information on currency exposures, refer to note 32(c).

	2021 £m	2020 £m
Cash at bank	117	73
Short-term deposits	40	—
Cash and cash equivalents	**157**	73

Notes to the consolidated financial statements
continued

21. Borrowings

We borrow money primarily in the form of bonds and bank loans. These are for a fixed term and may have fixed or floating interest rates or are linked to RPI. We use derivatives to manage risks associated with interest rates, inflation rates and foreign exchange. Lease liabilities are also included within borrowings.

Our price controls and rate plans require us to fund our networks within a certain ratio of debt to equity or regulatory value and, as a result, we have issued a significant amount of debt. As we continue to invest in our networks, the value of debt is expected to increase over time. To maintain a strong balance sheet and to allow us to access capital markets at commercially acceptable interest rates, we balance the amount of debt we issue with the value of our assets, and we take account of certain other metrics used by credit rating agencies.

All borrowings are measured at amortised cost, with the exception of one current liability which is measured at fair value through profit and loss in order to eliminate a measurement mismatch.

Borrowings, which include interest-bearing, zero-coupon and inflation-linked debt, overdrafts and collateral payable, are initially recorded at fair value. This normally reflects the proceeds received (net of direct issue costs for liabilities measured at amortised cost). Subsequently, borrowings are stated either: i) at amortised cost; or ii) at fair value though profit and loss. Where a borrowing is held at amortised cost, any difference between the proceeds after direct issue costs and the redemption value is recognised over the term of the borrowing in the income statement using the effective interest method. For the liability held at fair value through profit and loss, interest is calculated using the effective interest method.

Where a borrowing or liability is held at fair value, changes in the fair value of the borrowing due to changes in the issuer's credit risk are recorded in the own credit reserve within equity (see note 28). All other changes in the fair value of the liability are recognised in the income statement within remeasurements (see notes 5 and 6).

	2021 £m	2020 £m
Current		
Bank loans	**1,022**	1,244
Bonds[1]	**1,987**	1,446
Commercial paper	**628**	1,269
Lease liabilities	**99**	112
Other loans	**1**	1
	3,737	4,072
Non-current		
Bank loans	**2,532**	2,819
Bonds	**24,209**	23,094
Lease liabilities	**586**	623
Other loans	**156**	186
	27,483	26,722
Total borrowings	**31,220**	30,794

1. Includes a liability held at fair value through profit and loss of £682 million (2020: £741 million).

21. Borrowings continued

Total borrowings are repayable as follows:

	2021 £m	2020 £m
Less than 1 year	**3,737**	4,072
In 1 to 2 years	**1,745**	2,212
In 2 to 3 years	**889**	1,664
In 3 to 4 years	**2,206**	757
In 4 to 5 years	**1,833**	2,122
More than 5 years:		
By instalments	**927**	870
Other than by instalments	**19,883**	19,097
	31,220	30,794

The fair value of borrowings at 31 March 2021 was £34,676 million (2020: £34,174 million). Where market values were available, the fair value of borrowings (Level 1) was £20,333 million (2020: £14,059 million). Where market values were not available, fair value of borrowings (Level 2) was £14,343 million (2020: £20,115 million), and calculated by discounting cash flows at prevailing interest rates. The notional amount outstanding of the debt portfolio at 31 March 2021 was £31,010 million (2020: £30,422 million). There have been no new issuances since the year end.

In 2020, the assets of the Colonial Gas Company were merged with the Boston Gas Company, and have been ringfenced post-merger. Certain gas distribution assets of NECO are subject to liens and other charges and are provided as collateral over borrowings totalling £67 million at 31 March 2021 (2020: £84 million), all of which have been classified as held for sale as at 31 March 2021 (see note 10).

Collateral is placed with or received from any derivative counterparty where we have entered into a credit support annex to the ISDA Master Agreement once the current mark-to-market valuation of the trades between the parties exceeds an agreed threshold. Included in current bank loans is £582 million (2020: £785 million) in respect of cash received under collateral agreements. For further details of our borrowing facilities, refer to note 33. For further details of our bonds in issue, please refer to the debt investor section of our website. Unless included herein, the information on our website is unaudited.

Certain borrowings, primarily some of our USD denominated bank loans and company car lease contracts, have payments that are linked to LIBOR. LIBOR is being replaced as an interest rate benchmark by alternative reference rates and therefore negotiations are underway to amend these contracts. At 31 March 2021, none of the contracts had yet been amended. £328 million of bank loans affected by GBP LIBOR, £59 million of bank loans affected by USD LIBOR and £173 million of lease liabilities affected by USD LIBOR will be impacted.

Financial liability at fair value through profit and loss

The financial liability designated at fair value through profit and loss is analysed as follows:

i. the fair value of the liability was £682 million (2020: £741 million), which includes cumulative changes in fair value attributable to changes in credit risk recognised in other comprehensive income, post tax of £1 million (2020: £10 million);

ii. the amount repayable at maturity in November 2021 is £684 million (2020: £759 million); and

iii. the difference between carrying amount and contractual amount at maturity is £2 million (2020: £18 million).

This liability has been reclassified in order to eliminate a measurement mismatch with derivatives which provide an economic hedge. The associated derivatives are collateralised and do not contain significant exposure to our own credit risk. The presentation of credit risk in other comprehensive income does not, therefore, create or enlarge an accounting mismatch in profit or loss.

The change in the fair value attributable to a change in credit risk is calculated as the difference between the total change in the fair value of the liability and the change in the value of the liability due to changes in market risk factors alone. The change in the fair value due to market risk factors was calculated using benchmark yield curves as at the end of the reporting period holding the credit risk margin constant. The fair value of the liability was calculated using observed market prices.

Notes to the consolidated financial statements continued

21. Borrowings continued

Lease liabilities

The Group adopted IFRS 16 on 1 April 2019, which resulted in the recognition of £474 million of additional lease liabilities. Refer to note 37 for details.

Lease liabilities are initially measured at the present value of the lease payments expected over the lease term. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security. The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method.

	2021 £m	2020 £m
Gross lease liabilities are repayable as follows:		
Less than 1 year	114	132
1 to 5 years	321	361
More than 5 years	464	481
	899	974
Less: finance charges allocated to future periods	(214)	(239)
	685	735
The present value of lease liabilities are as follows:		
Less than 1 year	99	112
1 to 5 years	267	297
More than 5 years	319	326
	685	735

22. Trade and other payables

Trade and other payables include amounts owed to suppliers, tax authorities and other parties which are due to be settled within 12 months. The total also includes deferred amounts, some of which represent monies received from customers but for which we have not yet delivered the associated service. These amounts are recognised as revenue when the service is provided.

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2021 £m	2020 £m
Trade payables	2,165	2,205
Deferred payables	154	137
Customer contributions[1]	138	84
Social security and other taxes	140	202
Contingent consideration (note 38)	39	30
Other payables	881	944
	3,517	3,602

1. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

Due to their short maturities, the fair value of trade payables approximates their carrying value.

23. Contract liabilities

Contract liabilities primarily relate to the advance consideration received from customers for construction contracts, mainly in relation to connections, for which revenue is recognised over the life of the asset.

	2021 £m	2020 £m
Current	66	76
Non-current	1,094	1,082
	1,160	1,158

Significant changes in the contract liabilities balances during the period are as follows:

	2021 £m	2020 £m
As at 1 April	1,158	994
Exchange adjustments	(65)	39
Revenue recognised that was included in the contract liability balance at the beginning of the period	(96)	(60)
Increases due to cash received, excluding amounts recognised as revenue during the period	262	185
Reclassification to held for sale (note 10)	(99)	—
At 31 March	1,160	1,158

24. Other non-current liabilities

Other non-current liabilities include deferred income and customer contributions which will not be recognised as income until after 31 March 2022. It also includes contingent consideration and other payables that are not due until after that date.

Other non-current liabilities are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2021 £m	2020 £m
Deferred income[1]	78	101
Customer contributions[2]	400	428
Contingent consideration (note 38)	18	44
Other payables	347	318
	843	891

1. Principally the deferral of profits relating to the sale of property, which we expect to recognise in future years.
2. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

There is no material difference between the fair value and the carrying value of other payables.

Notes to the consolidated financial statements
continued

25. Pensions and other post-retirement benefits

All of our employees are eligible to participate in a pension plan. We have defined contribution (DC) and defined benefit (DB) pension plans in the UK and the US. In the US we also provide healthcare and life insurance benefits to eligible employees, post-retirement. The fair value of associated plan assets and present value of DB obligations are updated annually in accordance with IAS 19 (revised). We separately present our UK and US pension plans to show geographical split. Below we provide a more detailed analysis of the amounts recorded in the primary financial statements and the actuarial assumptions used to value the DB obligations.

National Grid's UK pension arrangements are held in separate Trustee administered funds. The arrangements are managed by Trustee companies with boards consisting of company- and member-appointed directors. In the US, the assets of the plans are held in trusts and administered by the Retirement Plans Committee comprised of appointed employees of the Company.

Defined contribution plans

These plans are designed to provide members with a pension pot for their retirement. The risks associated with these plans are assumed by the member.

Payments to these DC plans are charged as an expense as they fall due. There is no legal or constructive obligation on National Grid to pay additional contributions into a DC plan if the fund has insufficient assets to pay all employees' benefits relating to employee service in the current and prior periods.

In March 2021, National Grid announced its intention to move to a new DC plan from 1 April 2021.

The National Grid YouPlan (YouPlan)

Up until 31 March 2021, YouPlan was the qualifying UK pension plan that was used for automatic enrolment of new hires. National Grid paid contributions into YouPlan to provide DC benefits on behalf of employees, providing a double match of member contributions, up to a maximum Company contribution of 12% of salary as well as the cost of administration and insured benefits.

National Grid UK Retirement Plan (NGUKRP)

The NGUKRP is part of a Master Trust Arrangement managed by Legal & General and is National Grid's qualifying UK pension plan from 1 April 2021 and is used for the automatic enrolment of new hires. From April 2021, National Grid pays contributions into the NGUKRP to provide DC benefits on behalf of its employees, providing a double match of member contributions up to a maximum Company contribution of 12% of salary.

Defined benefit plans

On retirement, members of DB plans receive benefits whose value is dependent on factors such as salary and length of pensionable service. National Grid's obligation in respect of DB pension plans is calculated separately for each DB plan by projecting the estimated amount of future benefit payments that employees have earned for their pensionable service in the current and prior periods. These future benefit payments are discounted to determine the present value of the liabilities. Current service cost and any unrecognised past service cost are recognised immediately. The discount rate is set with reference to the yield curve on high-quality corporate bonds at the valuation date.

Advice is taken from independent actuaries relating to the appropriateness of the key assumptions applied, including life expectancy, expected salary and pension increases, and inflation. Comparatively small changes in the assumptions used may have a significant effect on the amounts recognised in the consolidated income statement, the consolidated statement of other comprehensive income and the net asset or liability recognised in the consolidated statement of financial position.

Remeasurements of pension assets and post-retirement benefit obligations are recognised in full in the period in which they occur in the consolidated statement of other comprehensive income.

The COVID-19 pandemic

The COVID-19 pandemic has had a global impact on economies, including on equity and bond markets. This directly affects the value of assets held in our pension schemes, as well as the value of National Grid's DB obligations. Our UK DB plans operate low-risk investment strategies with limited exposure to equities and other return-seeking assets, reducing the impact of investment volatility. Additionally, the large allocation to bonds leads to significant hedging against changes in the value of DB obligations that result from falling bond yields. Our US plans also hedge much of this market risk, however they do have larger asset allocations in return-seeking assets such as equities. Following the start of the pandemic, US equity markets have performed strongly and therefore our US DB plans have remained in a relatively strong funding position. The markets for unquoted investments are illiquid and therefore given the market volatility at 31 March 2020, there was a risk that the valuations provided by fund managers as at 31 March 2020 were based on valuation models that had unobservable inputs, making them subject to additional estimation uncertainty. Such uncertainty has reduced as at 31 March 2021.

UK pensions plans

The principal UK DB pensions plans are the National Grid UK Pension Scheme (NGUKPS) and the National Grid Electricity Group of the Electricity Supply Pension Scheme (NGEG of ESPS). In the US, we have four principal plans and various healthcare and life insurance plans.

National Grid UK Pension Scheme (NGUKPS)

NGUKPS consists of two legally and actuarially separate sections: Section A and Section B. This follows the transfer of Section C, a section supported by an unrelated third party, out of NGUKPS in September 2020. The plan closed to new hires on 1 April 2002.

25. Pensions and other post-retirement benefits continued

Scheme funding

The arrangements are subject to independent actuarial funding valuations at least every three years, and following consultation and agreement with us, the qualified actuary certifies the employers' contributions, which, together with the specified contributions payable by the employees and proceeds from the plans' assets, are expected to be sufficient to fund the benefits payable.

The results of the most recent actuarial valuations are shown below. See page 176 for the assumptions used for IAS 19 (revised) purposes.

	Section A of NGUKPS	Section B of NGUKPS	NGEG of ESPS
Latest full actuarial valuation	31 March 2019	31 March 2019	31 March 2019
Actuary	Willis Towers Watson	Willis Towers Watson	Aon Hewitt
Market value of plan assets at latest valuation	£6,551 million	£5,765 million	£3,144 million
Actuarial value of benefits due to members	£6,502 million	£5,831 million	£3,381 million
Market value as percentage of benefits	101%	99%	93%
Funding surplus/(deficit)	£49 million	(£66 million)	(£237 million)

Section A

Following the latest actuarial valuation at 31 March 2019, Section A remains in surplus, and so no deficit funding contributions are required. National Grid and the Trustees have agreed a schedule of contributions whereby the employers will continue to contribute 51.8% of pensionable salary, less member contributions, in respect of future benefit accrual.

Section B

The latest full actuarial valuation at 31 March 2019 determined that Section B was in deficit. To recover the deficit, National Grid paid recovery plan payments of approximately £34 million per annum over two years to September 2020. In addition, the employers contribute 51.4% of pensionable salary, less member contributions, in respect of future benefit accrual.

Investment de-risking transactions

In December 2020, the Trustees of the NGUKPS exchanged £0.8 billion of gilts from Section A for a buy-in transaction with Rothesay Life. This follows two similar arrangements entered into in the previous year. In Section A, £2.8 billion of gilts were exchanged for a buy-in policy with Rothesay Life, and in Section B, £1.6 billion of gilts were exchanged for a buy-in policy with Legal & General.

These policies provide bulk annuities in respect of some pensioner and dependant members of NGUKPS and were funded by existing assets. All policies are held by the Trustee. For each transaction, the pricing of the policies was highly competitive; however, under IAS 19 the methodology for calculating the value of the buy-ins (as an asset held by the pension plan) differs from the price paid. This resulted in the recognition of actuarial losses on purchase of £0.1 billion (2020: £0.7 billion), recorded within the consolidated statement of other comprehensive income.

National Grid Electricity Group of the Electricity Supply Pension Scheme

The last full actuarial valuation for the NGEG of the ESPS determined that the plan was in deficit. To recover the deficit, National Grid agreed to a payment plan of £54 million per annum over three years to 2022, and a final payment of £26 million in 2023, all adjusted for changes in the Retail Price Index (RPI). In addition, National Grid contributes 44% of pensionable salary, less member contributions, in respect of the ongoing service cost. The plan closed to new hires from 1 April 2006.

The plan holds a longevity insurance contract which covers improvements in longevity, providing long-term protection to the scheme, should some pensioner and dependant members live longer than currently expected.

Administration costs

National Grid pays additional contributions to Section B of NGUKPS and NGEG of ESPS in respect of the costs of plan administration and the Pension Protection Fund (PPF) levies. Section A of NGUKPS will fund these costs from the Section's assets. Up to 31 March 2020, National Grid was responsible for the costs of plan administration and the Pension Protection Fund (PPF) levies for both Sections A and B of NGUKPS and NGEG of ESPS.

Security arrangements

National Grid has also established security arrangements with charges in favour of the Trustees.

	Section A of NGUKPS	Section B of NGUKPS	NGEG of ESPS
Value of security arrangements at 31 March 2021	£186 million	£nil	£100 million
Principal supporting employers	National Grid plc and National Grid UK Limited	National Grid Gas plc (NGG)	National Grid Electricity Transmission plc (NGET)
Additional amounts payable[1] at 31 March 2021	n/a	A maximum of £175 million	A maximum of £500 million

1. These amounts are payable if certain trigger events occur which have been individually agreed between the plans and their relevant supporting employers.

All of the security is currently provided in the form of surety bonds, but may also be provided as letters of credit or cash. The assets held as security will be paid to the respective section or plan in the event that the relevant supporting employer is subject to an insolvency event or fails to make the required contributions; and applicable to NGEG of ESPS only, if NGET loses its licence to operate under relevant legislation. Counter indemnities have also been taken out to ensure the obligations will be fulfilled.

In addition, a guarantee of £1 billion has been provided to Section A of NGUKPS, with the payment contingent on insolvency or on failure to pay pension obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total).

Notes to the consolidated financial statements continued

25. Pensions and other post-retirement benefits continued

US pension plans

National Grid has multiple DC pension plans which allow employee as well as Company contributions. Non-union employees hired after 1 January 2011, as well as new hire represented union employees, receive a core contribution into the DC plan, irrespective of the employee's contribution into the plan.

National Grid sponsors four non-contributory qualified DB pension plans, which provide vested union employees, and vested non-union employees hired before 1 January 2011 with retirement benefits within prescribed limits as defined by the US Internal Revenue Service. National Grid also provides non-qualified DB pension arrangements for a section of current and former employees, which are closed to new entrants. Benefits under the DB plans generally reflect age, years of service and compensation and are paid in the form of an annuity or lump sum. An independent actuary performs valuations annually. The Company funds the DB plans by contributing no less than the minimum amount required, but no more than the maximum tax-deductible amount allowed under US Internal Revenue Service regulations. The range of contributions determined under these regulations can vary significantly depending upon the funded status of the plans. At present, there is some flexibility in the amount that is contributed on an annual basis. In general, the Company's policy for funding the US pension plans is to contribute the amounts collected in rates and capitalised in the rate base during the year, to the extent that the funding is no less than the minimum amount required. For the current financial year, these contributions amounted to approximately £110 million (2020: £153 million).

US retiree healthcare and life insurance plans

National Grid provides healthcare and life insurance benefits to eligible employees, post-retirement. Eligibility is based on certain age and length of service requirements, and in most cases, retirees contribute to the cost of their healthcare coverage. In the US, there is no governmental requirement to pre-fund post-retirement healthcare and life insurance plans. However, in general, the Company's policy for funding the US retiree healthcare and life insurance plans is to contribute amounts collected in rates and capitalised in the rate base during the year. For the current financial year, these contributions amounted to £26 million (2020: £18 million).

For the last few years, it has been the Company's policy to primarily direct contributions to the DB pension plans due to concerns over tax deductible limitations relating to the retiree and healthcare and life insurance plans.

Actuarial assumptions

The Company has applied the following financial assumptions in assessing DB liabilities:

	UK pensions		
	2021 %	2020 %	2019 %
Discount rate – past service	**2.00**	2.35	2.40
Discount rate – future service	**2.15**	2.35	2.45
Salary increases	**3.40**	2.90	3.50
Rate of increase in RPI – past service	**3.15**	2.65	3.25
Rate of increase in RPI – future service	**3.00**	2.45	3.20

At 31 March 2021 and 31 March 2020, single equivalent financial assumptions are shown above for presentational purposes, although full yield curves have been used in our calculations. In 2019, single equivalent financial assumptions were set which reflected the average duration for the aggregate past and future service obligations.

The discount rate is determined by reference to high-quality UK corporate bonds at the reporting date. The rate of increase in salaries has been set using a promotional scale where appropriate. The rates of increases stated are not indicative of historical increases awarded or a guarantee of future increase, but merely an appropriate assumption used in assessing DB liabilities. RPI is the key assumption that determines assumed increases in pensions in payment and deferment in the UK only.

	US pensions			US other post-retirement benefits		
	2021 %	2020 %	2019 %	**2021 %**	2020 %	2019 %
Discount rate	**3.25**	3.30	3.95	**3.25**	3.30	3.95
Salary increases	**4.30**	3.50	3.50	**4.30**	3.50	3.50
Initial healthcare cost trend rate	n/a	n/a	n/a	**7.10**	7.00	7.25
Ultimate healthcare cost trend rate	n/a	n/a	n/a	**4.50**	4.50	4.50

Discount rates for US pension liabilities have been determined by reference to appropriate yields on high-quality US corporate bonds at the reporting date based on the duration of plan liabilities. The healthcare cost trend rate is expected to reach the ultimate trend rate by 2030 (2020: 2030). The table below sets out the projected life expectancies adopted for the UK and US pension arrangements:

	2021		2020		2019	
	UK years	**US years**	UK years	US years	UK years	US years
Assumed life expectations for a retiree age 65						
Males	**21.8**	**21.6**	22.1	20.9	22.0	22.1
Females	**23.7**	**24.0**	23.8	23.4	23.6	24.2
In 20 years:						
Males	**23.1**	**23.2**	23.3	22.5	23.3	23.7
Females	**25.2**	**25.5**	25.3	25.1	25.2	25.9

25. Pensions and other post-retirement benefits continued

Maturity profile of DB obligations

The weighted average duration of the DB obligation for each category of plan is 14 years for UK pension plans; 14 years for US pension plans and 17 years for US other post-retirement benefit plans.

As at the reporting date, the present value of the funded obligations split according to member status was approximately:

- UK pensions: 8% active members (2020: 8%; 2019: 10%); 14% deferred members (2020: 14%; 2019: 16%); 78% pensioner members (2020: 78%; 2019: 74%);
- US pensions: 35% active members (2020: 36%; 2019: 37%); 9% deferred members (2020: 9%; 2019: 9%); 56% pensioner members (2020: 55%; 2019: 54%); and
- US other post-retirement benefits: 34% active members (2020: 35%; 2019: 39%); 66% pensioner members (2020: 65%; 2019: 61%).

For sensitivity analysis see note 35.

Amounts recognised in the consolidated statement of financial position

	2021 £m	2020 £m	2019 £m
Present value of funded obligations	**(23,283)**	(24,281)	(24,609)
Fair value of plan assets	**24,388**	23,748	24,793
	1,105	(533)	184
Present value of unfunded obligations	**(324)**	(345)	(330)
Other post-employment liabilities	**(66)**	(75)	(72)
Net defined benefit asset/(liability)	**715**	(953)	(218)
Represented by:			
Liabilities	**(1,032)**	(2,802)	(1,785)
Assets	**1,747**	1,849	1,567
	715	(953)	(218)

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK Pensions			US Pensions			US other post-retirement benefits		
	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m
Present value of funded obligations	**(13,571)**	(12,775)	(14,200)	**(6,681)**	(7,809)	(6,901)	**(3,031)**	(3,697)	(3,508)
Fair value of plan assets	**14,680**	14,364	15,507	**6,909**	6,972	6,646	**2,799**	2,412	2,640
	1,109	1,589	1,307	**228**	(837)	(255)	**(232)**	(1,285)	(868)
Present value of unfunded obligations	**(74)**	(69)	(76)	**(250)**	(276)	(254)	**—**	—	—
Other post-employment liabilities	**—**	—	—	**—**	—	—	**(66)**	(75)	(72)
Net defined benefit asset/(liability)	**1,035**	1,520	1,231	**(22)**	(1,113)	(509)	**(298)**	(1,360)	(940)
Represented by:									
Liabilities	**(74)**	(69)	(76)	**(393)**	(1,373)	(769)	**(565)**	(1,360)	(940)
Assets	**1,109**	1,589	1,307	**371**	260	260	**267**	—	—
	1,035	1,520	1,231	**(22)**	(1,113)	(509)	**(298)**	(1,360)	(940)

The recognition of the pension assets in both the UK in relation to the NGUKPS, the NGEG of ESPS and the US in relation to the Niagara Mohawk Plan and the KeySpan Retirement Plan reflects legal and actuarial advice that we have taken regarding recognition of surpluses under IFRIC 14. Similarly on the recognition of US other post-retirement assets in relation to: the Long Island Union Life Insurance plan; the New York Union Health Insurance Plan; the Long Island Union Health Insurance plan; and Retirees Health and Welfare Plan II.

We have concluded that the Group has an unconditional right to a refund from the individual plans, including from each Section of the NGUKPS and the NGEG of ESPS, in the event of a winding up. In the UK, the Trustees must seek the agreement of the Company to any benefit augmentation beyond the provisions set out in the Scheme Rules. In the US, surplus assets may be used to pay benefits under other plans, thereby allowing the Company to settle other liabilities under other Plans.

Notes to the consolidated financial statements
continued

25. Pensions and other post-retirement benefits continued

Amounts recognised in the income statement and statement of other comprehensive income

	2021 £m	2020 £m	2019 £m
Included within operating costs			
Administration costs	**18**	16	14
Included within payroll costs			
Defined benefit plan costs:			
Current service cost	**175**	178	193
Past service cost – augmentations	**–**	–	5
Past service credit – redundancies	**(1)**	–	(7)
Special termination benefit cost – redundancies	**5**	2	55
Past service cost – plan amendments[1]	**–**	–	34
	179	180	280
Included within finance income and costs			
Net interest cost	**38**	23	22
Total included in income statement	**235**	219	316
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[2]	**1,408**	(724)	68
Exchange adjustments	**186**	(97)	(101)
Total included in the statement of other comprehensive income	**1,594**	(821)	(33)

1. For the year ended 31 March 2019, the estimated cost of equalising for the impact of GMP under the most cost-effective permissible methodology (Section A of NGUKPS – £17 million; Section B of NGUKPS – £12 million; NGEG of ESPS – £5 million).
2. This includes actuarial losses from the purchase of buy-in policies of £0.1 billion (2020: £0.7 billion).

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK Pensions			US Pensions			US other post-retirement benefits		
	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m
Included within operating costs									
Administration costs	**9**	9	6	**7**	6	7	**2**	1	1
Included within payroll costs									
Defined benefit plan costs:									
Current service cost	**28**	33	41	**104**	100	104	**43**	45	48
Past service cost – augmentations	**–**	–	5	**–**	–	–	**–**	–	–
Past service credit – redundancies	**(1)**	–	(7)	**–**	–	–	**–**	–	–
Special termination benefit cost – redundancies	**5**	2	55	**–**	–	–	**–**	–	–
Past service cost – plan amendments	**–**	–	34	**–**	–	–	**–**	–	–
	32	35	128	**104**	100	104	**43**	45	48
Included within finance income and costs									
Net interest (income)/cost	**(38)**	(31)	(31)	**35**	21	21	**41**	33	32
Total included in income statement	**3**	13	103	**146**	127	132	**86**	79	81
Remeasurement (losses)/gains of pension assets and post-retirement benefit obligations[1]	**(622)**	143	57	**1,017**	(588)	(14)	**1,013**	(279)	25
Exchange adjustments	**–**	–	–	**83**	(42)	(42)	**103**	(55)	(59)
Total included in the statement of other comprehensive income	**(622)**	143	57	**1,100**	(630)	(56)	**1,116**	(334)	(34)

1. UK pensions is stated after actuarial losses from the purchase of buy-in policies of £0.1 billion (2020: £0.7 billion).

Following a High Court ruling in October 2018, UK pension schemes were required to equalise Guaranteed Minimum Pensions (GMPs). As a result, a past service cost of £34 million was recognised in the year ended 31 March 2019 for the UK DB pension schemes. This reflected the estimated cost of equalising GMPs for current pension scheme members using the most cost-effective permissible methodology. Following the further High Court ruling in December 2020, an additional allowance of £0.4 million, was included for the year ended 31 March 2021, reflecting the associated cost for members who had transferred out of the pension scheme and were therefore not previously in scope.

25. Pensions and other post-retirement benefits continued

Reconciliation of the net defined benefit liability

	2021 £m	2020 £m	2019 £m
Opening net defined benefit liability	**(953)**	(218)	(263)
Cost recognised in the income statement	**(235)**	(219)	(316)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**1,594**	(821)	(33)
Employer contributions	**274**	327	419
Other movements	**(14)**	(22)	(25)
Reclassification to held for sale (note 10)	**49**	—	—
Closing net defined benefit asset/(liability)	**715**	(953)	(218)

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m	2021 £m	2020 £m	2019 £m
Opening net defined benefit asset/(liability)	**1,520**	1,231	1,104	**(1,113)**	(509)	(552)	**(1,360)**	(940)	(815)
Cost recognised in the income statement	**(3)**	(13)	(103)	**(146)**	(127)	(132)	**(86)**	(79)	(81)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**(622)**	143	57	**1,100**	(630)	(56)	**1,116**	(334)	(34)
Employer contributions	**138**	156	174	**110**	153	231	**26**	18	14
Other movements	**2**	3	(1)	**—**	—	—	**(16)**	(25)	(24)
Reclassification to held for sale (note 10)	**—**	—	—	**27**	—	—	**22**	—	—
Closing net defined benefit asset/(liability)	**1,035**	1,520	1,231	**(22)**	(1,113)	(509)	**(298)**	(1,360)	(940)

Changes in the present value of defined benefit obligations (including unfunded obligations)

	2021 £m	2020 £m	2019 £m
Opening defined benefit obligations	**(24,626)**	(24,939)	(24,054)
Current service cost	**(175)**	(178)	(193)
Interest cost	**(651)**	(751)	(771)
Actuarial gains/(losses) – experience	**123**	148	(69)
Actuarial (losses)/gains – demographic assumptions	**(1)**	452	266
Actuarial losses – financial assumptions	**(1,268)**	(84)	(619)
Past service credit – redundancies	**1**	—	7
Special termination benefit cost – redundancies	**(5)**	(2)	(55)
Past service cost – augmentations	**—**	—	(5)
Past service cost – plan amendments	**—**	—	(34)
Medicare subsidy received	**(25)**	(22)	(19)
Employee contributions	**(1)**	(1)	(1)
Benefits paid	**1,246**	1,282	1,376
Exchange adjustments	**1,166**	(531)	(768)
Reclassification to held for sale (note 10)	**609**	—	—
Closing defined benefit obligations	**(23,607)**	(24,626)	(24,939)

Notes to the consolidated financial statements
continued

25. Pensions and other post-retirement benefits continued

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Opening defined benefit obligations	**(12,844)**	(14,276)	(14,226)	**(8,085)**	(7,155)	(6,582)	**(3,697)**	(3,508)	(3,246)
Current service cost	**(28)**	(33)	(41)	**(104)**	(100)	(104)	**(43)**	(45)	(48)
Interest cost	**(296)**	(335)	(358)	**(243)**	(280)	(277)	**(112)**	(136)	(136)
Actuarial (losses)/gains – experience	**(21)**	113	(56)	**(72)**	(45)	(52)	**216**	80	39
Actuarial (losses)/gains – demographic assumptions	**(1)**	140	224	**—**	78	—	**—**	234	42
Actuarial (losses)/gains – financial assumptions	**(1,181)**	798	(568)	**(62)**	(595)	(24)	**(25)**	(287)	(27)
Past service credit – redundancies	**1**	—	7	**—**	—	—	**—**	—	—
Special termination benefit cost – redundancies	**(5)**	(2)	(55)	**—**	—	—	**—**	—	—
Past service cost – augmentations	**—**	—	(5)	**—**	—	—	**—**	—	—
Past service cost – plan amendments	**—**	—	(34)	**—**	—	—	**—**	—	—
Medicare subsidy received	**—**	—	—	**—**	—	—	**(25)**	(22)	(19)
Employee contributions	**(1)**	(1)	(1)	**—**	—	—	**—**	—	—
Benefits paid	**731**	752	837	**371**	374	398	**144**	156	141
Exchange adjustments	**—**	—	—	**804**	(362)	(514)	**362**	(169)	(254)
Reclassification to held for sale (note 10)	**—**	—	—	**460**	—	—	**149**	—	—
Closing defined benefit obligations	**(13,645)**	(12,844)	(14,276)	**(6,931)**	(8,085)	(7,155)	**(3,031)**	(3,697)	(3,508)

Changes in the value of plan assets

	2021 £m	2020 £m	2019 £m
Opening fair value of plan assets	**23,748**	24,793	23,858
Interest income	**613**	728	749
Return on plan assets in excess of/(less than) interest[1]	**2,554**	(1,240)	490
Administration costs	**(18)**	(16)	(14)
Employer contributions	**274**	327	419
Employee contributions	**1**	1	1
Benefits paid	**(1,244)**	(1,279)	(1,377)
Exchange adjustments	**(980)**	434	667
Reclassification to held for sale (note 10)	**(560)**	—	—
Closing fair value of plan assets	**24,388**	23,748	24,793
Actual return on plan assets	**3,167**	(512)	1,239
Expected contributions to plans in the following year	**212**	269	307

1. This includes actuarial losses from the purchase of buy-in policies of £0.1 billion (2020: £0.7 billion).

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2021 £m	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m	**2021 £m**	2020 £m	2019 £m
Opening fair value of plan assets	**14,364**	15,507	15,330	**6,972**	6,646	6,030	**2,412**	2,640	2,498
Interest income	**334**	366	389	**208**	259	256	**71**	103	104
Return on plan assets in excess of/(less than) interest[1]	**581**	(908)	457	**1,151**	(26)	62	**822**	(306)	(29)
Administration costs	**(9)**	(9)	(6)	**(7)**	(6)	(7)	**(2)**	(1)	(1)
Employer contributions	**138**	156	174	**110**	153	231	**26**	18	14
Employee contributions	**1**	1	1	**—**	—	—	**—**	—	—
Benefits paid	**(729)**	(749)	(838)	**(371)**	(374)	(398)	**(144)**	(156)	(141)
Exchange adjustments	**—**	—	—	**(721)**	320	472	**(259)**	114	195
Reclassification to held for sale (note 10)	**—**	—	—	**(433)**	—	—	**(127)**	—	—
Closing fair value of plan assets	**14,680**	14,364	15,507	**6,909**	6,972	6,646	**2,799**	2,412	2,640
Actual return on plan assets	**915**	(542)	846	**1,359**	233	318	**893**	(203)	75
Expected contributions to plans in the following year	**93**	137	148	**113**	125	150	**6**	7	9

1. This includes actuarial losses from the purchase of buy-in policies of £0.1 billion (2020: £0.7 billion).

25. Pensions and other post-retirement benefits continued

Main defined benefit risks

DB pension plans can pose a significant risk to future cash flows, as National Grid underwrites the financial and demographic risks associated with these plans. Although the governing bodies have sole responsibility for setting investment strategies and managing risks, National Grid closely works with and supports the governing bodies of each plan, to assist them in mitigating the risks associated with their plans and to ensure that the plans are funded to meet their obligations.

The most significant risks associated with the DB plans are:

- investment risk – the plans invest in a variety of asset classes, with actual returns likely to differ from the underlying discount rate adopted, impacting the funding position of the plan through the net balance sheet asset or liability. Each plan seeks to balance the level of investment return required with the risk that it can afford to take, to design the most appropriate investment portfolio. Volatility will be controlled through using liability-matching asset strategies including bulk annuities, as well as interest rate hedging and management of foreign exchange exposure, and diversification of the return-seeking assets;
- changes in bond yields – liabilities are calculated using discount rates set with reference to the yields on high-quality corporate bonds prevailing in the UK and US debt markets and will fluctuate as yields change;
- member longevity – longevity is a key driver of liabilities and changes in life expectancy have a direct impact on liabilities. Improvements in life expectancy will lead to pension payments being paid for longer than expected and benefits ultimately being more expensive. This risk has been partly mitigated by recent scheme investment transactions including a longevity insurance contract (longevity swap) for NGEG of ESPS and three separate buy-in policies for NGUKPS Section A and B;
- counterparty risk – is managed by having a diverse range of counterparties and through having a strong collateralisation process (including for the longevity swap held by NGEG of ESPS). Measurement and management of counterparty risk is delegated to the relevant investment managers. For our bulk annuity policies, various termination provisions were introduced in the contracts, managing our exposure to counterparty risk. The insurers' operational performance and financial strength are monitored on a regular basis;
- currency risk – fluctuations in the value of foreign denominated assets due to exposure to currency exchange rates is managed through a combination of segregated currency hedging overlay and currency hedging carried out by some of the investment managers; and
- inflation risk – changes in inflation will affect the current and future pensions but are partially mitigated through investing in inflation-matching assets and hedging instruments as well as bulk annuity buy-in policies.

Defined benefit investment strategies

In the UK, each plan has a Trustee that is the governing body. The Trustees' responsibilities are set out in the Trust Deed and Rules. In the US, the fiduciary committee for all the retirement plans is the Retirement Plan Committee (RPC). The RPC is structured in accordance with US laws governing retirement plans under the Employee Retirement Income Security Act (ERISA). The Trustees and RPC, after taking advice from professional investment advisors and in consultation with National Grid, set the key principles, including expected returns, risk and liquidity requirements. In setting these they take into account expected contributions, maturity of the pension liabilities, and in the UK, the strength of the covenant. The Trustees and RPC formulate an investment strategy to manage risk through diversification. Where appropriate, the strategies may include interest rate and inflation hedging instruments, and currency hedging to hedge specific risks.

Investments are usually grouped into:

- return-seeking assets – equities, property and diversified funds where the objective is to achieve growth within the constraints of the plans' risk profiles. These assets should produce returns greater than the liability increase, so improving the funding position, and are assessed by reference to benchmarks and performance targets agreed with the investment managers; and
- liability-matching assets – liability-driven investment (LDI) funds, buy-ins, government securities, corporate bonds and swaps, where the objective is to secure fixed or inflation-adjusted cash flows in future. These investments are generally expected to match the change in liability valuation, so protecting the funding position. Bonds and securities are also measured against certain market benchmarks.

The approximate investment allocations for our plans is as follows:

	2021			2020			2019		
	UK pensions	**US pensions**	**US other post-retirement benefits**	UK pensions	US pensions	US other post-retirement benefits	UK pensions	US pensions	US other post-retirement benefits
	%	**%**	**%**	%	%	%	%	%	%
Return-seeking assets	**18**	**55**	**74**	21	49	71	23	56	73
Liability-matching assets	**82**	**45**	**26**	79	51	29	77	44	27

Investments are predominantly made in assets considered to be of investment grade. Where investments are made in non-investment grade assets, the higher volatility involved is carefully judged and balanced against the expected higher returns. Similarly, investments are made predominantly in regulated markets. Where investments are made either in non-investment grade assets or outside of regulated markets, investment levels are kept to prudent levels and subject to agreed control ranges, to control the risk. Should these investments fall outside the pre-agreed ranges, corrective actions and timescales are agreed with the investment manager to remedy the position.

The governing bodies ensure that the performance of investment managers is regularly reviewed against measurable objectives, consistent with each pension plan's long-term objectives and accepted risk levels. Where required, the portfolios are amended, or investment managers changed.

The Trustees and RPC can generally delegate responsibility for the selection of specific bonds, securities and other investments to appointed investment managers. Investment managers are selected based on the required skills, expertise of those markets, process and financial security to manage the investments. The investment managers use their skill and expertise to manage the investments competently. In some cases, they may further delegate this responsibility, through appointing sub-managers.

The pension plans hold sufficient cash to meet benefit requirements, with other investments being held in liquid or realisable assets to meet unexpected cash flow requirements. The plans do not borrow money, or act as guarantor, to provide liquidity to other parties (unless it is temporary).

Notes to the consolidated financial statements continued

25. Pensions and other post-retirement benefits continued

Defined benefit investment strategies continued

In the UK, both NGUKPS and NGEG of ESPS have Responsible Investment (RI) Policies, which take into account Environmental, Social and Governance (ESG) factors. The NGUKPS RI also incorporates the six UN-backed Principles for Responsible Investment (UNPRI). The Trustees believe that ESG factors can be material to financial outcomes and therefore these should and will be considered alongside other factors. The Trustees recognise that their primary responsibility remains a fiduciary one, i.e. their first duty is to ensure the best possible return on investments with the appropriate level of risk. However, the Trustees also recognise the increasing materiality of ESG factors and that they have a fiduciary and regulatory duty to consider RI, including ESG factors and the potential impact on the quality and sustainability of long-term investment returns and therefore on the Trustees' primary fiduciary duty.

In the US, the regulatory and political landscape is evolving with respect to ESG investments within retirement plans. The prior administration had restrictive policies around ESG investments in retirement plans. The current administration is more supportive of ESG investments which will allow fiduciaries more opportunities to incorporate ESG principles into their investment strategy and still remain compliant with ERISA, the federal law governing US retirement plans. Currently, many of the active investment managers for the National Grid US plans utilise ESG factors as part of their investment screening process.

Asset allocations

Within the asset allocations below, there is significant diversification across regions, asset managers, currencies and bond categories.

UK pensions

	2021			2020			2019		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	555	801	1,356	732	732	1,464	1,181	784	1,965
Corporate bonds	3,730	37	3,767	3,837	—	3,837	3,625	—	3,625
Government securities	1,836	—	1,836	2,051	—	2,051	6,114	—	6,114
Property	104	565	669	103	585	688	108	749	857
Diversified alternatives	—	712	712	—	893	893	—	771	771
Liability-matching assets	1,731[1]	4,133[2]	5,864	1,704[1]	3,278[2]	4,982	1,751[1]	—	1,751
Longevity swap	—	(64)	(64)	—	(51)	(51)	—	(35)	(35)
Cash and cash equivalents	34	250	284	29	222	251	40	259	299
Other (including net current assets and liabilities)	—	256	256	—	249	249	—	160	160
	7,990	6,690	14,680	8,456	5,908	14,364	12,819	2,688	15,507

1. Consists of pooled funds which invests mainly in fixed interest securities.
2. Comprises the buy-in policies held by NGUKPS.

US pensions

	2021			2020			2019		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	560	2,359	2,919	467	2,043	2,510	533	2,178	2,711
Corporate bonds	1,547	507	2,054	1,640	518	2,158	1,329	425	1,754
Government securities	354	527	881	535	732	1,267	422	640	1,062
Property	—	264	264	—	307	307	—	316	316
Diversified alternatives	167	458	625	162	464	626	183	487	670
Infrastructure	—	130	130	—	121	121	—	99	99
Cash and cash equivalents	24	—	24	24	—	24	21	—	21
Other (including net current assets and liabilities)	12	—	12	(44)	3	(41)	(8)	21	13
	2,664	4,245	6,909	2,784	4,188	6,972	2,480	4,166	6,646

US other post-retirement benefits

	2021			2020			2019		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	419	1,303	1,722	353	1,037	1,390	404	1,184	1,588
Corporate bonds	13	—	13	15	—	15	19	—	19
Government securities	533	3	536	551	1	552	540	3	543
Diversified alternatives	185	172	357	162	161	323	175	166	341
Other[1]	—	171	171	—	132	132	—	149	149
	1,150	1,649	2,799	1,081	1,331	2,412	1,138	1,502	2,640

1. Other primarily comprises insurance contracts.

26. Provisions

Provisions are recognised when an obligation exists resulting from a past event, and it is probable that cash will be paid to settle it, but the exact amount of cash required can only be estimated. The majority of our provisions relate to environmental remediation, specifically in relation to certain Superfund sites in the US, being sites we own or have owned in the past where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York. We also recognise provisions for decommissioning costs for various assets we would be required to remove at the end of their lives, the costs associated with restructuring plans and for lease contracts we have entered into that are now loss-making.

In determining the quantum of the provision we recognise, we make estimates in relation to management's best judgement of the evaluation of the likelihood and the probability of exposure to potential loss, and the costs that would be incurred. Should circumstances change following unforeseeable developments, the likelihood or quantum could alter.

Provisions are recognised where a legal or constructive obligation exists at the reporting date, as a result of a past event, where the amount of the obligation can be reliably estimated and where the outflow of economic benefit is probable.

The quantum of the provision recognised for decommissioning, environmental, restructuring and other costs is based on estimated future expenditure, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment. Provisions to decommission significant portions of our regulated transmission and distribution assets are not recognised where no legal obligations exist, and a realistic alternative exists to incurring costs to decommission assets at the end of their life. In any case, even if a legal or constructive obligation did exist, it is not currently determinable when remediation work would take place and therefore no provision would be recorded at this point.

Changes in the provision arising from revised estimates, discount rates or changes in the expected timing of expenditure that relates to property, plant and equipment are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated useful economic lives; otherwise such changes are recognised in the income statement.

The unwinding of the discount is included within the income statement within finance costs.

	Environmental £m	Decommissioning £m	Restructuring £m	Other £m	Total provisions £m
At 1 April 2019	1,639	188	83	289	2,199
Exchange adjustments	82	5	—	10	97
Additions[1]	437	93	7	52	589
Unused amounts reversed	(29)	(16)	(16)	(9)	(70)
Unwinding of discount	65	5	—	7	77
Utilised	(123)	(21)	(39)	(55)	(238)
At 31 March 2020	2,071	254	35	294	2,654
Exchange adjustments	(185)	(9)	(1)	(21)	(216)
Additions	26	42	11	67	146
Unused amounts reversed	(38)	(27)	—	(16)	(81)
Unwinding of discount	66	7	—	5	78
Utilised	(161)	(16)	(19)	(62)	(258)
Reclassification to held for sale (note 10)	(79)	(7)	—	(10)	(96)
At 31 March 2021	**1,700**	**244**	**26**	**257**	**2,227**

	2021 £m	2020 £m
Current	**260**	348
Non-current	**1,967**	2,306
	2,227	2,654

1. For the year ended 31 March 2020, £402 million of additions related to exceptional environmental provisions, of which £76 million related to the impact of the change in the real discount rate from 1% to 0.5% during the year (see note 5 for details).

Notes to the consolidated financial statements
continued

26. Provisions continued

Environmental provisions

The environmental provision represents the estimated restoration and remediation costs relating to a number of sites owned and managed by subsidiary undertakings, together with certain US sites that National Grid no longer owns. The environmental provision is as follows:

	2021			2020		
	Discounted £m	**Undiscounted £m**	**Real discount rate**	Discounted £m	Undiscounted £m	Real discount rate
UK sites	**167**	**171**	**0.5%**	175	184	0.5%
US sites	**1,533**	**1,583**	**0.5%**	1,896	1,955	0.5%
	1,700	**1,754**		2,071	2,139	

The remediation expenditure in the UK relates to old gas manufacturing sites and also to electricity transmission sites. Cash flows are expected to be incurred until 2075, although the weighted average duration of the cash flows is 15 years. A number of estimation uncertainties affect the calculation of the provision, including the impact of regulation, the accuracy of site surveys, unexpected contaminants, transportation costs, the impact of alternative technologies and changes in the real discount rate. This provision incorporates our best estimate of the financial effect of these uncertainties, but future changes in any of the assumptions could materially impact the calculation of the provision. The undiscounted amount is the undiscounted best estimate of the liability having regard to these uncertainties.

The remediation expenditure in the US is expected to be incurred until 2069, of which the majority relates to three Superfund sites (being sites where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York). The weighted average duration of the cash flows is 10 years. The uncertainties regarding the calculation of this provision are similar to those considered in respect of UK sites. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers.

Decommissioning provisions

The decommissioning provisions primarily include £160 million (2020: £174 million) of expenditure relating to asset retirement obligations estimated to be incurred until 2104 and £60 million (2020: £74 million) of expenditure relating to the demolition of gas holders, which is estimated to be incurred until 2026.

Restructuring provisions

In 2021, we are undertaking the design and implementation of our new operating model in both our UK and US businesses, which resulted in the recognition of a £11 million provision in the year. The income statement expense relating to the provision has been treated as an exceptional item, and details are provided in note 5.

Other provisions

Included within other provisions at 31 March 2021 are the following amounts:

- £166 million (2020: £164 million) of estimated liabilities in respect of past events insured by insurance subsidiary undertakings, including employer liability claims. In accordance with insurance industry practice, these estimates are based on experience from previous years, but we currently expect that cash flows will be incurred until 2049;
- £21 million (2020: £37 million) in respect of legacy provisions recognised following the sale of UK Gas Distribution;
- £27 million (2020: £31 million) in respect of onerous lease commitments and rates payable on surplus properties with expenditure expected to be incurred until 2039; and
- £13 million (2020: £17 million) in respect of emissions provisions.

27. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of treasury shares the Company holds, which are shares that the Company has bought itself, predominantly to actively manage scrip issuances and settle employee share option and reward plan liabilities.

Share capital is accounted for as an equity instrument. An equity instrument is any contract that includes a residual interest in the consolidated assets of the Company after deducting all its liabilities and is recorded at the proceeds received, net of direct issue costs, with an amount equal to the nominal amount of the shares issued included in the share capital account and the balance recorded in the share premium account.

	Allotted, called-up and fully paid	
	million	£m
At 1 April 2019	3,687	458
Issued during the year in lieu of dividends[1]	93	12
At 31 March 2020	3,780	470
Issued during the year in lieu of dividends[1]	35	4
At 31 March 2021	**3,815**	**474**

1. The issue of shares under the scrip dividend programme is considered to be a bonus issue under the terms of the Companies Act 2006, and the nominal value of the shares is charged to the share premium account.

The share capital of the Company consists of ordinary shares of $12\frac{204}{473}$ pence nominal value each including ADSs. The ordinary shares and ADSs allow holders to receive dividends and vote at general meetings of the Company. The Company holds treasury shares but may not exercise any rights over these shares including the entitlement to vote or receive dividends. There are no restrictions on the transfer or sale of ordinary shares.

In line with the provisions of the Companies Act 2006, the Company has amended its Articles of Association and ceased to have authorised share capital.

Treasury shares

At 31 March 2021, the Company held 266 million (2020: 272 million) of its own shares. The market value of these shares as at 31 March 2021 was £2,296 million (2020: £2,574 million).

For the benefit of employees and in connection with the operation of the Company's various share plans, the Company made the following transactions in respect of its own shares during the year ended 31 March 2021:

i. During the year, 4 million (2020: 3 million) treasury shares were gifted to National Grid Employee Share Trusts and 2 million (2020: 2 million) treasury shares were re-issued in relation to employee share schemes, in total representing approximately 0.2% (2020: 0.1%) of the ordinary shares in issue as at 31 March 2021. The nominal value of these shares was £1 million (2020: £1 million) and the total proceeds received were £17 million (2020: £17 million). National Grid settles share awards under its Long Term Incentive Plan and the Save As You Earn scheme, by the transfer of treasury shares to its employee share trusts.

ii. During the year, the Company made payments totalling £2 million (2020: £6 million) to National Grid Employee Share Trusts to enable the trustees to make purchases of National Grid plc shares to settle share awards in relation to all employee share plans and discretionary reward plans. The cost of such purchases is deducted from retained earnings in the period that the transaction occurs.

The maximum number of ordinary shares held in treasury during the year was 272 million (2020: 277 million) representing approximately 7.1% (2020: 7.3%) of the ordinary shares in issue as at 31 March 2021 and having a nominal value of £34 million (2020: £34 million).

Notes to the consolidated financial statements
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28. Other equity reserves

Other equity reserves are different categories of equity as required by accounting standards and represent the impact of a number of our historical transactions or fair value movements on certain financial instruments that the Company holds.

Other equity reserves comprise the translation reserve (see accounting policy C in note 1), cash flow hedge reserve and the cost of hedging reserve (see note 32), debt instruments at fair value through other comprehensive income reserve (FVOCI debt) and equity investments at fair value through other comprehensive income reserve (FVOCI equity) (see note 15), the capital redemption reserve and the merger reserve.

The merger reserve arose as a result of the application of merger accounting principles under the then prevailing UK GAAP, which under IFRS 1 was retained for mergers that occurred prior to the IFRS transition date. Under merger accounting principles, the difference between the carrying amount of the capital structure of the acquiring vehicle and that of the acquired business was treated as a merger difference and included within reserves. The merger reserve represents the difference between the carrying value of subsidiary undertaking investments and their respective capital structures following the Lattice demerger from BG Group plc and the 1999 Lattice refinancing.

The cash flow hedge reserve will amortise as the committed future cash flows from borrowings are paid or capitalised in fixed assets (as described in note 32). Cost of hedging, FVOCI debt, and FVOCI equity reserves arose as a result of the adoption of IFRS 9 on 1 April 2018. See note 15 for further detail on FVOCI debt and FVOCI equity reserves and note 32 in respect of cost of hedging reserve.

As the amounts included in other equity reserves are not attributable to any of the other classes of equity presented, they have been disclosed as a separate classification of equity.

	Translation £m	Cash flow hedge £m	Cost of hedging £m	Available-for-sale £m	FVOCI equity £m	FVOCI debt £m	Own credit £m	Capital redemption £m	Merger £m	Total £m
At 1 April 2018 (as previously reported)	390	128	—	88	—	—	—	19	(5,165)	(4,540)
Transfer on transition to IFRS 9	—	(3)	76	(88)	34	46	7	—	—	72
At 1 April 2018 (as restated)	390	125	76	—	34	46	7	19	(5,165)	(4,468)
Exchange adjustments[1,2]	360	—	—	—	—	—	—	—	—	360
Net (losses)/gains taken to equity	—	(206)	(107)	—	—	2	7	—	—	(304)
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	—	1
Transferred to profit or loss	—	166	41	—	—	—	—	—	—	207
Net losses in respect of cash flow hedging of capital expenditure	—	(13)	—	—	—	—	—	—	—	(13)
Tax	—	6	7	—	—	—	(1)	—	—	12
Cash flow hedges transferred to the statement of financial position, net of tax	—	(18)	—	—	—	—	—	—	—	(18)
At 1 April 2019	750	61	17	—	34	48	13	19	(5,165)	(4,223)
Exchange adjustments[1,2]	560	—	—	—	—	—	—	—	—	560
Net losses taken to equity	—	(142)	(33)	—	(13)	(15)	(3)	—	—	(206)
Share of net losses of associates taken to equity	—	(5)	—	—	—	—	—	—	—	(5)
Transferred to profit or loss	—	14	(45)	—	—	—	—	—	—	(31)
Net losses in respect of cash flow hedging of capital expenditure	—	(17)	—	—	—	—	—	—	—	(17)
Tax	—	29	11	—	4	(2)	—	—	—	42
Cash flow hedges transferred to the statement of financial position, net of tax	—	(15)	—	—	—	—	—	—	—	(15)
At 1 April 2020	1,310	(75)	(50)	—	25	31	10	19	(5,165)	(3,895)
Exchange adjustments[1]	(1,345)	—	—	—	—	—	—	—	—	(1,345)
Net gains/(losses) taken to equity	—	14	11	—	36	80	(11)	—	—	130
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	—	1
Transferred to profit or loss	—	56	3	—	—	—	—	—	—	59
Net losses in respect of cash flow hedging of capital expenditure	—	(14)	—	—	—	—	—	—	—	(14)
Tax	—	(13)	8	—	(10)	—	2	—	—	(13)
Cash flow hedges transferred to the statement of financial position, net of tax	—	(17)	—	—	—	—	—	—	—	(17)
At 31 March 2021	**(35)**	**(48)**	**(28)**	**—**	**51**	**111**	**1**	**19**	**(5,165)**	**(5,094)**

1. The exchange adjustments recorded in the translation reserve comprise a loss of £1,507 million (2020: gain of £545 million; 2019: gain of £896 million) relating to the translation of foreign operations offset by a gain of £183 million (2020: gain of £5 million; 2019: loss of £550 million) relating to borrowings, cross-currency swaps and foreign exchange forward contracts used to hedge the net investment in non-sterling denominated subsidiaries.
2. Comparative amounts have been revised as described in note 1F.

29. Net debt

We define net debt as the amount of borrowings and overdrafts less cash, current financial investments and related financing derivatives.

(a) Composition of net debt

Net debt is comprised as follows:

	2021 £m	2020 £m	2019 £m
Cash and cash equivalents	**157**	73	252
Current financial investments	**2,342**	1,998	1,981
Borrowings	**(31,220)**	(30,794)	(28,730)
Financing derivatives[1]	**175**	133	(32)
	(28,546)	(28,590)	(26,529)

1. The financing derivatives balance included in net debt excludes the commodity derivatives (see note 17).

(b) Analysis of changes in net debt

	Notes	Cash and cash equivalents £m	Financial investments £m	Borrowings £m	Financing derivatives £m	Total[1] £m
At 1 April 2018		329	2,694	(26,625)	600	(23,002)
Impact of transition to IFRS 9	37	—	—	(32)	—	(32)
Cash flow	29(c)	(80)	(846)	(240)	422	(744)
Fair value gains and losses		—	14	(9)	(1,011)	(1,006)
Foreign exchange movements		3	79	(724)	—	(642)
Interest income/(charges)	6	—	29	(1,062)	(43)	(1,076)
Other non-cash movements		—	11	(38)	—	(27)
At 1 April 2019		252	1,981	(28,730)	(32)	(26,529)
Impact of transition to IFRS 16	37	—	—	(474)	—	(474)
Cash flow	29(c)	(183)	(42)	450	450	675
Fair value gains and losses		—	1	(57)	(246)	(302)
Foreign exchange movements		4	24	(807)	—	(779)
Interest income/(charges)	6	—	34	(1,092)	(39)	(1,097)
Other non-cash movements		—	—	(84)	—	(84)
At 1 April 2020		73	1,998	(30,794)	133	(28,590)
Cash flow	29(c)	95	429	(2,336)	4	(1,808)
Fair value gains and losses		—	14	159	31	204
Foreign exchange movements		(7)	(106)	1,710	—	1,597
Interest income/(charges)	6	—	7	(946)	7	(932)
Other non-cash movements		—	—	(136)	—	(136)
Reclassification to held for sale	10	(4)	—	1,123	—	1,119
At 31 March 2021		**157**	**2,342**	**(31,220)**	**175**	**(28,546)**
Balances at 31 March 2021 comprise:						
Non-current assets		—	—	—	514	514
Current assets		157	2,342	—	428	2,927
Current liabilities		—	—	(3,737)	(70)	(3,807)
Non-current liabilities		—	—	(27,483)	(697)	(28,180)
		157	**2,342**	**(31,220)**	**175**	**(28,546)**

1. Includes accrued interest at 31 March 2021 of £263 million (2020: £246 million; 2019: £223 million).
2. Cash flows on current financial investments are comprised of £7 million (2020: £35 million; 2019: £24 million) of interest received and £436 million of cash inflows (2020: £7 million outflows; 2019: £822 million outflows) of net cash flow movements in short-term financial investments, as presented in the consolidated cash flow statement.

Notes to the consolidated financial statements continued

29. Net debt continued

(c) Reconciliation of cash flow from liabilities within net debt to cash flow statement

	2021		2020		2019	
	Borrowings and other £m	Financing derivatives £m	Borrowings and other £m	Financing derivatives £m	Borrowings and other £m	Financing derivatives £m
Cash flows per financing activities section of cash flow statement:						
Proceeds received from loans	5,645	–	4,218	–	2,932	–
Repayment of loans	(1,663)	–	(3,253)	–	(1,969)	–
Payments of lease liabilities	(112)	–	(121)	–	(70)	–
Net movements in short-term borrowings	(759)	–	(424)	–	179	–
Cash inflows on derivatives	–	58	–	62	–	221
Cash outflows on derivatives	–	(185)	–	(249)	–	(186)
Interest paid	(804)	(31)	(904)	(53)	(856)	(58)
Cash flows per financing activities section of cash flow statement	2,307	(158)	(484)	(240)	216	(23)
Adjustments:						
Non-net debt-related items	29	–	34	–	24	–
Derivative cash inflow in relation to capital expenditure	–	10	–	13	–	13
Derivative cash inflows per investing section of cash flow statement	–	225	–	58	–	17
Derivative cash outflows per investing section of cash flow statement	–	(81)	–	(281)	–	(429)
Cash flows relating to financing liabilities within net debt	2,336	(4)	(450)	(450)	240	(422)
Analysis of changes in net debt:						
Borrowings	2,336	–	(450)	–	240	–
Financing derivatives	–	(4)	–	(450)	–	(422)
Cash flow movements relating to financing liabilities within net debt	2,336	(4)	(450)	(450)	240	(422)

(d) Reconciliation of changes in liabilities arising from financing activities

The table below reconciles changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. For the purposes of this table, the liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the consolidated cash flow statement within financing activities. As a result we have separately disclosed the reconciliation below, excluding derivatives associated with our net investment hedges and derivatives associated with the hedging of capital expenditure, given that they are both classified in the consolidated cash flow statement within investing activities.

	Notes	Borrowings £m	Financing derivatives £m	Total £m
At 1 April 2018		(26,625)	553	(26,072)
Impact of transition to IFRS 9	37	(32)	–	(32)
Cash flow	29(c)	(240)	23	(217)
Fair value gains and losses		(9)	(334)	(343)
Foreign exchange movements		(724)	–	(724)
Interest charges	6	(1,062)	(14)	(1,076)
Other non-cash movements		(38)	–	(38)
At 1 April 2019		(28,730)	228	(28,502)
Impact of transition to IFRS 16	37	(474)	–	(474)
Cash flow	29(c)	450	240	690
Fair value gains and losses		(57)	(231)	(288)
Foreign exchange movements		(807)	–	(807)
Interest charges	6	(1,092)	(9)	(1,101)
Other non-cash movements		(84)	–	(84)
At 1 April 2020		(30,794)	228	(30,566)
Cash flow	29(c)	(2,336)	158	(2,178)
Fair value gains and losses		159	(301)	(142)
Foreign exchange movements		1,710	–	1,710
Interest charges	6	(946)	11	(935)
Other non-cash movements		(136)	–	(136)
Reclassification to held for sale	10	1,123	–	1,123
At 31 March 2021		**(31,220)**	**96**	**(31,124)**

30. Commitments and contingencies

Commitments are those amounts that we are contractually required to pay in the future as long as the other party meets its obligations. These commitments primarily relate to energy purchase agreements and contracts for the purchase of assets which, in many cases, extend over a long period of time. We also disclose any contingencies, which include guarantees that companies have given, where we pledge assets against current obligations that will remain for a specific period.

	2021 £m	2020 £m
Future capital expenditure		
Contracted for but not provided	**2,716**	2,629
Energy purchase commitments[1]		
Less than 1 year	**1,255**	1,365
In 1 to 2 years	**894**	890
In 2 to 3 years	**975**	973
In 3 to 4 years	**959**	955
In 4 to 5 years	**896**	861
More than 5 years	**10,805**	11,314
	15,784	16,358
Guarantees[2]		
Guarantee of sublease for US property (expires 2040)	**149**	173
Guarantees of certain obligations of Grain LNG (expire up to 2025)	**33**	34
Guarantees of certain obligations for construction of HVDC West Coast Link (expected expiry 2059)	**85**	92
Guarantees of certain obligations of National Grid North Sea Link Limited (various expiry dates)[2]	**584**	683
Guarantees of certain obligations of St William Homes LLP (various expiry dates)[3]	**53**	30
Guarantees of certain obligations of National Grid IFA 2 Limited (expected expiry 2022)[2]	**170**	564
Guarantees of certain obligations of National Grid Viking Link Limited (expected expiry 2024)	**1,276**	1,096
Other guarantees and letters of credit (various expiry dates)	**486**	150
	2,836	2,822

1. Energy purchase commitments relate to contractual commitments to purchase electricity or gas that are used to satisfy physical delivery requirements to our customers or for energy that we use ourselves (i.e. normal purchase, sale or usage) and hence are accounted for as ordinary purchase contracts (see note 32(f)). Details of commodity contract derivatives that do not meet the normal purchase, sale or usage criteria, and hence are accounted for as derivative contracts, are shown in note 17(b).
2. Included within total guarantees are guarantees to both joint ventures and Engineering, Procurement and Construction contractors regarding the construction of interconnectors of £136 million (2020: £358 million).
3. Includes guarantees to related parties.

Through the ordinary course of our operations, we are party to various litigation, claims and investigations. We do not expect the ultimate resolution of any of these proceedings to have a material adverse effect on our results of operations, cash flows or financial position.

Notes to the consolidated financial statements
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31. Related party transactions

Related parties include joint ventures, associates, investments and key management personnel.

The following significant transactions with related parties were in the normal course of business. Amounts receivable from and payable to related parties are due on normal commercial terms:

	2021 £m	2020 £m	2019 £m
Sales: Goods and services supplied to a pension plan	**3**	5	5
Sales: Goods and services supplied to joint ventures[1]	**79**	101	151
Sales: Goods and services supplied to associates[2]	**1**	33	192
Purchases: Goods and services received from joint ventures[3]	**35**	61	26
Purchases: Goods and services received from associates[3]	**43**	56	141
Receivable from joint ventures[4]	**263**	255	584
Receivable from associates[4]	**–**	1	368
Payable to joint ventures	**17**	–	8
Payable to associates	**3**	4	12
Interest income from joint ventures	**–**	2	5
Interest income from associates	**–**	8	23
Dividends received from joint ventures[5]	**49**	34	30
Dividends received from associates[6]	**32**	41	171

1. During the year, £14 million (2020: £38 million; 2019: £139 million) of property sites were sold to St William Homes LLP, £50 million of sales were made to Emerald Energy Venture LLC (2020: £21 million; 2019: £nil) and a further £6 million (2020: £32 million; 2019; £2 million) of sales were made to NGET/SPT Upgrades Limited.
2. In previous years, sales related to transactions with Quadgas, until the date it ceased to be a related party following the disposal of our 39% stake in June 2019 (see note 10) and included income of £31 million in 2020 and £52 million in 2019 relating to a Transitional Service Agreement following the sale of the UK Gas Distribution business to Quadgas.
3. During the year, the Group received goods and services from a number of US associates, both for the transportation of gas and for pipeline services in the US, most notably, £41 million (2020: £31 million; 2019: £30 million) of purchases from Millennium Pipeline Company LLC. The Group also purchased assets of £5 million (2020: £58 million; 2019: £26 million) from NGET/SPT Upgrades Limited (a joint venture).
4. Amounts receivable from joint ventures include £241 million (2020: £242 million; 2019: £325 million) in relation to St William Homes LLP. There are no longer loans receivable from Quadgas (2020: £nil; 2019: £352 million) and Nemo Link (a joint venture) (2020: £nil; 2019: £258 million).
5. Includes dividends of £18 million (2020: £25 million; 2019: £30 million) received from BritNed Development Limited and £25 million (2020: £8 million; 2019:£ nil) from Nemo Link Limited.
6. Includes dividends of £31 million (2020: £32 million; 2019: £24 million) received from Millennium Pipeline Company LLC. Dividends of £133 million were received from Quadgas in 2019.

Details of investments in principal subsidiary undertakings, joint ventures and associates are disclosed in note 34, and information relating to pension fund arrangements is disclosed in note 25. For details of Directors' and key management remuneration, refer to the Directors' Remuneration Report on pages 92 – 113 and note 4(c).

32. Financial risk management

Our activities expose us to a variety of financial risks including credit risk, liquidity risk, capital risk, currency risk, interest rate risk, inflation risk and commodity price risk. Our risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential volatility of financial performance from these risks. We use financial instruments, including derivative financial instruments, to manage these risks.

Risk management related to financing activities is carried out by a central treasury department under policies approved by the Finance Committee of the Board. The objective of the treasury department is to manage funding and liquidity requirements, including managing associated financial risks, to within acceptable boundaries. The Finance Committee provides written principles for overall risk management, and written policies covering the following specific areas: foreign exchange risk, interest rate risk, credit risk, liquidity risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity. The Finance Committee has delegated authority to administer the commodity price risk policy and credit policy for US-based commodity transactions to the Energy Procurement Risk Management Committee and the National Grid USA Board of Directors. Details of key activities in the current year are set out in the Finance Committee report on page 88.

We have exposure to the following risks, which are described in more detail below:
- credit risk;
- liquidity risk;
- currency risk;
- interest rate risk;
- commodity price risk; and
- capital risk.

Where appropriate, derivatives and other financial instruments used for hedging currency and interest rate risk exposures are formally designated as fair value, cash flow or net investment hedges as defined in IFRS 9. Hedge accounting allows the timing of the profit or loss impact of qualifying hedging instruments to be recognised in the same reporting period as the corresponding impact of hedged exposures. To qualify for hedge accounting, documentation is prepared specifying the risk management objective and strategy, the component transactions and methodology used for measurement of effectiveness.

32. Financial risk management continued

Hedge accounting relationships are designated in line with risk management activities further described below. The categories of hedging entered into are as follows:

- currency risk arising from our forecasted foreign currency transactions (capital expenditure or revenues) is designated in cash flow hedges;
- currency risk arising from our net investments in foreign operations is designated in net investment hedges; and
- currency and interest rate risk arising from borrowings are designated in cash flow or fair value hedges.

Critical terms of hedging instruments and hedged items are transacted to match on a 1:1 ratio by notional values. Hedge ineffectiveness can nonetheless arise from inherent differences between derivatives and non-derivative instruments and other market factors including credit, correlations, supply and demand, and market volatilities. Ineffectiveness is recognised in the remeasurements component of finance income and costs (see note 6). Hedge accounting is discontinued when a hedging relationship no longer qualifies for hedge accounting.

Certain hedging instrument components are treated separately as costs of hedging with the gains and losses deferred in a component of other equity reserves and released systematically into profit or loss to correspond with the timing and impact of hedged exposures, or released in full to finance costs upon an early discontinuation of a hedging relationship.

Refer to sections (c) currency risk and (d) interest rate risk below for further details on hedge accounting.

(a) Credit risk

We are exposed to the risk of loss resulting from counterparties' default on their commitments including failure to pay or make a delivery on a contract. This risk is inherent in our commercial business activities. Exposure arises from derivative financial instruments, deposits with banks and financial institutions, trade receivables and committed transactions with wholesale and retail customers.

Treasury credit risk

Counterparty risk arises from the investment of surplus funds and from the use of derivative financial instruments. As at 31 March 2021, the following limits were in place for investments and derivative financial instruments held with banks and financial institutions:

	Maximum limit £m	Long-term limit £m
Triple 'A' G7 sovereign entities (AAA)	2,259	1,129
Triple 'A' vehicles (AAA)	500	—
Triple 'A' range institutions and non-G7 sovereign entities (AAA)	1,232	616
Double 'A+' G7 sovereign entities (AA+)	2,054	1,027
Double 'A' range institutions (AA)	822 to 1,027	411 to 513
Single 'A' range institutions (A)	288 to 411	144 to 205

The maximum limit applies to all transactions, including long-term transactions. The long-term limit applies to transactions which mature in more than 12 months' time.

As at 31 March 2021 and 2020, we had a number of exposures to individual counterparties. In accordance with our treasury policies, counterparty credit exposure utilisations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilisation adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties. Further information on financial investments subject to impairment provisioning is included in note 15.

Commodity credit risk

The credit policy for US-based commodity transactions is owned by the Finance Committee to the Board, which establishes controls and procedures to determine, monitor and minimise the credit exposure to counterparties.

Wholesale and retail credit risk

Our principal commercial exposure in the UK is governed by the credit rules within the regulated codes: Uniform Network Code and Connection and Use of System Code. These set out the level of credit relative to the RAV for each credit rating. In the US, we are required to supply electricity and gas under state regulations. Our policies and practices are designed to limit credit exposure by collecting security deposits prior to providing utility services, or after utility services have commenced if certain applicable regulatory requirements are met. Collection activities are managed on a daily basis. Sales to retail customers are usually settled in cash, cheques, electronic bank payments or by using major credit cards. We are committed to measuring, monitoring, minimising and recording counterparty credit risk in our wholesale business. The utilisation of credit limits is regularly monitored, and collateral is collected against these accounts when necessary.

Since March 2020, the Group's US distribution business ceased certain cash collection and termination activities in response to regulatory instructions following the COVID-19 pandemic. This has resulted in the recognition of expected credit losses (see note 19 for further details).

Notes to the consolidated financial statements continued

32. Financial risk management continued

(a) Credit risk continued

Offsetting financial assets and liabilities

The following tables set out our financial assets and liabilities which are subject to offset and to enforceable master netting arrangements or similar agreements. The tables show the amounts which are offset and reported net in the statement of financial position. Amounts which cannot be offset under IFRS, but which could be settled net under terms of master netting arrangements if certain conditions arise, and with collateral received or pledged, are shown to present National Grid's net exposure.

Financial assets and liabilities on different transactions would only be reported net in the balance sheet if the transactions were with the same counterparty, a currently enforceable legal right of offset exists, and the cash flows were intended to be settled on a net basis.

Amounts which do not meet the criteria for offsetting on the statement of financial position, but could be settled net in certain circumstances, principally relate to derivative transactions under ISDA agreements, where each party has the option to settle amounts on a net basis in the event of default of the other party.

Commodity contract derivatives that have not been offset on the balance sheet may be settled net in certain circumstances under ISDA or North American Energy Standards Board (NAESB) agreements.

For bank account balances and bank overdrafts, there are no 'Gross amounts offset' under cash pooling arrangements (2020: £23 million). Our UK bank accounts for National Grid subsidiaries previously participated in GBP, EUR and USD Composite Accounting System overdraft facilities subject to offsetting gross and net overdraft limits. EUR and USD offsetting arrangements have been discontinued in the year and GBP offsetting arrangements have no impact as at 31 March 2021. In the US, no offsetting arrangements exist, and cash transactions are settled through Service Company bank accounts with subsequent intercompany payables and receivables reported by subsidiaries with the Service Company.

The gross amounts offset for trade payables and receivables, which are subject to general terms and conditions, are insignificant.

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2021	**Gross carrying amounts £m**	**Gross amounts offset £m**	**Net amount presented in statement of financial position £m**	**Financial instruments £m**	**Cash collateral received/ pledged £m**	**Net amount £m**
Assets						
Financing derivatives	**942**	**–**	**942**	**(234)**	**(561)**	**147**
Commodity contract derivatives	**57**	**–**	**57**	**(8)**	**–**	**49**
	999	**–**	**999**	**(242)**	**(561)**	**196**
Liabilities						
Financing derivatives	**(767)**	**–**	**(767)**	**234**	**467**	**(66)**
Commodity contract derivatives	**(132)**	**–**	**(132)**	**8**	**4**	**(120)**
	(899)	**–**	**(899)**	**242**	**471**	**(186)**
	100	**–**	**100**	**–**	**(90)**	**10**

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2020	Gross carrying amounts £m	Gross amounts offset £m	Net amount presented in statement of financial position £m	Financial instruments £m	Cash collateral received/ pledged £m	Net amount £m
Assets						
Financing derivatives	1,267	–	1,267	(351)	(694)	222
Commodity contract derivatives	75	–	75	(5)	(3)	67
	1,342	–	1,342	(356)	(697)	289
Liabilities						
Financing derivatives	(1,134)	–	(1,134)	351	646	(137)
Commodity contract derivatives	(200)	–	(200)	5	8	(187)
	(1,334)	–	(1,334)	356	654	(324)
	8	–	8	–	(43)	(35)

32. Financial risk management continued

(b) Liquidity risk

Our policy is to determine our liquidity requirements by the use of both short-term and long-term cash flow forecasts. These forecasts are supplemented by a financial headroom analysis which is used to assess funding requirements for at least a 24-month period and maintain adequate liquidity for a continuous 12-month period.

We believe our contractual obligations, including those shown in commitments and contingencies in note 30, can be met from existing cash and investments, operating cash flows and other financing that we reasonably expect to be able to secure in the future, together with the use of committed facilities if required.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, restrictions on disposals and financial covenants, such as restrictions on the level of subsidiary indebtedness. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

The following is a payment profile of our financial liabilities and derivatives:

At 31 March 2021	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(3,350)	(1,690)	(806)	(25,562)	(31,408)
Interest payments on borrowings[1]	(810)	(755)	(731)	(12,018)	(14,314)
Lease liabilities	(118)	(108)	(90)	(599)	(915)
Other non-interest-bearing liabilities	(3,207)	(350)	–	–	(3,557)
Contingent consideration	(40)	(24)	–	–	(64)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,773	749	451	4,326	9,299
Financing derivatives – payments[2]	(3,899)	(877)	(533)	(5,153)	(10,462)
Commodity contract derivatives – receipts[2]	12	–	–	–	12
Commodity contract derivatives – payments[2]	(83)	(23)	(14)	(12)	(132)
Derivative financial assets					
Financing derivatives – receipts[2]	2,162	926	833	1,789	5,710
Financing derivatives – payments[2]	(1,700)	(834)	(780)	(1,536)	(4,850)
Commodity contract derivatives – receipts[2]	21	4	1	1	27
Commodity contract derivatives – payments[2]	(21)	(4)	(2)	–	(27)
	(7,260)	(2,986)	(1,671)	(38,764)	(50,681)

At 31 March 2020	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(3,672)	(2,150)	(1,611)	(22,214)	(29,647)
Interest payments on borrowings[1]	(765)	(750)	(714)	(12,002)	(14,231)
Lease liabilities	(132)	(114)	(99)	(629)	(974)
Other non-interest-bearing liabilities	(3,149)	(318)	–	–	(3,467)
Contingent consideration	(32)	(16)	(32)	(16)	(96)
Derivative financial liabilities					
Financing derivatives – receipts[2]	2,249	986	1,208	3,510	7,953
Financing derivatives – payments[2]	(2,582)	(1,136)	(1,463)	(4,067)	(9,248)
Commodity contract derivatives – receipts[2]	4	2	–	–	6
Commodity contract derivatives – payments[2]	(116)	(50)	(24)	(12)	(202)
Derivative financial assets					
Financing derivatives – receipts[2]	2,469	1,063	570	1,775	5,877
Financing derivatives – payments[2]	(2,271)	(527)	(375)	(1,478)	(4,651)
Commodity contract derivatives – receipts[2]	20	1	1	–	22
Commodity contract derivatives – payments[2]	(21)	–	–	–	(21)
	(7,998)	(3,009)	(2,539)	(35,133)	(48,679)

1. The interest on borrowings is calculated based on borrowings held at 31 March without taking account of future issues. Floating rate interest is estimated using a forward interest rate curve as at 31 March. Payments are included on the basis of the earliest date on which the Company can be required to settle.
2. The receipts and payments line items for derivatives comprise gross undiscounted future cash flows, after considering any contractual netting that applies within individual contracts. Where cash receipts and payments within a derivative contract are settled net, and the amount to be received/(paid) exceeds the amount to be paid/(received), the net amount is presented within derivative receipts/(payments).

Notes to the consolidated financial statements continued

32. Financial risk management continued

(c) Currency risk

National Grid operates internationally with mainly the pound sterling as the functional currency for the UK companies and the US dollar for the US businesses. Currency risk arises from three major areas: funding activities, capital investment and related revenues, and holdings in foreign operations. This risk is managed using financial instruments including derivatives as approved by policy, typically cross-currency interest rate swaps, foreign exchange swaps and forwards.

Funding activities – our policy is to borrow in the most advantageous market available. Foreign currency funding gives rise to risk of volatility in the amount of functional currency cash to be repaid. This risk is reduced by swapping principal and interest back into the functional currency of the issuer. All foreign currency debt and transactions are hedged except where they provide a natural offset to assets elsewhere in the Group.

Capital investment and related revenues – capital projects often incur costs or generate revenues in a foreign currency, most often euro transactions done by the UK business. Our policy for managing foreign exchange transaction risk is to hedge contractually committed foreign currency cash flows over a prescribed minimum size, typically by buying euro forwards to hedge future expenditure, and selling euro forwards to hedge future revenues. For hedges of forecast cash flows our policy is to hedge a proportion of highly probable cash flows.

Holdings in foreign operations – we are exposed to fluctuations on the translation into pounds sterling of our foreign operations. The policy for managing this translation risk is to issue foreign currency debt or to replicate foreign debt using derivatives that pay cash flows in the currency of the foreign operation. The primary managed exposure arises from dollar denominated assets and liabilities held by our US operations, with a smaller euro exposure in respect of joint venture investments.

Derivative financial instruments were used to manage foreign currency risk as follows:

	2021					2020				
	Sterling £m	**Euro £m**	**Dollar £m**	**Other £m**	**Total £m**	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Cash and cash equivalents	**63**	**—**	**94**	**—**	**157**	18	—	55	—	73
Financial investments	**1,215**	**—**	**1,127**	**—**	**2,342**	813	—	1,185	—	1,998
Borrowings	**(12,210)**	**(5,351)**	**(12,660)**	**(999)**	**(31,220)**	(12,407)	(4,150)	(13,217)	(1,020)	(30,794)
Pre-derivative position	**(10,932)**	**(5,351)**	**(11,439)**	**(999)**	**(28,721)**	(11,576)	(4,150)	(11,977)	(1,020)	(28,723)
Derivative effect	**(826)**	**5,459**	**(5,494)**	**1,036**	**175**	(1,169)	4,341	(4,214)	1,175	133
Net debt position	**(11,758)**	**108**	**(16,933)**	**37**	**(28,546)**	(12,745)	191	(16,191)	155	(28,590)

The exposure to dollars largely relates to our net investment hedge activities; exposure to euros largely relates to hedges for our future non-sterling capital expenditure.

The currency exposure on other financial instruments is as follows:

	2021					2020				
	Sterling £m	**Euro £m**	**Dollar £m**	**Other £m**	**Total £m**	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Trade and other receivables	**282**	**—**	**1,387**	**—**	**1,669**	306	—	1,403	—	1,709
Trade and other payables	**(1,207)**	**—**	**(1,878)**	**—**	**(3,085)**	(1,177)	—	(2,002)	—	(3,179)
Other non-current liabilities	**(77)**	**—**	**(288)**	**—**	**(365)**	(85)	—	(277)	—	(362)

The carrying amounts of other financial instruments are denominated in the above currencies, which in most instances are the functional currency of the respective subsidiaries. Our exposure to dollars is due to activities in our US subsidiaries. We do not have any other significant exposure to currency risk on these balances.

Hedge accounting for currency risk

Where available, derivatives transacted for hedging are designated for hedge accounting. Economic offset is qualitatively determined because the critical terms (currency and volume) of the hedging instrument match the hedged exposure. If a forecast transaction was no longer expected to occur, the cumulative gain or loss previously reported in equity would be transferred to the income statement. This has not occurred in the current or comparative years.

Cash flow hedging of currency risk of capital expenditure and revenues is designated as hedging the exposure to movements in the spot translation rates only; the timing of forecasted transactions is not designated as a hedged risk. Gains and losses on hedging instruments arising from forward points and foreign currency basis spreads are excluded from designation and are recognised immediately in profit or loss, along with any hedge ineffectiveness. On recognition of the hedged purchase or sale in the financial statements, the associated hedge gains and losses, deferred in the cash flow hedge reserve in other equity reserves, are transferred out of reserves and included with the recognition of the underlying transaction. Where a non-financial asset or a non-financial liability results from a forecast transaction or firm commitment being hedged, the amounts deferred in reserves are included directly in the initial measurement of that asset or liability.

Net investment hedging is also designated as hedging the exposure to movements in spot translation rates only: spot-related gains and losses on hedging instruments are presented in the cumulative translation reserve within other equity reserves to offset gains or losses on translation of the hedged balance sheet exposure. Any ineffectiveness is recognised immediately in the income statement. Amounts deferred in the cumulative translation reserve with respect to net investment hedges are subsequently recognised in the income statement in the event of disposal of the overseas operations concerned. Any remaining amounts deferred in the cost of hedging reserve are also released to the income statement.

Hedges of foreign currency funding are designated as cash flow hedges or fair value hedges of forward exchange risk (hedging both currency and interest rate risk together, where applicable). Gains and losses arising from foreign currency basis spreads are excluded from designation and are treated as a cost of hedging, deferred initially in other equity reserves and released into profit or loss over the life of the hedging relationship. Hedge accounting for funding is described further in the interest rate risk section below.

32. Financial risk management continued

(d) Interest rate risk

National Grid's interest rate risk arises from our long-term borrowings. Our interest rate risk management policy is to seek to minimise total financing costs (being interest costs and changes in the market value of debt). Hedging instruments principally consist of interest rate and cross-currency swaps that are used to translate foreign currency debt into functional currency and to adjust the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the Board. The benchmark interest rates hedged are currently based on LIBOR.

LIBOR is being replaced as an interest rate benchmark by alternative reference rates in certain currencies including our functional currencies, USD and GBP, and foreign currencies in which we operate. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which will impact the valuations of certain liabilities. We have disclosed our exposure to LIBOR on our derivative portfolio in note 17, on our borrowings in note 21 and on our hedging arrangements in note 32(e). We are managing the risk by planning to replace LIBOR cash flows with alternative reference rates on our affected contracts. The migration project is underway, with all affected contracts expected to be amended by 31 December 2021. As at 31 March 2021 no contracts had yet been amended. The Finance Committee of the Board have delegated to the treasury department the authority to determine which benchmarks are the most appropriate. A combination of LIBOR and the successor benchmarks, primarily GBP Sterling Overnight Index Average (SONIA) and USD Secured Overnight Financing Rate (SOFR) will be used in the portfolio during the migration period.

We also consider inflation risk and hold some inflation-linked borrowings. We believe that these provide a partial economic offset to the inflation risk associated with our UK inflation-linked revenues.

The table in note 21 sets out the carrying amount, by contractual maturity, of borrowings that are exposed to interest rate risk before taking into account interest rate swaps.

Net debt was managed using derivative financial instruments to hedge interest rate risk as follows:

	2021					2020				
	Fixed rate £m	**Floating rate £m**	**Inflation linked £m**	**Other[1] £m**	**Total £m**	Fixed rate £m	Floating rate £m	Inflation linked £m	Other[1] £m	Total £m
Cash and cash equivalents	**64**	**67**	**—**	**26**	**157**	71	10	—	(8)	73
Financial investments	**—**	**2,309**	**—**	**33**	**2,342**	—	1,966	—	32	1,998
Borrowings	**(23,163)**	**(1,762)**	**(6,295)**	**—**	**(31,220)**	(20,969)	(3,085)	(6,740)	—	(30,794)
Pre-derivative position	**(23,099)**	**614**	**(6,295)**	**59**	**(28,721)**	(20,898)	(1,109)	(6,740)	24	(28,723)
Derivative effect	**2,869**	**(2,511)**	**(183)**	**—**	**175**	2,259	(1,892)	(234)	—	133
Net debt position	**(20,230)**	**(1,897)**	**(6,478)**	**59**	**(28,546)**	(18,639)	(3,001)	(6,974)	24	(28,590)

1. Represents financial instruments which are not directly affected by interest rate risk, such as investments in equity or other similar financial instruments.

Hedge accounting for interest rate risk

Borrowings paying variable or floating-rates expose National Grid to cash flow interest rate risk, partially offset by cash held at variable rates. Where a hedging instrument results in paying a fixed-rate, it is designated as a cash flow hedge because it has reduced the cash flow volatility of the hedged borrowing. Changes in the fair value of the derivative are initially recognised in other comprehensive income as gains or losses in the cash flow hedge reserve, with any ineffective portion recognised immediately in the income statement.

Borrowings paying fixed-rates expose National Grid to fair value interest rate risk. Where the hedging instrument pays a floating-rate, it is designated as a fair value hedge because it has reduced the fair value volatility of the borrowing. Changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the income statement to the extent the fair value hedge is effective, with the residual difference remaining as ineffectiveness.

Both types of hedges are designated as hedging the currency and interest rate risk arising from changes in forward points. Amounts accumulated in the cash flow hedge reserve (cash flow hedges only) and the deferred cost of hedging reserve (both cash flow and fair value hedges) are reclassified from reserves to the income statement on a systematic basis as hedged interest expense is recognised. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the income statement to match the timing of the hedged interest expense.

When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the income statement to match the impact of outstanding hedged items. Any remaining amounts deferred in the cost of hedging reserve are released immediately to the income statement as finance costs.

The Group early-adopted Phase I of IFRS Interest Rate Benchmark Reform amendments related to hedge accounting with effect from 1 April 2019, and Phase II with effect from 1 April 2020. The amendments impact our fair value hedging relationships where derivative cash flows will be transitioned from paying LIBOR to paying an alternative reference rate. The hedged risk must be re-documented to reflect this, and allow existing hedge designations to continue unchanged during the period of uncertainty relating to the timing and method of benchmark migrations.

The amendments will be applied until the earliest point in time of the Group's contracts that reference LIBOR being amended, the hedging relationship being formally discontinued or formal market conventions ending uncertainty being published and widely adopted. If amended cash flows do not cause a hedging relationship to be discontinued, then the amendments will cease to be applied only when that relationship is discontinued under IFRS 9.

The IFRS amendments impact fair value and cash flow hedges of interest rate risk and related hedging instruments, and certain net investment hedges that use cross-currency interest rate swaps to pay a foreign currency floating rate and receive a functional currency floating rate. The notional values of hedging instruments, for each type of hedging relationship impacted, are shown in the hedge accounting tables in note 32(e). These amounts also correspond to the exposures designated as hedged.

Notes to the consolidated financial statements continued

32. Financial risk management continued

(e) Hedge accounting

In accordance with the requirements of IFRS 7, certain additional information about hedge accounting is disaggregated by risk type and hedge designation type in the tables below:

Year ended 31 March 2021	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net gains/(losses) in respect of:				
Cash flow hedges	–	14	(14)	–
Cost of hedging	(15)	(24)	–	50
Transferred to profit or loss in respect of:				
Cash flow hedges	–	56	–	–
Cost of hedging	1	2	–	–
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(11)	(30)	–	6
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	–	10	2	5
Assets – non-current	187	59	1	140
Liabilities – current	–	(12)	(24)	(17)
Liabilities – non-current	(113)	(255)	(22)	–
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Jan 2023 – Jan 2043	Sep 2021 – Nov 2040	Apr 2021 – Feb 2027	Mar 2022 – Sep 2027
Spot foreign exchange range:				
GBP:USD	1.64	1.30 – 1.66	1.31 – 1.41	1.22 – 1.40
GBP:EUR	1.11 – 1.24	1.08 – 1.24	1.04 – 1.29	1.15 – 1.16
EUR:USD	1.13 – 1.17	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+408bps	0.976% – 5.845%	n/a	n/a
USD	LIBOR +68bps/+115bps	2.513% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

32. Financial risk management continued

(e) Hedge accounting continued

Year ended 31 March 2020	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net losses in respect of:				
Cash flow hedges	–	(143)	(17)	–
Cost of hedging	5	(7)	–	(30)
Transferred to profit or loss in respect of:				
Cash flow hedges	–	14	–	–
Cost of hedging	1	(1)	–	(45)
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	2	(8)	–	(43)
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	1	–	4	9
Assets – non-current	247	106	8	–
Liabilities – current	(1)	(105)	(8)	(82)
Liabilities – non-current	(39)	(264)	(12)	(19)
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	May 2020 – Feb 2040	Jul 2020 – Dec 2039	Apr 2020 – Dec 2024	Jun 2020 – Sep 2027
Spot foreign exchange range:				
GBP:USD	1.64	1.30 – 1.66	1.24 – 1.41	1.21 – 1.49
GBP:EUR	1.19 – 1.24	1.10 – 1.24	1.04 – 1.30	1.14
EUR:USD	1.13 – 1.17	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+408bps	1.331% – 5.850%	n/a	n/a
USD	LIBOR –44bps/+115bps	1.103% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

Notes to the consolidated financial statements continued

32. Financial risk management continued

(e) Hedge accounting continued

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge. These tables also present notional values of hedging instruments (and equal hedged exposures) impacted by IFRS 9 Interest Rate Benchmark Reform amendments.

(i) Fair value hedges of foreign currency and interest rate risk on recognised borrowings:

As at 31 March 2021		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1,2]	**(2,755)**	**121**	**(85)**	**153**	**(127)**	**26**

1. The carrying value of the hedged borrowings is £2,714 million, of which £nil is current and £2,714 million is non-current.
2. Included within the hedging instrument notional balance is £2,679 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2020		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1,2]	(1,751)	(31)	(95)	(42)	48	6

1. The carrying value of the hedged borrowings was £1,883 million, of which £72 million was current and £1,811 million was non-current.
2. Included within the hedging instrument notional balance was £1,675 million impacted by Interest Rate Benchmark Reform amendments.

(ii) Cash flow hedges of foreign currency and interest rate risk:

As at 31 March 2021		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1]	**(4,884)**	**(11)**	**(6)**	**(16)**	**16**	**–**
Foreign currency risk on forecasted cash flows	**(988)**	**(31)**	**3**	**17**	**(17)**	**–**

1. Included within the hedging instrument notional balance is £176 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2020		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(4,127)	(69)	(22)	142	(143)	(1)
Foreign currency risk on forecasted cash flows	(794)	8	–	17	(17)	–

1. Included within the hedging instrument notional balance was £176 million impacted by Interest Rate Benchmark Reform amendments.

(iii) Net investment hedges of foreign currency risk:

As at 31 March 2021		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Currency risk on foreign operations[1]	**(2,786)**	**183**	**(2,826)**	**(183)**	**183**	**–**

1. Included within the hedging instrument notional balance is £nil impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2020		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Currency risk on foreign operations[1]	(3,064)	45	(2,871)	(6)	6	–

1. Included within the hedging instrument notional balance was £nil impacted by Interest Rate Benchmark Reform amendments.

32. Financial risk management continued

(f) Commodity price risk

We purchase electricity and gas to supply our customers in the US and to meet our own energy needs. Substantially all our costs of purchasing electricity and gas for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular year that can lead to large fluctuations in the income statement. We follow approved policies to manage price and supply risks for our commodity activities.

Our energy procurement risk management policy and delegations of authority govern our US commodity trading activities for energy transactions. The purpose of this policy is to ensure we transact within pre-defined risk parameters and only in the physical and financial markets where we or our customers have a physical market requirement. In addition, state regulators require National Grid to manage commodity risk and cost volatility prudently through diversified pricing strategies. In some jurisdictions we are required to file a plan outlining our strategy to be approved by regulators. In certain cases, we might receive guidance with regard to specific hedging limits.

Energy purchase contracts for the forward purchase of electricity or gas that are used to satisfy physical delivery requirements to customers, or for energy that the Group uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. Disclosure of commitments under such contracts is made in note 30.

US states have introduced a variety of legislative requirements with the aim of increasing the proportion of our electricity that is derived from renewable or other forms of clean energy. Annual compliance filings regarding the level of Renewable Energy Certificates (and other similar environmental certificates) are required by the relevant department of utilities. In response to the legislative requirements, National Grid has entered into long-term, typically fixed-price, energy supply contracts to purchase both renewable energy and environmental certificates. We are entitled to recover all costs incurred under these contracts through customer billing.

Under IFRS, where these supply contracts are not accounted for as leases, they are considered to comprise two components, being a forward purchase of power at spot prices, and a forward purchase of environmental certificates at a variable price (being the contract price less the spot power price). With respect to our current contracts, neither of these components meets the requirement to be accounted for as a derivative. The environmental certificates are currently required for compliance purposes, and at present there are no liquid markets for these attributes. Accordingly, this component meets the expected purchase or usage exemption of IFRS 9. We expect to enter into an increasing number of these contracts, in order to meet our compliance requirements in the short to medium term. In future, if and when liquid markets develop, and to the extent that we are in receipt of environmental certificates in excess of our required levels, this exemption may cease to apply, and we may be required to account for forward purchase commitments for environmental certificates as derivatives at fair value through profit and loss.

Notes to the consolidated financial statements
continued

32. Financial risk management continued

(g) Fair value analysis

Included in the statement of financial position are financial instruments which are measured at fair value. These fair values can be categorised into hierarchy levels that are representative of the inputs used in measuring the fair value. The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active, a valuation technique is used.

	2021				2020			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Assets								
Investments held at FVTPL	1,768	–	240	2,008	1,278	–	108	1,386
Investments held at FVOCI	99	416	–	515	83	352	–	435
Investments in associates	–	–	–	–	–	–	103	103
Financing derivatives	–	942	–	942	–	1,257	10	1,267
Commodity contract derivatives	–	12	45	57	–	9	66	75
	1,867	1,370	285	3,522	1,361	1,618	287	3,266
Liabilities								
Financing derivatives	–	(584)	(183)	(767)	–	(889)	(245)	(1,134)
Commodity contract derivatives	–	(75)	(57)	(132)	–	(136)	(64)	(200)
Liabilities held at fair value	(682)	–	–	(682)	(741)	–	–	(741)
Contingent consideration[1]	–	–	(57)	(57)	–	–	(74)	(74)
	(682)	(659)	(297)	(1,638)	(741)	(1,025)	(383)	(2,149)
	1,185	711	(12)	1,884	620	593	(96)	1,117

1. Contingent consideration relates to the acquisition of National Grid Renewables (see note 38).

Level 1: Financial instruments with quoted prices for identical instruments in active markets.

Level 2: Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets, and financial instruments valued using models where all significant inputs are based directly or indirectly on observable market data.

Level 3: Financial instruments valued using valuation techniques where one or more significant inputs are based on unobservable market data.

Our Level 1 financial investments and liabilities held at fair value are valued using quoted prices from liquid markets.

Our Level 2 financial investments held at fair value are valued using quoted prices for similar instruments in active markets, or quoted prices for identical or similar instruments in inactive markets. Alternatively, they are valued using models where all significant inputs are based directly or indirectly on observable market data.

Our Level 2 financing derivatives include cross-currency, interest rate and foreign exchange derivatives. We value these by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. These derivatives can be priced using liquidly traded interest rate curves and foreign exchange rates, and therefore we classify our vanilla trades as Level 2 under the IFRS 13 framework. One FX forward transacted in the year contains deal-contingent terms linked to the sale of NECO. As at the reporting date, these terms have no material impact on the valuation. This will be re-assessed at each relevant reporting date.

Our Level 2 commodity contract derivatives include over-the-counter gas and power swaps as well as forward physical gas deals. We value our contracts based on market data obtained from the New York Mercantile Exchange (NYMEX) and the Intercontinental Exchange (ICE) where monthly prices are available. We discount based on externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties and liquidity in the market. Our commodity contracts can be priced using liquidly traded swaps. Therefore, we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 3 financing derivatives include cross-currency swaps, inflation-linked swaps and equity options, where the market is illiquid. In valuing these instruments, we use in-house valuation models and obtain external valuations to support each reported fair value.

Our Level 3 commodity contract derivatives primarily consist of our forward purchases of electricity and gas that we value using proprietary models. Derivatives are classified as Level 3 where significant inputs into the valuation technique are neither directly nor indirectly observable (including our own data, which are adjusted, if necessary, to reflect the assumptions market participants would use in the circumstances).

Our Level 3 investments include equity instruments accounted for at fair value through profit and loss. These equity holdings are part of our corporate venture capital portfolio held by National Grid Partners and comprise a series of small unquoted investments where prices or valuation inputs are unobservable. These investments are either recently acquired or there have been recent funding rounds with third parties and therefore the valuation is based on the latest transaction price and any subsequent investment-specific adjustments.

Our Level 3 investments also include our investment in Sunrun Neptune 2016 LLC, which is accounted for at fair value through profit and loss. The investment is fair valued by discounting expected cash flows using a weighted average cost of capital specific to Sunrun Neptune 2016 LLC.

In light of the current ongoing impact of the COVID-19 pandemic, the valuations of certain assets and liabilities can be more subjective. While there have been significant movements in market indices, we are satisfied that there has been no significant impact on the fair values of our financial instruments measured at fair value, and that any impact is reflected in the fair values in the table above.

32. Financial risk management continued

(g) Fair value analysis continued

The changes in value of our Level 3 financial instruments are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]		Total	
	2021 £m	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m
At 1 April	**(235)**	(214)	**2**	1	**137**	152	**(96)**	(61)
Net gains/(losses) for the year[1,2]	**51**	(20)	**(16)**	6	**(2)**	26	**33**	12
Purchases	**—**	—	**(1)**	26	**32**	51	**31**	77
Acquisition of National Grid Renewables	**—**	—	**—**	—	**—**	(74)	**—**	(74)
Settlements	**1**	(1)	**(1)**	(31)	**16**	(18)	**16**	(50)
Reclassification to held for sale (note 10)	**—**	—	**4**	—	**—**	—	**4**	—
At 31 March	**(183)**	(235)	**(12)**	2	**183**	137	**(12)**	(96)

1. Gain of £51 million (2020: £20 million loss) is attributable to derivative financial instruments held at the end of the reporting period and has been recognised in finance costs in the income statement.
2. Loss of £46 million (2020: £17 million loss) is attributable to commodity contract derivative financial instruments held at the end of the reporting period.
3. Other comprises our investments in Sunrun Neptune 2016 LLC and the investments made by National Grid Partners, which are accounted for at fair value through profit and loss as well as the contingent consideration arising from the acquisition of National Grid Renewables (see note 38).

The impacts on a post-tax basis of reasonably possible changes in significant Level 3 assumptions are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]	
	2021 £m	2020 £m	**2021 £m**	2020 £m	**2021 £m**	2020 £m
10% increase in commodity prices[1]	**—**	—	**3**	2	**—**	—
10% decrease in commodity prices[1]	**—**	—	**(1)**	—	**—**	—
+10% market area price change	**—**	—	**(4)**	(4)	**—**	—
-10% market area price change	**—**	—	**7**	4	**—**	—
+20 basis points change in Limited Price Inflation (LPI) market curve[2]	**(83)**	(95)	**—**	—	**—**	—
-20 basis points change in LPI market curve[2]	**83**	90	**—**	—	**—**	—
+50 basis points change in discount rate	**—**	—	**—**	—	**(5)**	(3)
-50 basis points change in discount rate	**—**	—	**—**	—	**5**	4

1. Level 3 commodity price sensitivity is included within the sensitivity analysis disclosed in note 35.
2. A reasonably possible change in assumption of other Level 3 derivative financial instruments is unlikely to result in a material change in fair values.
3. The investments acquired in the period were on market terms, and sensitivity is considered insignificant at 31 March 2021.

The impacts disclosed above were considered on a contract-by-contract basis with the most significant unobservable inputs identified.

Notes to the consolidated financial statements
continued

32. Financial risk management continued

(h) Capital risk management

The capital structure of the Group consists of shareholders' equity, as disclosed in the consolidated statement of changes in equity, and net debt (note 29). National Grid's objectives when managing capital are: to safeguard our ability to continue as a going concern; to remain within regulatory constraints of our regulated operating companies; and to maintain an efficient mix of debt and equity funding thus achieving an optimal capital structure and cost of capital. We regularly review and manage the capital structure as appropriate in order to achieve these objectives.

Maintaining appropriate credit ratings for our operating and holding companies is an important aspect of our capital risk management strategy and balance sheet efficiency. We monitor our balance sheet efficiency using several metrics including retained cash flow/net debt (RCF), regulatory gearing and interest cover. For the year ended 31 March 2021, these metrics for the Group were 6.6% (2020: 9.2%), 65% (2020: 63%) and 4.5x (2020: 4.1x), respectively – see pages 30 and 254 – 255. We believe these are consistent with the current credit ratings for National Grid plc in respect of the main companies of the Group, based on guidance from the rating agencies.

We monitor the RAV gearing within NGET and the regulated transmission businesses within NGG. This is calculated as net debt expressed as a percentage of RAV, and indicates the level of debt employed to fund our UK regulated businesses. It is compared with the level of RAV gearing indicated by Ofgem as being appropriate for these businesses, at around 60% to 62.5%. We also monitor net debt as a percentage of rate base for our US operating companies, comparing this with the allowed rate base gearing inherent within each of our agreed rate plans, typically around 50%.

The majority of our regulated operating companies in the US and the UK are subject to certain restrictions on the payment of dividends by administrative order, contract and/or licence. The types of restrictions that a company may have that would prevent a dividend being declared or paid unless they are met include:

- dividends must be approved in advance by the relevant US state regulatory commission;
- the subsidiary must have at least two recognised rating agency credit ratings of at least investment grade;
- dividends must be limited to cumulative retained earnings, including pre-acquisition retained earnings;
- the securities of National Grid plc must maintain an investment grade credit rating, and if that rating is the lowest investment grade bond rating it cannot have a negative watch/review for downgrade notice by a credit rating agency;
- the subsidiary must not carry on any activities other than those permitted by the licences;
- the subsidiary must not create any cross-default obligations or give or receive any intra-group cross-subsidies; and
- the percentage of equity compared with total capital of the subsidiary must remain above certain levels.

There is a further restriction relating only to NECO, which is required to maintain its consolidated net worth above certain levels.

These restrictions are subject to alteration in the US as and when a new rate case or rate plan is agreed with the relevant regulatory bodies for each operating company and in the UK through the normal licence review process.

As most of our business is regulated, at 31 March 2021 the majority of our net assets are subject to some of the restrictions noted above. These restrictions are not considered to be significantly onerous, nor do we currently expect they will prevent the planned payment of dividends in future in line with our dividend policy.

All the above requirements are monitored on a regular basis in order to ensure compliance. The Group has complied with all externally imposed capital requirements to which it is subject.

33. Borrowing facilities

To support our liquidity requirements and provide backup to commercial paper and other borrowings, we agree committed credit facilities with financial institutions over and above the value of borrowings that may be required. These committed credit facilities have never been drawn, and our undrawn amounts are listed below.

At 31 March 2021, we had bilateral committed credit facilities of £5,410 million (2020: £5,495 million). In addition, we had committed credit facilities from syndicates of banks of £115 million at 31 March 2021 (2020: £277 million). All committed credit facilities were undrawn in 2021 and 2020. An analysis of the maturity of these undrawn committed facilities is shown below:

	2021 £m	2020 £m
Undrawn committed borrowing facilities expiring:		
Less than 1 year	–	–
In 1 to 2 years	1,668	1,940
In 2 to 3 years	534	1,668
In 3 to 4 years	1,718	277
In 4 to 5 years	1,605	1,887
More than 5 years	–	–
	5,525	5,772

Of the unused facilities at 31 March 2021, £5,410 million (2020: £5,495 million) is available for liquidity purposes, while £115 million (2020: £277 million) is available as backup to specific US borrowings. £1,668 million of the undrawn bilateral facilities due to mature in one to two years, were renegotiated between 1 April 2021 and 19 May 2021, with an uplift in the amount committed to £1,861 million with new expiry dates to May 2024. Of the £534 million of undrawn committed borrowings facilities due to expire within two to three years, £150 million was renegotiated between 1 April 2021 and 19 May 2021, with the expiry extended by a further year to June 2024. £400 million of additional undrawn bilateral facilities were entered into subsequent to the year end with expiry dates in May 2024.

In addition, we have the following facilities which are not included in the table above:

- for the separately regulated business of National Grid Electricity System Operator Limited, the Group has a facility of £550 million (2020: £550 million). This facility is not available as Group general liquidity support;
- the Group has Export Credit Agency (ECA) facilities totalling £1,345 million (2020: £901 million), of which £446 million (2020: £233 million) is undrawn; and
- the Group has two new loan facilities in place relating to the acquisition of PPL Western Power Distribution Investments Limited (WPD) (see note 38). A facility of £8,250 million (31 March 2020: £nil) to finance the consideration and a facility of £1,105 million (31 March 2020: £nil) to back up acquired debt which contains change of control provisions, of which £8,250 million and £1,105 million is undrawn. Subsequent to the year end the £1,105 million facility has been cancelled as waivers have been obtained by WPD in relation to the change of control clauses.

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates

While we present consolidated results in these financial statements as if we were one company, our legal structure is such that there are a number of different operating and holding companies that contribute to the overall result. This structure has evolved through acquisitions as well as regulatory requirements to have certain activities within separate legal entities.

Subsidiary undertakings

A list of the Group's subsidiaries as at 31 March 2021 is given below. The entire share capital of subsidiaries is held within the Group except where the Group's ownership percentages are shown. These percentages give the Group's ultimate interest and therefore allow for the situation where subsidiaries are owned by partly owned intermediate subsidiaries. Where subsidiaries have different classes of shares, this is largely for historical reasons, and the effective percentage holdings given represent both the Group's voting rights and equity holding. Shares in National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc are held directly by National Grid plc. All other holdings in subsidiaries are owned by other subsidiaries within the Group. All subsidiaries are consolidated in the Group's financial statements.

Principal Group companies are identified in **bold**. These companies are incorporated and principally operate in the countries under which they are shown. All entities incorporated in the United States are taxed in the United States on their worldwide income other than where indicated in the footnotes below. Other entities are tax resident in their jurisdiction of incorporation other than where indicated in the footnotes below.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

Beegas Nominees Limited
Birch Sites Limited
Carbon Sentinel Limited
Droylsden Metering Services Limited
Gridcom Limited
Icelink Interconnector Limited
Landranch Limited
Lattice Group Employee Benefit Trust Limited
Lattice Group Limited
Lattice Group Trustees Limited
Natgrid Limited
NatGrid One Limited[1]
NatgridTW1 Limited[1]
National Grid Belgium Limited[2*]
National Grid Blue Power Limited[2*]
National Grid Carbon Limited
National Grid Commercial Holdings Limited
National Grid Distributed Energy Limited
National Grid Electricity Group Trustee Limited
National Grid Electricity System Operator Limited
National Grid Electricity Transmission plc
National Grid Energy Metering Limited
National Grid Four Limited[2*]
National Grid Fourteen Limited[2*]
National Grid Gas Holdings Limited
National Grid Gas plc
National Grid Grain LNG Limited
National Grid Holdings Limited[1]
National Grid Holdings One plc
National Grid IFA 2 Limited
National Grid Interconnector Holdings Limited
National Grid Interconnectors Limited
National Grid International Limited[1]
National Grid Metering Limited
National Grid North Sea Link Limited
National Grid Offshore Limited
National Grid Partners Limited
National Grid Plus Limited
National Grid Property Holdings Limited
National Grid Seventeen Limited[2*]
National Grid Smart Limited
National Grid Ten
National Grid Thirty Five Limited[2*]
National Grid Thirty Six Limited
National Grid Twelve Limited[1]
National Grid Twenty Eight Limited
National Grid Twenty-Five Limited[2*]
National Grid Twenty Seven Limited
National Grid Twenty Three Limited[1]
National Grid UK Limited
National Grid UK Pension Services Limited
National Grid (US) Holdings Limited[1]
National Grid (US) Investments 2 Limited[1]
National Grid (US) Investments 4 Limited[1]
National Grid (US) Partner 1 Limited[1]
National Grid Ventures Limited
National Grid Viking Link Limited
National Grid William Limited
NG Nominees Limited
NGC Employee Shares Trustee Limited
NGG Finance plc
Ngrid Intellectual Property Limited
NGT Telecom No. 1 Limited[2*]
NGT Two Limited
Port Greenwich Limited
Stargas Nominees Limited
Supergrid Electricity Limited
Supergrid Energy Transmission Limited
Supergrid Limited
Thamesport Interchange Limited
The National Grid Group Quest Trustee Company Limited
The National Grid YouPlan Trustee Limited
Transco Limited
Warwick Technology Park Management Company (No 2) Limited (60.56%)[3]

1. Companies where National Grid plc has issued guarantees over the liabilities of the companies as at 31 March 2021 and for which the companies are taking the exemption from the requirements of an audit for their individual financial statements as permitted by section 479A of the Companies Act.
2. Registered office: c/o KPMG, 15 Canada Square, London E14 5GL, UK.
3. Registered office: Shire Hall, PO Box 9, Warwick CV34 4RL, UK.

* In liquidation.

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in the US

Registered office: National Registered Agents, Inc., 1209 Orange Street, Wilmington, DE 19801, USA (unless stated otherwise in footnotes).

Agave Solar, LLC
Altona Solar, LLC
Apple River Solar, LLC
Apple Solar, LLC
Argenta Solar, LLC
Armenia Solar, LLC
Artemisia Solar, LLC[1]
Ashland Solar, LLC
Athens Solar, LLC
Audubon Wind Farm, LLC
Autauga Solar, LLC
Baileyville Solar, LLC (previously Ellison Solar, LLC)**
Banner Solar, LLC
Bazile Creek Wind Farm, LLC
Bee Hollow Solar, LLC
Bell Plaine Solar, LLC
Benevolent Solar, LLC
Birdsong Creek Solar, LLC
Black Bear Solar, LLC
Blackhawk Solar, LLC
Blaze Solar, LLC[2]
Blevins Solar, LLC
Blue Ridge Wind, LLC
Blue Spring Solar, LLC
Blues Solar, LLC
Bluewater Solar, LLC
Boone Solar, LLC
Boston Gas Company[3]
Braeburn Solar, LLC
Bridges Solar, LLC
Brilliance Solar, LLC
British Transco Capital, Inc.[4]
British Transco Finance, Inc.[4]
Brock Solar, LLC
Broken Bridge Corp.[5]
Brook Trout Solar, LLC
BT Noble Solar, LLC[6]
Bullsnake Solar, LLC
Burley Solar, LLC
Burlington Solar, LLC
Burr Ridge Wind, LLC
Cage Ranch Solar, LLC
Cage Ranch Solar II, LLC
Cage Ranch Solar III, LLC
Caldwell Solar, LLC
Caldwell Solar II, LLC
Cameo Solar, LLC
Canary Solar, LLC
Canby Solar, LLC
Carriere Solar, LLC
Cass Wind Farm, LLC
Cattle Ridge Wind Farm 2, LLC
Cedar Grove Solar, LLC
Centennial Solar, LLC
Chewelah Solar, LLC
Clear Creek Solar, LLC
Clermont Solar, LLC
Clinton County Solar, LLC
Coles Solar, LLC
Commonwealth Solar, LLC
Compass Prairie Wind, LLC
Coneflower Solar, LLC[1]
Conestoga Wind, LLC
Copperhead Solar, LLC
Creekview Solar, LLC
Crocker Wind Farm 2, LLC
Dahlia Solar, LLC[1]
Dakota Hills Wind Farm, LLC
Day Lily Solar, LLC[1]
Deatsville Solar, LLC
Deer Trail Solar, LLC
Dodson Creek Solar, LLC[7]
Donnellson Solar, LLC
East Galesburg Solar, LLC
East Macomb Solar, LLC
Eastern Hemlock Solar, LLC
Eatonville Solar, LLC
Elba Solar, LLC
Elburn Solar, LLC
Eldena Solar, LLC
Elk Creek Solar, LLC
Elk Creek Solar 2, LLC
EUA Energy Investment Corporation[3]
Exie Solar, LLC
Falls City Solar, LLC
Fayette Solar, LLC[8]
Firstview Wind Farm, LLC
Fish Creek Solar, LLC
Forrest Solar, LLC
Fort Solar, LLC
Fowlkes Solar, LLC
Front Range Wind Farm, LLC
Fulton Solar, LLC
Gala Solar, LLC
Galesburg Solar, LLC
Gardenia Solar, LLC[1]
Genesee Solar Energy, LLC
Gillis Solar, LLC
Glenwood Solar, LLC
Golden Solar, LLC
Goldendale Solar, LLC
Goldenrod Wind Farm, LLC
Goldfinch Solar, LLC
Grand Junction Solar, LLC
Granite State Power Link LLC[4]
Grant Solar, LLC
Grant Solar 2, LLC
Grayson Solar, LLC
Greenbrier Creek Solar, LLC
Greensky Solar, LLC
Greenwood Solar, LLC
Grid NY LLC[9]
Grindstone Wind Farm, LLC[10]
Hale County Solar, LLC
Hale Solar, LLC
Hampton Solar, LLC
Hansford Energy Storage, LLC
Harmony Solar ND, LLC
Harmony Solar ND 2, LLC
Harrington Solar, LLC
Hartley Solar, LLC
Hearth Solar, LLC
Heyworth Solar, LLC
Hill River Solar, LLC
Honeybee Solar, LLC
Hoosier Solar, LLC
Hoskins Solar, LLC
Illumination Solar, LLC
Innovation Solar, LLC
Irwin Solar, LLC
Itasca Energy Development, LLC[1]
Itasca Energy Services, LLC
Jackalope Solar, LLC
Jack Rabbit Wind, LLC
Jackson County Solar, LLC
Jantz Solar, LLC
Jonagold Solar, LLC
Junction Solar, LLC
Kankakee Solar, LLC
KeySpan CI Midstream Limited[4]
KeySpan Energy Corporation[9]
KeySpan Energy Services Inc.[4]
KeySpan Gas East Corporation[9]
KeySpan International Corporation[4]
KeySpan MHK, Inc.[4]
KeySpan Midstream Inc.[4]
KeySpan Plumbing Solutions, Inc.[9]
Kindle Solar, LLC
Kingsnake Solar, LLC
Knox Solar, LLC
KSI Contracting, LLC[4]
KSI Electrical, LLC[4]
KSI Mechanical, LLC[4]
Lake Charlotte Solar, LLC
Lake Iris Solar, LLC
Lakeside Solar, LLC
Lamdin Solar, LLC
Land Management & Development, Inc.[9]
Landwest, Inc.[9]
Lansing Solar, LLC
Lawrence Solar, LLC
Leola Wind Farm, LLC
Liberty Solar, LLC
Lilac Solar, LLC[1]
Limestone Solar, LLC
Lind Solar, LLC
Livingston County Solar, LLC
Long Mount Solar, LLC

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in the US continued

Lordsburg Solar, LLC
Louisa Solar, LLC
Lowlands Solar, LLC
Lydia Solar, LLC
Macedonia Solar, LLC
Madden Creek Solar, LLC
Marion County Solar, LLC
Massachusetts Electric Company[3]
Maverick Wind Farm, LLC
Mazon Solar, LLC
Mazon Solar 2, LLC
McFadden Solar, LLC
Meadowlands Solar, LLC
Merton Solar, LLC
Metrowest Realty LLC[4]
Miller Creek Solar, LLC
Millers Ferry Solar, LLC
Moonrise Solar, LLC
Morgan County Solar, LLC
Morning Glory Solar, LLC[1]
Mountain Laurel Solar, LLC
Muddy Creek Solar, LLC
Mustang Ridge Wind Farm, LLC
Mystic Steamship Corporation[7]
Nantucket Electric Company[3]
National Grid Algonquin LLC[4]
National Grid Connect Inc.[4]
National Grid Development Holdings Corp.[4]
National Grid Electric Services LLC[9]
National Grid Energy Management LLC[4]
National Grid Energy Services LLC[4]
National Grid Energy Trading Services LLC[9]
National Grid Engineering & Survey Inc.[9]
National Grid Generation LLC[9]
National Grid Generation Ventures LLC[11]
National Grid Glenwood Energy Center, LLC[4]
National Grid IGTS Corp.[9]
National Grid Insurance USA Ltd[12]
National Grid Islander East Pipeline LLC[4]
National Grid LNG GP LLC[4]
National Grid LNG LLC[4]
National Grid LNG LP LLC[4]
National Grid Millennium LLC[4]
National Grid NE Holdings 2 LLC[3]
National Grid North America Inc.[4]
National Grid North East Ventures Inc.[4]
National Grid Partners Inc.[9]
National Grid Partners LLC[4]
National Grid Port Jefferson Energy Center LLC[4]
National Grid Renewables, LLC (previously NGV Emerald Acquisition Co., LLC)[4]
National Grid Renewables Development, LLC (previously Geronimo Energy, LLC)
National Grid Renewables E Wind, LLC (previously Geronimo E Wind LLC)[1]
National Grid Renewables Operations, LLC[4]
National Grid Renewables Projects, LLC (previously Geronimo Solar Energy, LLC)[1]
National Grid Renewables Stutsman, LLC (previously Geronimo Stutsman Wind Farm, LLC)
National Grid Services Inc.[4]
National Grid Transmission Services Corporation[3]
National Grid US 6 LLC[4,†]
National Grid US LLC[4]
National Grid USA[4]
National Grid USA Service Company, Inc.[3]
NEES Energy, Inc.[3]
New England Electric Transmission Corporation[5]
New England Energy Incorporated[3]
New England Hydro Finance Company, Inc. (53.704%)[3]
New England Hydro-Transmission Corporation (53.704%)[5]
New England Hydro-Transmission Electric Company, Inc. (53.704%)[3]
New England Power Company[3]
Newport America Corporation[13]
Newton Solar, LLC
NG Renewables Energy Marketing, LLC[4]
NG Renewables Energy Services, LLC
NGNE LLC[4]
NGV Emerald Energy Venture Holdings, LLC[4]
NGV OSW Holdings, LLC[4]
NGV US Distributed Energy Inc.[4]
NGV US, LLC (previously NGV Emerald Holdings, LLC)[4]
NGV US Transmission Inc.[4]
Niagara Mohawk Energy, Inc.[4]
Niagara Mohawk Holdings, Inc.[9]
Niagara Mohawk Power Corporation[9]
Niobrara Wind, LLC
NM Properties, Inc.[9]
Noble Storage, LLC
Nordic VOS, LLC
North Adair Solar, LLC
Northeast Renewable Link LLC[4]
North East Transmission Co., Inc.[4]
North Fork Wind, LLC
North Rock Solar, LLC
Onton Solar, LLC
Opinac North America, Inc.[4]
Oreana Solar, LLC
Parklawn Solar, LLC
Patriotic Solar, LLC
Pearl River County Solar, LLC
Pennington Solar, LLC
Peony Solar, LLC
Philadelphia Coke Co., Inc.[4]
Pierce County Solar, LLC
Pike County Solar, LLC
Pinon Pine Solar, LLC
Piper Solar, LLC
Pipestone Solar, LLC
Placedo Solar, LLC
Pleasant Plains Solar, LLC
Plum Creek Wind Farm, LLC
Plum Creek Wind Farm 2, LLC
Portage Solar, LLC
Port of the Islands North, LLC[9]
Prairie Oasis Solar, LLC
Prairie Rose Wind 2, LLC[1]
Prosperity Wind Farm, LLC
Prosperity Wind Farm 2, LLC
Radiance Solar, LLC[1]
Red Rock Solar SD, LLC
Red Wolf Solar, LLC
Regal Solar, LLC
Regal Solar 2, LLC
River North Solar, LLC
Robertson Solar, LLC
Rochester Solar, LLC[1]
Rock Ridge Wind Farm, LLC
Rocky Meadow Solar, LLC
Rolling Hills Solar, LLC
Ross County Solar, LLC[7]
Royal Solar, LLC
Royal Solar 2, LLC
Royerton Solar, LLC
Saddle Solar, LLC
Saginaw Bay Solar, LLC
Sandstone Creek Solar, LLC
Sandstone Creek Solar 2, LLC
Sapphire Sky Wind Farm, LLC
Scorpion Solar, LLC
Serenity Solar, LLC[1]
Shelby Solar, LLC
Sherco Solar, LLC[1]
Sherco Solar 2, LLC[1]
Silver City Solar, LLC
Simpson Solar, LLC (previously Geronimo White Pine Solar, LLC)
South Belleville Solar, LLC
South Macomb Solar, LLC
Spotlight Solar, LLC
Spring Brook Solar, LLC
Springfield Solar Farm, LLC
Spring River Solar, LLC
Stockton Solar, LLC
Stony Brook Wind, LLC
Stony Point Solar, LLC
Stove Creek Solar, LLC
Sturgis Solar, LLC
Summit Lake Solar, LLC
Sunbeam Solar, LLC
Sunray Solar, LLC
Sunrise Solar, LLC
Sycamore Creek Solar, LLC
Thacker Solar, LLC
The Brooklyn Union Gas Company[9]
The Narragansett Electric Company[13]
Tilton Solar, LLC
Torchlight Solar, LLC[1]
Transgas Inc.[3]
Tri-City Solar, LLC
Turquoise Solar, LLC
Uintah Solar, LLC
Unbridled Solar, LLC (previously Henderson Solar, LLC)
Union City Solar, LLC
Upper Hudson Development Inc.[9]
Valley Appliance and Merchandising Company[13]

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Valley Solar, LLC
Vermont Green Line Devco, LLC (90%)[4]
Vibrant Solar, LLC
Virgo Community Solar Gardens, LLC[1]
Virtue Solar, LLC
Vivid Solar, LLC
Wallowa Solar, LLC
Wayfinder Group, Inc.[3]
Wayside Solar, LLC
Western Hemlock Solar, LLC
Wheatfield Solar, LLC
White Elm Wind Farm, LLC
Wild Springs Solar, LLC[1]
Wildcat Ridge Wind Farm, LLC
Wildhorse Creek Solar, LLC
Willard Solar, LLC
Williams County Solar, LLC
Wiregrass Solar, LLC
Wolf River Solar, LLC
Wonder Lake Solar, LLC
Woodlands Solar, LLC
Worthington Solar, LLC
Yellowbud Solar, LLC
Yellowhammer Solar, LLC
Young County Solar, LLC
Yucca Solar, LLC

Incorporated in Australia
Registered office: Level 7, 330 Collins Street, Melbourne, VIC 3000, Australia

National Grid Australia Pty Limited

Incorporated in Canada
Registered office: Stewart McKelvey LLP, c/o Charles Reagh, Queen's Marque, 600-1741 Lower Water Street, Halifax, Nova Scotia, B3J 0J2, Canada

KeySpan Energy Development Co.

Incorporated in Hong Kong
Registered office: Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong

National Grid Hong Kong Limited†

Incorporated in the Isle of Man
Registered office: Third Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE, Isle of Man, UK

National Grid Insurance Company (Isle of Man) Limited
NGT Holding Company (Isle of Man) Limited*†

Incorporated in Jersey
Registered office: 44 Esplanade, St Helier, JE4 9WG, Jersey, UK

National Grid Jersey Investments Limited*†
NG Jersey Limited*†

Incorporated in Luxembourg
Registered office: 412F, Route d'Esch, L-2086, Luxembourg, Grand Duchy of Luxembourg

National Grid Luxembourg SARL

Incorporated in the Netherlands
Registered office: Westblaak 89, 3012 KG Rotterdam, PO Box 21153, 3001 AD, Rotterdam, Netherlands

British Transco International Finance B.V.

Incorporated in the Republic of Ireland
Registered office: c/o Moore Stephens Nathans, Third Floor, Ulysses House, 23/24 Foley Street, Dublin, D01 W2T2, Ireland

National Grid Company (Ireland) Designated Activity Company*

1. Registered office: National Grid Renewables Development, LLC, 8400 Normandale Lake Blvd. Suite 1200, Bloomington, MN 55437, USA.
2. Registered office: National Registered Agents, Inc., 160 Greentree Drive, Suite 101, Dover DE 19904, USA.
3. Registered office: Corporation Service Company, 84 State Street, Boston MA 02109, USA.
4. Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, USA.
5. Registered office: Corporation Service Company, 10 Ferry Street, Suite 313, Concord NH 03301, USA.
6. Registered office: National Registered Agents, Inc., 1999 Bryan St, Bryan Street, Dallas, Dallas County TX 75201, USA.
7. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801, USA.
8. Registered office: 60 Mine Lake Ct, Mine Lake Court, Suite 200, Raleigh, Wake County, NC 27615, USA.
9. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
10. Registered office: National Registered Agents, Inc., 30600 Telegraph Road, Suite 2345, Bingham Farms, MI 48025-5720, USA.
11. Registered office: Corporation Service Company, 84 State Street, Albany NY 12207, USA.
12. Registered office: One MetroTech Center, Brooklyn NY 11201, USA.
13. Registered office: Corporation Service Company, 222 Jefferson Boulevard, Suite 200, Warwick RI 02888, USA.

* In liquidation.
** Name change post 31 March 2021.
† Entity is tax resident in the United Kingdom.

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates continued

Joint ventures

A list of the Group's joint ventures as at 31 March 2021 is given below. All joint ventures are included in the Group's financial statements using the equity method of accounting. Principal joint ventures are identified in **bold**.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

BritNed Development Limited (50%)*
Joint Radio Company Limited (50%)[1]**
National Places LLP (50%)[2]
Nemo Link Limited (50%)
NGET/SPT Upgrades Limited (50%)†
St William Homes LLP (50%)[3]

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Bight Wind Holdings, LLC (30%)[4]
Clean Energy Generation, LLC (50%)
Emerald Energy Venture LLC (51%)
Island Park Energy Center, LLC (50%)
Islander East Pipeline Company, LLC (50%)[4]
LI Energy Storage System, LLC (50%)
LI Solar Generation, LLC (50%)

Incorporated in France

Registered office: 1 Terrasse Bellini, Tour Initiale, TSA 41000 – 9291, Paris La Defense, CEDEX, France

IFA2 SAS (50%)

Associates

A list of the Group's associates as at 31 March 2021 is given below. Unless otherwise stated, all associates are included in the Group's financial statements using the equity method of accounting. Principal associates are identified in **bold**.

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Clean Line Energy Partners LLC (32%)[4]
Connecticut Yankee Atomic Power Company (19.5%)[5]
Direct Global Power, Inc. (26%)[4]
Energy Impact Fund LP (9.41%)[6]
KHB Venture LLC (33.33%)[7]
Maine Yankee Atomic Power Company (24%)[8]
Millennium Pipeline Company, LLC (26.25%)[4]
New York Transco LLC (28.3%)[9]
NYSEARCH RMLD, LLC (22.63%)
The Hive IV, LLC (28.2%)[4]
Yankee Atomic Electric Company (34.5%)[10]

Incorporated in Belgium

Registered office: Avenue de Cortenbergh 71, 1000 Brussels, Belgium

Coreso SA (15.84%)

Other investments

A list of the Group's other investments as at 31 March 2021 is given below.

Incorporated in England and Wales

Registered office: 1 More London Place, London SE1 2AF, UK

Energis plc (33.06%)‡

1. Registered office: Friars House, Manor House Drive, Coventry CV1 2TE, UK.
2. Registered office: 80 Cheapside, London, EC2V 6EE, UK.
3. Registered office: Berkeley House, 19 Portsmouth Road, Cobham, Surrey KT11 1JG, UK.
4. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801, USA.
5. Registered office: Carla Pizzella, 362 Injun Hollow Road, East Hampton CT 06424-3099, USA.
6. Registered office: Harvard Business Services, Inc., 16192 Coastal Highway, Lewes DE 19958, Sussex County, USA.
7. Registered office: De Maximus Inc., 135 Beaver Street, 4th Floor, Waltham MA 02452, USA.
8. Registered office: Joseph D Fay, 321 Old Ferry Road, Wiscasset ME 04578, USA.
9. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
10. Registered office: Karen Sucharzewski, 49 Yankee Road, Rowe MA 01367, USA.

* National Grid Interconnector Holdings Limited owns 284,500,000 €0.20 C Ordinary shares and one £1.00 Ordinary A share.
** National Grid Gas plc owns all £1.00 A Ordinary shares.
† National Grid Electricity Transmission plc owns 50 £1.00 A Ordinary shares.
‡ In administration.

Our interests and activities are held or operated through the subsidiaries, joint arrangements or associates as disclosed above. These interests and activities (and their branches) are established in – and subject to the laws and regulations of – these jurisdictions.

The following UK subsidiaries will take advantage of the audit exemption set out within section 479A of the Companies Act 2006 for the year ended 31 March 2021:

Company name	Company number
NatGrid One Limited	5521240
Natgrid TW1 Limited	7579324
National Grid Holdings Limited	3096772
National Grid International Limited	2537092
National Grid Twelve Limited	4355616
National Grid Twenty Three Limited	6999009
National Grid (US) Holdings Limited	2630496
National Grid (US) Investments 2 Limited	3784528
National Grid (US) Investments 4 Limited	3867128
National Grid (US) Partner 1 Limited	4314432

35. Sensitivities

In order to give a clearer picture of the impact on our results or financial position of potential changes in significant estimates and assumptions, the following sensitivities are presented. These sensitivities are based on assumptions and conditions prevailing at the year-end and should be used with caution. The effects provided are not necessarily indicative of the actual effects that would be experienced because our actual exposures are constantly changing.

The sensitivities in the tables below show the potential impact in the income statement (and consequential impact on net assets) for a reasonably possible range of different variables each of which have been considered in isolation (i.e. with all other variables remaining constant). There are a number of these sensitivities which are mutually exclusive, and therefore if one were to happen, another would not, meaning a total showing how sensitive our results are to these external factors is not meaningful.

The sensitivities included in the tables below broadly have an equal and opposite effect if the sensitivity increases or decreases by the same amount unless otherwise stated.

(a) Sensitivities on areas of estimation uncertainty

The table below sets out the sensitivity analysis for certain areas of estimation uncertainty set out in note 1E. These estimates are those that have a significant risk of resulting in a material adjustment to the carrying values of assets and liabilities in the next year. Note that the sensitivity analysis for the useful economic lives of our gas network assets is included in note 13.

	2021		2020	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Pensions and other post-retirement benefit liabilities (pre-tax)[1]:				
UK discount rate change of 0.5%[2]	**4**	**952**	6	877
US discount rate change of 0.5%[2]	**17**	**730**	10	514
UK RPI rate change of 0.5%[3]	**3**	**723**	4	670
UK long-term rate of increase in salaries change of 0.5%	**1**	**42**	1	39
US long-term rate of increase in salaries change of 0.5%	**3**	**42**	2	47
UK change of one year to life expectancy at age 65[4]	**1**	**612**	1	545
US change of one year to life expectancy at age 65	**4**	**429**	4	456
Assumed US healthcare cost trend rates change of 1%	**26**	**437**	31	507
Environmental provision:				
10% change in estimated future cash flows	**170**	**170**	210	210

1. The changes shown are a change in the annual pension or other post-retirement benefit service charge and change in the defined benefit obligations.
2. A change in the discount rate is likely to occur as a result of changes in bond yields and as such would be expected to be offset to a significant degree by a change in the value of the bond assets held by the plans. In the UK, there would also be a £257 million (2020: £205 million) net assets offset from the buy-in policies, where the accounting value of the buy-in asset is set equal to the associated liabilities.
3. The projected impact resulting from a change in RPI reflects the underlying effect on pensions in payment, pensions in deferment and resultant increases in salary assumptions. The buy-in policies would have a £190 million (2020: £152 million) net assets offset to the above.
4. In the UK, the buy-in policies and the longevity swap entered into, would have a £183 million (2020: £223 million) net assets offset to the above.

Pensions and other post-retirement benefits assumptions

Sensitivities have been prepared to show how the defined benefit obligations and annual service costs could potentially be impacted by changes in the relevant actuarial assumption that were reasonably possible as at 31 March 2021. In preparing sensitivities, the potential impact has been calculated by applying the change to each assumption in isolation and assuming all other assumptions remain unchanged. This is with the exception of RPI in the UK where the corresponding change to increases to pensions in payment, increases to pensions in deferment and increases in salary are recognised.

Notes to the consolidated financial statements continued

35. Sensitivities continued

(b) Sensitivities on financial instruments

We are further required to show additional sensitivity analysis under IFRS 7 and these are shown separately in the subsequent table due to the additional assumptions that are made in order to produce meaningful sensitivity disclosures.

Our net debt as presented in note 29 is sensitive to changes in market variables, primarily being UK and US interest rates, the UK RPI and the dollar to sterling exchange rate. These impact the valuation of our borrowings, deposits and derivative financial instruments. The analysis illustrates the sensitivity of our financial instruments to reasonably possible changes in these market variables.

The following main assumptions were made in calculating the sensitivity analysis for continuing operations:

- the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives portfolio, and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations in place at 31 March 2021 and 2020 respectively;
- the statement of financial position sensitivity to interest rates relates to items presented at their fair values: derivative financial instruments; our investments measured at fair value through profit and loss (FVTPL) and fair value through other comprehensive income; and our liability measured at FVTPL. Further debt and other deposits are carried at amortised cost and so their carrying value does not change as interest rates move;
- the sensitivity of interest to movements in interest rates is calculated on net floating rate exposures on debt, deposits and derivative instruments;
- changes in the carrying value of derivatives from movements in interest rates of designated cash flow hedges are assumed to be recorded fully within equity; and
- changes in the carrying value of derivative financial instruments designated as net investment hedges from movements in interest rates are presented in equity as costs of hedging, with a one-year release to the income statement. The impact of movements in the dollar to sterling exchange rate are recorded directly in equity.

	2021		2020	
	Income statement £m	Other equity reserves £m	Income statement £m	Other equity reserves £m
Financial risk (post-tax):				
UK RPI change of 0.5%[1]	25	–	27	–
UK interest rates change of 0.5%	12	98	14	47
US interest rates change of 0.5%	6	22	5	27
US dollar exchange rate change of 10%[2]	44	285	49	216

1. Excludes sensitivities to LPI curve. Further details on sensitivities are provided in note 32(g).
2. The other equity reserves impact does not reflect the exchange translation in our US subsidiaries' net assets. It is estimated this would change by £1,425 million (2020: £1,319 million) in the opposite direction if the dollar exchange rate changed by 10%.

Our commodity contract derivatives are sensitive to price risk. Additional sensitivities in respect to commodity price risk and to our derivative fair values are as follows:

	2021		2020	
	Income statement £m	Net assets £m	Income statement £m	Net assets £m
Commodity price risk (post-tax):				
10% increase in commodity prices	20	20	26	26
10% decrease in commodity prices	(21)	(21)	(27)	(27)
Assets and liabilities carried at fair value (post-tax):				
10% fair value change in derivative financial instruments[1]	14	14	12	12
10% fair value change in commodity contract derivative liabilities	6	6	9	9

1. The effect of a 10% change in fair value assumes no hedge accounting.

36. Additional disclosures in respect of guaranteed securities

We have preferred shares that are listed on a US national securities exchange and are guaranteed by a company in the Group. This guarantor commits to honour any liabilities should the company issuing the debt have any financial difficulties. In order to provide debt holders with information on the financial stability of the company providing the guarantee, we are required to disclose individual financial information for this company. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

Niagara Mohawk Power Corporation, a wholly owned subsidiary of the Group, has issued preferred shares that are listed on a US national securities exchange and are guaranteed by National Grid plc. In order to provide preferred shareholders with information on the financial stability of the company providing the guarantee, we are required to disclose individual financial information for these companies. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

The following summarised financial information is given in respect of Niagara Mohawk Power Corporation as a result of National Grid plc's guarantee, dated 29 October 2007, of Niagara Mohawk Power Corporation's 3.6% and 3.9% issued preferred shares, which amount to £29 million. National Grid plc's guarantee of Niagara Mohawk Power Corporation's preferred shares is full and unconditional. There are no restrictions on the payment of dividends by Niagara Mohawk Power Corporation or limitations on National Grid plc's guarantee of the preferred shares, and there are no factors that may affect payments to holders of the guaranteed securities.

The following summarised financial information for National Grid plc and Niagara Mohawk Power Corporation is presented on a combined basis and is intended to provide investors with meaningful and comparable financial information, and is provided pursuant to the early adoption of Rule 13-01 of Regulation S-X in lieu of the separate financial statements of Niagara Mohawk Power Corporation.

Summarised financial information is presented, on a combined basis, as at 31 March 2021. The combined amounts are presented under IFRS measurement principles. Inter-company transactions have been eliminated. Investments in other non-issuer and non-guarantor subsidiaries are included at cost, subject to impairment.

Summarised financial information for the year ended 31 March 2021 – IFRS

	National Grid plc and Niagara Mohawk Power Corporation combined £m
Combined statement of financial position	
Non-current loans to other subsidiaries	–
Non-current assets	8,940
Current loans to other subsidiaries	20,692
Current assets	1,553
Current loans from other subsidiaries	(17,589)
Current liabilities	(1,342)
Non-current loans from other subsidiaries	(2,059)
Non-current liabilities	(6,363)
Net assets[1]	3,832
Equity	3,832
Combined income statement – continuing operations	
Revenue	2,462
Operating costs	(4,562)
Operating profit	(2,100)
Other income from other subsidiaries	9,978
Other income and costs, including taxation	(182)
Profit after tax	7,696

1. Excluded from net assets above are investments in other consolidated subsidiaries with a carrying value of £14,415 million.

37. Transition to new accounting standards

(a) Transition to IFRS 16

The Group adopted IFRS 16 'Leases', with effect from 1 April 2019. IFRS 16 introduced a single lease accounting model for lessees (rather than the previous distinction between operating and finance leases). A contract is, or contains, a lease, if it provides the right to control the use of an identified asset for a specific period of time in exchange for consideration. The new standard resulted in our operating leases being accounted for in the consolidated statement of financial position as 'right-of-use' assets with corresponding lease liabilities also recognised. It therefore increased both our assets and liabilities (including net debt). It also changed the timing and presentation in the consolidated income statement as it resulted in an increase in finance costs and depreciation largely offset by a reduction in the previously straight-line operating costs.

Transition options

We applied IFRS 16 using the modified retrospective approach. Comparatives were not restated on adoption. Instead, on the opening balance sheet date, right-of-use assets (net of accrued rent or rent-free periods, and reported within property, plant and equipment), additional lease liabilities (reported within borrowings) and any associated deferred tax were recognised, with no cumulative transition adjustment to reflect through retained earnings. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis as permitted by IFRS 16.

Notes to the consolidated financial statements continued

37. Transition to new accounting standards continued

(a) Transition to IFRS 16 continued

We elected to apply the practical expedient to grandfather our previous assessments of whether contracts were previously accounted for as a lease, as permitted by the standard, instead of reassessing all significant contracts as at the date of initial application to determine whether they met the IFRS 16 definition of a lease.

We elected to apply the practical expedient on transition, which permitted right-of-use assets to be measured at an amount equal to the lease liability on adoption of the standard (adjusted for any prepaid or accrued lease expenses).

In addition, we also elected the option to adjust the carrying amounts of the right-of-use assets as at 1 April 2019 for any onerous lease provisions that had been recognised on the Group consolidated statement of financial position as at 31 March 2019, rather than performing impairment assessments on transition.

Impact of transition

At 31 March 2019, the Group disclosed non-cancellable operating lease commitments of £0.3 billion, of which the majority were in the US. A further £0.4 billion of lease liabilities were recognised due to the requirement in IFRS 16 to recognise lease liabilities for the term that we are reasonably certain to exercise lease extension or lease termination options for, rather than only for the period of the minimum contractual term that was used in determining our lease liability commitments. This was partially offset by the £0.2 billion impact of discounting our lease liabilities at the incremental borrowing rate for each lease. The weighted average discount rate applied to lease liabilities recognised on the transition date was 2.8%. There were some immaterial short-term and low-value leases, which were recognised on a straight-line basis as an expense in the consolidated income statement over the remaining lease term.

As a result, the Group recognised additional right-of-use assets of £0.5 billion and lease liabilities (which are included within net debt) of £0.5 billion at 1 April 2019. No additional net deferred tax was recognised. The transition adjustment was in addition to the £270 million of finance leases already recognised on the consolidated statement of financial position under IAS 17. There was no impact on net assets as shown in the table below, which shows the impacted balances from the Group consolidated statement of financial position.

Impact of transition	31 March 2019 (before the impact of IFRS 16)[1] £m	IFRS 16 transition adjustments £m	**1 April 2019 As restated £m**
Property, plant and equipment – Right-of-use assets			
Land and buildings	2,560	381	**2,941**
Plant and machinery	36,911	67	**36,978**
Assets in the course of construction	5,049	—	**5,049**
Motor vehicles and office equipment	339	20	**359**
Total property, plant and equipment	44,859	468	**45,327**
Borrowings – Lease liabilities			
Current	(65)	(48)	**(113)**
Non-current	(205)	(426)	**(631)**
Total lease liabilities	(270)	(474)	**(744)**
Other liabilities			
Trade and other payables	(3,769)	3	**(3,766)**
Other non-current liabilities	(808)	3	**(805)**
Net assets	19,568	—	**19,568**
Equity			
Total equity	19,568	—	**19,568**

1. Comparative amounts have been revised as described in note 1F.

The impact of IFRS 16 on profit after tax as a result of adopting the new standard was not material. However, it resulted in an increase in operating profit due to the operating costs now being replaced with depreciation and interest charges.

The impact on the cash flow statement was also not material, although there was an increase in operating cash flows and decrease in financing cash flows, because repayment of the principal portion of the lease liabilities is now classified as cash flows from financing activities rather than operating cash flows.

Ongoing accounting policy

With effect from 1 April 2019, new lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term, plus any other costs. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security.

The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

37. Transition to new accounting standards continued

(b) Transition to IFRS 9 and IFRS 15

On 1 April 2018, the Group adopted IFRS 9 and IFRS 15. Both standards were applied using the modified retrospective approach whereby comparative amounts were not restated on transition, but a cumulative adjustment was made to retained earnings in the opening consolidated statement of financial position as at 1 April 2018. The impact of the transition on the opening consolidated statement of financial position is set out in the following table:

Impact of transition	31 March 2018 (Before the impact of transition adjustments)* £m	Transition adjustments IFRS 9 £m	IFRS 15 £m	1 April 2018 £m
Non-current assets				
Goodwill	4,984	–	–	**4,984**
Other intangible assets	899	–	–	**899**
Property, plant and equipment	40,730	–	–	**40,730**
Other non-current assets	115	–	–	**115**
Pension assets	1,409	–	–	**1,409**
Financial and other investments	899	–[1]	–	**899**
Investments in joint ventures and associates	2,168	–	–	**2,168**
Derivative financial assets	1,319	–	–	**1,319**
Total non-current assets	52,523	–	–	**52,523**
Current assets				
Inventories and current intangible assets	341	–	–	**341**
Trade and other receivables	2,798	–[2]	(3)	**2,795**
Current tax assets	114	–	–	**114**
Financial and other investments	2,694	–[1]	–	**2,694**
Derivative financial assets	405	–	–	**405**
Cash and cash equivalents	329	–	–	**329**
Total current assets	6,681	–	(3)	**6,678**
Total assets	59,204	–	(3)	**59,201**
Current liabilities				
Borrowings	(4,447)	–	–	**(4,447)**
Derivative financial liabilities	(401)	–	–	**(401)**
Trade and other payables	(3,453)	–	59[7]	**(3,394)**
Contract liabilities	–	–	(53)[7]	**(53)**
Current tax liabilities	(123)	–	–	**(123)**
Provisions	(273)	–	–	**(273)**
Total current liabilities	(8,697)	–	6	**(8,691)**
Non-current liabilities				
Borrowings	(22,178)	(32)[3]	–	**(22,210)**
Derivative financial liabilities	(660)	–	–	**(660)**
Other non-current liabilities	(1,317)	–	567[7]	**(750)**
Contract liabilities	–	–	(813)[7]	**(813)**
Deferred tax liabilities	(3,868)	5[4]	74[8]	**(3,789)**
Pensions and other post-retirement benefit obligations	(1,672)	–	–	**(1,672)**
Provisions	(1,779)	–	–	**(1,779)**
Total non-current liabilities	(31,474)	(27)	(172)	**(31,673)**
Total liabilities	(40,171)	(27)	(166)	**(40,364)**
Net assets	19,033	(27)	(169)	**18,837**
Equity				
Share capital	452	–	–	**452**
Share premium account	1,321	–	–	**1,321**
Retained earnings	21,784	(99)[5]	(169)[9]	**21,516**
Other equity reserves	(4,540)	72[6]	–	**(4,468)**
Total shareholders' equity	19,017	(27)	(169)	**18,821**
Non-controlling interests	16	–	–	**16**
Total equity	19,033	(27)	(169)	**18,837**

*Comparative amounts have been revised as described in note 1F.

Notes to the consolidated financial statements
continued

37. Transition to new accounting standards continued

(b) Transition to IFRS 9 and IFRS 15 continued

IFRS 9: Financial Instruments

IFRS 9 has changed the rules concerning the classification and measurement of financial instruments, impairment of financial assets, and hedge accounting. Details of the impact of applying IFRS 9 for the year ended 31 March 2019 are set out below.

Adjustments arising in the year ended 31 March 2019 as a result of the transition to IFRS 9:

1. The available-for-sale category for financial assets was replaced with investments held at fair value through profit and loss (FVTPL) and investments held at fair value through other comprehensive income (FVOCI). Changes to the classification and measurement of financial assets did not alter the carrying value of any financial assets held by the Group. The net impact to retained earnings of the reclassification on transition was an £8 million gain.

   As described in note 15, all recognised financial assets that are within the scope of IFRS 9 are initially recorded at fair value and subsequently measured at amortised cost or fair value based on the Group's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. Therefore on 1 April 2018, the Group reclassified its investments as follows:

   - Money market funds and fund investments held by captive insurance companies were classified as financial assets at FVTPL because their contractual cash flows are not solely payments of principal and interest;
   - Investments in debt securities that have contractual payments that are solely payments of principal and interest, and which are held as part of the liquidity portfolio or to back employee benefit liabilities, were classified as financial assets at FVOCI because they are held in a business model whose objective is to collect the contractual cash flows and to sell the debt instruments;
   - The Group has elected to hold investments in equity securities, which are held to back employee benefit liabilities, as financial assets at FVOCI as the Group does not believe that changes in their fair value is reflective of the financial performance of the Group; and
   - Loans to joint ventures and associates, cash at bank, and short-term deposits are classified at amortised cost as they have contractual cash flows which are solely payments of principal and interest and the Group holds them to collect contractual cash flows.

   Aside from derivative financial instruments, which remain classified as FVTPL, the Group did not previously have any financial assets or liabilities classified at FVTPL.

   The table below illustrates those financial assets and liabilities that were reclassified at 1 April 2018:

Financial asset/liability	Note	Original measurement category under IAS 39	New measurement category under IFRS 9	Original carrying amount under IAS 39 £m	Change to measurement basis under IFRS 9 £m	New carrying amount under IFRS 9 £m
Money market funds and fund investments in equities and bonds	15	Available-for-sale investments	Financial assets at FVTPL	2,294	–	2,294
Cash surrender value of life insurance policies and investments in debt securities	15	Available-for-sale investments	Financial assets at FVOCI	343	–	343
Investments in equity securities	15	Available-for-sale investments	Financial assets at FVOCI (equity instruments)	84	–	84
Loans to joint ventures and associates and restricted balances	15	Loans and receivables	Financial assets at amortised cost	872	–	872
Borrowings	21	Financial liabilities at amortised cost	Financial liabilities at fair value through profit and loss	(570)	(32)	(602)

   Note that the table above does not include derivative assets, derivative liabilities, trade receivables, cash at bank and short-term deposits, borrowings measured at amortised cost or trade payables. This is because neither the classification nor the measurement of these items has changed on transition to IFRS 9.

2. The change from the incurred loss impairment model of IAS 39 to the expected loss model in IFRS 9 did not have a material impact on the Group's credit loss provision. The Group calculates its impairment provision on trade receivables using a sophisticated provisions matrix. The inclusion of forward-looking information did not have a significant impact on the matrix as the relevant short-term future economic conditions affecting our retail customers in the US are expected to be similar to recent experience.

3. The Group elected to reclassify an existing liability with a carrying value of £570 million from amortised cost to fair value through profit and loss to reduce a measurement mismatch. At transition, the resultant impacts included an increase in the carrying value of the liability of £32 million, a reduction in retained earnings of £40 million and the establishment of an own credit reserve (within other equity reserves) of £7 million.

4. Deferred tax was recognised on the adjustments recorded on the transition to IFRS 9. Reserve impacts are stated net of related deferred tax.

5. Retained earnings included the impact from adjustments 1, 3 and 6.

6. The Group adopted the hedge accounting requirements of IFRS 9, which more closely align with the Group's risk management policies. On transition, it was concluded that all IAS 39 hedge relationships are qualifying IFRS 9 relationships with the treatment of the cost of hedging being the main change. The effect was a reclassification in reserves of a £67 million gain from retained earnings and a £10 million gain from the cash flow hedge reserve, into a new cost of hedging reserve (within other equity reserves). In this reserve, qualifying unrealised gains and losses excluded from hedging relationships are deferred and released systematically into profit or loss to match the timing of hedged items.

37. Transition to new accounting standards continued

(b) Transition to IFRS 9 and IFRS 15 continued

IFRS 15: Revenue from Contracts with Customers

IFRS 15 primarily changed the accounting for our connection and diversion revenues in our regulated businesses. No practical expedients on transition were applied.

The accounting for revenue under IFRS 15 did not represent a substantive change from the Group's previous practice under IAS 18 for recognising revenue from sales to customers with the exception of the following items:

- Certain pass-through revenues (principally revenues collected on behalf of the Scottish and Offshore transmission operators) were recorded net of operating costs, whereas previously they were recognised gross of operating costs. Had we not adopted IFRS 15, our revenues and operating costs for the year ended 31 March 2019 would have been £1,197 million higher, with no impact to operating profits;
- Contributions for capital works relating to connections for our customers were deferred as contract liabilities on our consolidated statement of financial position on transition, and released over the life of the connection assets. This was a change for our US Regulated business and our UK Gas Transmission business, where previously revenues were recorded once the work was completed. Had we not adopted IFRS 15, our revenues and operating profit for the year ended 31 March 2019 would have been £57 million higher; and
- In the UK, contributions for capital works relating to diversions were recognised as the works are completed. This was a change for the UK regulated businesses where revenues were previously deferred over the life of the asset. Had we not adopted IFRS 15, our revenues and operating profit for the year ended 31 March 2019 would have been £26 million and £23 million lower, respectively.

Adjustments arising in the year ended 31 March 2019 as a result of the transition to IFRS 15:

7. Deferred income from contributions for capital works were reclassified to contract liabilities. In addition, these liabilities for capital works relating to connections have increased as these capital contributions for connections were cumulatively adjusted for on 1 April 2018 and are now deferred and released over the life of the connection assets. This was a change for our US Regulated business and our UK Gas Transmission business where previously revenues were recorded once the work was completed.

   Partially offsetting the increase in contract liabilities for connections was the change in accounting treatment for contributions relating to diversions in our UK businesses. These contributions are recognised as revenue as the works are completed where previously revenue was recognised over the life of the assets.

8. Deferred tax was recorded on the incremental amounts recorded against capital contributions and contract liabilities on the transition to IFRS 15. Deferred tax balances have been calculated at the rate substantively enacted at the balance sheet date.

9. The transition adjustment reflected the net of adjustments 7 and 8 above.

Notes to the consolidated financial statements
continued

38. Acquisitions

This note outlines the acquisition announced during the year and the acquisition made in the prior year.

Acquisition of PPL Western Power Distribution Investments Limited
On 17 March 2021, National Grid plc entered into an agreement to acquire 100% of the share capital of PPL WPD Investments Limited (WPD), the holding company of Western Power Distribution plc, which is the UK's largest electricity distribution network operator. The total consideration for the transaction is £7.8 billion. The transaction is expected to complete in July 2021.

Acquisition of Geronimo Energy LLC and Emerald Energy Venture LLC
On 11 July 2019, National Grid Ventures acquired 100% of the share capital of National Grid Renewables (formerly known as Geronimo Energy LLC) and 51% of Emerald Energy Venture LLC (Emerald), which is jointly controlled by National Grid and Washington State Investment Board (WSIB). National Grid Renewables Development LLC is a leading developer of wind and solar generation based in Minneapolis in the US, and the acquisition is a significant step in National Grid's commitment to the decarbonisation agenda, towards developing and growing a large-scale renewable generation business in the US, and delivering sustainable, reliable and efficient energy. This is National Grid's first ownership stake in wind generation and an expansion of our activities in solar generation. Whilst National Grid Renewables develops the assets, Emerald has a right of first refusal to buy, build and operate those assets.

The total consideration was £209 million, satisfied by a combination of cash and contingent consideration. The contingent consideration was recorded within trade and other payables for the amount payable within one year, with the remainder recorded within other non-current liabilities. The fair value of contingent consideration recognised was determined as the present value of our best estimate of the value that we will be required to pay, taking into consideration management's estimates of the volume of successful development activity by National Grid Renewables over the relevant period.The contingent consideration will be payable over a number of years.

The fair values of the assets and liabilities recognised at the acquisition date for both the acquisition of the subsidiary, National Grid Renewables, and the joint venture, Emerald, are set out below.

	£m
Intangible assets	5
Property, plant and equipment	1
Investment in joint venture – Emerald	90
Cash	2
Other identifiable assets and liabilities	30
Total identifiable assets	128
Goodwill	81
Total consideration transferred	209
Satisfied by:	
Contingent consideration – National Grid Renewables	70
Cash consideration – National Grid Renewables	49
Cash consideration – Emerald	90
	209

The goodwill arising from the acquisition comprised the value associated with the potential future projects that will be developed by National Grid Renewables as well as the expertise of the management team that was acquired, neither of which qualify for recognition as tangible or intangible assets. At the acquisition date, there were no material contingent liabilities.

Total acquisition-related costs of £3 million were recognised within operating costs within the consolidated income statement, of which £1 million was recognised in the year ended 31 March 2020.

National Grid Renewables earns revenue from selling its development stage assets to Emerald and other third parties. Emerald generates revenue from the assets it purchases from National Grid Renewables once they are operational and has no other business (see note 16). Neither entity has generated significant revenues or profits for the period between the acquisition date and 31 March 2020. Even if the acquisition had completed on 1 April 2019, there would have been no significant revenues or profits for the year ended 31 March 2020.

39. Post balance sheet events

In the period between 1 April 2021 and 19 May 2021, there have been no significant post balance sheet events.

Company accounting policies

We are required to include the stand-alone balance sheet of our ultimate Parent Company, National Grid plc, under the Companies Act 2006. This is because the publicly traded shares are actually those of National Grid plc (the Company) and the following disclosures provide additional information to shareholders.

A. Basis of preparation

National Grid plc is the Parent Company of the National Grid Group, which is engaged in the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited company, limited by shares. The Company is incorporated and domiciled in England, with its registered office at 1–3 Strand, London, WC2N 5EH.

The financial statements of National Grid plc for the year ended 31 March 2021 were approved by the Board of Directors on 19 May 2021. The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. Accordingly, these individual financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101). In preparing these financial statements the Company applies the recognition and measurement requirements of International Financial Reporting Standards (IFRS) as adopted by the EU, but makes amendments where necessary in order to comply with the provisions of the Companies Act 2006 and sets out below where advantage of the FRS 101 disclosure exemptions has been taken.

These individual financial statements have been prepared on an historical cost basis, except for the revaluation of financial instruments, and are presented in pounds sterling, which is the currency of the primary economic environment in which the Company operates. The comparative financial information has also been prepared on this basis.

These individual financial statements have been prepared on a going concern basis, which presumes that the Company has adequate resources to remain in operation, and that the Directors intend it to do so, for at least one year from the date the financial statements are signed. As the Company is part of a larger group it participates in the Group's centralised treasury arrangements and so shares banking arrangements with its subsidiaries. The Company is expected to generate positive cash flows or be in a position to obtain finance via intercompany loans to continue to operate for the foreseeable future.

As described further in note 1 to the consolidated financial statements, the Directors have considered the impact of COVID-19 on the Group. Based on this analysis, they have concluded that the Company will have adequate resources to continue in operation for at least 12 months from the signing date of these financial statements. Therefore, they continue to adopt the going concern basis of accounting in preparing the financial statements.

In accordance with the exemption permitted by section 408 of the Companies Act 2006, the Company has not presented its own profit and loss account or statement of comprehensive income.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements of the Company in accordance with FRS 101:

- a cash flow statement and related notes;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management; and
- the effects of new but not yet effective IFRS standards.

The exemption from disclosing key management personnel compensation has not been taken as there are no costs borne by the Company in respect of employees, and no related costs are recharged to the Company.

As the consolidated financial statements of National Grid plc, which are available from the registered office, include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 in respect of certain disclosures required by IFRS 13 'Fair value measurement' and the disclosures required by IFRS 7 'Financial instruments: Disclosures'.

There are no areas of judgement or key sources of estimation uncertainty that are considered to have a significant effect on the amounts recognised in the financial statements.

The balance sheet has been prepared in accordance with the Company's accounting policies approved by the Board and described below.

B. Fixed asset investments

Investments held as fixed assets are stated at cost less any provisions for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairments are calculated such that the carrying value of the fixed asset investment is the lower of its cost or recoverable amount. Recoverable amount is the higher of its fair value less costs of disposal and its value-in-use. The Company accounts for common control transactions at cost.

C. Tax

Current tax for the current and prior periods is provided at the amount expected to be paid or recovered using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full on temporary differences which result in an obligation at the balance sheet date to pay more tax, or the right to pay less tax, at a future date, at tax rates expected to apply when the temporary differences reverse based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is provided for using the balance sheet liability method and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax assets are recognised to the extent that it is regarded as more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

Company accounting policies continued

D. Foreign currencies
Transactions in currencies other than the functional currency of the Company are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Gains and losses arising on retranslation of monetary assets and liabilities are included in the profit and loss account.

E. Financial instruments
The Company's accounting policies are the same as the Group's accounting policies under IFRS, namely IAS 32 'Financial Instruments: Presentation', IFRS 9 'Financial Instruments' and IFRS 7 'Financial Instruments: Disclosures'. The Company applies these policies only in respect of the financial instruments that it has, namely investments, derivative financial instruments, debtors, cash at bank and in hand, borrowings and creditors.

The policies are set out in notes 15, 17, 19, 20, 21 and 22 to the consolidated financial statements. The Company is taking the exemption for financial instruments disclosures, because IFRS 7 disclosures are given in notes 32 and 35 to the consolidated financial statements.

F. Hedge accounting
The Company applies the same accounting policy as the Group in respect of fair value hedges and cash flow hedges. This policy is set out in note 32 to the consolidated financial statements.

G. Parent Company guarantees
The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. Such guarantees are accounted for by the Company as insurance contracts. In the event of default or non-performance by the subsidiary, a liability is recorded in accordance with IAS 37.

H. Share awards to employees of subsidiary undertakings
The issuance by the Company to employees of its subsidiaries of a grant over the Company's options represents additional capital contributions by the Company to its subsidiaries. An additional investment in subsidiaries results in a corresponding increase in shareholders' equity. The additional capital contribution is based on the fair value of the option at the date of grant, allocated over the underlying grant's vesting period. Where payments are subsequently received from subsidiaries, these are accounted for as a return of a capital contribution and credited against the Company's investments in subsidiaries. The Company has no employees.

I. Dividends
Interim dividends are recognised when they are paid to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

J. Directors' remuneration
Full details of Directors' remuneration are disclosed on pages 92 to 113.

Company balance sheet

as at 31 March

	Notes	2021 £m	2020 £m
Fixed assets			
Investments	1	**14,389**	14,362
Current assets			
Debtors (amounts falling due within one year)	2	**20,699**	12,427
Debtors (amounts falling due after more than one year)	2	**143**	398
Investments	5	**784**	752
Cash at bank and in hand		**40**	2
Total current assets		**21,666**	13,579
Creditors (amounts falling due within one year)	3	**(18,312)**	(16,836)
Net current assets/(liabilities)		**3,354**	(3,257)
Total assets less current liabilities		**17,743**	11,105
Creditors (amounts falling due after more than one year)	3	**(3,085)**	(2,620)
Net assets		**14,658**	8,485
Equity			
Share capital	7	**474**	470
Share premium account		**1,296**	1,301
Cash flow hedge reserve		**(3)**	(28)
Cost of hedging reserve		**(15)**	(6)
Other equity reserves		**426**	399
Profit and loss account	8	**12,480**	6,349
Total shareholders' equity		**14,658**	8,485

The Company's profit after tax for the year was £5,107 million (2020: £3,684 million profit). Profits available for distribution by the Company to shareholders were £9.9 billion at 31 March 2021. The financial statements of the Company on pages 217 to 223 were approved by the Board of Directors on 19 May 2021 and were signed on its behalf by:

Sir Peter Gershon Chairman
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Company statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Cash flow hedge reserve £m	Cost of hedging reserve £m	Other equity reserves £m	Profit and loss account £m	Total shareholders' equity £m
At 1 April 2019	458	1,314	1	—	380	3,546	5,699
Profit for the year[1]	—	—	—	—	—	3,684	3,684
Other comprehensive (loss)/profit for the year							
Transferred from equity (net of tax)	—	—	(29)	(6)	—	—	(35)
Total comprehensive (loss)/profit for the year	—	—	(29)	(6)	—	3,684	3,649
Other equity movements							
Scrip dividend-related share issue[2]	12	(13)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Purchase of own shares	—	—	—	—	—	(6)	(6)
Share awards to employees of subsidiary undertakings	—	—	—	—	19	—	19
Equity dividends	—	—	—	—	—	(892)	(892)
At 31 March 2020	470	1,301	(28)	(6)	399	6,349	8,485
Profit for the year[1]	—	—	—	—	—	5,107	5,107
Other comprehensive profit/(loss) for the year							
Transferred to/(from) equity (net of tax)	—	—	25	(9)	—	—	16
Dividends in specie (note 1)	—	—	—	—	—	2,422	2,422
Total comprehensive profit/(loss) for the year	—	—	25	(9)	—	7,529	7,545
Other equity movements							
Scrip dividend-related share issue[2]	4	(5)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Purchase of own shares	—	—	—	—	—	(2)	(2)
Share awards to employees of subsidiary undertakings	—	—	—	—	27	—	27
Equity dividends	—	—	—	—	—	(1,413)	(1,413)
At 31 March 2021	**474**	**1,296**	**(3)**	**(15)**	**426**	**12,480**	**14,658**

1. Included within profit for the year is dividend income from subsidiaries of £7,556 million (2020: £3,887 million).
2. Included within the share premium account are costs associated with scrip dividends.

Notes to the Company financial statements

1. Fixed asset investments

	Shares in subsidiary undertakings £m
Cost at 1 April 2019	9,923
Additions	7,011
Disposals	(2,572)
Cost at 31 March 2020	14,362
Additions	2,447
Cost at 31 March 2021	16,809
Provision at 1 April 2019 and 1 April 2020	—
Charge for the year	(2,420)
Provision at 31 March 2021	(2,420)
Net book value at 31 March 2021	**14,389**
Net book value at 31 March 2020	14,362

During the year, there was a capital contribution of £27 million (2020: £19 million) which represents the fair value of equity instruments granted to subsidiaries' employees arising from equity-settled employee share schemes.

In addition, the Company acquired a 100% investment in National Grid (US) Investments 2 Limited and National Grid Hong Kong Limited from its subsidiary undertaking, National Grid Luxembourg SARL, for a total consideration of £2,420 million in the form of a dividend in specie. Then as part of a wider group restructuring project, National Grid (US) Investments 2 Limited, was identified as a subsidiary no longer required and hence a number of accounting steps were implemented to reduce the net assets of that company to a nominal value. These steps included a capital reduction and the payment of dividends to the Company of £2,422 million. Following the receipt of these dividends the carrying value of the investment was reviewed and an impairment charge was made to the profit and loss account of £2,420 million. It is anticipated that National Grid (US) Investments 2 Limited will be placed into voluntary liquidation in the next financial year.

During the year ended 31 March 2020, the Company made a further investment of £2,000 million in National Grid (US) Holdings Limited, following a rights issue by that company; acquired National Grid (US) Investments 2 Limited from an indirect subsidiary undertaking for £2,420 million; and disposed of its investments in National Grid Holdings One plc and National Grid (US) Investments 2 Limited in exchange for an investment in National Grid Luxembourg SARL at a cost of £2,572 million.

The Company's direct subsidiary undertakings as at 31 March 2021 were as follows: National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc. The names of indirect subsidiary undertakings, joint ventures and associates are included in note 34 to the consolidated financial statements.

The Directors believe that the carrying value of the investments is supported by the fair value of their underlying net assets.

2. Debtors

	2021 £m	2020 £m
Amounts falling due within one year		
Derivative financial instruments (note 4)	**86**	37
Amounts owed by subsidiary undertakings	**20,613**	12,390
	20,699	12,427
Amounts falling due after more than one year		
Derivative financial instruments (note 4)	**139**	27
Amounts owed by subsidiary undertakings	**—**	363
Deferred tax	**4**	8
	143	398

The carrying values stated above are considered to represent the fair values of the assets. For the purposes of the impairment assessment, loans to subsidiary undertakings are considered low credit risk as the subsidiaries are solvent and are covered by the Group's liquidity arrangements.

A reconciliation of the movement in deferred tax in the year is shown below:

	Deferred tax £m
At 1 April 2019	—
Charged to equity	8
At 31 March 2020	8
Credited to equity	(4)
At 31 March 2021	**4**

Notes to the Company financial statements continued

3. Creditors

	2021 £m	2020 £m
Amounts falling due within one year		
Borrowings (note 6)	**635**	666
Derivative financial instruments (note 4)	**34**	278
Amounts owed to subsidiary undertakings	**17,589**	15,834
Other creditors	**54**	58
	18,312	16,836
Amounts falling due after more than one year		
Borrowings (note 6)	**823**	355
Derivative financial instruments (note 4)	**203**	160
Amounts owed to subsidiary undertakings	**2,059**	2,105
	3,085	2,620
Amounts owed to subsidiary undertakings falling due after more than one year are repayable as follows:		
In 1 to 2 years	**–**	–
In 2 to 3 years	**–**	–
In 3 to 4 years	**1,061**	–
In 4 to 5 years	**998**	443
More than 5 years	**–**	1,662
	2,059	2,105

The carrying values stated above are considered to represent the fair values of the liabilities.

4. Derivative financial instruments

The fair values of derivative financial instruments are:

	2021			2020		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Amounts falling due within one year	**86**	**(34)**	**52**	37	(278)	(241)
Amounts falling due after more than one year	**139**	**(203)**	**(64)**	27	(160)	(133)
	225	**(237)**	**(12)**	64	(438)	(374)

For each class of derivative, the notional contract[1] amounts are as follows:

	2021 £m	2020 £m
Cross-currency interest rate swaps	**(3,604)**	(3,804)
Foreign exchange forward contracts	**(9,517)**	(7,886)
	(13,121)	(11,690)

1. The notional contract amounts of derivatives indicate the gross nominal value of transactions outstanding at the balance sheet date.

5. Investments

	2021 £m	2020 £m
Investments in short-term money funds	**697**	572
Restricted balances – collateral	**87**	180
	784	752

6. Borrowings

The following table analyses the Company's total borrowings:

	2021 £m	2020 £m
Amounts falling due within one year		
Bank loans	**8**	46
Bonds	**362**	2
Commercial paper	**265**	618
	635	666
Amounts falling due after more than one year		
Bonds	**823**	355
	1,458	1,021

The maturity of total borrowings is as follows:

	2021 £m	2020 £m
Total borrowings are repayable as follows:		
Less than 1 year	**635**	666
In 1 to 2 years	**–**	355
In 2 to 3 years	**–**	–
In 3 to 4 years	**–**	–
In 4 to 5 years	**–**	–
More than 5 years	**823**	–
	1,458	1,021

The notional amount of borrowings outstanding as at 31 March 2021 was £1,480 million (2020: £1,018 million).

7. Share capital

The called-up share capital amounting to £474 million (2020: £470 million) consists of 3,814,951,606 ordinary shares of $12^{204}/_{473}$ pence each (2020: 3,780,237,016 ordinary shares of $12^{204}/_{473}$ pence each). For further information on share capital, refer to note 27 of the consolidated financial statements.

8. Shareholders' equity and reserves

At 31 March 2021, the profit and loss account reserve stood at £12,480 million (2020: £6,349 million) of which profits available for distribution by the Company to shareholders were £9.9 billion (2020: £5 billion). The Company bore no employee costs in either the current or prior year.

For further details of dividends paid and payable to shareholders, refer to note 9 of the consolidated financial statements.

9. Parent Company guarantees

The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. At 31 March 2021, the sterling equivalent amounted to £2,108 million (2020: £2,169 million). The guarantees are for varying terms from less than one year to open-ended.

In addition, as part of the sectionalisation of the National Grid UK Pension Scheme on 1 January 2017, a guarantee of £1 billion has been provided to Section A. This payment is contingent on insolvency or on failure to pay pensions obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total). Refer to note 25 of the consolidated financial statements.

10. Audit fees

The audit fee in respect of the Parent Company was £28,000 (2020: £27,000). Fees payable to Deloitte for non-audit services to the Company are not required to be disclosed as they are included within note 4 to the consolidated financial statements.

4. Additional Information

Picture by
Leo Harry Jamieson
UK
Joint winner
Age group 12–16


RECHARGE
Station

The business in detail

Key milestones

Some of the key dates and actions in the corporate history of National Grid are listed below. Our full history goes back much further.

1986

British Gas (BG) privatisation

1990

Electricity transmission network in England and Wales transfers to National Grid on electricity privatisation

1995

National Grid listed on the London Stock Exchange

1997

Centrica demerges from BG

Energis demerges from National Grid

2000

Lattice Group demerges from BG and is listed separately

New England Electric System and Eastern Utilities Associates acquired

2002

Niagara Mohawk Power Corporation merges with National Grid in US

National Grid and Lattice Group merge to form National Grid Transco

2004

UK wireless infrastructure network acquired from Crown Castle International Corp

2005

Four UK regional gas distribution networks sold and we adopt National Grid as our name

2006

Rhode Island gas distribution network acquired

2007

UK and US wireless infrastructure operations and the Basslink electricity interconnector in Australia sold

KeySpan Corporation acquired

2008

Ravenswood generation station sold

2010

Rights issue raises £3.2 billion

2012

New Hampshire electricity and gas distribution businesses sold

2016

National Grid separates the UK Gas Distribution business

2017

National Grid sells a 61% equity interest in the UK Gas Distribution business

2019

National Grid separates the UK Electricity System Operator business

National Grid sells its remaining 39% equity interest in UK Gas Distribution business

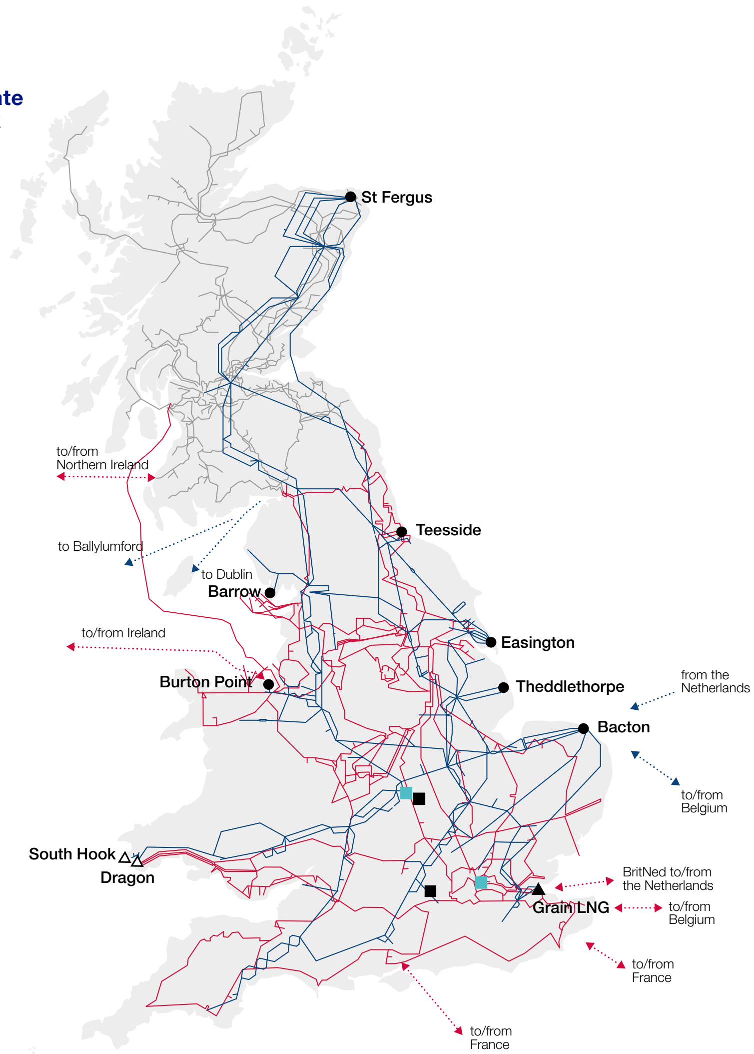
Acquisition of Geronimo

2021

National Grid agrees to buy WPD and, subject to the WPD Acquisition and certain regulatory approvals, to sell NECO, its Rhode Island gas and electricity business

National Grid announces its intention to commence a process for the sale of a majority equity interest in the UK GT Business

Where we operate
Our UK network



UK Transmission[1]

- Scottish electricity transmission system
- English and Welsh electricity transmission system

Approximately 4,496 miles (7,236 kilometres) of overhead line, 1,744 miles (2,806 kilometres) of the underground cable and 350 substations.

- Gas transmission system

Approximately 4,740 miles (7,627 kilometres) of high-pressure pipe and 23 compressor stations connecting to eight distribution networks and third-party independent systems.

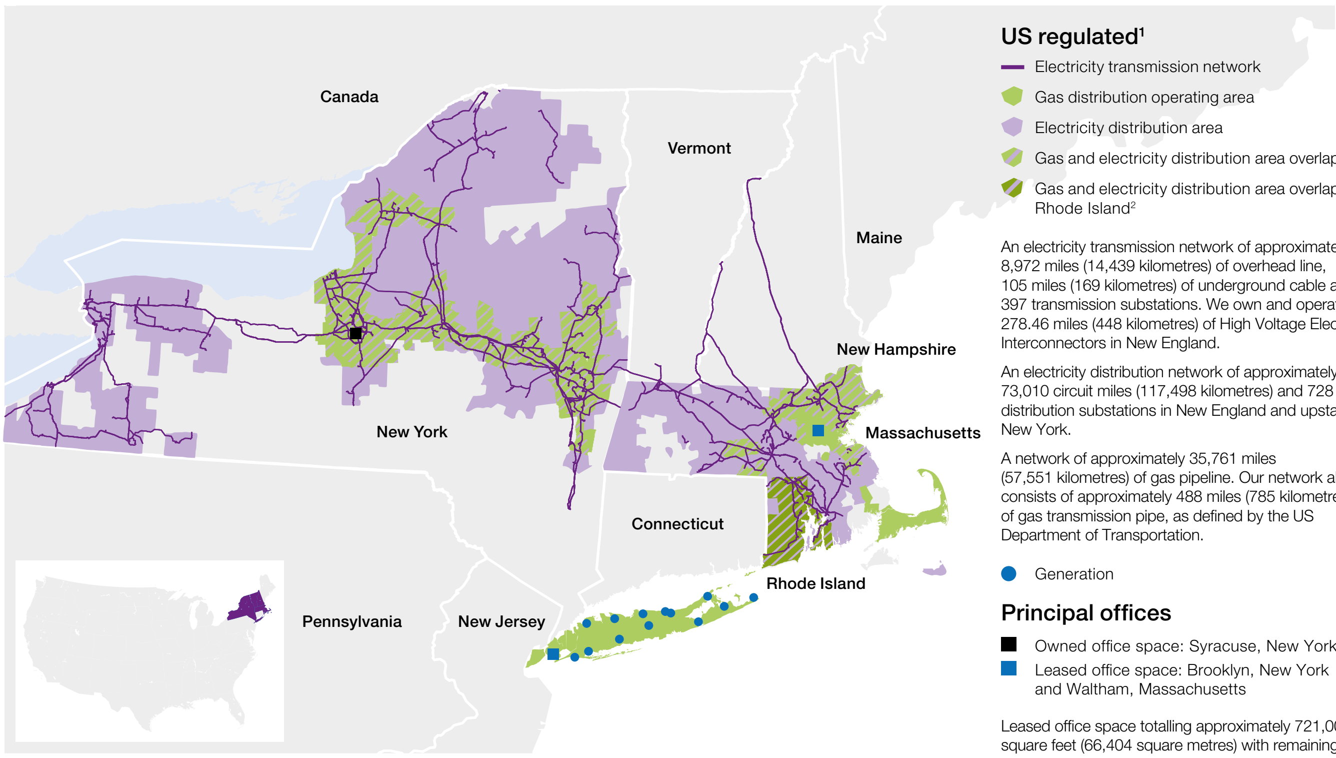
- Terminal
- LNG terminal owned by National Grid
- LNG terminal
- Electricity interconnector
- Gas interconnector

Principal offices

- Owned office space: Warwick and Wokingham
- Leased office space: Solihull and London

Leased office space totalling 105,771 square feet (9,827 square metres) with remaining terms two to five years.

Our US network



US regulated[1]

- Electricity transmission network
- Gas distribution operating area
- Electricity distribution area
- Gas and electricity distribution area overlap
- Gas and electricity distribution area overlap – Rhode Island[2]

An electricity transmission network of approximately 8,972 miles (14,439 kilometres) of overhead line, 105 miles (169 kilometres) of underground cable and 397 transmission substations. We own and operate 278.46 miles (448 kilometres) of High Voltage Electric Interconnectors in New England.

An electricity distribution network of approximately 73,010 circuit miles (117,498 kilometres) and 728 distribution substations in New England and upstate New York.

A network of approximately 35,761 miles (57,551 kilometres) of gas pipeline. Our network also consists of approximately 488 miles (785 kilometres) of gas transmission pipe, as defined by the US Department of Transportation.

- Generation

Principal offices

- Owned office space: Syracuse, New York
- Leased office space: Brooklyn, New York and Waltham, Massachusetts

Leased office space totalling approximately 721,000 square feet (66,404 square metres) with remaining terms of four to fifteen years. In August of 2020, the Company commenced its new lease at 2 Hanson Place, Downtown Brooklyn, New York. The existing One MetroTech lease terminates in February 2025 and will not be renewed; space anticipated to be vacated is being marketed for sub-lease.

At present, environmental issues are not preventing our UK and US businesses from utilising any material operating assets in the course of their operations.

1. Access to electricity and gas transmission assets on property owned by others is controlled through various agreements.
2. Conditional on completion of the WPD acquisition and certain regulatory approvals, we have agreed to sell our Rhode Island electricity transmission and distribution, and gas distribution business to PPL.

The business in detail continued

UK regulation

Our licences to participate in transmission and interconnection activities are established under the Gas Act 1986 and the Electricity Act 1989, as amended (the Acts). These require us to develop, maintain and operate economic and efficient networks and to facilitate competition in the supply of gas and electricity in Great Britain (GB). They also give us statutory powers, including the right to bury our pipes or cables under public highways and the ability to use compulsory powers to purchase land so we can conduct our business.

Our licensed activities are regulated by Ofgem, which has a statutory duty under the Acts to protect the interests of consumers. To protect consumers from the ability of companies to set unduly high prices, Ofgem has established price controls that limit the amount of revenue such regulated businesses can earn. In setting price controls, Ofgem must have regard to the need to secure that licence holders are able to finance their obligations under the Acts. This should give us a level of revenue for the duration of the price control that is sufficient to meet our statutory duties and licence obligations with a reasonable return on our investments. Licensees and other affected parties can appeal price controls or within period licence modifications which have errors, including in respect of financeability.

The RIIO-T1 price controls for electricity and gas transmission networks came into effect on 1 April 2013 for the eight-year period until 31 March 2021. New price controls, called RIIO-2, came into effect on 1 April 2021 and will run for five years until 31 March 2026. Both RIIO-T1 and RIIO-2 follow the RIIO (revenue = incentives + innovation + outputs) framework established by Ofgem. While the RIIO-T1 period has finished, the confirmation of the delivered outputs and performance levels will be reported through the annual reporting process that takes place in July each year. For 2021, this annual process will review what was delivered throughout RIIO-T1 and make adjustments to allowed revenues as allowed in our licences. This process, known as close-out, is an integral part of the price control arrangements.

These price controls include a number of mechanisms designed to help achieve their objectives. These include financial incentives that encourage us to:

- efficiently deliver, through investment and maintenance, the network outputs that customers and stakeholders require, including reliable supplies, new connections and infrastructure capacity;
- innovate so we can continuously improve the services we give our customers, stakeholders and communities; and
- efficiently balance the transmission networks to support the wholesale markets.

Our UK gas and electricity transmission and system operator businesses operate under four separate price controls. These cover our roles as Transmission Owner (TO) and System Operator (SO) in both gas and electricity. In addition to these four regulated network price controls, there is also a tariff cap price control applied to certain elements of domestic-sized metering activities carried out by National Grid Metering and regulation of our electricity interconnector interests.

In 2017, Ofgem, the Department for Business, Energy and Industrial Strategy (BEIS) and National Grid plc agreed to create a legally separate business, the Electricity System Operator (ESO), within the National Grid Group. The ESO became a separate entity within the Group on 1 April 2019. In January 2021, Ofgem recommended to BEIS that the ESO should be fully separated from National Grid into an Independent System Operator. Ofgem suggested that this could also incorporate network planning functions for gas, but it has not recommended that the Gas System Operator (GSO) be separated from National Grid. Ofgem believes an industry structure that enables long-term thinking and allows the SOs to take on new roles as part of the energy transition is an important step in the market and regulatory reform necessary to deliver net zero. Significant further work is needed to determine the detail of that structure. BEIS have commented that it will consider Ofgem's recommendation thoroughly. If and when these changes will be taken forward will be decided at a government level and with further consultation.

More information on the regulation of the ESO and on interconnector regulation is given in separate sections below.

RIIO price controls

The building blocks of the RIIO price control are broadly similar to the price controls historically used in the UK. There are, however, some significant differences in the mechanics of the calculations.

Under RIIO, the outputs we deliver are explicitly articulated and our allowed revenues are linked to their delivery, although some outputs and deliverables have only a reputational impact or are linked to legislation. These outputs reflect what our stakeholders have told us they want us to deliver and were determined through an extensive consultation process, which gave stakeholders a greater opportunity to influence the decisions.

Using information we have submitted, along with independent assessments, including for RIIO-2 an independent user group report, Ofgem determines the efficient level of expected costs necessary for these deliverables to be achieved. Under RIIO this is known as 'totex', which is a component of total allowable expenditure and is broadly the sum of what was defined in previous price controls as operating expenditure (opex) and capital expenditure (capex).

A number of assumptions are necessary in setting allowances for the outputs that we will deliver, including the volumes of work that will be needed and the price of the various external inputs required to achieve them. Consequently, there are a number of uncertainty mechanisms within the RIIO framework designed to protect consumers and network companies by avoiding the need to set allowances when future needs and costs are uncertain.

Where we under- or over-spend the allowed totex for reasons that are not covered by uncertainty mechanisms, there is a 'sharing' factor. This means we share the under- or over-spend with customers through an adjustment to allowed revenues in future years. This sharing factor provides an incentive for us to provide the outputs efficiently, as we are able to keep a portion of savings we make, with the remainder benefiting our customers. Likewise, it provides a level of protection for us if we need to spend more than allowances. Alongside this, there are several specific areas where companies can submit further claims for new allowances within the period, for instance to enable net zero.

Allowed revenue to fund totex costs is split between RIIO 'fast' and 'slow' money categories using specified ratios that are fixed for the duration of the price control. Fast money represents the amount of totex we are able to recover in the year of expenditure. Slow money is added to our Regulatory Asset Value (RAV) – effectively the regulatory IOU. (For more details on the sharing factors under RIIO, please see the tables overleaf.)

In addition to fast money, each year we are allowed to recover regulatory depreciation, i.e. a portion of the RAV, and a return on the outstanding RAV balance. The RAV is also indexed to a measure of inflation, using RPI in RIIO-T1 and CPIH in RIIO-2. In RIIO-T1 regulatory depreciation in electricity and gas transmission permitted recovery of RAV consistent with each addition bringing benefit to consumers for a period of up to 45 years. In RIIO-2, Electricity Transmission (ET) continues on a straight-line depreciation methodology, with Gas Transmission (GT) moving from straight line to sum-of-digit depreciation (so that depreciation is front loaded but then lower in the later years of the life of the asset). We are also allowed to collect additional revenues related to non-controllable costs and incentives. In addition to totex sharing, RIIO incentive mechanisms can increase or decrease our allowed revenue to reflect our performance against various other measures related to our outputs. For example, in RIIO-T1 performance against our customer and stakeholder satisfaction targets could have a positive or negative effect of up to 1% of allowed annual revenues. Many of our incentives affect our revenues two years after the year of performance.

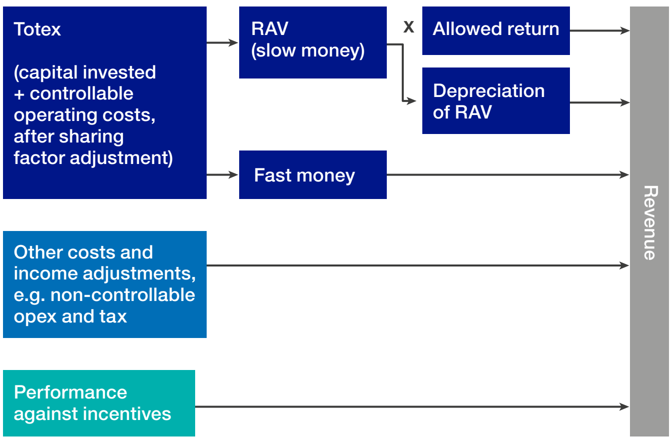
More information on RIIO-T1

The extended eight-year length of the first round of RIIO price controls is one of the ways that RIIO has given innovation more prominence. Innovation refers to all the new ways of working that deliver outputs more efficiently. This broad challenge has an impact on everyone in our business.

During the eight-year period of the RIIO-T1 price control, our regulator included a provision for a mid-period review, which was completed during 2017 and led to some changes in allowances relating to certain specific costs. Further to the mid-period review, National Grid volunteered that £480 million (in 2009/10 prices) of allowances for electricity transmission investments should be deferred. In August 2017, Ofgem determined how the RIIO allowances would be correspondingly adjusted.

In addition, the RIIO-T1 price controls for transmission included a 're-opener mechanism', in relation to specific cost categories where there was uncertainty about expenditure requirements at the time of setting allowances. Both our gas and electricity transmission businesses requested changes to funding under this mechanism in May 2018, leading to some changes to the allowed revenues. In Electricity Transmission, Ofgem has confirmed additional funding spanning both RIIO-T1 and RIIO-2 periods for reinforcements to connect the new Hinkley C power station. Additional funding has also been applied and granted for two visual amenity projects (VIP), in RIIO-T1, where existing overhead lines in national parks and areas of outstanding natural beauty are replaced by underground cables, and a third VIP investment was submitted under the RIIO-T1 arrangement and so will be treated as a RIIO-T1 scheme.

Simplified illustration of RIIO regulatory building blocks for RIIO-T1



Allowed returns

The cost of capital allowed under our RIIO-T1 price controls were as follows:

	Transmission	
	Gas	**Electricity**
Cost of equity (post-tax real[2])	6.8%	7.0%
Cost of debt (pre-tax real[2])	iBoxx 10-year simple trailing average index (1.09% for 2020/21)	
Notional gearing	62.5%	60.0%
Vanilla WACC (for 2020/21)[1]	3.23%	3.45%

1. Vanilla WACC = cost of debt × gearing + cost of equity × (1-gearing).
2. In RIIO-T1, real returns are relative to RPI.

Sharing factors and fast:slow money ratios under our RIIO-T1 price controls were as follows:

	Gas Transmission		Electricity Transmission	
	Transmission owner (TO)	**System operator (SO)**	**Transmission owner**	**System operator**
Fast[1]	Baseline[3] 35.6% Uncertainty 10%	62.60%	15.00%	72.10%
Slow[2]	Baseline[3] 64.4% Uncertainty 90%	37.40%	85.00%	27.90%
Sharing	44.36%		46.89%	

1. Fast money allows network companies to recover a percentage of totex within a one-year period.
2. Slow money is where costs are added to RAV and, therefore, revenues are recovered slowly (e.g. over up to 45 years) from both current and future customers.
3. The baseline was the expenditure that was funded through ex-ante allowances, whereas the uncertainty adjusted the allowed expenditure where the level of outputs delivered differed from the baseline level, or if triggered by an event.

More information on RIIO-2

In December 2019 we submitted our business plans to Ofgem for the RIIO-2 period, setting out the proposed activities and expenditure to meet the needs of our customers and stakeholders in the period 1 April 2021 to 31 March 2026. These plans were developed through extensive enhanced stakeholder engagement to improve the quality and ensure they delivered what our stakeholders need.

To support this process Independent User Groups were set up in July 2018, one for GT and one for ET. Their responsibility was to ensure that the companies were putting stakeholders at the heart of their decision-making processes so as to produce a business plan that was fully reflective of customers'/consumers'/stakeholders' requirements. They summarised their views in an independent report to Ofgem on the companies' RIIO-2 business plans in December 2019.

The Independent User Groups represent a cross-section of the energy industry and represent the interests of consumers, environmental and public interest groups, as well as large-scale and small-scale customers and distribution networks.

The Group has now taken on an enduring role through RIIO-2. There are expected to be three key focus areas which are to:

- scrutinise and challenge the Company's periodic business plans;
- monitor, interrogate and help the business to enhance transparency of performance against commitments; and
- act as a 'critical friend' for strategy, culture and processes in key areas like stakeholder engagement, innovation, customer, consumer and responsible business.

Ofgem published its Final Determinations in December 2020, followed by the RIIO-2 licences and Regulatory Instructions and Guidance in February 2021. The RIIO-2 price controls started on 1 April 2021. On 2 March 2021, National Grid announced that it was broadly accepting most of the RIIO-2 package for its Electricity and Gas Transmission businesses, but had decided to submit a technical appeal to the Competition and Markets Authority (CMA) in relation to ET and GT focused on Ofgem's proposed cost of equity and 'outperformance wedge', which is a downward adjustment to allowed returns in expectation of future outperformance.

RIIO-2 builds on the framework established for RIIO-T1. For example, it introduces a range of new mechanisms to facilitate the transition to net zero, and it increases support for innovation, for example by allowing the regulator to direct additional funding in gas transportation for hydrogen innovation, in recognition of the uncertainty around the extent networks may have a role in transporting hydrogen.

The business in detail continued

Key Parameters from Ofgem's RIIO-2 Determinations

	Gas Transmission	Electricity Transmission
Allowed return on equity[1, 2]	4.3%[3] (real, relative to CPIH)	4.02%[4] (real, relative to CPIH), at 55% gearing (which is broadly equivalent to 4.3% at 60% gearing)
Allowed debt funding	Calculated and updated each year using an extending 'trombone-like' trailing average of iBoxx Utilities 10+ year index (increases from 10 years for 2021/22 to 14 years for 2025/26), plus 25 bps additional borrowing costs.	
Depreciation of RAV	45-year sum of digits regulatory depreciation applied to RIIO-2 additions and retrospectively to 2002-2021 additions.	No change in policy: straight line over 45 years for post-2021 RAV additions, with pre-2021 RAV additions as per RIIO-T1.
Notional Gearing	60%	55%
Split between fast/slow money	Fast: TO baseline 35%; SO baseline 66%; TO uncertainty mechanisms 25% Slow: TO baseline 65%; SO baseline 34%; TO uncertainty mechanisms 75%	Fast: TO baseline 22%; TO uncertainty mechanisms 15% Slow: TO baseline 78%; TO uncertainty mechanisms 85%
Sharing factor	39%	33%
Core baseline totex in 2018/19 prices (cumulative for the 5 years of RIIO-2)	£2.0 billion	£5.4 billion

1. National Grid has submitted a technical appeal to the CMA on Ofgem's proposed cost of equity and 'outperformance wedge'.
2. The cost of equity in RIIO-2 is subject to annual adjustments that are calculated using the Capital Asset Pricing Model, through indexation of the 'risk-free rate' parameter. The 4.3% and 4.02% figures shown in this row are Ofgem's estimates of the average allowed return on equity over the five years of RIIO-2, as given in the RIIO-2 Final Proposals.
3. The 4.3% value shown here for allowed return on equity is after deduction of the 'outperformance wedge': Ofgem's estimate of the cost of equity before deduction of the wedge is 4.55%.
4. The 4.02% value shown here for allowed return on equity is after deduction of the 'outperformance wedge': Ofgem's estimate of the cost of equity before deduction of the wedge is 4.25%.

Competition in onshore transmission

Ofgem stated in its final decision on the RIIO-T1 price control that it would consider holding a competition to appoint the constructor and owner of suitably large new electricity transmission projects, rather than including these new outputs and allowances in existing transmission licensee price controls. Ofgem reiterated this view in the RIIO-2 Determination, extending it now to gas transmission and gas distribution. In the absence, thus far, of the legislation needed to support a competition, Ofgem has developed a number of models which it has indicated it would consider using to deliver benefits of competition, the primary one of these being called the 'Competition Proxy Model' (CPM), but so far this has not been used for any projects or implemented into licences. The December 2020 BEIS energy white paper reiterated the government's ambition to introduce greater competition to support the delivery of net zero targets but also explained that the introduction of legislation to support full third-party competition would be subject to available parliamentary time.

Regulation of the electricity system operator, NGESO

A primary goal of the ESO legal separation in April 2019 was to increase transparency of our activities and help minimise any perceived conflicts of interest as we take on the challenge of driving forward the energy transformation. There are clear signals from Ofgem and the broader regulatory context that the ESO will play a crucial role in the changing energy environment. As an asset-light and service-based entity, the ESO is also fundamentally different from other regulated network companies. The new price control arrangements for RIIO-2 are therefore an opportunity to implement a new regulatory framework that enables the ESO to meet our stakeholders' expectations.

In April 2018, Ofgem introduced a new regulatory and incentives framework for the ESO. This moved away from the use of targeted, mechanistic incentives towards a 'principles-based' evaluative incentives approach. The new approach includes a set of 'Roles and Principles' designed to set clear expectations about the baseline behaviours expected from the ESO and a requirement for the ESO to produce a Forward Plan, following stakeholder engagement, demonstrating the activities it will undertake over the year to add value for consumers. Ofgem's ESO Performance Panel will challenge the ESO on its plans, evaluate its performance and make recommendations to Ofgem. At the end of the year, Ofgem will decide whether to financially reward or penalise the ESO, with a maximum annual reward of +£30 million and maximum annual penalty of -£30 million (during the RIIO-T1 price control), informed by the Performance Panel's recommendations, as well as other evidence collected throughout the year.

In 2019, the ESO published a mission and set of ambitious goals accompanied by its Forward Plan and its RIIO-2 business plan to set out what, when and how it delivers. The RIIO-2 business plan reflects the ambition shared by us and Ofgem for the ESO to be innovative, ambitious and agile, responding to stakeholder needs and the changing energy landscape. Ofgem's Final Determinations were published on 8 December 2020 confirming a new regulatory framework for the ESO. The framework includes a return on regulatory asset value (RAV) but also provides additional non-RAV funding for roles and risks that are not linked to an asset base. There is no totex incentive mechanism for ESO in RIIO-2, which means that all efficiently incurred costs can be recovered through regulated revenues. This means the ESO have greater flexibility to adjust spending in order to deliver the ambitious business plan and maximise consumer benefit. ESO performance in RIIO-2 will continue to be assessed via an evaluative incentive approach, through a two-year incentive scheme with a total maximum reward of £30 million and maximum penalty of £12 million for the two-year period.

On 25 January 2021, Ofgem published its review into GB system operation. This recommends that the ESO take on more roles and responsibilities within the energy sector to help accelerate the transition to net zero. These roles include more responsibility for onshore and offshore network planning, greater responsibility for whole-system thinking in both system operation and market development, and enhanced responsibilities for data management across the industry as well as upscaling our own use of data and digital infrastructure. As part of taking on new responsibilities, Ofgem believes that further independence of the ESO may be appropriate. The decision on changes and developments for system operation remains with BEIS. The BEIS Energy White Paper, published in December 2020, sets out the government's intention to consult on system governance later this year. We expect that the requirements for further separation will be considered as a part of that process.

Interconnectors regulation

Interconnectors derive their revenues from sales of capacity to users who wish to move power between market areas with different prices. Up until 31 December 2020, this was governed under European legislation and these capacity sales are classified as 'congestion revenues'. This is because the market price differences result from congestion on the established interconnector capacity which limits full price convergence. European legislation governed how congestion revenues may be used and how interconnection capacity is allocated. It requires all interconnection capacity to be allocated to the market through auctions. From 1 January 2021, interconnectors to the UK are no longer governed by European legislation, and the operation of these interconnectors is governed by individual sets of access rules which are agreed by regulators at each end of the link. This does not affect the fundamental business model for interconnectors.

Under UK legislation, interconnection businesses must be separate from transmission businesses.

There is a range of different regulatory models available for interconnector projects. These involve various levels of regulatory intervention, ranging from fully merchant (where the project is fully reliant on sales of interconnector capacity) to cap and floor.

The cap and floor regime is now the regulated route for interconnector investment in GB and may be sought by project developers who do not qualify for, or do not wish to apply for, exemptions from UK and European legislation which would facilitate a merchant development.

US regulation

Regulators

In the US, public utilities' retail transactions are regulated by state utility commissions which serve as economic regulators, approving cost recovery and authorised rates of return. The state commissions establish the retail rates to recover the cost of transmission and distribution services within their jurisdictions. They also serve the public interest by making sure utilities provide safe and reliable services at just and reasonable prices. The commissions establish service standards and approve public utility mergers and acquisitions. State Commissions are also asked to approve a variety of programmes and costs related to state energy and climate goals.

The Federal Energy Regulatory Commission (FERC) regulates wholesale transactions for utilities, such as interstate transmission and wholesale electricity sales, including rates for these services, at the federal level. FERC also regulates public utility holding companies and centralised service companies, including those of our US businesses.

Regulatory process

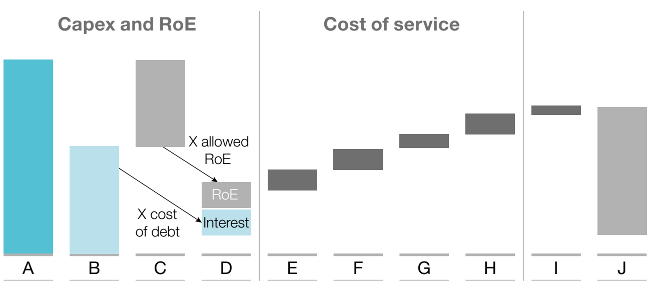
The US regulatory regime is premised on allowing the utility the opportunity to recover its cost of service and earn a reasonable return on its investments as determined by the commission. Utilities submit formal rate filings (rate cases) to the relevant state regulator when additional revenues are necessary to provide safe, reliable service to customers. Utilities can be compelled to file a rate case, either due to complaints filed with the commission or at the commission's own discretion.

The rate case is typically litigated with parties representing customers and other interests. The utility is required to prove that the requested rate change is just and reasonable, and the requested rate plan can span multiple years. In the states where we operate, it can take 9 to 13 months for the commission to render a final decision although, in some instances, rules allow for longer negotiation periods which may extend the length of the rate case proceeding. Unlike the state processes, the federal regulator has no specified timeline for adjudicating a rate case; typically it makes a final decision retroactive when the case is completed.

Gas and electricity rates are established from a revenue requirement, or cost of service, equal to the utility's total cost of providing distribution or delivery service to its customers, as approved by the commission in the rate case. This revenue requirement includes operating expenses, depreciation, taxes and a fair and reasonable return on shareholder capital invested in certain components of the utility's regulated asset base or 'rate base'.

The final revenue requirement and rates for service are approved in the rate case decision. The revenue requirement is derived from a comprehensive study of the utility's total costs during a representative 12-month period, referred to as a test year. Each commission has its own rules and standards for adjustments to the test year. These may include forecast capital investments and operating costs.

US regulatory revenue requirement



A Rate base
B Debt
C Equity
D Return
E Controllable costs
F Non-controllable costs
G Depreciation
H Taxes
I Lagged recoveries
J Allowed revenue

Our rate plans

Each operating company has a set of rates for service. We have three electric distribution operations (upstate New York, Massachusetts and Rhode Island) and six gas distribution networks (upstate New York, New York City, Long Island, Massachusetts (two) and Rhode Island).

Our distribution operating companies have revenue-decoupling mechanisms that delink their revenues from the quantity of energy delivered and billed to customers. These mechanisms remove the natural disincentive utility companies have for promoting and encouraging customer participation in energy-efficiency programmes that lower energy end use and distribution volumes.

We bill our customers for their use of electricity and gas services. Customer bills typically cover the cost of the commodity (electricity or gas delivered), and charges covering our delivery service. With the exception of residential gas customers in Rhode Island, our customers are allowed to select an unregulated competitive supplier for the commodity component of electricity and gas utility services.

A substantial proportion of our costs, in particular electricity and gas commodity purchases, are 'pass-through' costs, fully recoverable from our customers. We recover 'pass-through' costs through making separate charges to customers, designed to recover those costs with no profit. We adjust the charges from time to time often annually to make sure that any over- or under-recovery of these costs is returned to, or recovered from, our customers.

Our rate plans are designed to a specific allowed Return on Equity (RoE), by reference to an allowed operating expense level and rate base. Some rate plans include earnings-sharing mechanisms that allow us to retain a proportion of the earnings above our allowed RoE, achieved through improving efficiency, with the balance benefiting customers.

In addition, our performance under certain rate plans is subject to service performance targets. We may be subject to monetary penalties in cases where we do not meet those targets.

Our FERC-regulated transmission companies use formula rates (instead of periodic stated rate cases) to set rates annually that recover their cost of service. Through the use of annual true-ups, formula rates recover our actual costs incurred and the allowed RoE based on the actual transmission rate base each year. We must make annual formula rate filings documenting the revenue requirement that customers can review and challenge.

Revenue for our wholesale transmission businesses in New England and New York is collected from wholesale transmission customers. These are typically other utilities and include our own New England electricity distribution businesses. With the exception of upstate New York, which continues to combine retail transmission and distribution rates to end-use customers, these wholesale transmission costs are generally incurred by distribution utilities on behalf of their customers. They are fully recovered as a pass-through from end-use customers, as approved by each state commission.

Our Long Island generation plants sell capacity to the Long Island Power Authority (LIPA) under 15-year and 25-year power supply agreements and within wholesale tariffs approved by FERC. Through the use of cost-based formula rates, these long-term contracts provide a similar economic effect to cost-of-service rate regulation.

One measure used to monitor the performance of our regulated businesses is a comparison of achieved RoE to allowed RoE. However, this measure cannot be used in isolation, as several factors may prevent us from achieving the allowed RoE. These include financial market conditions, regulatory lag (e.g. the time period after a rate or expense is approved for recovery but before we collect same from customers) and decisions by the regulator preventing cost recovery in rates from customers.

We work to increase achieved RoE through:

- productivity improvements;
- positive performance against incentives or earned savings mechanisms, such as available energy-efficiency programmes; and
- filing a new rate case when achieved returns are lower than those the Company could reasonably expect to attain through a new rate case.

The business in detail continued

US regulatory filings

The objectives of our rate case filings are to make sure we have the right cost of service and are able to earn a fair and reasonable rate of return, while providing a safe, reliable and economical service. To achieve these objectives and reduce regulatory lag, we have been successful in many cases in obtaining relief, such as:

- revenue decoupling mechanisms;
- capital trackers;
- commodity-related bad debt true-ups;
- pension and other post-employment benefit true-ups, separately from base rates; and
- performance-based frameworks such as incentives and multi-year plans.

We explain these terms in the table on page 235.

Below, we summarise significant, recent developments in rate filings and the regulatory environment. In 2017/18, we made full rate case filings with Niagara Mohawk (electric and gas), in April 2017; Boston Gas and Colonial Gas, in November 2017; and The Narragansett Electric Company, also in November 2017. A joint proposal, setting forth a three-year rate plan for Niagara Mohawk, was approved by the New York State Public Service Commission (NYPSC) in March 2018. An amended settlement agreement setting forth a three-year rate plan for The Narragansett Electric Company was approved by the Rhode Island Public Utilities Commission (RIPUC) in August 2018. The multi-year rate plan includes an interim fourth year, effective 1 September 2021. An order, establishing new base rates for Boston Gas and Colonial Gas, was approved by the Massachusetts Department of Public Utilities (MADPU) in September 2018. In November 2018, we made a full rate case filing for Massachusetts Electric which resulted in a five-year performance-based ratemaking plan in September 2019. In April 2019, we made a full rate case filing for KEDNY and KEDLI in April 2019. In November 2020, we made a full rate case filing for Boston Gas proposing a five-year performance-based ratemaking plan which is currently pending.

Massachusetts

Massachusetts Electric and Nantucket Electric rate cases

We filed a rate case for Massachusetts Electric and Nantucket Electric with the MADPU on 15 November 2018 with new rates effective on 1 October 2019. The Massachusetts Electric rate case was the first for Massachusetts Electric and Nantucket Electric since the case was filed in 2015. It updated the electric companies' rates to more closely align revenues with the cost of service and bring their earned RoEs closer to the allowed RoE. New rates were approved with an allowed RoE of 9.6% on an equity ratio of 53.5%. The MADPU approved a five-year performance-based ratemaking plan, which adjusts distribution rates annually based on a predetermined formula. As part of its decision, the MADPU required a management audit addressing the Company's strategic planning processes, staffing decisions and its relationship to National Grid USA Service Company, among other items.

Boston Gas Company rate case

On 13 November 2020, we filed a rate case with the MADPU for Boston Gas Company, including a request for approval of a performance-based ratemaking plan (PBR Plan), and related proposals. We requested that the MADPU approve new distribution rates to increase distribution revenues by $220.7 million, including the transfer of $81.9 million of recovery of Boston Gas's Gas System Enhancement Program (GSEP) investments completed through 31 March 2020, from the GSEP factors to base distribution rates, with new rates to be effective 1 October 2021. The actual net revenue deficiency calculated by Boston Gas for distribution rates is $138.8 million, or an incremental increase in distribution revenue of 18.1%. The last Boston Gas rate case was filed in 2017, and this rate case would allow the Company's rates to more closely align revenues with the cost of service and bring the earned RoE closer to the allowed RoE. Boston Gas also presented its Future of Heat proposals to address Massachusetts' ambitious greenhouse gas emissions reduction goals. These proposals are innovative programmes and demonstration projects that the Company has developed to reduce emissions, promote gas demand response, and encourage the development of sustainable heating options and new technologies to advance low carbon heating solutions. Ultimately, the MADPU elected to remove our Future of Heat proposals from the rate case without prejudice for their consideration as part of other proceedings.

Investigation into role of gas distribution companies in achieving climate change goals

On 29 October 2020, the MADPU issued an order opening an investigation into the role of gas distribution companies in achieving the Massachusetts' 2050 climate goals. Noting Massachusetts' work to develop a 2050 Decarbonization Roadmap and a Clean Energy Climate Plan for 2030 (together the 'Roadmaps'), released in December 2020, the MADPU directed the gas distribution companies to jointly hire one or more independent consultants to review the Roadmaps, identify any pathways not examined in the Roadmaps, and perform a detailed study of each gas company that analyses the feasibility of all pathways. On or before 1 March 2022, each company must submit a proposal to the MADPU that includes its recommendations and plans for helping Massachusetts achieve its 2050 climate goals, supported by the consultants' report, that incorporates feedback and advice on its proposals obtained through a stakeholder process.

Management Audit

On 30 September 2019, in its decision regarding Massachusetts Electric Company and Nantucket Electric Company's most recent request for a change in base distribution rates, the MADPU required a comprehensive independent management audit of the company, including a review of its relationship to the National Grid USA Service Company (NGSC). On 25 November 2019, the MADPU formally opened the investigation to undertake the audit. The audit scope included a review of:

- the Company's strategic planning processes;
- National Grid's staffing decisions and the extent to which they affect the Company's efficiency of operations and the productivity of its employees;
- potential management problems through to the highest levels of the organisation, as well as potential management issues related to National Grid's relationship with NGSC;
- investigation of management process issues relating to IT strategy, cybersecurity, and the Phase I EV and Phase II EV Programmes; and
- the Company's management of its interconnection process in light of the Transmission Cluster Study in Central and Western, Massachusetts.

The final audit report was issued on 29 March 2021. Regarding organisational structure, the report recommended improvements to risk management processes/mitigation plans and presentation materials to enable the senior leadership team to have visibility of risks at the right level of granularity, and noted changes are already underway. Regarding strategic planning, the report recommended changes to enhanced alignment of strategic planning and budgetary planning processes to avoid a mismatch between budget and resources, and track strategic decision-making at senior management level. In relation to staffing decisions, the report recommended improvements to strategic workforce/resource planning processes. In addition, the report noted positive changes in information technology strategy and efforts to insource strategic capabilities and recommended that the Company implement more electric vehicle programme metrics to track and identify the programme's effectiveness.

On 30 April 2021, the Company filed its response to the final audit report. As part of the Company's proposal for implementation of the audit's recommendations regarding strategic planning, the Company will submit compliance filings during 2021/22 with more specific plans and policies. These compliance filings will also provide an opportunity for the Company to update the MADPU on its progress.

The MADPU inquiry regarding COVID-19 customer assistance and ratemaking matters
Starting with the First Set of Orders on 24 March 2020, the Chairman of the MADPU issued a series of orders in response to the Governor's declaration of a state of emergency due to the COVID-19 pandemic. In the First Set of Orders, the MADPU prohibited the utilities from terminating service to any customer (including residential, commercial and industrial customers) for non-payment of utility bills until the state of emergency is lifted. Since that time the state has extended the moratorium for residential customers to 1 July 2021, but the moratorium for commercial and industrial (C&I) customers has since expired.

On 11 May 2020, the MADPU opened an inquiry into establishing policies and practices regarding customer assistance and ratemaking measures for gas companies in response to the effects of the COVID-19 pandemic and established a Customer Assistance and Ratemaking Working Group ('Working Group') to develop programmes to assist customers and to establish appropriate policies and practices for the resumption of collections activities. The Working Group's first report on customer assistance issues contained a four-phased plan for customer outreach which was approved by the MADPU on 26 June 2020.

On 31 December 2020, the MADPU approved the consensus implementation issues related to the ratemaking treatment of the COVID-19 customer assistance programmes and determined that the remaining contested issues, including the extent to which the companies will be allowed to recover their COVID-19 costs, should be fully adjudicated in a new proceeding which is currently pending before the MADPU.

On 1 March 2021, the distribution companies filed their initial testimony in D.P.U. 20–91 on the following contested ratemaking issues:

- whether companies with PBR Plans, including National Grid, should be permitted to recover incremental bad debt costs or COVID-19 expenses; and
- whether the distribution companies and their shareholders should absorb some losses associated with the pandemic and resulting economic downturn (the Massachusetts Office of the Attorney General's position is that the companies should only get 50%).

New York

Downstate New York 2019 rate cases
On 30 April 2019, we filed to increase revenues for The Brooklyn Union Gas Company and KeySpan Gas East Corporation for the 12 months ending 31 March 2021. On 14 May 2021, we filed a joint proposal setting out a comprehensive three-year rate plan (financial years 2021–23) for our downstate New York gas business. The rate plan includes: a 8.8% RoE and 48% equity ratio; gas revenue decreases of $4.7 million for KEDNY and $22.8 million for KEDLI in 2020/21, gas revenue increases of $47 million for KEDNY and $28.9 million for KEDLI in 2021/22, and gas revenue increases of $73.4 million for KEDNY and $26.2 million for KEDLI in 2022/23; funding for a three-year capital plan of approximately $2 billion for KEDNY and $1.4 billion for KEDLI; annual reconciliation mechanisms for certain non-controllable costs (e.g. property taxes, pension/OPEBs, and site investigation remediation costs); a gas safety and reliability surcharge to recover the costs of incremental leak-prone pipe replacement; and a number of incentive mechanisms, including earnings adjustment mechanisms (EAMs), which provide a potential incentive of approximately $3.3 million and $2.2 million annually for KEDNY and KEDLI, respectively. The NYPSC final decision is expected later this summer.

NMPC rate case
In July 2020, we filed to adjust Niagara Mohawk's base electric and gas delivery rates in the 12 months ending 30 June 2022. To facilitate a potential multi-year settlement, we submitted comprehensive financial information for two additional data years ending 30 June 2023 and 30 June 2024. On 14 October 2020, the Company filed corrections and updates, which requested rate increases of $103.3 million for the electricity business and $37.1 million for the gas business. We are currently engaged in settlement negotiations. If a settlement can be achieved on a multi-year rate plan, we will file a plan that will be subject to approval by the NYPSC.

Downstate Gas Moratorium
Following the Company's decision to enact a moratorium on new gas connections in 2019 and the resulting threat against the Company's licence to operate in New York, various actions have been taken to address gas supply constraints and improve stakeholder relationships.

During November 2019, a settlement was agreed to immediately resume connecting gas services in Brooklyn, Queens and Long Island for applications that had been put on hold. A total of $36 million in customer assistance, gas conservation measures and clean energy investments has been committed by the Company, along with the appointment of an external monitor and the requirement to deliver a plan to address service to customers through winter 2020/21. In the interest of promoting transparency and to assure the public of the Company's commitment to identifying long-term solutions for the region's energy challenges, we extended the engagement of the external monitor through to September 2021. The settlement agreement also provides a framework for identifying longer-term solutions to address the supply constraints in downstate New York. We developed a range of options to address the natural gas constraints facing the region, which were presented at a series of public meetings in the downstate New York service territory. These meetings were designed to facilitate a dialogue with customers, residents, advocates, business leaders and local elected officials on potential solutions. Following the public meetings, the Companies published a report that summarised the public feedback and provided additional information and analysis on the various long-term natural gas supply options. The companies are now working with regulators, stakeholders, and customers to implement long-term solutions to the gas supply constraints in the region. On 15 April 2021, the NYPSC approved an amendment to the Settlement Agreement, which repurposed $20 million of shareholder funding to establish a deferral for the benefit of customers. The funding would be used as a credit to offset the costs of KEDNY and KEDLI's energy efficiency and demand response programmes being addressed in their ongoing rate cases.

COVID-19 response New York
The New York State Legislature, in response to the state of emergency, enacted amendments to Section 32 of the Public Service Law, referred to as the Parker-Mosley amendments, that provided, inter alia, that no utility corporation shall terminate or discontinue service to any residential customer for non-payment of any overdue charges for the duration of the COVID-19 state of emergency.

Other important regulatory updates
In November 2020, the NYPSC approved our filing requesting permission to deploy advanced metering infrastructure (AMI) in NMPC's upstate New York service territory. The AMI programme involves a six-year, $640 million (20-year NPV) deployment of approximately 1.7 million electric AMI meters and 640,000 AMI-compatible gas modules, with two years of back-office system work beginning in the second quarter of 2021, and electric meter/gas module deployment to begin in the second quarter of 2023. This investment will modernise both customer and grid-facing components of the Company's distribution system and is considered a key enabler of NMPC's strategy to address the comprehensive clean energy goals set forth in New York's Climate Leadership and Community Protection Act.

In addition, on 12 February 2021, the Department of Public Service Staff issued white papers on gas system planning that propose:

- a process for modernising the long-term gas planning process in New York; and
- procedures for managing future moratoria on new gas service connections resulting from supply constraints.

The Gas Planning Paper proposes significant changes to the reporting and regulatory oversight for gas supply planning, including that the Commission direct New York's distributions companies to begin filing long-term supply plans every three years. These supply plans would be similar in many respects to our long-term report for downstate New York, in terms of identifying and analysing various supply options to address different demand scenarios. Staff proposes potential financial incentive mechanisms for developing non-pipeline alternatives, including potential incentives for sourcing renewable natural gas and promoting electrification. The Moratorium Paper proposes a roadmap for managing future moratoria, including requirements for stakeholder notifications, communications plans, and applicant management. Final comments on Staff's proposals are due in June 2021.

The business in detail continued

Rhode Island

Rhode Island combined gas and electric rate case

On 24 August 2018, the RIPUC approved the terms of an Amended Settlement Agreement (ASA). We are currently in year three of the Company's multi-year rate plan. The ASA also requires the Company to file the next rate case so that new rates take effect no later than 1 September 2022, unless the Rhode Island Division of Public Utilities and Carriers consents to an extension of the term and specifies another date upon which rates are to take effect. The Company will file its Rate Year 4 compliance filing by 1 June 2021 for distribution rates for year four of the multi-year rate plan, effective 1 September 2021. The ASA includes an Electric Transportation Initiative (the ET Initiative or Program) to facilitate the growth of Electric Vehicle (EV) adoption and scaling of the market for EV-charging equipment to advance Rhode Island's zero emission vehicles and greenhouse gas emissions policy goals. The ET Initiative includes the following five components:

- Off-Peak Charging Rebate Pilot;
- Charging Station Demonstration Program;
- Discount Pilot for Direct Current Fast Charging (DCFC) Station Accounts;
- Fleet Advisory Services; and
- Electric Transportation Initiative Evaluation.

As of the end of Rate Year 2, the Charging Station Demonstration Program achieved 72% of ET Initiative targets for Level 2 ports and 7% of the target for DCFC ports. The ASA also includes two energy storage demonstration projects because storage is critical for achieving Rhode Island's clean energy future, as it provides the ability to optimise system performance over time and allows intermittent renewable resources to make a larger contribution to overall generation.

Rhode Island Aquidneck Island gas service interruption

On 21 January 2019, we suffered a significant loss of gas supply to the distribution system that serves our customers on Aquidneck Island in Rhode Island. As a result, we made the decision to interrupt the gas service to the Aquidneck Island system to protect the safety of our customers and the public. Overall, approximately 7,500 customers lost their gas service. On 30 October 2019, RIPUC issued an investigation report regarding the gas service interruption which identified the causes of the outages, which included multiple factors, some of which were outside the control of The Narragansett Electric Company. RIPUC's report also recommended several gas system improvements, many of which we have addressed already. On 13 December 2019, we filed our response to the RIPUC's report and continue to meet with RIPUC on a quarterly basis regarding winter reliability issues for Aquidneck Island and Rhode Island. On 23 September 2020, we published a long-term capacity study for energy solutions for Aquidneck Island for stakeholder feedback. We are gathering stakeholder feedback on a hybrid model approach that will offset gas demand growth with advanced non-infrastructure solutions while addressing existing gas capacity and vulnerability challenges with an alternative LNG solution.

Power Sector Transformation/Advanced Metering Functionality and Grid Modernisation Plan

On 27 November 2017, we filed a Power Sector Transformation (PST) Vision and Implementation Plan (the PST Plan) in conjunction with our combined gas and electric rate case. The PST Plan proposed a suite of investments, including the full deployment of Advanced Metering Functionality (AMF) and grid modernisation investments. On 21 January 2021, following more than two years of extensive collaboration with regulators and key stakeholders, we filed an Updated AMF Business Case and Grid Modernisation Plan (GMP) with the RIPUC. The Updated AMF Business Case provides a detailed plan to provide customers with greater control, choice and convenience in their energy consumption through the full-scale deployment of approximately 525,000 electric AMF meters, 277,000 gas modules, and the associated communications network. GMP presents a five-year implementation plan, and a ten-year road map of investments necessary to manage the electric distribution grid more granularly considering a range of Distributed Energy Resource (DER) adoption levels through 2030, as well as a comprehensive cost benefit analysis. Cost recovery for the specific projects and programmes in the GMP will be separately requested as part of future Infrastructure, Safety and Reliability (ISR) Plans or rate cases.

Infrastructure, Safety and Reliability Plans

We filed our 2022 Gas and Electric ISR Plans on 18 December and 21 December 2020, respectively, for effect 1 April 2021. The Electric ISR Plan proposed capital spending of $103.7 million, plus $12 million for total operation and maintenance expenses. The Gas ISR Plan proposed total capital spending of $180.1 million. On 29 March 2021, RIPUC approved the Company's 2021/22 Gas ISR Plan which included $173.2 million of investments, and the Company's 2021/22 Electric ISR Plan which included $101.7 million for capital investments plus an additional $12 million for operation and maintenance expenses. The Electric ISR Plan hearing took place on 16 March 2021. The Gas ISR Plan hearing took place on 11 March 2021.

COVID-19 response Rhode Island

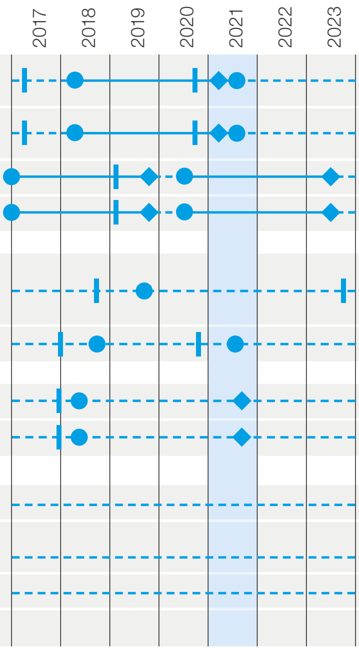
In response to the COVID-19 emergency, effective on 16 March 2020, the RIPUC ordered all electric and natural gas utilities to immediately cease certain collection activities, including termination of service for non-payment. On 13 July 2020, RIPUC, after finding that an emergency still existed for customers eligible for the low-income rate, extended the moratorium on utility shut-offs until 1 November 2020 for customers qualifying for a low-income discount and until 30 September 2020 for remaining residential customers of National Grid. All COVID-19-related moratoria have now expired, and the Company has continued to make progress on the three-stage process for resuming collection activities.

Federal Energy Regulatory Commission

Formula Rate 206 proceeding

On 28 December 2020, FERC approved the settlement of a proceeding it had initiated against the Company and other New England transmission owners in 2015 under Section 206 of the Federal Power Act. The new settlement formula rates will go into effect on 1 January 2022. Permanent formula rate protocols providing for information exchange and challenges will go into effect in June 2023. As part of the settlement approved by the Commission, the parties agreed to a moratorium which applies to Section 205 or Section 206 filings seeking to change Attachment F of the ISO-NE OATT, its appendices or the formula rate Protocols developed as part of the settlement, subject to certain exceptions, until 31 December 2024.

Summary of US price controls and rate plans



Commission	Company	Rate base (31 Mar 2021)	Equity-to-debt ratio	Allowed Return on Equity	Achieved Return on Equity (31 Mar 2020)	Revenue decoupling†	Capital tracker‡	Commodity-related bad debt true-up§	Pension/OPEB true-up◊
New York Public Service Commission	Niagara Mohawk[1] (upstate, electricity)	**$6,206m**	**48:52**	**9.0%**	**6.3%**	✓	**P**	**P**	✓
	Niagara Mohawk (upstate, gas)	**$1,467m**	**48:52**	**9.0%**	**7.2%**	✓	**P**	**P**	✓
	KEDNY (downstate)[2,4]	**$4,958m**	**48:52**	**8.8%**	**6.1%**	**P**	**P**	**P**	✓
	KEDLI (downstate)[3,4]	**$3,158m**	**48:52**	**8.8%**	**8.2%**	**P**	**P**	**P**	✓
Massachusetts Department of Public Utilities	Massachusetts Electric/Nantucket Electric	**$3,033m**	**53:47**	**9.6%**	**5.3%**	✓	**P**	✓	✓
	Massachusetts Gas[5]	**$3,521m**	**53:47**	**9.5%**	**5.7%**	✓	**P**	✓	✓
Rhode Island Public Utilities Commission	Narragansett Electric[6]	**$950m**	**51:49**	**9.3%**	**10.0%**	✓	✓	**P**	✓
	Narragansett Gas[6]	**$1,082m**	**51:49**	**9.3%**	**6.9%**	✓	✓	**P**	✓
Federal Energy Regulatory Commission	Narragansett	**$787m**	**50:50**	**10.6%**	**11.1%**	**n/a**	✓	**n/a**	✓
	Canadian Interconnector/Other[7]	**$58m**	**100:0**	**13.0%**	**13.0%**	**n/a**	✓	**n/a**	✓
	New England Power	**$1,970m**	**64:36**	**10.6%**	**11.0%**	**n/a**	✓	**n/a**	✓
	Long Island Generation	**$440m**	**48:52**	**9.9%**	**12.2%**	**n/a**	✓	**n/a**	✓

1. Both transmission and distribution, excluding stranded costs.
2. KeySpan Energy Delivery New York (the Brooklyn Union Gas Company).
3. KeySpan Energy Delivery Long Island (KeySpan Gas East Corporation).
4. National Grid, Department of Public Service Staff, and other settling parties filed a joint proposal for a three-year rate plan beginning April 2020 and ending March 2023. The settlement was filed on 14 May 2021 and a final decision from the NYPSC is expected later this year.
5. The chart shows the anticipated date rates are to be in effect.
6. The Narragansett Electric Company is currently seeking an extension of their current electric and gas rate plans.
7. Equity ratio and return on equity values are for the Canadian Interconnector only.

Rate filing made
New rates effective
Rate plan ends
Rates continue indefinitely
Multi-year rate plan

✓ Feature in place
P Feature partially in place

†Revenue decoupling
A mechanism that removes the link between a utility's revenue and sales volume so that the utility is indifferent to changes in usage. Revenues are reconciled to a revenue target, with differences billed or credited to customers. Allows the utility to support energy efficiency.

‡Capital tracker
A mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

§Commodity-related bad debt true-up
A mechanism that allows a utility to reconcile commodity-related bad debt to either actual commodity-related bad debt or to a specified commodity-related bad debt write-off percentage. For electricity utilities, this mechanism also includes working capital.

◊Pension/OPEB true-up
A mechanism that reconciles the actual non-capitalised costs of pension and OPEB and the actual amount recovered in base rates. The difference may be amortised and recovered over a period or deferred for a future rate case.

Internal control and risk factors

Disclosure controls

Our management, including the Chief Executive and Chief Financial Officer, have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as at 31 March 2021. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives; however, their effectiveness has limitations, including the possibility of human error and the circumvention or overriding of the controls and procedures.

Even effective disclosure controls and procedures provide only reasonable assurance of achieving their objectives. Based on the evaluation, the Chief Executive and Chief Financial Officer concluded that the disclosure controls and procedures are effective to provide reasonable assurance that information required for disclosure in the reports that we file and submit under the Exchange Act is recorded, processed, summarised and reported as and when required and that such information is accumulated and communicated to our management, including the Chief Executive and Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure.

Internal control over financial reporting

Our management, including the Chief Executive and Chief Financial Officer, have carried out an evaluation of our internal control over financial reporting pursuant to the Disclosure Guidance and Transparency Rules sourcebook and Section 404 of the Sarbanes-Oxley Act 2002. As required by Section 404, management is responsible for establishing and maintaining an adequate system of internal control over financial reporting (as defined in Rules 13a-5(f) and 15d-15(f) under the Exchange Act).

Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes, in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's evaluation of the effectiveness of the Company's internal control over financial reporting was based on the revised Internal Control-Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission. Using this evaluation, management concluded that our internal control over financial reporting was effective as at 31 March 2021.

Deloitte LLP, which has audited our consolidated financial statements for the year ended 31 March 2021, has also audited the effectiveness of our internal control over financial reporting.

During the year, there were no changes in our internal control over financial reporting that have materially affected it, or are reasonably likely to materially affect it.

Risk factors

Management of our risks is an important part of our internal control environment, as we describe on pages 24 – 27. In addition to the principal risks listed, we face a number of inherent risks that could have a material adverse effect on our business, financial condition, results of operations and reputation, as well as the value and liquidity of our securities.

Any investment decision regarding our securities and any forward-looking statements made by us should be considered in the light of these risk factors and the cautionary statement set out on page 268. An overview of the key inherent risks we face is provided below.

Risk factors

Law, regulation and political and economic uncertainty

Changes in law or regulation, or decisions by governmental bodies or regulators and increased political and economic uncertainty, could materially adversely affect us.

Most of our businesses are utilities or networks subject to regulation by governments and other authorities. Changes in law or regulation or regulatory policy and precedent (including changes arising as a result of the UK's exit from the European Union), as well as legislation introduced to facilitate the attainment of net zero emissions targets, and decisions of governmental bodies or regulators in the countries or states in which we operate could materially adversely affect us. We may fail to deliver any one of our customer, investor and wider stakeholder propositions due to increased political and economic uncertainty. Subject to completion of the WPD Acquisition, we may come under increased regulatory scrutiny resulting in greater costs of compliance.

If we fail to respond to or meet our own commitments as a leader in relation to climate change and the energy transition, we may be unable to influence future energy policy and deliver our strategy.

Decisions or rulings concerning the following (as examples) could have a material adverse impact on our results of operations, cash flows, the financial condition of our businesses and the ability to develop those businesses in the future:

- the implementation of the RIIO-2 price controls; whether licences, approvals or agreements to operate or supply are granted, amended or renewed; whether consents for construction projects are granted in a timely manner; or whether there has been any breach of the terms of a licence, approval or regulatory requirement; and
- timely recovery of incurred expenditure or obligations; the ability to pass through commodity costs; a decoupling of energy usage and revenue, and other decisions relating to the impact of general economic conditions on us, our markets and customers; implications of climate change and of advancing energy technologies; whether aspects of our activities are contestable; and the level of permitted revenues and dividend distributions for our businesses and in relation to proposed business development activities.

For further information, see pages 228 – 235, which explain our regulatory environment in detail.

Potentially harmful activities

Aspects of the work we do could potentially harm employees, contractors, members of the public or the environment.

Potentially hazardous activities that arise in connection with our business include: the generation, transmission and distribution of electricity; and the storage, transmission and distribution of gas. Electricity and gas utilities also typically use and generate hazardous and potentially hazardous products and by-products. In addition, there may be other aspects of our operations that are not currently regarded or proved to have adverse effects but could become so, such as the effects of electric and magnetic fields.

A significant safety or environmental incident, or the failure of our safety processes or of our occupational health plans, as well as the breach of our regulatory or contractual obligations or our climate change targets, could materially adversely affect our results of operations and our reputation.

Safety is a fundamental priority for us, and we commit significant resources and expenditure to ensuring process safety; to monitoring personal safety, occupational health and environmental performance; and to meeting our obligations under negotiated settlements.

We are subject to laws and regulations in the UK and US governing health and safety matters to protect the public and our employees and contractors, who could potentially be harmed by these activities, as well as laws and regulations relating to pollution, the protection of the environment, and the use and disposal of hazardous substances and waste materials.

These expose us to costs and liabilities relating to our operations and properties, including those inherited from predecessor bodies, whether currently or formerly owned by us, and sites used for the disposal of our waste.

The cost of future environmental remediation obligations is often inherently difficult to estimate, and uncertainties can include the extent of contamination, the appropriate corrective actions and our share of the liability. We are increasingly subject to regulation in relation to climate change and are affected by requirements to reduce our own carbon emissions (including our own commitment to reduce our greenhouse gas emissions to net zero by 2050) as well as to enable reduction in energy use by our customers. If more onerous requirements are imposed or our ability to recover these costs under regulatory frameworks changes, this could have a material adverse impact on our business, reputation, results of operations and financial position.

Infrastructure and IT systems

We may suffer a major network failure or interruption, or may not be able to carry out critical operations due to the failure of infrastructure, data or technology or a lack of supply.

Operational performance could be materially adversely affected by: a failure to maintain the health of our assets or networks; inadequate forecasting of demand and inadequate record keeping or control of data or failure of information systems and supporting technology. This, in turn, could cause us to fail to meet agreed standards of service, incentive and reliability targets, or be in breach of a licence, approval, regulatory requirement or contractual obligation. Even incidents that do not amount to a breach could result in adverse regulatory and financial consequences, as well as harming our reputation.

Where demand for electricity or gas exceeds supply, including where we do not adequately forecast and respond to disruptions in energy supplies, and our balancing mechanisms are not able to mitigate this fully, a lack of supply to consumers may damage our reputation.

In addition to these risks, we may be affected by other potential events that are largely outside our control, such as the impact of the COVID-19 pandemic (including on our operations and as a result of large-scale working from home by our employees), weather (including as a result of climate change and major storms), unlawful or unintentional acts of third parties, insufficient or unreliable supply, or force majeure.

Weather conditions can affect financial performance, and severe weather that causes outages or damages infrastructure, together with our actual or perceived response, could materially adversely affect operational and potentially business performance and our reputation.

Malicious attack, sabotage or other intentional acts, including breaches of our cyber security, may also damage our assets (which include critical national infrastructure) or otherwise significantly affect corporate activities and, as a consequence, have a material adverse impact on our reputation, business, results of operations and financial condition.

Unauthorised access to, or deliberate breaches of, our IT systems may also lead to manipulation of our proprietary business data or customer information. Unauthorised access to private customer information may make us liable for a violation of data privacy regulations. Even where we establish business continuity controls and security against threats to our systems, these may not be sufficient.

Pandemics

We face risks related to health epidemics and other outbreaks.

As seen in the context of COVID-19, pandemics and their associated counter-measures may affect countries, communities, supply chains and markets, including the UK and our service territory in the US. The spread of such pandemics could have adverse effects on our workforce, which could affect our ability to maintain our networks and provide service. In addition, disruption of supply chains could adversely affect our systems or networks.

Pandemics such as COVID-19 can also result in extraordinary economic circumstances in our markets which could negatively affect our customers' ability to pay our invoices in the US or the charges payable to the system operators for transmission services in the UK. Measures such as the suspension of debt collection and customer termination activities across our service area in response to such pandemics are likely to result in near-term lower customer collections, and could result in increasing levels of bad debt and associated provisions.

The extent to which pandemics such as COVID-19 may affect our liquidity, business, financial condition, results of operations and reputation will depend on future developments, which are highly uncertain and cannot be predicted, and will depend on the severity of the relevant pandemic, the scope, duration, cost to National Grid and overall economic impact of actions taken to contain it or treat its effects.

Business performance

Current and future business performance may not meet our expectations or those of our regulators and shareholders.

Earnings maintenance and growth from our regulated gas and electricity businesses will be affected by our ability to meet or exceed efficiency targets and service quality standards set by, or agreed with, our regulators.

If we do not meet these targets and standards, or if we are not able to deliver the US rate plans strategy successfully, we may not achieve the expected benefits, our business may be materially adversely affected and our performance, results of operations and reputation may be materially harmed and we may be in breach of regulatory or contractual obligations.

Internal control and risk factors continued

Growth and business development activity

Failure to respond to external market developments and execute our growth strategy may negatively affect our performance. Conversely, new businesses or activities that we undertake alone or with partners may not deliver target outcomes and may expose us to additional operational and financial risk.

Failure to grow our core business sufficiently and have viable options for new future business over the longer term, or failure to respond to the threats and opportunities presented by emerging technology or innovation (including for the purposes of adapting our networks to meet the challenges of increasing distributed energy resources), could negatively affect the Group's credibility and reputation and jeopardise the achievement of intended financial returns.

Our business development activities, including the WPD Acquisition, the NECO sale and the announced proposed sale of a stake in our Gas Transmission business and the delivery of our growth ambition, involve acquisitions, disposals, joint ventures, partnering and organic investment opportunities, such as development activities relating to changes to the energy mix and the integration of distributed energy resources and other advanced technologies. These are subject to a wide range of both external uncertainties (including the availability of potential investment targets and attractive financing and the impact of competition for onshore transmission in both the UK and US) and internal uncertainties (including actual performance of our existing operating companies and our business planning model assumptions and ability to integrate acquired businesses effectively). As a result, we may suffer unanticipated costs and liabilities and other unanticipated effects.

We may also be liable for the past acts, omissions or liabilities of companies or businesses we have acquired, which may be unforeseen or greater than anticipated. In the case of joint ventures, we may have limited control over operations and our joint venture partners may have interests that diverge from our own.

The occurrence of any of these events could have a material adverse impact on our results of operations or financial condition, and could also impact our ability to enter into other transactions.

Financing and liquidity

An inability to access capital markets at commercially acceptable interest rates could affect how we maintain and grow our businesses.

Our businesses are financed through cash generated from our ongoing operations, bank lending facilities and the capital markets, particularly the long-term debt capital markets.

Some of the debt we issue is rated by credit rating agencies, and changes to these ratings may affect both our borrowing capacity and borrowing costs. In addition, restrictions imposed by regulators may also limit how we service the financial requirements of our current businesses or the financing of newly acquired or developing businesses.

Financial markets can be subject to periods of volatility and shortages of liquidity – for example, as a result of unexpected political or economic events or the COVID-19 pandemic. If we were unable to access the capital markets or other sources of finance at commercially acceptable rates for a prolonged period, our cost of financing may increase, the discretionary and uncommitted elements of our proposed capital investment programme may need to be reconsidered, and the manner in which we implement our strategy may need to be reassessed.

Such events could have a material adverse impact on our business, results of operations and prospects.

Some of our regulatory agreements impose lower limits for the long-term unsecured debt credit ratings that certain companies within the Group must hold or the amount of equity within their capital structures, including a limit requiring National Grid plc to hold an investment-grade long-term senior unsecured debt credit rating.

In addition, some of our regulatory arrangements impose restrictions on the way we can operate. These include regulatory requirements for us to maintain adequate financial resources within certain parts of our operating businesses and may restrict the ability of National Grid plc and some of our subsidiaries to engage in certain transactions, including paying dividends, lending cash and levying charges.

The inability to meet such requirements, or the occurrence of any such restrictions, may have a material adverse impact on our business and financial condition.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, restrictions on disposals and financial covenants, such as restrictions on the level of subsidiary indebtedness.

Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

Exchange rates, interest rates and commodity price indices

Changes in foreign currency rates, interest rates or commodity prices could materially impact earnings or our financial condition.

We have significant operations in the US and are therefore subject to the exchange rate risks normally associated with non-UK operations including the need to translate US assets, liabilities, income and expenses into sterling (our reporting currency).

In addition, our results of operations and net debt position may be affected because a significant proportion of our borrowings, derivative financial instruments and commodity contracts are affected by changes in interest rates, commodity price indices and exchange rates, in particular the dollar-to-sterling exchange rate.

Furthermore, our cash flow may be materially affected as a result of settling hedging arrangements entered into to manage our exchange rate, interest rate and commodity price exposure, or by cash collateral movements relating to derivative market values, which also depend on the sterling exchange rate into the euro and other currencies.

Post-retirement benefits

We may be required to make significant contributions to fund pension and other post-retirement benefits.

We participate in a number of pension schemes that together cover substantially all our employees. In both the UK and US, such schemes include various large defined benefit schemes where the scheme assets are held independently of our own financial resources.

In the US, we also have other post-retirement benefit schemes. Estimates of the amount and timing of future funding for the UK and US schemes are based on actuarial assumptions and other factors, including: the actual and projected market performance of the scheme assets; future long-term bond yields; average life expectancies; and relevant legal requirements.

Actual performance of scheme assets may be affected by volatility in debt and equity markets.

Changes in these assumptions or other factors may require us to make additional contributions to these pension schemes which, to the extent they are not recoverable under our price controls or state rate plans, could materially adversely affect the results of our operations and financial condition.

Customers and counterparties

Customers and counterparties may not perform their obligations.

Our operations are exposed to the risk that customers, suppliers, banks and other financial institutions, and others with whom we do business, will not satisfy their obligations, which could materially adversely affect our financial position.

This risk is significant where our subsidiaries have concentrations of receivables from gas and electricity utilities and their affiliates, as well as industrial customers and other purchasers, and may also arise where customers are unable to pay us as a result of increasing commodity prices or adverse economic conditions (including as a result of the COVID-19 pandemic).

To the extent that counterparties are contracted with for physical commodities (gas and electricity) and they experience events that impact their own ability to deliver, we may suffer supply interruption as described in Infrastructure and IT systems on page 237.

There is also a risk to us where we invest excess cash or enter into derivatives and other financial contracts with banks or other financial institutions. Banks who provide us with credit facilities may also fail to perform under those contracts.

Employees and others

We may fail to attract, develop and retain employees with the competencies (including leadership and business capabilities), values and behaviours required to deliver our strategy and vision and ensure they are engaged to act in our best interests.

Our ability to implement our strategy depends on the capabilities and performance of our employees and leadership at all levels of the business. Our ability to implement our strategy and vision may be negatively affected by the loss of key personnel or an inability to attract, integrate, engage and retain appropriately qualified personnel (including people with the skills to help us deliver on our net zero commitments) or if significant disputes arise with our employees.

As a result, there may be a material adverse effect on our business, financial condition, results of operations and prospects.

There is a risk that an employee or someone acting on our behalf may breach our internal controls or internal governance framework, or may contravene applicable laws and regulations. This could have an impact on the results of our operations, our reputation and our relationship with our regulators and other stakeholders.

Index to Directors' Report and other disclosures

Shareholder information

Articles of Association

The following description is a summary of the material terms of our Articles of Association (Articles) and applicable English law. It is a summary only and is qualified in its entirety by reference to the Articles.

The Company is proposing at the 2021 AGM to update the Articles to take account of recent changes to company law and market changes, including in particular the flexibility for the Company to hold general meetings by allowing combined physical and electronic general meetings (also known as 'hybrid' meetings). The Notice of Meeting for the 2021 AGM, which sets out details of the proposed amendments to the Articles and the proposed form of the amended Articles (the 'New Articles') are available on the Company's website.

Summary

The Articles set out the Company's internal regulations. Copies are available on our website and upon request. Amendments to the Articles have to be approved by at least 75% of those voting at a general meeting of the Company. Subject to company law and the Articles, the Directors may exercise all the powers of the Company. They may delegate authorities to committees and day-to-day management and decision-making to individual Executive Directors. We set out the committee structure on page 74.

General

The Company is incorporated under the name National Grid plc and is registered in England and Wales with registered number 4031152. Under the Companies Act 2006, the Company's objects are unrestricted.

Directors

Under the Articles, a Director must disclose any personal interest in a matter and may not vote in respect of that matter, subject to certain limited exceptions. As permitted under the Companies Act 2006, the Articles allow non-conflicted Directors to authorise a conflict or potential conflict for a particular matter. In doing so, the non-conflicted Directors must act in a way they consider, in good faith, will be most likely to promote the success of the Company for the benefit of the shareholders as a whole.

The Directors (other than a Director acting in an executive capacity) are paid fees for their services. In total, these fees must not exceed £2,000,000 per year or any higher sum decided by an ordinary resolution at a general meeting of shareholders. In addition, special pay may be awarded to a Director who acts in an executive capacity, serves on a committee, performs services which the Directors consider to extend beyond the ordinary duties of a Director, devotes special attention to the business of National Grid, or goes or lives abroad on the Company's behalf. Directors may also receive reimbursement for expenses properly incurred, and may be awarded pensions and other benefits. The compensation awarded to the Executive Directors is determined by the Remuneration Committee. Further details of Directors' remuneration are set out in the Directors' Remuneration Report (see pages 92 – 113).

The Directors may exercise all the powers of National Grid to borrow money. However, the aggregate principal amount of all the Group's borrowings outstanding at any time must not exceed £35 billion or any other amount approved by shareholders by an ordinary resolution at a general meeting. At the Company's AGM for 2020, shareholders approved, by ordinary resolution, an increase in this amount (which had remained unchanged since the 2009 AGM) to £45 billion and to enable the funding of growth over the medium term in an efficient manner. At the General Meeting on 22 April 2021 to approve the WPD Acquisition, shareholders approved a further increase in this amount to £55 billion to reflect the additional borrowing required for the WPD Acquisition and the taking on of existing WPD debt. The amount specified in the New Articles reflect these resolutions.

Directors can be appointed or removed by the Board or shareholders at a general meeting. Directors must stand for election at the first AGM following their appointment to the Board and the New Articles provide, in line with market practice, that they must be recommended by the Board or the Company must have received written confirmation of their willingness to act as Director. Each Director must retire at least every three years, although they will be eligible for re-election. In accordance with best practice introduced by the UK Corporate Governance Code, all Directors wishing to continue in office currently offer themselves for re-election annually. No person is disqualified from being a Director or is required to vacate that office by reason of attaining a maximum age.

A Director is not required to hold shares in National Grid in order to qualify as a Director.

Rights, preferences and restrictions

(i) Dividend rights

National Grid may not pay any dividend otherwise than out of profits available for distribution under the Companies Act 2006 and other applicable provisions of English law. In addition, as a public company, National Grid may only make a distribution if, at the time of the distribution, the amount of its net assets is not less than the aggregate of its called-up share capital and undistributable reserves (as defined in the Companies Act 2006), and to the extent that the distribution does not reduce the amount of those assets to less than that aggregate. Ordinary shareholders and American Depositary Share (ADS) holders receive dividends.

Subject to these points, shareholders may, by ordinary resolution, declare dividends in accordance with the respective rights of the shareholders, but not exceeding the amount recommended by the Board. The Board may pay interim dividends if it considers that National Grid's financial position justifies the payment. Any dividend or interest unclaimed for 12 years from the date when it was declared or became due for payment will be forfeited and revert to National Grid, and the New Articles clarify that the Company may use such unclaimed dividends for the Company's benefit as the Directors may think fit.

(ii) Voting rights

Subject to any rights or restrictions attached to any shares and to any other provisions of the Articles, at any general meeting on a show of hands, every shareholder who is present in person will have one vote and, on a poll, every shareholder will have one vote for every share they hold. On a show of hands or poll, shareholders may cast votes either personally or by proxy. A proxy need not be a shareholder. Under the Articles, all substantive resolutions at a general meeting must be decided on a poll and the New Articles provide that voting on resolutions at a general meeting that is held at least in part using an electronic platform must be decided on a poll. Ordinary shareholders and ADS holders can vote at general meetings.

(iii) Liquidation rights

In a winding up, a liquidator may (in each case with the sanction of a special resolution passed by the shareholders and any other sanction required under English law): (a) divide among the shareholders the whole or any part of National Grid's assets (whether the assets are of the same kind or not); the liquidator may, for this purpose, value any assets and determine how the division should be carried out as between shareholders or different classes of shareholders, or (b) transfer any part of the assets to trustees on trust for the benefit of the shareholders as the liquidator determines. In neither case will a shareholder be compelled to accept assets upon which there is a liability.

(iv) Restrictions

There are no restrictions on the transfer or sale of ordinary shares. Some of the Company's employee share plans, details of which are contained in the Directors' Remuneration Report, include restrictions on the transfer of ordinary shares while the ordinary shares are subject to the plan. Where, under an employee share plan operated by the Company, participants are the beneficial owners of the ordinary shares but not the registered owner, the voting rights may be exercised by the registered owner at the direction of the participant. Treasury shares do not attract a vote or dividends.

(v) Variation of rights

Subject to applicable provisions of English law, the rights attached to any class of shares of National Grid may be varied or cancelled. This must be with the written consent of the holders of three quarters in nominal value of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

General meetings
AGMs must be convened each year within six months of the Company's accounting reference date upon 21 clear days' advance written notice. Under the Articles, any other general meeting may be convened provided at least 14 clear days' written notice is given, subject to annual approval of shareholders. In certain limited circumstances, the Company can convene a general meeting by shorter notice. The notice must specify, among other things, the nature of the business to be transacted, the place, the date and the time of the meeting. As at the date of this report, it will be possible to hold the Company's 2021 AGM as a physical meeting in accordance with the UK government's roadmap to ease COVID-19 restrictions across England. However, given the unpredictable circumstances of the COVID-19 pandemic and to ensure the health and safety of all our shareholders and colleagues, we may be required to rapidly adapt these arrangements to respond to the UK government guidelines. Please ensure you continue to monitor our website nationalgrid.com/investors/shareholder-information/agm for any updates to the arrangements for the AGM.

Rights of non-residents
There are no restrictions under the Articles that would limit the rights of persons not resident in the UK to vote in relation to ordinary shares.

Disclosure of interests
Under the Companies Act 2006, National Grid may, by written notice, require a person whom it has reasonable cause to believe to be or to have been, in the last three years, interested in its shares to provide additional information relating to that interest. Under the Articles, failure to provide such information may result in a shareholder losing their rights to attend, vote or exercise any other right in relation to shareholders' meetings.

Under the UK Disclosure Guidance and Transparency Rules (DTR) sourcebook, there is also an obligation on a person who acquires or ceases to have a notifiable interest in shares in National Grid to notify the Company of that fact. The disclosure threshold is 3% and disclosure is required each time the person's direct and indirect holdings reach, exceed or fall below each 1% threshold thereafter.

The UK City Code on Takeovers and Mergers imposes strict disclosure requirements regarding dealings in the securities of an offeror or offeree company, and also on their respective associates, during the course of an offer period. Other regulators in the UK, US and elsewhere may have, or assert, notification or approval rights over acquisitions or transfers of shares.

Depositary payments to the Company
The Depositary (The Bank of New York Mellon) reimburses the Company for certain expenses it incurs in relation to the ADS programme. The Depositary also pays the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses for the mailing of annual and interim financial reports, printing and distributing dividend cheques, the electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimiles and telephone calls. It also reimburses the Company for certain investor relationship programmes or special investor relations promotional activities. There are limits on the amount of expenses for which the Depositary will reimburse the Company, but the amount of reimbursement is not necessarily tied to the amount of fees the Depositary collects from investors.

For the period 18 June 2020 to 19 May 2021, the Company received a total of $1,943,797.24 in reimbursements from the Depositary consisting of $1,112,830.34, $285,087.01 and $545,879.89 received in October 2020, December 2020 and March 2021 respectively. Fees that are charged on cash dividends will be apportioned between the Depositary and the Company.

Any questions from ADS holders should be directed to The Bank of New York Mellon at the contact details on page 267.

Description of securities other than equity securities: Depositary fees and charges
The Depositary collects fees by deducting them from the amounts distributed or by selling a portion of distributable property for:

- delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them; and
- making distributions to investors (including, it is expected, cash dividends).

The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Persons depositing or withdrawing shares must pay:	For:
$5.00 per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; cancellation of ADSs for the purpose of withdrawal, including if the Deposit agreement terminates; and distribution of securities distributed to holders of deposited securities that are distributed by the Depositary to ADS holders.
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	Cable, telex and facsimile transmissions (when expressly provided in the Deposit agreement); and converting foreign currency to dollars.
Taxes and other governmental charges the Depositary or the Custodian has to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes	As necessary.

The Company's Deposit agreement under which the ADSs are issued allows a fee of up to $0.05 per ADS to be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2020/21 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to distribution of the cash dividend.

Documents on display
National Grid is subject to the US Securities and Exchange Commission (SEC) reporting requirements for foreign companies. The Company's Form 20-F and other filings can be viewed on the National Grid website as well as the SEC website at sec.gov.

Shareholder information continued

Events after the reporting period

There were no events after the reporting period.

Exchange controls

There are currently no UK laws, decrees or regulations that restrict the export or import of capital, including, but not limited to, foreign exchange control restrictions, or that affect the remittance of dividends, interest or other payments to non-UK resident holders of ordinary shares except as otherwise set out in Taxation on pages 243 and 244 and except in respect of the governments of and/or certain citizens, residents or bodies of certain countries (described in applicable Bank of England Notices or European Union Council Regulations in force as at the date of this document).

Material interests in shares

As at 31 March 2021, National Grid had been notified of the following holdings in voting rights of 3% or more in the issued share capital of the Company:

	Number of ordinary shares	% of voting rights[1]	Date of last notification of interest
BlackRock, Inc.	253,998,855	7.21	1 December 2020
The Capital Group Companies, Inc.	145,094,617	3.88	16 April 2015

1. This number is calculated in relation to the issued share capital at the time the holding was disclosed.

As at 19 May 2021, no further notifications have been received.

The rights attached to ordinary shares are detailed on page 240. All ordinary shares and all major shareholders have the same voting rights. The Company is not, to the best of its knowledge, directly or indirectly controlled.

Share capital

As at 19 May 2021, the share capital of the Company consists of ordinary shares of $12^{204/473}$ pence nominal value each and ADSs, which represent five ordinary shares each.

Authority to purchase shares

Shareholder approval was given at the 2020 AGM to purchase up to 10% of the Company's share capital (being 351,013,155 ordinary shares). The Directors intend to seek shareholder approval to renew this authority at the 2021 AGM.

In some circumstances, the Company may find it advantageous to have the authority to purchase its own shares in the market, where the Directors believe this would be in the interests of shareholders generally. The Directors believe that it is an important part of the financial management of the Company to have the flexibility to repurchase issued shares to manage its capital base, including actively managing share issuances from the operation of the scrip dividend scheme. It is expected that repurchases to manage share issuances under the scrip dividend scheme will not exceed 2.5% of the issued share capital (excluding treasury shares) per annum.

When purchasing shares, the Company has taken, and will continue to take, into account market conditions prevailing at the time, other investment and financing opportunities, and the overall financial position of the Company.

At the 2020 AGM, the Company sought authority to purchase ordinary shares in the capital of the Company as part of the management of the dilutive effect of share issuances under the scrip dividend scheme. During the year, the Company did not purchase any of its own shares.

	Number of shares	Total nominal value	% of called up share capital
Shares held in Treasury purchased in prior years[1]	271,931,784	£33,804,627.69[2]	7.19[1]
Shares purchased and held in Treasury during the year	–	–	–
Shares transferred from Treasury during the year (to employees under employee share plans)	6,172,027	£767,262.55[2]	0.16[3]
Maximum number of shares held in Treasury during the year	271,931,784	£33,804,627.69[2]	7.13[3]

1. Called-up share capital: 3,780,237,016 as at 31 March 2020.
2. Nominal value: $12^{204/473}$p.
3. Called-up share capital of 3,814,951,606 ordinary shares as at the date of this report.

As at the date of this report, the Company held 259,621,074 ordinary shares as treasury shares. This represented 6.81% of the Company's called-up share capital.

Authority to allot shares

Shareholder approval was given at the 2020 AGM to allot shares of up to one third of the Company's share capital. The Directors are seeking this same level of authority this year. The Directors consider that the Company will have sufficient flexibility with this level of authority to respond to market developments and that this authority is in line with investor guidelines.

The Directors currently have no intention of issuing new shares or of granting rights to subscribe for or convert any security into shares. This is except in relation to, or in connection with, the operation and management of the Company's scrip dividend scheme and the exercise of options under the Company's share plans. No issue of shares will be made that would effectively alter control of the Company without the sanction of shareholders in a general meeting.

The Company expects to actively manage the dilutive effect of share issuance arising from the operation of the scrip dividend scheme. In some circumstances, additional shares may be allotted to the market for this purpose under the authority provided by this resolution. Under these circumstances, it is expected that the associated allotment of new shares (or rights to subscribe for or convert any security into shares) will not exceed 1% of the issued share capital (excluding treasury shares) per annum.

Dividend waivers

The trustee of the National Grid Employee Share Trust, which is independent of the Company, waived the right to dividends paid during the year. They have also agreed to waive the right to future dividends, in relation to the ordinary shares and ADSs held by the trust.

Under the Company's ADS programme, the right to dividends in relation to the ordinary shares underlying the ADSs was waived during the year, under an arrangement whereby the Company pays the monies to satisfy any dividends separately to the Depositary for distribution to ADS holders entitled to the dividend. This arrangement is expected to continue for future dividends.

Share information

National Grid ordinary shares are listed on the London Stock Exchange under the symbol NG. The ADSs are listed on the New York Stock Exchange under the symbol NGG.

Shareholder analysis

The following table includes a brief analysis of shareholder numbers and shareholdings as at 31 March 2021.

	Number of shareholders	% of shareholders	Number of shares	% of shares[1]
1–50	163,850	21.22	4,977,152	0.13
51–100	194,515	25.19	13,646,168	0.36
101–500	322,508	41.77	67,393,746	1.77
501–1,000	45,487	5.89	31,660,235	0.83
1,001–10,000	43,014	5.57	105,181,894	2.76
10,001–50,000	1,714	0.22	31,282,895	0.82
50,001–100,000	206	0.03	14,734,456	0.39
100,001–500,000	413	0.05	99,665,659	2.61
500,001–1,000,000	151	0.02	109,396,417	2.87
1,000,001+	302	0.04	3,337,012,984	87.47
Total	772,160	100	3,814,951,606	100

1. Percentages have been rounded to two decimal places.

Taxation

This section provides information about certain US federal income tax and UK tax consequences for US Holders (defined below) of owning ADSs and ordinary shares. A US Holder is the beneficial owner of ADSs or ordinary shares who:

- is for US federal income tax purposes (i) an individual citizen or resident of the United States; (ii) a corporation created or organised under the laws of the United States, any state thereof or the District of Columbia; (iii) an estate, the income of which is subject to US federal income tax without regard to its source; or (iv) a trust, if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more US persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for US federal income tax purposes; and
- does not hold ADSs or ordinary shares in connection with the conduct of a business or the performance of services in the UK or otherwise in connection with a branch, agency or permanent establishment in the UK.

This section is not a comprehensive description of all the US federal income tax and UK tax considerations that may be relevant to any particular investor (including consequences under the US alternative minimum tax or net investment income tax). Neither does it address state, local or other tax laws. National Grid has assumed that shareholders, including US Holders, are familiar with the tax rules applicable to investments in securities generally and with any special rules to which they may be subject. This discussion deals only with US Holders who hold ADSs or ordinary shares as capital assets. It does not address the tax treatment of investors who are subject to special rules. Such investors may include:

- financial institutions;
- insurance companies;
- dealers in securities or currencies;
- investors who elect mark-to-market treatment;
- entities treated as partnerships or other pass-through entities and their partners;
- individual retirement accounts and other tax-deferred accounts;
- tax-exempt organisations;
- investors who own (directly or indirectly) 10% or more of our shares (by vote or value);
- investors who hold ADSs or ordinary shares as a position in a straddle, hedging transaction or conversion transaction;
- individual investors who have ceased to be resident in the UK for a period of five years or less;
- persons that have ceased to be US citizens or lawful permanent residents of the US; and
- US Holders whose functional currency is not the US dollar.

The statements regarding US and UK tax laws and administrative practices set forth below are based on laws, treaties, judicial decisions and regulatory interpretations that were in effect on the date of this document. These laws and practices are subject to change without notice, potentially with retroactive effect. In addition, the statements set forth below are based on the representations of the Depositary and assume that each party to the Deposit agreement will perform its obligations thereunder in accordance with its terms.

US Holders of ADSs generally will be treated as the owners of the ordinary shares represented by those ADSs for US federal income tax purposes. For the purposes of the Tax Convention, the Estate Tax Convention and UK tax considerations, this discussion assumes that a US Holder of ADSs will be treated as the owner of the ordinary shares represented by those ADSs. HMRC has stated that it will continue to apply its long-standing practice of treating a holder of ADSs as holding the beneficial interest in the ordinary shares represented by the ADSs; however, we note that this is an area of some uncertainty and may be subject to change.

US Holders should consult their own advisors regarding the tax consequences of buying, owning and disposing of ADSs or ordinary shares depending on their particular circumstances, including the effect of any state, local or other tax laws.

Taxation of dividends

The UK does not currently impose a withholding tax on dividends paid to US Holders.

US Holders should assume that any cash distribution paid by us with respect to ADSs or ordinary shares will be reported as dividend income for US federal income tax purposes. While dividend income received from non-US corporations is generally taxable to a non-corporate US Holder as ordinary income for US federal income tax purposes, dividend income received by a non-corporate US Holder from us generally will be taxable at the same favourable rates applicable to long-term capital gains provided (i) either: (a) we are eligible for the benefits of the Tax Convention or (b) ADSs or ordinary shares are treated as 'readily tradable' on an established securities market in the United States; and (ii) we are not, for our taxable year during which the dividend is paid or the prior year, a passive foreign investment company for US federal income tax purposes (a PFIC), and certain other requirements are met. We expect that our shares will be treated as 'readily tradable' on an established securities market in the United States as a result of the trading of ADSs on the New York Stock Exchange. We also believe we are eligible for the benefits of the Tax Convention.

Based on our audited financial statements and the nature of our business activities, we believe that we were not treated as a PFIC for US federal income tax purposes with respect to our taxable year ending 31 March 2021. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income, and the nature of our business activities, we do not anticipate becoming a PFIC in the foreseeable future.

Dividends received by corporate US Holders with respect to ADSs or ordinary shares will not be eligible for the dividends-received deduction that is generally allowed to corporations.

Taxation of capital gains

Subject to specific rules relating to assets that derive at least 75% of their value from UK land, US Holders will not be subject to UK taxation on any capital gain realised on the sale or other disposition of ADSs or ordinary shares.

Provided that we are not a PFIC for any taxable year during which a US Holder holds their ADSs or ordinary shares, upon a sale or other disposition of ADSs or ordinary shares, a US Holder generally will recognise a capital gain or loss for US federal income tax purposes that is equal to the difference between the US dollar value of the amount realised on the sale or other disposition and the US Holder's adjusted tax basis in the ADSs or ordinary shares. Such capital gain or loss generally will be long-term capital gain or loss if the ADSs or ordinary shares were held for more than one year. For non-corporate US Holders, long-term capital gain is generally taxed at a lower rate than ordinary income. A US Holder's ability to deduct capital losses is subject to significant limitations.

Shareholder information continued

US information reporting and backup withholding tax

Dividend payments made to US Holders and proceeds paid from the sale, exchange, redemption or disposal of ADSs or ordinary shares to US Holders may be subject to information reporting to the US Internal Revenue Service (IRS). Such payments may be subject to backup withholding taxes if the US Holder fails to provide an accurate taxpayer identification number or certification of exempt status or fails to comply with applicable certification requirements.

US Holders should consult their tax advisors about these rules and any other reporting obligations that may apply to the ownership or disposition of ADSs or ordinary shares. Such obligations include reporting requirements related to the holding of certain foreign financial assets.

UK stamp duty and stamp duty reserve tax (SDRT)

Transfers of ordinary shares – SDRT at the rate of 0.5% of the amount or value of the consideration will generally be payable on any agreement to transfer ordinary shares that is not completed using a duly stamped instrument of transfer (such as a stock transfer form).

The SDRT liability will be cancelled where an instrument of transfer is executed and duly stamped before the expiry of the six-year period beginning with the date on which the agreement is made. If a claim is made within the specified period, any SDRT which has been paid will be refunded. SDRT is due whether or not the agreement or transfer is made or carried out in the UK and whether or not any party to that agreement or transfer is a UK resident.

Purchases of ordinary shares completed using a stock transfer form will generally result in a UK stamp duty liability at the rate of 0.5% (rounded up to the nearest £5) of the amount or value of the consideration. Paperless transfers under the CREST paperless settlement system will generally be liable to SDRT at the rate of 0.5%, and not stamp duty. SDRT is generally the liability of the purchaser, and UK stamp duty is usually paid by the purchaser or transferee.

Transfers of ADSs – no UK stamp duty will be payable on the acquisition or transfer of existing ADSs or beneficial ownership of ADSs, provided that any instrument of transfer or written agreement to transfer is executed outside the UK and remains at all times outside the UK.

An agreement for the transfer of ADSs in the form of American Depositary Receipts will not result in an SDRT liability. A charge to stamp duty or SDRT may arise on the transfer of ordinary shares to the Depositary or The Bank of New York Mellon as agent of the Depositary (the Custodian).

The rate of stamp duty or SDRT will generally be 1.5% of the value of the consideration or, in some circumstances, the value of the ordinary shares concerned. However, there is no 1.5% SDRT charge on the issue of ordinary shares (or, where it is integral to the raising of new capital, the transfer of ordinary shares) to the Depositary or the Custodian.

The Depositary will generally be liable for the stamp duty or SDRT. Under the terms of the Deposit Agreement, the Depositary will charge any tax payable by the Depositary or the Custodian (or their nominees) on the deposit of ordinary shares to the party to whom the ADSs are delivered against such deposits. If the stamp duty is not a multiple of £5, the duty will be rounded up to the nearest multiple of £5.

UK inheritance tax

An individual who is domiciled in the US for the purposes of the Estate Tax Convention and who is not a UK national for the purposes of the Estate Tax Convention will generally not be subject to UK inheritance tax in respect of (i) the ADSs or ordinary shares on the individual's death or (ii) a gift of the ADSs or ordinary shares during the individual's lifetime. This is not the case where the ADSs or ordinary shares are part of the business property of the individual's permanent establishment in the UK or relate to a fixed base in the UK of an individual who performs independent personal services.

Special rules apply to ADSs or ordinary shares held in trust.

In the exceptional case where the ADSs or shares are subject both to UK inheritance tax and to US federal gift or estate tax, the Estate Tax Convention generally provides for the tax paid in the UK to be credited against tax paid in the US or vice versa.

Capital gains tax (CGT) for UK resident shareholders

You can find CGT information relating to National Grid shares for UK resident shareholders on the investor section of our website. Share prices on specific dates are also available on our website.

Other disclosures

All-employee share plans

The Company has a number of all-employee share plans as described below, which operated during the year. These allow UK or US-based employees to participate in tax-advantaged plans and to become shareholders in National Grid.

Sharesave

UK employees are eligible to participate in the Sharesave plan. Under this plan, participants may contribute between £5 and £500 each month, for a fixed period of three years, five years or both. Contributions are taken from net salary. At the end of the fixed period, participants may use their savings to purchase ordinary shares in National Grid at a 20% discounted option price, which is set at the time of each annual Sharesave launch.

Share Incentive Plan (SIP)

UK employees are eligible to participate in the SIP. Contributions up to £150 per month are deducted from participants' gross salary and used to purchase National Grid ordinary shares each month. The shares are placed in a UK resident trust and are available to the individual with tax advantages after a five-year period.

US Incentive Thrift Plans

Thrift Plans are open to all US employees of participating National Grid companies; these are tax-advantaged savings plans (commonly referred to as 401k plans). These are defined contribution (DC) pension plans that give participants the opportunity to invest up to applicable federal salary limits. The federal limits for calendar year 2020 were: for pre-tax contributions, a maximum of 50% of salary limited to $19,500 for those under the age of 50 and $26,000 for those aged 50 and above; for post-tax contributions, up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) could not exceed 50% of compensation, and was further subject to the combined federal annual contribution limit of $57,000. For the calendar year 2021, participants may invest up to the applicable federal salary limits: for pre-tax contributions, this is a maximum of 50% of salary limited to $19,500 for those under the age of 50 and $26,000 for those aged 50 and above; for post-tax contributions, this is up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) may not exceed 50% of compensation, and is further subject to the combined federal annual contribution limit of $58,000.

US Employee Stock Purchase Plan (ESPP)

Employees of National Grid's participating US companies are eligible to participate in the ESPP (commonly referred to as a 423b plan). Eligible employees have the opportunity to purchase ADSs in National Grid on a monthly basis at a 15% discounted price. Under the plan, employees may contribute up to 20% of base pay each year, up to a maximum annual contribution of $25,000, to purchase ADSs.

The ESPP rules expire in July 2021 and so the Company will seek shareholder approval at the 2021 AGM for the new ESPP rules. The new rules will be substantially in line with the existing rules, updated to reflect developments in market practice and good governance.

Change of control provisions

No compensation would be paid for loss of office of Directors on a change of control of the Company. As at 31 March 2021, the Company had borrowing facilities of £4.2 billion available to it with a number of banks, which, on a change of control of the Company following a takeover bid, may alter or terminate; however, the Company is currently not drawing on any of such borrowing facilities. All of the Company's share plans contain provisions relating to a change of control. Outstanding awards and options would normally vest and become exercisable on a change of control, subject to the satisfaction of any performance conditions at that time. In the event of a change of control of the Company, a number of governmental and regulatory consents or approvals are likely to be required, arising from laws or regulations of the UK or the US. Such consents or approvals may also be required for acquisitions of equity securities that do not amount to a change of control.

No other agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid are considered to be significant in terms of their potential impact on the business as a whole.

Code of Ethics

In accordance with US legal requirements, the Board has adopted a Code of Ethics for senior financial professionals. This Code is available on our website: nationalgrid.com (where any amendments or waivers will also be posted). There were no amendments to, or waivers of, our Code of Ethics during the year.

Conflicts of interest

In accordance with the Companies Act 2006, the Board has a policy and procedure in place for the disclosure and authorisation (if appropriate) of actual and potential conflicts of interest. The Board continues to monitor and note possible conflicts of interest that each Director may have. The Directors are regularly reminded of their continuing obligations in relation to conflicts, and are required to review and confirm their external interests annually. During the year ended 31 March 2021, no new actual or potential conflicts of interest were identified that required approval by the Board. The Board has considered and noted a number of situations in relation to which no actual conflict of interest was identified. Due to current ongoing contractual negotiations that the Company has with Costain plc, the situational conflict that Paul Golby has by virtue of being a Non-executive Director of the Company and Chairman of Costain plc has been kept under constant review during the year and Paul Golby has been recused of all discussions in relation to contractual issues with Costain plc. He has also confirmed to us in writing that the same arrangements are in place in Costain plc.

Corporate governance practices: differences from New York Stock Exchange (NYSE) listing standards

The Company is listed on the NYSE and is therefore required to disclose differences in its corporate governance practices adopted as a UK listed company, compared with those of a US company.

The corporate governance practices of the Company are primarily based on the requirements of the Corporate Governance Code 2018 but substantially conform to those required of US companies listed on the NYSE. The following is a summary of the significant ways in which the Company's corporate governance practices differ from those followed by US companies under Section 303A Corporate Governance Standards of the NYSE.

The NYSE rules and the Code apply different tests for the independence of Board members.

The NYSE rules require a separate nominating/corporate governance committee composed entirely of independent directors. There is no requirement for a separate corporate governance committee in the UK. Under the Company's corporate governance policies, all directors on the Board discuss and decide upon governance issues, and the Nominations Committee makes recommendations to the Board with regard to certain responsibilities of a corporate governance committee.

The NYSE rules require listed companies to adopt and disclose corporate governance guidelines. While the Company reports compliance with the Code in each Annual Report and Accounts, the UK requirements do not require the Company to adopt and disclose separate corporate governance guidelines.

The NYSE rules require a separate audit committee composed of at least three independent members. While the Company's Audit Committee exceeds the NYSE's minimum independent Non-executive Director membership requirements, it should be noted that the quorum for a meeting of the Audit Committee, of two independent Non-executive Directors, is less than the minimum membership requirements under the NYSE rules.

The NYSE rules require a compensation committee composed entirely of independent directors, and prescribe criteria to evaluate the independence of the committee's members and its ability to engage external compensation advisors. While the Code prescribes different independence criteria, the Non-executive Directors on the Company's Remuneration Committee have each been deemed independent by the Board under the NYSE rules. Although the evaluation criteria for appointment of external advisors differ under the Code, the Remuneration Committee is solely responsible for the appointment, retention and termination of such advisors.

Directors' indemnity

The Company has arranged, in accordance with the Companies Act 2006 and the Articles of Association, qualifying third-party indemnities against financial exposure that Directors may incur in the course of their professional duties. Equivalent qualifying third-party indemnities were, and remain, in force for the benefit of those Directors who stood down from the Board in prior financial years for matters arising when they were Directors of the Company. Alongside these indemnities, the Company places Directors' and Officers' liability insurance cover for each Director. To the extent appropriate and required, similar indemnities have also been given to directors of subsidiary and other associated companies, who also benefit from Directors' and Officers' liability insurance cover.

Other disclosures continued

Employees
We negotiate with recognised unions. It is our policy to maintain well developed communications and consultation programmes. Other than the implementation of the Massachusetts workforce contingency plan in June 2018 there have been no material disruptions to our operations from labour disputes during the past five years. The agreement under dispute between the Company and the Massachusetts Gas unions was satisfactorily renegotiated in January 2019. National Grid believes that it can conduct its relationships with trade unions and employees in a satisfactory manner. Further details on the Company's colleagues can be found on page 59.

Human rights
We launched our Responsible Business Charter in October 2020 focusing on five key areas. One of the areas is our people and our commitment to ensuring all our people are treated fairly and given the opportunity to thrive at work. As a responsible, purpose-led company the way in which we conduct ourselves allows us to build trust with the people we work with by doing things in the right way, building our reputation as a responsible and ethical company that our stakeholders want to do business with and our employees want to work for.

National Grid does not have direct operations in countries of high concern with respect to human rights, therefore we do not have a specific policy relating to human rights. However, respect for human rights is incorporated into our employment practices and our values. We treat everyone fairly and equally, without discrimination. Respecting others and valuing inclusion and diversity are integral to our Code of Ethics and we provide unconscious bias training to all our people to build awareness of cultural differences and the importance of diversity, and necessity of achieving equity and inclusion. We acknowledge that there may be potential risks in our wider supply chain, and we ensure that the expectations outlined in our Supplier Code of Conduct relating to respecting, protecting and promoting human rights regarding our suppliers are proactively promoted. Our Global Supplier Diversity Policy outlines our commitments to ensuring there is an established approach to diversity, equity, inclusion and respect from our suppliers in all aspects of business.

We recognise that the relationship we have with our suppliers can influence how they support our commitment to acting responsibly. Our Supplier Code of Conduct is updated and communicated to our suppliers annually and clearly sets out our expectations to share our commitment to respecting, protecting and promoting human rights. This includes alignment to the UN Guiding Principles, the 10 Principles of the United Nations Global Compact, the International Labour Organisation (ILO) minimum standards, the Ethical Trading Initiative (ETI) Base Code, the UK Modern Slavery Act 2015, the US Victims of Trafficking and Violence Protection Act 2000, the US Department of State Principles Combatting Human Trafficking and, for our UK suppliers, the requirements of the Living Wage Foundation.

In addition, we are signatories to the UK Construction Protocol, which is a joint agreement with many of the largest firms in the UK construction sector focused on eradicating modern slavery and exploitation in the building industry. We are also founding signatory members of the People Matter Charter which was created to help organisations up and down the supply chain to bring challenges related to decent work together into one workforce strategy. The Charter has eight commitments that can apply to any organisation, of any size including aspects supporting human rights.

We are members of the UNGC Modern Slavery working group and actively involved in the UK Utilities Sector Modern Slavery Working Group which is aimed at working together to eradicate slavery and exploitation in the UK Utilities Sector and its supply chains.

We aim to maintain fairness across the organisation for pay and make sure our pay practices do not show bias. In the US, we pay all our employees at least the minimum wage or above the minimum wage requirements. In the UK, we are accredited by the Living Wage Foundation. Our commitment to our direct employees extends to our contractors and the work they do on behalf of National Grid and is actively promoted through our supply chain and embedded in our contract terms and conditions. We believe that everyone should be appropriately rewarded for their time and effort. We also go above the real living wage requirements and voluntarily pay our trainees the Living Wage. We undertake a real living wage review each year to ensure continued alignment. We also increase individual salaries as required. We have verified the implementation of the real living wage in supply chain contracts where low wages could be a risk including our catering and cleaning contracts.

Listing Rule 9.8.4 R cross-reference table
Information required to be disclosed by LR 9.8.4 R (starting on page indicated):

Interest capitalised	Page 149
Publication of unaudited financial information	Not applicable
Details of long-term incentive schemes	Page 97
Waiver of emoluments by a director	Not applicable
Waiver of future emoluments by a director	Not applicable
Non-pre-emptive issues of equity for cash	Not applicable
Item (7) in relation to major subsidiary undertakings	None
Parent participation in a placing by a listed subsidiary	Not applicable
Contracts of significance	Not applicable
Provision of services by a controlling shareholder	Not applicable
Shareholder waivers of dividends	Page 242
Shareholder waivers of future dividends	Page 242
Agreements with controlling shareholders	Not applicable

Material contracts
On 17 March 2021 we agreed to buy WPD from PPL, and, conditional upon the completion of the WPD Acquisition and certain regulatory approvals, agreed to sell NECO to PPL. The share purchase agreements for the WPD Acquisition and the NECO sale, together with the sponsor agreement between the Company and Barclays Bank plc (Barclays) dated 31 March 2021 (pursuant to which the Company appointed Barclays as sponsor in connection with the WPD Acquisition and the publication of its shareholder circular for approval of the WPD Acquisition), as well as the acquisition facility dated 17 March 2021 required for the WPD Acquisition, comprising a £8,250,000,000 term loan facility and a £1,105,000,000 revolving loan facility term between the Company, Barclays and Goldman Sachs as lenders and lead arrangers, constitute material contracts for the Company.

In addition, each of our Executive Directors has a Service Agreement and each Non-executive Director has a Letter of Appointment. Apart from these, no contract (other than contracts entered into in the ordinary course of business) has been entered into by the Group within the two years immediately preceding the date of this report that is, or may be material; or which contains any provision under which any member of the Group has any obligation or entitlement which is material to the Group at the date of this report.

Political donations and expenditure
At this year's AGM, the Directors will again seek authority from shareholders, on a precautionary basis, for the Company and its subsidiaries to make donations to registered political parties and other political organisations and/or incur political expenditure as such terms are defined in the Companies Act 2006. In each case, donations will be in amounts not exceeding £125,000 in aggregate. The definitions of these terms in the Companies Act 2006 are very wide. As a result, this can cover bodies such as those concerned with policy review, law reform and the representation of the business community (for example trade organisations). It could include special interest groups, such as those involved with the environment, which the Company and its subsidiaries might wish to support, even though these activities are not designed to support or influence support for a particular party. The Companies Act 2006 states that all-party parliamentary groups are not political organisations for these purposes, meaning the authority to be sought from shareholders is not relevant to interactions with such groups. The Company has no intention of changing its current practice of not making political donations or incurring political expenditure within the ordinary meaning of those words. This authority is, therefore, being sought to ensure that none of the Company's activities inadvertently infringe these rules.

National Grid made no political donations and did not incur any political expenditure during the year, as such terms are defined for the purposes of the Companies Act 2006 and the Political Parties, Elections and Referendums Act 2000. National Grid USA and its affiliated New York and federal political action committees (PAC) made political donations in the US totalling $35,000 (£25,365) during the year. National Grid USA's affiliated New York PAC (NYPAC) was funded partly by contributions from National Grid USA and certain of its subsidiaries and partly by voluntary employee contributions. National Grid USA's affiliated federal PAC was funded wholly by voluntary employee contributions. The NYPAC did not receive any corporate contribution during the past fiscal year.

Property, plant and equipment

This information can be found in note 13 property, plant and equipment on pages 159 – 161, note 21 borrowing on pages 170 – 172 and where we operate on page 227.

Research, development and innovation activity

Investment in research and development during the year for the Group was £17 million (2019/20: £14 million; 2018/19: £19 million). We only disclose directly incurred expenditure, and not those amounts our partners contribute to joint or collaborative projects. Collaborating across the industry has played a crucial role in our ability to develop new programmes and deliver value to our stakeholders throughout 2020/21.

UK Electricity

Continued collaboration and stakeholder engagement have driven the research programmes for ET innovation. Our engagement with stakeholders as part of webinars, formal meetings, conferences and dissemination events has been instrumental to developing our strategies including our overall innovation strategy as well as technology and asset-related innovation strategies.

As a result, our project portfolio has been developed around the themes of delivering cleaner and cheaper energy. Our commitment to the net zero target for 2050 has provided the focus for our research programme on carbon emission reduction. We completed our Zero-2050 project, which was aimed at developing the decarbonisation pathways for South Wales using a whole system approach. The project resulted in significant learning for the development of optimised regional pathways to meet the UK net zero targets. We presented our findings to the Welsh government and are now developing the next stages of the project in close collaboration with key stakeholders.

We are also increasing research into decarbonising our own operations and preparing our network for the changes we need to make to accommodate a fully decarbonised energy sector. We have worked with our partners on several projects, investigating ways to eliminate greenhouse gases from our gas-insulated equipment, replacement of diesel generators with low-carbon alternatives for back-up power generation in our substations, and the reduction of our carbon footprint relating to our construction work. Our future network will need to accommodate more renewable energy sources and other converter-based connections and equipment. Providing the infrastructure for a secure, efficient and reliable network requires an increased understanding of network stability. We have, therefore, developed several projects investigating the impacts of reduced inertia, potential controller interactions and reduced fault levels. We are also working with other GB transmission owners and ESO to develop a detailed GB transmission network electromagnetic transient model. An accurate network representation will provide greater insight and design of mitigating actions to maintain network stability.

The second key aspect that our stakeholder engagement has highlighted is the delivery of cheaper energy. This has been implemented in our research programme on optimised asset management and monitoring as well as the digitisation of operational technology, considering in particular, cyber security in a context of increasing cyber threats.

As a key enabler for future innovation we have continued the delivery of our Deeside Centre for Innovation. Significant progress has been made with good progress on the construction of the overhead line test area and detailed design for the substation area, which notably includes a trial for construction with cement-free concrete. We are aiming to open the facility for wider industry use in October 2021.

We submitted two entries to Ofgem for this year's Network Innovation Competition (NIC). The first entry was Proteus, a project which aimed to trial an innovative STATCOM solution for stability and voltage management. The second entry was RICA (Retro-Insulated Cross-Arms), a research project aimed to develop an innovative method for uprating existing overhead lines, allowing the voltage on 275kV overhead lines to be increased to 400kV. Both the entries were successful in the initial screening process and in its final decision, Ofgem awarded £8.1 million funding to the RICA project but chose not to take Proteus forward. The total cost of the RICA project is £9.1 million and ET will be contributing the remaining £1 million. We are also working with Smart Wires (see page 40) to use modular power flow control devices to increase power transfer capability on our network, thereby enabling greater volumes of renewable energy to be efficiently transferred to customers.

Electricity System Operator

Throughout the year the ESO has delivered a diverse innovation portfolio that supports our role in keeping electricity supplies safe, reliable and efficient, while pushing the boundaries to enable a net zero energy future. Our innovation projects continue to explore how we work in ground breaking areas such as advanced analytics and machine learning, as well as state-of-the-art technologies such as Virtual Synchronous Machines. In 2020/21 the ESO funded over £2.6 million worth of projects using Network Innovation Allowance (NIA), and were involved in four large-scale NIC projects with partners (two led by the ESO), we also supported third-party innovation with in-kind support from ESO experts. We refresh our strategy and innovation priorities annually, based on consultation with our stakeholders and this ensures we continue to focus innovation funding only on the most effective projects which could deliver significant consumer benefits. Our innovation activities last year include the Distributed ReStart project, which continues to engage with stakeholders, and explore how distributed energy resources can be used to restore power to the transmission network in the unlikely event of a blackout. The 4D Heat project explored how off-mains gas homes in Scotland could use wind power for domestic heating to ease constraint and congestion issues on the network. While the benefits of closer to real-time procurement of frequency response was tested in the Frequency Response Auction Trial, 2021 was the first year of the new ESO regulatory period, where we have access to £23 million of NIA over five years, and the Strategic Innovation Fund (SIF) will replace the NIC to support large-scale, collaborative projects focused on key industry challenges to achieving net zero targets.

UK Gas

Gas Transmission innovation has increased focus on meeting the UK's net zero 2050 targets. An accelerated programme of work in 2020/21 covered net zero challenges, including hydrogen and reduction of methane emissions alongside a focus on safety, reliability and asset health. The key highlights of 2020/21 include:

- collaboratively working with the gas distribution networks on several new projects under our Hydrogen in the NTS (HyNTS) programme: Hydrogen Deblending which allows for the separation of hydrogen in a natural gas mix and HyTechnical working with the Institute of Gas Engineers & Managers (IGEM) to overhaul the gas technical standards to meet hydrogen specifications;
- successfully securing funding for the £12.7 million HyNTS FutureGrid NIC Project which is an ambitious programme that seeks to build a hydrogen test facility from decommissioned assets at DNV GL Spadeadam, to demonstrate the National Transmission System (NTS) can transport hydrogen;
- reduction of methane emissions through two key projects: Monitoring of Real-time Fugitive Emissions (MoRFE), which looks at developing a cost-effective continuous fugitive emission detection system and CH4RGE, a project that looks at reducing methane emissions from rotating gas equipment;
- development of valve remediation techniques under the Valve Care Toolbox project to provide a suite of solutions that allow for repair rather than replacement of valves; and
- unlocking the potential of drone technology for inspection through the Above & Beyond Project to investigate and demonstrate the ability to fly a drone beyond visual line of sight, in uncontrolled airspace, to inspect large areas of our network and assets.

US research and development

Research and development (R&D) work in the US focused on the advancement of products, processes, systems technologies and work methods that may be new to National Grid. This is accomplished by working with internal departments to identify where strategic R&D investment is needed and is likely to prove beneficial. To achieve these goals, we work in collaboration with technical organisations, academia and vendors in the energy sector that align with our goals and objectives to provide a safe, reliable, efficient and clean service. We continue to focus our R&D on increasing public safety supporting the integration of renewable resource, protecting our workforce and reducing the cost of the work we perform.

Research efforts are designed with the focus on shared learnings across jurisdictions to help reduce cost and allow for a faster pace of technology adoption.

In 2020/21, we continued to invest and participate in several significant pilot projects with the intention of obtaining operational knowledge and experience of technology-driven system impacts.

Other disclosures continued

US Electricity
New England – Distribution

- Under the Company's 'Solar Phase 1, 2 and 3' programmes, we contracted and built approximately 35 MW of PV solar and 6.2 MW/ 12 MWh of energy storage system as part of our company-owned facilities portfolio. The facilities are used to explore new technologies that can help reduce the interconnection cost and time of solar energy. The research also aims to help the Company move from interconnecting DER to integrating it. Among the technologies researched are smart inverters, energy storage, dynamic VAR STATCOMS, plant level controllers and dual axis PV tracking. To enhance the learning experience the Company partnered with industry leaders such as the Electric Power Research Institute (EPRI), Sandia National Laboratories (Sandia) and Fraunhofer Gesellschaft (Fraunhofer). The programme won two awards in 2020:
  - the 2020 Digitalisation/Technology Adoption Award by Power Magazine; and
  - the Game Changer Award at the 2020 Connected Plant Conference.

New England – Transmission

- Working with Boston Dynamics, National Grid deployed the 'Spot Robot' (the robot) at its Sandy Pond HVDC station, which is responsible for importing almost 2,000 MW of clean hydroelectricity into New England every day. Currently technicians inspect the thyristors twice a year visually through windows looking into a hall, during two planned outages a year.
- The robot can be in the hall when energised. The robot can walk around the full floor area of the thyristor hall, affording the technicians full viewing angles of the equipment which were impossible to view through the windows alone. The robot also conducts thermal scans. With both its high-resolution optical cameras and sensors it can pick up on very small water leaks (which were difficult to detect visually before) and identify hot spots (places of possible mechanical fatigue). This is all without entering the environment such that the station can stay in operation and energised.
- The pilot of the robot was successful, the Company is collaborating with Boston Dynamics and so far has two robots. One of the robots will be permanently in the thyristor hall, and the other serves as a back up and is being considered for other locations.
- Smart Wires manufactures a power flow control device called the SmartValve. SmartValve are FACTS (Flexible Alternating Current Transmission System) devices that use power electronics to 'push and pull' power over a transmission network thus increasing transmission capacity over AC lines without the need to build additional capability (for example, reconductoring, new lines, or other typical upgrades).
- National Grid US deployed the SmartValve system on a 69kV line near the Fitch Road substation (Lancaster, MA north of Worcester, MA). The deployment will give us operational experience with the technology and prove out the capabilities.

New York – Distribution

- We are working on a demand reduction pilot project in Clifton Park that will offer customers various programmes and pricing signals to manage usage to reduce energy bills and demand during peak times. In addition, the Company has deployed and operated two VVO/CVR schemes in Clifton Park. We are conducting an offline analysis to determine the incremental benefits of incorporating AMI data with VVO/CVR operation. We are also piloting a smart inverter VVO/CVR project to assess the feasibility and benefits of integrating smart inverters with the existing VVO/CVR scheme currently in operation in the Clifton Park Pilot.
- We continued to progress our Smart City REV demonstration project in partnership with the city of Schenectady. Phase 1, which involves procurement, deployment and initial operation of all selected technologies, has been completed. Now we are collaborating on the establishment and assessment of functional performance characteristics, including feedback from city stakeholders to evaluate the public acceptance and the overall value proposition. Phase 2 of the project is currently in the technology procurement phase, which will then be deployed in the remaining areas of the city.
- We have been proposing a flexible Load Study to quantify the ability of flexible load to solve potential peak load challenges from beneficial electrification and minimum load challenges from DG penetration simultaneously. This study will model and simulate shifting of load from peak periods to mid-day time.
- As part of our NIMO rate case, we have proposed a distributed communications project to investigate greater integration of DER into the grid via: 1) novel communication schemes and protocols through utilisation of DTT and 3V0 low cost alternatives, 2) communications between the Company and the NYISO for new DER market products, 3) increased integration of DER into distribution automation schemes, 4) low-cost monitoring and control for smart inverters.
- We are also looking to pilot a net zero Carbon Building-to-Grid project to develop building-to-grid ('B2G') software, communication, and integration to Building Management System (BMS) and DER to actively manage the increased electrical load to support the grid and potentially provide compensation to the building owner and tenants.
- We have selected two developers and are proceeding with contract negotiations of two energy storage projects. The first project, Old Forge, is a 20 MW and 40 MWh battery to operate as a Microgrid. The second project, North Lakeville, is a 10 MW and 20 MWh battery and will be operated as an alternative to a traditional wire upgrade. In addition, both projects aim to dually participate in the NYISO markets.

Calibration across multiple jurisdictions

- We are piloting an Active Resource Integration (ARI) project at solar phase 3 location in MA and at Peterboro substation in NY to test the ability to increase the amount of solar DG integrated into the distribution system in constrained areas via development of curtailment capabilities.
- We are starting a DERMS Investigation project to conduct a deep dive into many aspects of DERMS (e.g., use cases, functions, IT architecture, cybersecurity, BCA, vendor capabilities) to prepare National Grid for the enterprise-wide implementation of a DERMS platform and associated modules.
- National Grid is heavily engaged on several EPRI and CEATI programmes, including bulk system renewables, DERs integration, planning and asset management, energy storage, asset management for transmission and distribution, system automation and integrating emerging technologies.
- Over the next 10 years we will be deploying up to 150 digital substations in New England and New York as we transition to fully digital substations on our transmission network, which will utilise the IEC 61850 communications standard. The digital substation reduces construction and operation costs, engineering and construction time, increases system flexibility, and helps facilitate the large-scale incorporation of renewable power.

US Gas
New York

- While partnering with a robotics company and another utility, we have been developing and testing new technology to locate inadvertent sewer cross bores created when using some trenchless technology. This technology is deployed in our gas main immediately after installation, prior to the introduction of natural gas. It differs from the current process, which requires us to gain access to the municipal sewer system. Deployment will reduce the risk and cost associated with sewer cross bores. We constructed a functional sewer system covering five hectares at one of our facilities to test the accuracy of the technology. We purposefully created cross bores in the system at several points to determine if the technology could locate them. The technology found all the cross bores with no false negatives. We are currently transitioning the technology to the field for live testing. After achieving positive results deploying this technology in a controlled test bed at one of our NY facilities, the next step was to test this process in the field. This technology was tested after new pipe installation via trenchless methods as well as in validation runs where sewer cross bores were identified in the field through the existing process. In all cases, the technology was able to verify the locations of the cross bores accurately. We are now working to gather more field data to support the validation of this technology.
- We have been working with a Canadian valve manufacturer to develop a service isolation valve to locally and remotely isolate a gas service. The application has become necessary due to recent industry incidents in the US. The valve has passed all industry and National Grid required testing and can be installed on service lines up to 11 bar of pressure. The valve can take a switched signal from any source and locally isolate the gas service. Signals include flood, fire, seismic, under-pressurisation, over-pressurisation and methane. The valve can also be closed via a wireless signal from National Grid. The intent of this initiative is to incorporate the valve into an integrated safety solution with network communications that has the ability to remotely isolate the service under various hazard conditions while communicating alarms to the utility. We are currently pilot testing versions of this valve integrated with cellular and LoRaWan communications networks. To enhance the functionality of the service isolation valve, we have been working to develop and deploy enhanced residential methane detectors (RMDs).
- In connection with the deployment of the 75 service isolation valves, we have European manufactured RMDs, as part of the integrated safety solution, that are powered by 120 V and hard-wired to the valve control which complicates the installation of the solution at scale. To improve this overall solution, we are working with several manufacturers on RMDs with enhanced features: first to power the unit with long-term batteries (current technology limits battery life to three years); and second, to introduce wireless communication to the valve controller (as current technology requires wiring from the RMD to the isolation valve). We are developing an RMD with communications technology that would allow installation of the RMD in residential and commercial locations. RMDs with network communication will be one of the main components to the integrated safety solution along with the service isolation valve. We are starting trial testing to validate performance of the RMD's battery life and ability to communicate across various networks.
- We are partnering with another NY utility and a company in California on the development of an advanced RMD which is focused on early detection of gas leaks. This technology is focused on improving the detection of leaks to maximise response time to real hazards. The RMD is in its third prototype phase of development and has shown to be capable of precise and accurate detection of methane at the parts per million level. We are deploying several of these prototypes in a controlled test facility that will undergo methane dispersion through typical household leak scenarios. The performance of the RMDs will be evaluated against an established testing protocol that competing technologies have undergone.
- National Grid has begun supporting research into the ability to use hydrogen in its gas distribution systems with the intent of reducing the overall carbon footprint of the gas network. We are formally collaborating in several R&D projects with various other organisations. National Grid and the Institute for Gas Innovation & Technology (IGIT) at Stony Brook University are leading participants in the HyBlend Collaborative Research and Development Agreement (CRADA). This CRADA is a $14 million research programme sponsored by the United States Department of Energy's Hydrogen and Fuel Cell Technologies Office (HFTO) in the Office of Energy Efficiency and Renewable Energy and 22 other industry and academic participants which will identify and evaluate the technical and safety requirements for introducing hydrogen blending into US gas distribution systems. The HyBlend CRADA will be led by the National Renewable Energy Laboratory (NREL) and implemented by six other national laboratories. This effort is currently in the project formation stage and is expected to officially kick off in summer 2021.

The Company is pursuing the above R&D efforts to drive innovations that will improve safety, reliability and operational efficiency of our gas business operations.

Unresolved SEC staff comments

There are no unresolved SEC staff comments required to be reported.

Other unaudited financial information

Alternative performance measures/non-IFRS reconciliations

Within the Annual Report, a number of financial measures are presented. These measures have been categorised as alternative performance measures (APMs), as per the European Securities and Markets Authority (ESMA) guidelines and the Securities and Exchange Commission (SEC) conditions for use of non-GAAP financial measures.

An APM is a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined under IFRS. The Group uses a range of these measures to provide a better understanding of its underlying performance. APMs are reconciled to the most directly comparable IFRS financial measure where practicable.

The Group has defined the following financial measures as APMs derived from IFRS: net revenue, the various adjusted operating profit, earnings and earnings per share metrics detailed in the 'adjusted profit measures' section below, net debt, capital investment, funds from operations (FFO), FFO interest cover and retained cash flow (RCF)/adjusted net debt. For each of these we present a reconciliation to the most directly comparable IFRS measure.

We also have a number of APMs derived from regulatory measures which have no basis under IFRS; we call these Regulatory Performance Measures (RPMs). They comprise: Group Return on Equity (RoE), UK and US regulatory RoE, regulated asset base, regulated financial performance, regulatory gearing, asset growth, Value Added, including Value Added per share and Value Growth. These measures include the inputs used by utility regulators to set the allowed revenues for many of our businesses.

We use RPMs to monitor progress against our regulatory agreements and certain aspects of our strategic objectives. Further, targets for certain of these performance measures are included in the Company's Annual Performance Plan (APP) and Long Term Performance Plan (LTPP) and contribute to how we reward our employees. As such, we believe that they provide close correlation to the economic value we generate for our shareholders and are therefore important supplemental measures for our shareholders to understand the performance of the business and to ensure a complete understanding of Group performance.

As the starting point for our RPMs is not IFRS, and these measures are not governed by IFRS, we are unable to provide meaningful reconciliations to any directly comparable IFRS measures, as differences between IFRS and the regulatory recognition rules applied have built up over many years. Instead, for each of these we present an explanation of how the measure has been determined and why it is important, and an overview as to why it would not be meaningful to provide a reconciliation to IFRS.

Alternative performance measures

Net revenue

Net revenue is revenue less pass-through costs, such as UK system balancing costs, gas and electricity commodity costs in the US and, prior to the adoption of IFRS 15, payments to other UK network owners. Pass-through costs are fully recoverable from our customers and are recovered through separate charges that are designed to recover those costs with no profit. Where revenue received or receivable exceeds the maximum amount permitted by our regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery.

	2021			2020			2019		
	Gross revenue £m	**Pass-through costs £m**	**Net revenue £m**	Gross revenue £m	Pass-through costs £m	Net revenue £m	Gross revenue £m	Pass-through costs £m	Net revenue £m
UK Electricity Transmission	**3,992**	**(2,062)**	**1,930**	3,702	(1,528)	2,174	3,351	(1,397)	1,954
UK Gas Transmission	**904**	**(233)**	**671**	927	(242)	685	896	(227)	669
US Regulated	**9,195**	**(3,253)**	**5,942**	9,205	(3,460)	5,745	9,846	(3,978)	5,868
NGV and Other	**715**	**—**	**715**	736	—	736	876	—	876
Sales between segments	**(27)**	**—**	**(27)**	(30)	—	(30)	(36)	—	(36)
Total	**14,779**	**(5,548)**	**9,231**	14,540	(5,230)	9,310	14,933	(5,602)	9,331

Adjusted profit measures

In considering the financial performance of our business and segments, we use various adjusted profit measures in order to aid comparability of results year-on-year.

The various measures are presented on pages 30 – 39 and reconciled below.

Adjusted results, also referred to as Headline results – these exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by management that is used to derive part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in Note 5 to the financial statements.

Underlying results – further adapts our adjusted results to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues, including revenue incentives, as governed by our rate plans in the US or regulatory price controls in the UK (but excluding totex-related allowances and adjustments). For 2020/21, as highlighted on page 251, our underlying results exclude £207 million (2019/20: £147 million) of timing differences as well as £150 million (2019/20: £nil) of major storm costs (as costs were above our $100 million storm cost timing threshold in the current year). We expect to recover major storm costs incurred through regulatory mechanisms in the US.

Constant currency – the adjusted profit measures are also shown on a constant currency basis to show the year-on-year comparisons excluding any impact of foreign currency movements.

Reconciliation of statutory, adjusted and underlying profits and earnings – at actual exchange rates – continuing operations

Year ended 31 March 2021	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,027	7	1,034	88	–	1,122
UK Gas Transmission	337	5	342	96	–	438
US Regulated	1,344	(31)	1,313	23	150	1,486
NGV and Other	187	50	237	–	–	237
Total operating profit	2,895	31	2,926	207	150	3,283
Net finance costs	(870)	(72)	(942)	–	–	(942)
Share of post-tax results of joint ventures and associates	58	8	66	–	–	66
Profit before tax	2,083	(33)	2,050	207	150	2,407
Tax	(442)	26	(416)	(41)	(39)	(496)
Profit after tax	1,641	(7)	1,634	166	111	1,911

Year ended 31 March 2020	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,316	4	1,320	(146)	–	1,174
UK Gas Transmission	347	1	348	54	–	402
US Regulated	880	517	1,397	239	–	1,636
NGV and Other	237	5	242	–	–	242
Total operating profit	2,780	527	3,307	147	–	3,454
Net finance costs	(1,113)	64	(1,049)	–	–	(1,049)
Share of post-tax results of joint ventures and associates	87	1	88	–	–	88
Profit before tax	1,754	592	2,346	147	–	2,493
Tax	(480)	47	(433)	(45)	–	(478)
Profit after tax	1,274	639	1,913	102	–	2,015

Year ended 31 March 2019	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	778	237	1,015	77	–	1,092
UK Gas Transmission	267	36	303	38	–	341
US Regulated	1,425	299	1,724	(223)	93	1,594
NGV and Other	400	–	400	–	–	400
Total operating profit	2,870	572	3,442	(108)	93	3,427
Net finance costs	(1,069)	76	(993)	–	–	(993)
Share of post-tax results of joint ventures and associates	40	–	40	–	–	40
Profit before tax	1,841	648	2,489	(108)	93	2,474
Tax	(339)	(149)	(488)	36	(24)	(476)
Profit after tax	1,502	499	2,001	(72)	69	1,998

Other unaudited financial information continued

Reconciliation of adjusted and underlying profits – at constant currency

Year ended 31 March 2020	Adjusted at actual exchange rate £m	Constant currency adjustment £m	At constant currency: Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,320	—	1,320	(146)	—	1,174
UK Gas Transmission	348	—	348	54	—	402
US Regulated	1,397	(56)	1,341	229	—	1,570
NGV and Other	242	1	243	—	—	243
Total operating profit	3,307	(55)	3,252	137	—	3,389
Net finance costs	(1,049)	30	(1,019)	—	—	(1,019)
Share of post-tax results of joint ventures and associates	88	(1)	87	—	—	87
Profit before tax	2,346	(26)	2,320	137	—	2,457

Year ended 31 March 2019	Adjusted at actual exchange rate £m	Constant currency adjustment £m	At constant currency: Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,015	—	1,015	77	—	1,092
UK Gas Transmission	303	—	303	38	—	341
US Regulated	1,724	(46)	1,678	(217)	91	1,552
NGV and Other	400	(1)	399	—	—	399
Total operating profit	3,442	(47)	3,395	(102)	91	3,384
Net finance costs	(993)	19	(974)	—	—	(974)
Share of post-tax results of joint ventures and associates	40	(1)	39	—	—	39
Profit before tax	2,489	(29)	2,460	(102)	91	2,449

Earnings per share calculations from continuing operations – at actual exchange rates

The table below reconciles the profit before tax from continuing operations as per the previous tables back to the earnings per share from continuing operations for each of the adjusted profit measures. Earnings per share is only presented for those adjusted profit measures that are at actual exchange rates, and not for those at constant currency.

Year ended 31 March 2021	**Profit after tax £m**	**Non-controlling interest £m**	**Profit after tax attributable to shareholders £m**	**Weighted average number of shares millions**	**Earnings per share pence**
Statutory	**1,641**	**(1)**	**1,640**	**3,523**	**46.6**
Adjusted (also referred to as Headline)	**1,634**	**(1)**	**1,633**	**3,523**	**46.4**
Underlying	**1,911**	**(1)**	**1,910**	**3,523**	**54.2**

Year ended 31 March 2020	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	1,274	(1)	1,273	3,461	36.8
Adjusted (also referred to as Headline)	1,913	(1)	1,912	3,461	55.2
Underlying	2,015	(1)	2,014	3,461	58.2

Year ended 31 March 2019	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	1,502	(3)	1,499	3,386	44.3
Adjusted (also referred to as Headline)	2,001	(3)	1,998	3,386	59.0
Underlying	1,998	(3)	1,995	3,386	58.9

Timing and regulated revenue adjustments

As described on pages 228 – 235, our allowed revenues are set in accordance with our regulatory price controls or rate plans. We calculate the tariffs we charge our customers based on the estimated volume of energy we expect will be delivered during the coming period. The actual volumes delivered will differ from the estimate. Therefore, our total actual revenue will be different from our total allowed revenue. These differences are commonly referred to as timing differences.

If we collect more than the allowed revenue, adjustments will be made to future prices to reflect this over-recovery, and if we collect less than the allowed level of revenue, adjustments will be made to future prices to reflect the under-recovery. In the US, a substantial portion of our costs are pass-through costs (including commodity and energy-efficiency costs) and are fully recoverable from our customers. Timing differences between costs of this type being incurred and their recovery through revenue are also included in timing. The amounts calculated as timing differences are estimates and subject to change until the variables that determine allowed revenue are final.

Our continuing operating profit for the year includes a total estimated in-year under-collection of £207 million (2019/20: £147 million under-collection). Our closing balance at 31 March 2021 was £54 million over-recovered. In the UK, there was a cumulative under-recovery of £150 million at 31 March 2021 (2020: over-recovery of £24 million). In the US, cumulative timing over-recoveries at 31 March 2021 were £198 million (2020: £240 million over-recovery).

The total estimated in-year over- or under-collection excludes opening balance adjustments related to estimates or finalisation of balances as part of regulatory submissions.

In addition to the timing adjustments described above, as part of the RIIO price controls in the UK, outperformance against allowances as a result of the totex incentive mechanism, together with changes in output-related allowances included in the original price control, will almost always be adjusted in future revenue recoveries, typically starting in two years' time. We are also recovering revenues in relation to certain costs incurred (for example pension contributions made) in prior years.

Our current IFRS revenues and earnings include these amounts that relate to certain costs incurred in prior years or that will need to be repaid or recovered in future periods. Such adjustments will form an important part of the continuing difference between reported IFRS results and underlying economic performance based on our regulatory obligations.

For our UK Regulated businesses as a whole, timing and regulated revenue adjustments totalled a return of £184 million in the year (2019/20: £92 million recovery). In the US, accumulated regulatory entitlements cover a range of different areas, with the most significant being environmental remediation and pension assets, as well as deferred storm costs.

All regulatory entitlements are recoverable (or repayable) over different periods, which are agreed with the regulators to match the expected payment profile for the liabilities.

	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	Total £m
1 April 2020 opening balance[1]	18	16	227	261
Over/(under) recovery	(88)	(96)	(23)	(207)
31 March 2021 closing balance to (recover)/return[3]	(70)	(80)	204	54

	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	Total £m
1 April 2019 opening balance[1]	(127)	59	452	384
Over/(under) recovery	146	(54)	(229)	(137)
31 March 2020 closing balance to (recover)/return[2,3]	19	5	223	247

	UK Electricity Transmission £m	UK Gas Transmission £m	US Regulated £m	Total £m
1 April 2018 opening balance[1]	(41)	97	235	291
Over/(under) recovery	(77)	(38)	217	102
31 March 2019 closing balance to (recover)/return[2,3]	(118)	59	452	393

1. Opening balances have been restated to reflect the finalisation of calculated over/(under)-recoveries in the UK and the US.
2. US over/(under) recovery and all US Regulated balances have been translated using the average exchange rate for the year ended 31 March 2021.
3. The over-recovered closing balance at 31 March 2021 was £48 million (translated at the closing rate of $1.38:£1). 31 March 2020 was £264 million (translated at the closing rate of $1.24:£1). 31 March 2019 was £407 million (translated at the closing rate of $1.30:£1).

Other unaudited financial information continued

Capital investment

'Capital investment' or 'investment' refer to additions to property, plant and equipment and intangible assets, and contributions to joint ventures and associates, other than the St William Homes LLP joint venture during the period. We also include the Group's investments by National Grid Partners during the period, which are classified for IFRS purposes as non-current financial assets in the Group's consolidated statement of financial position.

Investments made to our St William Homes LLP arrangement are excluded based on the nature of this joint venture arrangement. We typically contribute property assets to the joint venture in exchange for cash and accordingly do not consider these transactions to be in the nature of capital investment.

Year ended 31 March	At actual exchange rates			At constant currency		
	2021 £m	2020 £m	% change	**2021 £m**	2020 £m	% change
UK Electricity Transmission	**1,072**	1,043	3	**1,072**	1,043	3
UK Gas Transmission	**176**	249	(29)	**176**	249	(29)
US Regulated	**3,223**	3,228	–	**3,223**	3,098	4
NGV and Other	**460**	559	(18)	**460**	559	(18)
Group capital expenditure	**4,931**	5,079	(3)	**4,931**	4,949	–
Equity investment, funding contributions and loans to joint ventures and associates[1]	**78**	56	39	**78**	54	44
Acquisition of National Grid Renewables (formerly Geronimo) and Emerald	**–**	209	n/a	**–**	195	n/a
Increase in financial assets (National Grid Partners)	**38**	61	(38)	**38**	59	(36)
Group capital investment	**5,047**	5,405	(7)	**5,047**	5,257	(4)

1. Excludes £nil (2020: £15 million) equity contribution to the St William Homes LLP joint venture.

Net debt

See note 29 on page 187 for the definition and reconciliation of net debt.

Funds from operations and interest cover

FFO is the cash flows generated by the operations of the Group. Credit rating metrics, including FFO, are used as indicators of balance sheet strength.

Year ended 31 March	**2021 £m**	2020[1] £m	2019[1] £m
Interest expense (income statement)	**977**	1,119	1,066
Hybrid interest reclassified as dividend	**(38)**	(39)	(51)
Capitalised interest	**131**	122	135
Pensions interest adjustment	**(16)**	16	(4)
Interest on lease rentals adjustment	**–**	–	11
Unwinding of discount on provisions	**(78)**	(77)	(74)
Other interest adjustments	**–**	–	1
Adjusted interest expense	**976**	1,141	1,084
Net cash inflow from operating activities	**4,461**	4,715	4,389
Interest received on financial instruments	**16**	73	68
Interest paid on financial instruments	**(835)**	(957)	(914)
Dividends received	**80**	75	201
Working capital adjustment	**(312)**	(269)	(40)
Excess employer pension contributions	**116**	176	260
Hybrid interest reclassified as dividend	**38**	39	51
Lease rentals	**–**	–	34
Difference in net interest expense in income statement to cash flow	**(138)**	(187)	(186)
Difference in current tax in income statement to cash flow	**(67)**	67	(13)
Current tax related to prior periods	**8**	(45)	(52)
Cash flow from discontinued operations	**–**	(97)	(71)
Other fair value adjustments	**22**	–	–
Funds from operations (FFO)	**3,389**	3,590	3,727
FFO interest cover ((FFO + adjusted interest expense)/adjusted interest expense)	**4.5 x**	4.1 x	4.4 x

1. Numbers for 2020 and 2019 reflect the calculations for the total Group as based on the published accounts for the respective years.

Retained cash flow/adjusted net debt

RCF/adjusted net debt is one of two credit metrics that we monitor in order to ensure the Group is generating sufficient cash to service its debts, consistent with maintaining a strong investment-grade credit rating. We calculated RCF/adjusted net debt applying the methodology used by Moody's, as this is one of the most constrained calculations of credit worthiness. The net debt denominator includes adjustments to take account of the equity component of hybrid debt.

Year ended 31 March	2021 £m	2020 £m	2019 £m
Funds from operations (FFO)	**3,389**	3,590	3,727
Hybrid interest reclassified as dividend	**(38)**	(39)	(51)
Ordinary dividends paid to shareholders	**(1,413)**	(892)	(1,160)
RCF (excluding share buybacks)	**1,938**	2,659	2,516
Repurchase of shares	**–**	–	–
RCF (net of share buybacks)	**1,938**	2,659	2,516
Borrowings[1]	**32,339**	30,794	28,730
Less:			
50% hybrid debt	**(1,032)**	(1,054)	(1,039)
Cash and cash equivalents	**(157)**	(73)	(252)
Financial and other investments	**(1,768)**	(1,278)	(1,311)
Underfunded pension obligations	**467**	1,442	845
Operating leases adjustment[2]	**–**	–	248
Derivative balances removed from debt[2]	**–**	(116)	141
Currency swaps[2]	**–**	203	38
Nuclear decommissioning liabilities reclassified as debt[2]	**–**	6	18
Collateral – cash received under collateral agreements	**(582)**	(785)	(558)
Accrued interest removed from short-term debt[2]	**–**	(246)	(223)
Adjusted net debt (includes pension deficit)	**29,267**	28,893	26,637
RCF (excluding share buybacks)/adjusted net debt	**6.6%**	9.2%	9.4%
RCF (net of share buybacks)/adjusted net debt	**6.6%**	9.2%	9.4%

1. Before NECO reclassification.
2. Below agency threshold, prior year not restated.

Regulatory Performance Measures

Regulated financial performance – UK

Regulatory financial performance is a pre-interest and tax measure, starting at segmental operating profit and making adjustments (such as the elimination of all pass-through items included in revenue allowances and timing) to approximate regulatory profit for the UK regulated activities. This measure provides a bridge for investors between a well-understood and comparable IFRS starting point and through the key adjustments required to approximate regulatory profit. This measure also provides the foundation to calculate Group RoE.

For the reasons noted above, the table below shows the principal differences between the IFRS operating profit and the regulated financial performance, but is not a formal reconciliation to an equivalent IFRS measure.

UK Electricity Transmission

Year ended 31 March	2021 £m	2020 £m	2019 £m
Adjusted operating profit	**1,034**	1,320	1,015
Movement in regulatory 'IOUs'	**188**	(99)	174
Deferred taxation adjustment	**60**	63	64
RAV indexation (average 3% long-run inflation)	**424**	406	391
Regulatory vs IFRS depreciation difference	**(439)**	(459)	(394)
Fast money/other	**28**	26	72
Pensions	**(54)**	(52)	(51)
Performance RAV created	**111**	119	90
Regulated financial performance	**1,352**	1,324	1,361

Other unaudited financial information continued

UK Gas Transmission

Year ended 31 March	2021 £m	2020 £m	2019 £m
Adjusted operating profit	**342**	348	303
Movement in regulatory 'IOUs'	**34**	67	68
Deferred taxation adjustment	**12**	25	8
RAV indexation (average 3% long-run inflation)	**189**	185	179
Regulatory vs IFRS depreciation difference	**(88)**	(77)	(42)
Fast money/other	**25**	(17)	(10)
Pensions	**(34)**	(34)	(33)
Performance RAV created	**(23)**	(24)	(30)
Regulated financial performance	**457**	473	443

Regulated financial performance – US

US Regulated

Year ended 31 March	2021 £m	2020 £m	2019 £m
Adjusted operating profit	**1,313**	1,397	1,724
Provision for bad and doubtful debts (COVID-19), net of recoveries[1]	**120**	117	—
Major storm costs	**150**	—	93
Timing	**23**	239	(223)
US GAAP pension adjustment	**3**	(4)	(80)
Regulated financial performance	**1,609**	1,749	1,514

1. US Regulated financial performance includes an adjustment reflecting our expectation for future recovery of COVID-19-related provision for bad and doubtful debts.

Total regulated financial performance

Year ended 31 March	2021 £m	2020 £m	2019 £m
UK Electricity Transmission	**1,352**	1,324	1,361
UK Gas Transmission	**457**	473	443
US Regulated	**1,609**	1,749	1,514
Total regulated financial performance	**3,418**	3,546	3,318

US timing, major storms and movement in UK regulatory 'IOUs' – Revenue related to performance in one year may be recovered in later years. Where revenue received or receivable exceeds the maximum amount permitted by our regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised under IFRS, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised under IFRS where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery. In the UK, this is calculated as the movement in other regulated assets and liabilities.

Performance RAV – UK performance efficiencies are in-part remunerated by the creation of additional RAV which is expected to result in future earnings under regulatory arrangements. This is calculated as in-year totex outperformance multiplied by the appropriate regulatory capitalisation ratio and multiplied by the retained company incentive sharing ratio.

Pension adjustment – Cash payments against pension deficits in the UK are recoverable under regulatory contracts. In US Regulated operations, US GAAP pension charges are generally recoverable through rates. Revenue recoveries are recognised under IFRS but payments are not charged against IFRS operating profits in the year. In the UK, this is calculated as cash payments against the regulatory proportion of pension deficits in the UK regulated business, whereas in the US, it is the difference between IFRS and US GAAP pension charges.

3% RAV indexation – Future UK revenues are expected to be set using an asset base adjusted for inflation. This is calculated as UK RAV multiplied by 3% (long-run RPI inflation assumption).

UK deferred taxation adjustment – Future UK revenues are expected to recover cash taxation cost including the unwinding of deferred taxation balances created in the current year. This is the difference between: (a) IFRS underlying EBITDA less other regulatory adjustments; and (b) IFRS underlying EBITDA less other regulatory adjustments less current taxation (adjusted for interest tax shield) then grossed up at full UK statutory tax rate.

Regulatory depreciation – US and UK regulated revenues include allowance for a return of regulatory capital in accordance with regulatory assumed asset lives. This return does not form part of regulatory profit.

Fast/slow money adjustment – The regulatory remuneration of costs incurred is split between in-year revenue allowances and the creation of additional RAV. This does not align with the classification of costs as operating costs and fixed asset additions under IFRS accounting principles. This is calculated as the difference between IFRS classification of costs as operating costs or fixed asset additions and the regulatory classification.

Regulated asset base

The regulated asset base is a regulatory construct, based on predetermined principles not based on IFRS. It effectively represents the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulated asset base over the long term, and this in turn contributes to delivering shareholder value. Our regulated asset base is comprised of our regulatory asset value in the UK, plus our rate base in the US.

Maintaining efficient investment in our regulated asset base ensures we are well positioned to provide consistently high levels of service to our customers and increases our revenue allowances in future years. While we have no specific target, our overall aim is to achieve between 5% and 7% growth in regulated asset base each year through continued investment in our networks in both the UK and US.

In the UK, the way in which our transactions impact RAV is driven by principles set out by Ofgem. In a number of key areas these principles differ from the requirements of IFRS, including areas such as additions and the basis for depreciation. Further, our UK RAV is adjusted annually for inflation. RAV in each of our retained UK businesses has evolved over the period since privatisation in 1990, and as a result, historical differences between the initial determination of RAV and balances reported under UK GAAP at that time still persist. Due to the above, substantial differences exist in the measurement bases between RAV and an IFRS balance metric, and therefore, it is not possible to provide a meaningful reconciliation between the two.

In the US, rate base is a regulatory measure determined for each of our main US operating companies. It represents the value of property and other assets or liabilities on which we are permitted to earn a rate of return, as set out by the regulatory authorities for each jurisdiction. The calculations are based on the applicable regulatory agreements for each jurisdiction and include the allowable elements of assets and liabilities from our US companies. For this reason, it is not practical to provide a meaningful reconciliation from the US rate base to an equivalent IFRS measure. However, we include the calculation below.

'Total Regulated and other balances' includes the under or over-recovery of revenues that National Grid's UK regulated businesses target to collect in any year, which are based on the regulator's forecasts for that year. Under the UK price control arrangements, revenues will be adjusted in future years to take account of actual levels of collected revenue, costs and outputs delivered when they differ from those regulatory forecasts. In the US, other regulatory assets and liabilities include regulatory assets and liabilities which are not included in the definition of rate base, including working capital where appropriate.

The investment in 'NGV and other businesses' includes net assets excluding pensions, tax and items related to the UK Gas Distribution sale.

	RAV, rate base or other business assets		Total Regulated and other balances	
Year ended 31 March (£m at constant currency)	**2021 £m**	2020[1] £m	**2021[2,3] £m**	2020[1,2,3] £m
UK Electricity Transmission	**14,565**	14,133	**14,379**	13,772
UK Gas Transmission	**6,307**	6,298	**6,333**	6,291
US Regulated	**20,041**	18,598	**22,015**	20,211
Total regulated	**40,913**	39,029	**42,727**	40,274
NGV and other businesses	**4,458**	3,942	**4,122**	3,428
Total Group regulated and other balances	**45,371**	42,971	**46,849**	43,702

1. Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2019, and finalisation of US balances.
2. Includes totex-related regulatory IOUs of £310 million (2020: £411 million), over-recovered timing balances of £150 million (2020: £24 million under-recovered) and under-recovered legacy balances related to previous price controls of £nil (2020: £78 million).
3. Includes assets for construction work-in-progress of £1,639 million (2020: £1,510 million), other regulatory assets related to timing and other cost deferrals of £806 million (2020: £642 million) and net working capital liabilities of £471 million (2020: £361 million).

US rate base and other total regulated and other balances for 31 March 2020 have been restated in the table above at constant currency. At actual currency the values were £20.6 billion and £25.5 billion respectively.

Group RoE

Group RoE provides investors with a view of the performance of the Group as a whole compared with the amounts invested by the Group in assets attributable to equity shareholders. It is the ratio of our regulatory financial performance to our measure of equity investment in assets. It therefore reflects the regulated activities as well as the contribution from our non-regulated businesses together with joint ventures and non-controlling interests.

We use Group RoE to measure our performance in generating value for our shareholders, and targets for Group RoE are included in the incentive mechanisms for executive remuneration within both the APP and LTPP schemes.

Group RoE is underpinned by our regulated asset base. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical. However, we do include the calculations below.

Calculation: Regulatory financial performance including a long-run assumption of 3% RPI inflation, less adjusted interest and adjusted taxation divided by equity investment in assets:

- adjusted interest removes interest on pensions, capitalised interest in regulated operations and unwind of discount rate on provisions;
- adjusted taxation adjusts the Group taxation charge for differences between IFRS profit before tax and regulated financial performance less adjusted interest; and
- equity investment in assets is calculated as the total opening UK regulatory asset value, the total opening US rate base plus goodwill plus opening net book value of National Grid Ventures and Other activities and our share of joint ventures and associates, minus opening net debt as reported under IFRS restated to the weighted average £/$ exchange rate for the year.

Other unaudited financial information continued

Year ended 31 March	2021 £m	2020[1] £m	2019[1] £m
Regulated financial performance	**3,418**	3,546	3,318
Operating profit of other activities	**264**	269	424
Group financial performance	**3,682**	3,815	3,742
Share of post-tax results of joint ventures and associates	**66**	88	40
Non-controlling interests	**(1)**	(1)	(3)
Adjusted Group interest charge	**(882)**	(1,069)	(1,037)
Group tax charge	**(416)**	(433)	(488)
Tax on adjustments	**(175)**	(117)	(34)
Group financial performance after interest and tax	**2,274**	2,283	2,220
Opening rate base/RAV	**39,552**	37,459	35,045
Opening other balances	**3,984**	3,304	2,298
Opening goodwill	**5,295**	5,435	5,356
Opening capital employed	**48,831**	46,198	42,699
Opening net debt	**(27,398)**	(27,194)	(24,345)
Opening equity	**21,433**	19,004	18,354
Return on Equity	**10.6%**	12.0%	12.1%

1. Group ROE in 2020 and 2019 have been recalculated to reflect the revision to decrease the comparative goodwill balances (see note 1F for details).

UK and US regulated RoE

		Achieved Return on Equity		Base or Allowed Return on Equity	
Year ended 31 March	Regulatory Debt: Equity assumption	2021 %	2020 %	2021 %	2020 %
UK Electricity Transmission	**60/40**	**13.9**	13.5	**10.2**	10.2
UK Gas Transmission	**62.5/37.5**	**9.6**	9.8	**10.0**	10.0
US Regulated	**Avg. 50/50**	**7.2**	9.3	**9.4**	9.4

UK regulated RoE
UK regulated RoEs are a measure of how the businesses are performing against the assumptions used by our UK regulator. These returns are calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure, at the cost of debt assumed by the regulator, and that RPI inflation is equal to a long-run assumption of 3%. They are calculated by dividing elements of out/under-performance versus the regulatory contract (i.e., regulated financial performance disclosed above) by the average equity RAV in line with the regulatory assumed capital structure and adding to the base allowed RoE.

This is an important measure of UK regulated business performance, and our operational strategy continues to focus on this metric. This measure can be used to determine how we are performing under the RIIO framework and also helps investors to compare our performance with similarly regulated UK entities. Reflecting the importance of this metric, it is also a key component of the APP scheme.

The UK RoE is underpinned by the UK RAV. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical.

US regulated RoE
US regulated RoE is a measure of how a business is performing against the assumptions used by the US regulators. This US operational return measure is calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure and allowed cost of debt. The returns are divided by the average rate base (or where a reported rate base is not available, an estimate based on rate base calculations used in previous rate filings) multiplied by the adjudicated equity portion in the regulatory adjudicated capital structure.

This is an important measure of our US regulated business performance, and our operational strategy continues to focus on this metric. This measure can be used to determine how we are performing and also helps investors compare our performance with similarly regulated US entities. Reflecting the importance of this metric, it is also a key component of the APP scheme.

The US return is based on a calculation which gives proportionately more weighting to those jurisdictions which have a greater rate base. For the reasons noted above, no reconciliation to IFRS for the RoE measure has been presented, as we do not believe it would be practical to reconcile our IFRS balance sheet to the equity base.

The table below shows the principal differences between the IFRS result of the US Regulated segment, and the ‘return’ used to derive the US RoE. In outlining these differences, we also include the result for the US regulated Operating Companies (OpCo) entities aggregated under US GAAP.

In respect of 2019/20 and 2018/19, this measure is the aggregate operating profit of our US OpCo entities’ publicly available financial statements prepared under US GAAP. For 2020/21, this measure represents our current estimate, since local financial statements have yet to be prepared.

	2021 £m	2020 £m	2019 £m
Underlying IFRS operating profit for US regulated segment	**1,486**	1,636	1,594
Weighted average £/$ exchange rate	**$1.341**	$1.287	$1.305

	2021 $m	2020 $m	2019 $m
Underlying IFRS operating profit for US regulated segment	**1,993**	2,105	2,081
Adjustments to convert to US GAAP as applied in our US OpCo entities			
Adjustment in respect of customer contributions	**(59)**	(50)	(50)
Pension accounting differences[1]	**–**	(13)	(10)
Environmental charges recorded under US GAAP	**(108)**	(94)	(117)
Storm costs and recoveries recorded under US GAAP	**(113)**	(9)	(112)
Other regulatory deferrals, amortisation and other items	**100**	3	121
Results for US regulated OpCo entities, aggregated under US GAAP[2]	**1,813**	1,942	1,913
Adjustments to determine regulatory operating profit used in US RoE			
Levelisation revenue adjustment	**–**	(122)	(48)
Adjustment for COVID-19-related provision for bad and doubtful debts[3]	**127**	150	–
Net other	**(32)**	51	(1)
Regulatory operating profit	**1,908**	2,021	1,864
Pensions[1]	**(46)**	19	(95)
Regulatory interest charge	**(539)**	(491)	(457)
Regulatory tax charge	**(348)**	(408)	(345)
Regulatory earnings used to determine US RoE	**975**	1,141	967

1. Following a change in US GAAP accounting rules, an element of the pensions charge is reported outside operating profit with effect from 2019.
2. Based on US GAAP accounting policies as applied by our US regulated OpCo entities.
3. US RoE includes an adjustment reflecting our expectation for future recovery of COVID-19-related bad and doubtful debt costs.

	2021 $m	2020 $m	2019 $m
US equity base (average for the year)	**13,621**	12,331	11,045
US RoE	**7.2%**	9.3%	8.8%

Value Added and Value Added per share and Value Growth

Value Added is a measure that reflects the value to shareholders of our cash dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), and corresponding growth in net debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making and long-term management incentive arrangements.

Value Added is derived using our regulated asset base and, as such, it is not practical to provide a meaningful reconciliation from this measure to an equivalent IFRS measure due to the reasons set out for our regulated asset base. However, the calculation is set out in the Financial review. Value Added per share is calculated by dividing Value Added by the weighted average number of shares (3,523 million) set out in note 8.

Value Growth of 9.4% (2020: 10.7%) is derived from Value Added by adjusting Value Added to normalise for a 3% long-run RPI inflation rate. In 2021, the numerator for Value Growth was £1,995 million (2020: £2,068 million). The denominator is Group equity as used in the Group RoE calculation, adjusted for foreign exchange movements. Value Growth in 2020 has been recalculated from the previously reported 10.4% to reflect the revision to decrease the comparative goodwill balance (see note 1F for details).

Asset growth

Asset growth is the annual percentage increase in our RAV and rate base and other business balances (including the assets of NGV and NGP) calculated at constant currency.

Regulatory gearing

Regulatory gearing is a measure of how much of our investment in RAV and rate base and other elements of our invested capital (including our investments in NGV, UK property and other assets and US other assets) is funded through debt. Comparative amounts as at 31 March 2020 are presented at historical exchange rates and have not been restated for opening balance adjustments.

As at 31 March	2021 £m	2020 £m	change
UK RAV	**20,872**	20,431	
US rate base	**20,041**	20,644	
Other invested capital included in gearing calculation	**4,458**	4,105	
Total assets included in gearing calculation	**45,371**	45,180	
Net debt (including 100% of hybrid debt)	**(29,665)**	**(28,590)**	
Group gearing (based on 100% of net debt)	**65%**	63%	2 % pts
Group gearing (excluding 50% of hybrid debt from net debt)	**63%**	61%	2 % pts

Commentary on consolidated financial statements

for the year ended 31 March 2020

In compliance with SEC rules, we present a summarised analysis of movements in the income statement and an analysis of movements in adjusted operating profit (for the continuing group) by operating segment. This should be read in conjunction with the 31 March 2021 financial review included on pages 30 – 39.

Analysis of the income statement for the year ended 31 March 2020

Revenue

Revenue for the year ended 31 March 2020 decreased by £393 million to £14,540 million. This decrease was driven by lower revenues in our US Regulated, in our UK Gas Transmission business and in our NGV & Other businesses, partially offset by higher revenues in our UK Electricity Transmission business. US Regulated revenues were £641 million lower year-on-year, principally due to the impact of lower commodity pass-through costs, partly offset by new rates and the benefit of foreign exchange. UK Gas Transmission revenues were £27 million higher, driven by the return of allowances related to Avonmouth in the year ended 31 March 2019, partly offset by timing under-recoveries. UK Electricity Transmission revenues increased by £363 million, mainly as the result of higher BSIS pass-through costs (due to increased levels of renewable generation) and favourable timing over-collections (higher volumes and collection of prior period under-recoveries). Revenue from NGV and Other businesses decreased by £142 million, primarily driven by the significant level of sales in our Commercial Property business in the year ended 31 March 2019 and lower income from other support services.

Operating costs

Operating costs for the year ended 31 March 2020 of £11,760 million were £303 million lower than the prior year. This decrease in costs included a £45 million reduction in exceptional items and remeasurements. Lower operating costs were driven by the reduction in US commodity pass-through costs and lower UK BSIS pass-through costs, partially offset by higher workforce costs, increased rates and property taxes, higher depreciation as a result of continued asset investment and the impact of movement in exchange rates.

Net finance costs

For the year ended 31 March 2020, net finance costs before exceptional items and remeasurements were £56 million higher than the year ended 31 March 2019 at £1,049 million, mainly as a result of swap termination and debt buy-back costs, lower capitalised interest, higher lease interest (as a result of IFRS16) and the impact of the stronger US dollar, partially offset by favourable tax interest and the impact of higher UK RPI inflation. Net finance costs in the year ended 31 March 2020 included remeasurement losses of £64 million on derivative financial instruments used to hedge our borrowings, compared to £76 million of remeasurement losses in the year ended 31 March 2019.

Tax

The tax charge on profits before exceptional items and remeasurements of £433 million was £55 million lower than the year ended 31 March 2019. This was mainly related to a lower level of profit before tax in the year ended 31 March 2020 compared to the year ended 31 March 2019, but was also the result of a benefit from the release of reserves following settlement of tax audits relating to earlier years and gains on chargeable disposals which were offset by previously unrecognised capital losses. In the year ended 31 March 2019, significantly higher gains on property disposals that were offset by previously unrecognised capital losses resulted in a lower underlying effective tax rate.

Exceptional items and remeasurements

In the year ended 31 March 2020, exceptional items included a £402 million charge associated with changes in our environmental provisions and an additional deferred tax charge of £192 million reflecting the impact of the remeasurement of the Group's deferred tax liabilities as a result of a change in the substantively enacted UK corporation tax rate. Remeasurement losses of £125 million on commodity contracts were recognised in the year ended 31 March 2020. In the previous year, operating costs included £283 million of costs arising from the workforce contingency plan related to the Massachusetts Gas labour dispute, £204 million of restructuring charges in our UK and US businesses and £137 million related to the impairment of nuclear connection development costs following the cancellation of the NuGen and Horizon projects. These were partially offset by a net £52 million gain on remeasurement of commodity contracts.

Finance costs for the year ended 31 March 2020 included a net loss of £64 million on financial remeasurements of derivative financial instruments used to hedge our borrowings, compared to a loss of £76 million on financial remeasurements in the year ended 31 March 2019.

Share of post-tax results of joint ventures and associates before exceptional items for the year ended 31 March 2020 were £88 million compared to £40 million in the year ended 31 March 2019, principally due to increased profits in St William, our Property joint venture.

Adjusted earnings and EPS from continuing operations

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the Group's results on an 'adjusted profit' basis, described further in note 5. See page 252 for a reconciliation of adjusted basic EPS to EPS.

The above earnings performance translated into adjusted EPS in the year ended 31 March 2020 of 55.2p, compared to 59.0p in the year ended 31 March 2019.

Exchange rates

Our financial results are reported in sterling. Transactions for our US operations are denominated in dollars, so the related amounts that are reported in sterling depend on the dollar to sterling exchange rate. The table below shows the average and closing exchange rates of sterling to US dollars.

	2019/20	2018/19	% change
Weighted average (income statement)	**1.29**	1.31	-1.42%
Year-end (statement of financial position)	**1.24**	1.30	4.79%

The movement in foreign exchange during the year ended 31 March 2020 has resulted in a £143 million increase in revenue, a £25 million increase in adjusted operating profit and a £21 million increase in operating profit.

Analysis of the adjusted operating profit by segment for the year ended 31 March 2020

UK Electricity Transmission

For the year ended 31 March 2020, revenue in the UK Electricity Transmission segment decreased by £351 million to £3,702 million, and adjusted operating profit increased by £305 million to £1,320 million. Revenue was significantly impacted by higher levels of pass-through costs related to balancing services in ESO, as a result of record levels of renewable generation in the year ended 31 March 2020. Excluding pass-through costs, net revenue was £220 million higher, principally reflecting timing over-recoveries (higher volumes and collection of prior period under-recoveries) along with higher revenues as a result of MOD impact from cyber and data centre allowances, offset by the true-up of totex allowances and RAV indexation from inflation. Regulated controllable costs were £26 million lower, reflecting inflation and higher IT costs more than offset by efficiency savings and the non-recurrence of ESO legal separation costs in the year ended 31 March 2019. Depreciation and amortisation was £24 million lower due to lower levels of asset commissioning and provision releases in the year ended 31 March 2020. Other costs were £34 million lower, principally relating to provision against income recognised on early termination of connections in the prior year.

Capital expenditure increased by £118 million compared with the year ended 31 March 2019 to £1,043 million reflecting increased activity on Hinkley Seabank, London Power Tunnels 2 and higher capex on the Dorset Visual Impact Provision project in the year ended 31 March 2020.

UK Gas Transmission

Revenue in the UK Gas Transmission segment increased by £31 million to £927 million, and adjusted operating profit increased by £45 million to £348 million.

After deducting pass-through costs, net revenue was £16 million higher than the yeard ended 31 March 2019, reflecting the prior year refund of revenues previously received in respect of the proposed Avonmouth pipeline project that is no longer required. Regulated controllable costs were £17 million lower than the year ended 31 March 2019, with efficiency savings and an environmental provision release offsetting the higher IT run-the-business costs and the impact of inflation. Pension costs were £8 million lower mainly related to the Guaranteed Minimum Pension equalisation ruling in the year ended 31 March 2019. Depreciation and amortisation costs were £10 million lower following a full year impact of asset lives changes made in the year ended 31 March 2019. Other operating costs were £6 million higher than the year ended 31 March 2019, as a result of the release of unused provisions in the prior year.

Capital expenditure decreased by £59 million to £249 million, as a result of lower expenditure on Feeder 9 project (Humber Estuary), lower investment in Peterborough and Huntingdon compressor project and reduced asset health investment.

US Regulated

Revenue in our US Regulated business reduced by £641 million to £9,205 million, and adjusted operating profit decreased by £327 million to £1,397 million.

The stronger US dollar decreased revenue and operating profit in the year ended 31 March 2020. Excluding the impact of foreign exchange rate movements, revenue decreased by £783 million. Of this decrease, £575 million was due to increases in commodity pass-through costs charged on to customers, and £465 million was due to year-on-year timing movements as a result of under-collection of revenues compared to our regulatory allowances in the year ended 31 March 2020 of £239 million (2019: £226 million over-recovery). Excluding pass-through costs and timing swings, net revenue increased by £257 million at constant currency, principally reflecting increased revenue allowances under rate plans in upstate and downstate New York, in Massachusetts and in Rhode Island.

We incurred £76 million of deferrable storm costs in the year ended 31 March 2020 through a number of storms that caused substantial damage to our electricity networks, but this fell below our $100 million threshold to qualify as ‘major’ and be excluded from our underlying results. This compared to £95 million in the year ended 31 March 2019, which as these this did exceed our threshold were stripped out of our underlying results in the previous year. Excluding the impact of foreign exchange movements, regulated controllable costs decreased by £51 million as a result of cost efficiencies (principally from the benefit of restructurings and contract management), partly offset by workload increases and inflation. Bad debt expense increased by £85 million at constant currency, driven by £117 million additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to ongoing investment in our networks. Other operating costs were £61 million higher at constant currency, as a result of higher storms in underlying in the year ending 31 March 2020 partly offset by lower cost of removal.

Capital expenditure in the US Regulated business increased to £3,228 million in the year ending 31 March 2020, £578 million more than in the year ending 31 March 2019. At constant currency, this represented a £540 million increase in investment driven by higher investment in new and replacement gas mains and gas business enablement investment, the impact of the Massachusetts Gas labour dispute on capex in the year ending 31 March 2019 and increased investment in IT.

NGV and Other

Revenue in NGV and Other reduced by £140 million to £736 million, and adjusted operating profit increased by £5 million to £242 million. This reflects lower revenues and profit on disposal of property sites in our UK commercial property business (due to significant sales made in the year ending 31 March 2019) and reduced income from support services supplied to Cadent compared to the prior year.

Capital expenditure in NGV and Other was £121 million higher than the year ending 31 March 2019 at £559 million, including the increased investment in a second French Interconnector, the North Sea Link interconnector to Norway and the Viking interconnector to Denmark.

Five year summary financial information

Financial summary (unaudited)

The financial summary set out below has been derived from the audited consolidated financial statements of National Grid for the five financial years ended 31 March 2021. It should be read in conjunction with the consolidated financial statements and related notes, together with the Strategic Report. The information presented below is adjusted for the matters described in the footnotes below for the years ended 31 March 2021, 2020, 2019, 2018 and 2017 where relevant and has been prepared under IFRS as issued by the IASB and as adopted by the EU.

Summary income statement (£m)	2021	2020	2019	2018[1]	2017
Continuing operations					
Revenue	**14,779**	14,540	14,933	15,250	15,035
Operating profit					
Before exceptional items, remeasurements	**2,926**	3,307	3,442	3,457	3,773
Exceptional items, remeasurements	**(31)**	(527)	(572)	36	(565)
Profit before tax					
Before exceptional items, remeasurements	**2,050**	2,346	2,489	2,500	2,807
Exceptional items, remeasurements	**33**	(592)	(648)	160	(623)
Profit after tax from continuing operations					
Before exceptional items, remeasurements	**1,634**	1,913	2,001	1,916	2,141
Exceptional items, remeasurements	**7**	(639)	(499)	1,633	(331)
(Loss)/profit after tax from discontinued operations					
Before exceptional items, remeasurements	**–**	5	57	145	606
Exceptional items, remeasurements	**–**	(14)	(45)	(143)	57
Gain on disposal of UK Gas Distribution after tax	**–**	–	–	–	5,321
Total profit for the year	**1,641**	1,265	1,514	3,551	7,794
Profit for the year attributable to equity shareholders					
Before exceptional items, remeasurements	**1,633**	1,917	2,055	2,060	2,747
Exceptional items, remeasurements	**7**	(653)	(544)	1,490	(273)
Gain on disposal of UK Gas Distribution after tax	**–**	–	–	–	5,321
Total	**1,640**	1,264	1,511	3,550	7,795
Earnings per share					
Basic – continuing operations (pence)	**46.6**	36.8	44.3	102.5	48.1
Diluted – continuing operations (pence)	**46.3**	36.6	44.1	102.1	47.9
Basic – total (pence)	**46.6**	36.5	44.6	102.6	207.1
Diluted – total (pence)	**46.3**	36.3	44.4	102.1	206.2
Weighted average number of shares – basic (millions)	**3,523**	3,461	3,386	3,461	3,763
Weighted average number of shares – diluted (millions)	**3,540**	3,478	3,401	3,476	3,780
Dividends per ordinary share					
Paid during the year (pence)	**49.00**	47.83	46.52	128.97	43.51
Approved or proposed during the year (pence)[2]	**49.16**	48.57	47.34	45.93	128.65
Paid during the year ($)	**0.628**	0.615	0.607	1.751	0.555
Approved or proposed during the year ($)	**0.682**	0.625	0.618	0.624	1.642

1. Items previously reported for 2018 have been re-presented to reflect our investment in Quadgas HoldCo Limited being presented as a discontinued operation in 2019.
2. Following the disposal of UK Gas Distribution, 2017 includes a special interim dividend of 84.375 pence per share that was paid on 2 June 2017.

Summary statement of net assets (£m)	2021	2020[1]	2019[1]	2018	2017
Non-current assets	**57,278**	61,759	55,466	52,106	52,266
Current assets	**9,938**	5,801	7,946	6,681	13,574
Total assets	**67,216**	67,560	63,412	58,787	65,840
Current liabilities	**(9,368)**	(8,564)	(9,129)	(8,697)	(10,511)
Non-current liabilities	**(37,988)**	(39,203)	(34,715)	(31,242)	(34,945)
Total liabilities	**(47,356)**	(47,767)	(43,844)	(39,939)	(45,456)
Net assets	**19,860**	19,793	19,568	18,848	20,384
Total shareholders' equity	**19,839**	19,771	19,548	18,832	20,368

1. Items previously reported for 2019 and 2020 have been revised as detailed in note 1F.

Definitions and glossary of terms

Our aim is to use plain English in this Annual Report and Accounts. However, where necessary, we do use a number of technical terms and abbreviations. We summarise the principal ones below, together with an explanation of their meanings. The descriptions below are not formal legal definitions. Alternative and Regulatory Performance Measures are defined on pages 250 – 262.

A

Adjusted interest
A measure of the interest charge of the Group, calculated by making adjustments to the Group reported interest charge.

Adjusted net debt
A measure of the indebtedness of the Group, calculated by making adjustments to the Group reported borrowings, including adjustments made to include elements of pension deficits and exclude elements of hybrid debt financing.

Adjusted results (also referred to as headline results)
Financial results excluding the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by National Grid management that forms part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in note 5 to the Financial Statements.

American Depositary Shares (ADSs)
Securities of National Grid listed on the New York Stock Exchange, each of which represents five ordinary shares. They are evidenced by American Depositary Receipts or ADRs.

Annual General Meeting (AGM)
Meeting of shareholders of the Company held each year to consider ordinary and special business as provided in the Notice of AGM.

B

BEIS
The Department for Business, Energy and Industrial Strategy, the UK government department responsible for business, industrial strategy, and science and innovation with energy and climate change policy.

Board
The Board of Directors of the Company (for more information see pages 72 and 73).

bps
Basis point (bp, bps) is a unit that is equal to 1/100th of 1% and is typically used to denote the movement in a percentage-based metric such as interest rates or RoE. A 0.1% change in a percentage represents 10 basis points.

BritNed
BritNed Development Limited, a joint venture company in which National Grid and Tennet, the Dutch national transmission system operator, each hold 50% of the shares.

C

Called-up share capital
Shares (common stock) that have been issued and have been fully paid for.

Capital tracker
In the context of our US rate plans, this is a mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

Carbon capture usage and storage (CCUS)
The process of capturing carbon dioxide (CO_2) for the purpose of recycling it for further usage and/or determining safe and permanent storage options for it.

Carrying value
The amount at which an asset or a liability is recorded in the Group's statement of financial position and the Company's balance sheet.

The Company, the Group, National Grid, we, our or us
We use these terms to refer to either National Grid plc itself or to National Grid plc and/or all or certain of its subsidiaries, depending on context.

Consolidated financial statements
Financial statements that include the results and financial position of the Company and its subsidiaries together as if they were a single entity.

Constant currency
'Constant currency basis' refers to the reporting of the actual results against the results for the same period last year, which, in respect of any US$ currency denominated activity, have been translated using the average US$ exchange rate for the year ended 31 March 2021, which was $1.34 to £1. The average rate for the year ended 31 March 2020 was $1.29 to £1, and for the year ended 31 March 2019 was $1.31 to £1. Assets and liabilities as at 31 March 2020 have been retranslated at the closing rate at 31 March 2021 of $1.38 to £1. The closing rate for the balance sheet date 31 March 2020 was $1.24 to £1.

Contingent liabilities
Possible obligations or potential liabilities arising from past events for which no provision has been recorded, but for which disclosure in the financial statements is made.

COP26
The 26th UN Climate Change Conference of the Parties which the UK will host at the Scottish Event Campus in Glasgow on 1–12 November 2021. The climate talks will bring together heads of state, climate experts and campaigners to agree coordinated action to tackle climate change. The Company is a principal partner of COP26.

COVID-19
COVID-19 or coronavirus disease is an infectious disease caused by a newly discovered coronavirus which spreads through droplets of saliva or discharge from the nose when an infected person coughs or sneezes.

CPIH
The UK Consumer Prices Index including Owner Occupiers' Housing Costs as published by the Office for National Statistics.

D

Dth
Decatherm, being an amount of energy equal to 1 million British thermal units (BTUs), equivalent to approximately 293 kWh.

DB
Defined benefit, relating to our UK or US (as the context requires) final salary pension schemes.

DC
Defined contribution, relating to our UK or US (as the context requires) pension schemes to which National Grid, as an employer, pays contributions based on a percentage of employees' salaries.

Deferred tax
For most assets and liabilities, deferred tax is the amount of tax that will be payable or receivable in respect of that asset or liability in future tax returns as a result of a difference between the carrying value for accounting purposes in the statement of financial position or balance sheet and the value for tax purposes of the same asset or liability.

Deposit agreement
The amended and restated deposit agreement entered into between National Grid plc, the Depositary and all the registered holders from time to time of ADRs, pursuant to which ADSs have been issued, dated 23 May 2013, and any related agreement.

Depositary
Depositary means the Bank of New York Mellon acting as depositary.

Derivative
A financial instrument or other contract where the value is linked to an underlying index, such as exchange rates, interest rates or commodity prices. In most cases, we exclude contracts for the sale or purchase of commodities that are used to supply customers or for our own needs from this definition.

Directors/Executive Directors/Non-executive Directors
The Directors/Executive Directors and Non-executive Directors of the Company, whose names are set out on pages 72 and 73 of this document.

Distributed energy resources (DER)
Decentralised assets, generally located behind the meter, covering a range of technologies including solar, storage, electric vehicle charging, district heating, smart street lighting and combined heat and power.

Definitions and glossary of terms continued

Dollars or $
Except as otherwise noted, all references to dollars or $ in this Annual Report and Accounts relate to the US currency.

E

Earnings per share (EPS)
Profit for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Electricity System Operator (ESO)
The party responsible for the long-term strategy, planning and real-time operation (balancing supply and demand) of the electricity system in Great Britain.

Electricity Transmission (ET)
National Grid's UK electricity transmission business.

Employee engagement
A key performance indicator (KPI), based on the percentage of favourable responses to certain indicator questions repeated in each employee survey. It is used to measure how employees think, feel and act in relation to National Grid. Research shows that a highly engaged workforce leads to increased productivity and employee retention. We use employee engagement as a measure of organisational health in relation to business performance.

Employee resource group (ERG)
A group of employees who join together in their workplace based on shared characteristics or life experiences.

Estate Tax Convention
The convention between the US and the UK for the avoidance of double taxation with respect to estate and gift taxes.

EU
The European Union (EU) is the economic and political union of 27 member states located in Europe. The UK left the European Union on 31 January 2020.

Exchange Act
The US Securities Exchange Act 1934, as amended.

F

FERC
The US Federal Energy Regulatory Commission.

Finance lease
A lease where the asset is treated as if it was owned for the period of the lease, and the obligation to pay future rentals is treated as if they were borrowings. Also known as a capital lease.

Financial year
For National Grid this is an accounting year ending on 31 March. Also known as a fiscal year.

FRS
A UK Financial Reporting Standard as issued by the UK Financial Reporting Council (FRC). It applies to the Company's individual financial statements on pages 217 – 223, which are prepared in accordance with FRS 101.

Funds from Operations (FFO)
A measure used by the credit rating agencies of the operating cash flows of the Group after interest and tax but before capital investment.

G

Gas Transmission (GT)
National Grid's UK gas transmission business.

Grain LNG
National Grid Grain LNG Limited.

Great Britain (GB)
England, Wales and Scotland.

Group Value Growth
Group Value Growth is Group-wide value added expressed as a proportion of Group equity. See page 34 for an explanation of Value Added.

GW
Gigawatt, an amount of power equal to 1 billion watts (10^9 watts).

GWh
Gigawatt hours, an amount of energy equivalent to delivering 1 billion watts (10^9 watts) of power for a period of one hour.

H

HMRC
HM Revenue & Customs. The UK tax authority.

HVDC
High-voltage, direct-current electric power transmission that uses direct current for the bulk transmission of electrical power in contrast to the more common alternating current systems.

I

IAS or IFRS
An International Accounting Standard (IAS) or International Financial Reporting Standard (IFRS), as issued by the International Accounting Standards Board (IASB). IFRS is also used as the term to describe international generally accepted accounting principles as a whole.

Individual financial statements
Financial statements of a company on its own, not including its subsidiaries or joint ventures and associates.

Interest cover
A measure used by the credit rating agencies, calculated as FFO plus adjusted interest divided by adjusted interest.

J

Joint venture (JV)
A company or other entity that is controlled jointly with other parties.

K

KEDLI
KeySpan Gas East Corporation, also known as KeySpan Energy Delivery Long Island.

KEDNY
The Brooklyn Union Gas Company, also known as KeySpan Energy Delivery New York.

KPI
Key performance indicator.

kW
Kilowatt, an amount of power equal to 1,000 watts.

L

LIPA
The Long Island Power Authority.

LNG
Liquefied natural gas is natural gas that has been condensed into a liquid form, typically at temperatures at or below -161°C (-258°F).

Lost time injury (LTI)
An incident arising out of National Grid's operations that leads to an injury where the employee or contractor normally has time off for the following day or shift following the incident. It relates to one specific (acute) identifiable incident which arises as a result of National Grid's premises, plant or activities, and was reported to the supervisor at the time and was subject to appropriate investigation.

Lost time injury frequency rate (LTIFR)
The number of lost time injuries (LTIs) per 100,000 hours worked in a 12-month period.

M

MADPU
The Massachusetts Department of Public Utilities.

MW
Megawatt, an amount of power equal to 1 million watts.

MWh
Megawatt hours, an amount of energy equivalent to delivering 1 million watts (10^6) of power for a period of one hour.

N

National Grid Metering Limited (NGM)
The Company's UK regulated metering business.

National Grid Partners (NGP)
The Company's venture investment and innovation business established in November 2018.

National Grid Renewables (NGR)
This business, which includes the renewables development company formerly known as Geronimo, is a leading developer of wind and solar generation based in Minneapolis in the US. National Grid acquired Geronimo in July 2019.

National Grid Ventures (NGV)
The Company's division that operates outside its core UK and US regulated businesses, comprising a broad range of activities in the UK and US, including National Grid Renewables, electricity interconnectors, the Grain LNG terminal and energy metering, as well as being tasked with investment in adjacent businesses and distributed energy opportunities.

National Transmission System (NTS)
The gas National Transmission System in Great Britain.

NECO
The Narragansett Electric Company, National Grid's electricity transmission and distribution service provider to, as well as a natural gas distribution company in, Rhode Island.

NECO Sale
The agreed sale by National Grid to PPL of NECO, conditional upon completion of the WPD Acquisition and receipt of certain regulatory approvals, which is expected to complete before the end of the first quarter of 2022.

Nemo Link
Nemo Link Limited, a joint venture company in which National Grid and Elia, the Belgian national transmission system operator each hold 50% of the shares.

Net Promoter Score (NPS)
A commonly used tool to measure customer experience to gauge the loyalty of a company's customer relationships. It is an index ranging from -100 to +100.

Net zero
Net zero means that a person, legal entity (such as a company), country or other body's own emissions of greenhouse gases are either zero or that its remaining greenhouse gas emissions are balanced by schemes to offset, through the removal of an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

New England
The term refers to a region within northeastern US that includes the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. National Grid's New England operations are primarily in the states of Massachusetts and Rhode Island.

Northeastern US
The northeastern region of the US, comprising the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

NYPSC
The New York Public Service Commission.

O

Ofgem
The UK Office of Gas and Electricity Markets is part of the UK Gas and Electricity Markets Authority (GEMA), which regulates the energy markets in the UK.

OPEB
Other post-employment benefits.

Ordinary shares
Voting shares entitling the holder to part ownership of a company. Also known as common stock. National Grid's ordinary shares have a nominal value of $12^{204/473}$ pence following the share consolidation approved at the General Meeting of the Company held on 19 May 2017.

P

Paris Agreement
The agreement, also known as the Paris Climate Accord, within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020, and adopted by consensus on 12 December 2015.

PPL
PPL Corporation, a US energy company headquartered in Pennsylvania.

Price control
The mechanism by which Ofgem sets restrictions on the amounts of revenue we are allowed to collect from customers in our UK businesses. The allowed revenues are intended to cover efficiently incurred operational expenditure, capital expenditure and financing costs, including a Return on Equity invested.

R

Rate base
The base investment on which the utility is authorised to earn a cash return. It includes the original cost of facilities, minus depreciation, an allowance for working capital and other accounts.

Rate plan
The term given to the mechanism by which a US utility regulator sets terms and conditions for utility service, including, in particular, tariffs and rate schedules. The term can mean a multi-year plan that is approved for a specified period, or an order approving tariffs and rate schedules that remain in effect until changed as a result of future regulatory proceedings. Such proceedings can be commenced through a filing by the utility or on the regulator's own initiative.

Regulated controllable costs
Total operating costs under IFRS less depreciation and certain regulatory costs where, under our regulatory agreements, mechanisms are in place to recover such costs in current or future periods.

Regulatory asset value (RAV)
The value ascribed by Ofgem to the capital employed in the relevant licensed business. It is an estimate of the initial market value of the regulated asset base at privatisation, plus subsequent allowed additions at historical cost, less the deduction of annual regulatory depreciation. Deductions are also made to reflect the value realised from the disposal of certain assets that formed part of the regulatory asset base. It is also indexed to the RPI to allow for the effects of inflation.

Regulatory IOUs
Net under/over-recoveries of revenue from output-related allowance changes, the totex incentive mechanism, legacy price control cost true-up and differences between allowed and collected revenues.

Retained cash flow (RCF)
A measure of the cash flows of the Group used by the credit rating agencies. It is calculated as funds from operations less dividends paid and costs of repurchasing scrip shares.

Revenue decoupling
Revenue decoupling is the term given to the elimination of the dependency of a utility's revenue on the volume of gas or electricity transported. The purpose of decoupling is to encourage energy-efficiency programmes by eliminating the disincentive a utility otherwise has to such programmes.

RIIO
Revenue = Incentives + Innovation + Outputs, the regulatory framework for energy networks issued by Ofgem.

RIIO-T1
The regulatory framework for transmission networks that was implemented in the eight-year price controls that started on 1 April 2013.

RIIO-2
The regulatory framework for energy networks issued by Ofgem which started on 1 April 2021.

Definitions and glossary of terms continued

RIPUC
The Rhode Island Public Utilities Commission.

RPI
The UK retail price index as published by the Office for National Statistics.

S

Scope 1 greenhouse gas emissions
Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are owned or controlled by the Company. Examples include emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2 greenhouse gas emissions
Scope 2 emissions are greenhouse gas emissions from the generation of purchased electricity consumed by the Company. Purchased electricity is defined as electricity, heat, steam or cooling that is purchased or otherwise brought into the organisational boundary of the Company. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3 greenhouse gas emissions
Scope 3 emissions are indirect greenhouse gas emissions as a consequence of the operations of the Company, but are not owned or controlled by the Company, such as emissions from third-party logistics providers, waste management suppliers, travel suppliers, employee commuting, and combustion of sold gas by customers.

SEC
The US Securities and Exchange Commission, the financial regulator for companies with registered securities in the US, including National Grid and certain of its subsidiaries.

SF_6
Sulphur hexafluoride is an inorganic, colourless, odourless and non-flammable greenhouse gas. SF_6 is used in the electricity industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear and other electrical equipment. The Kyoto protocol estimated that the global warming potential over 100 years of SF_6 is 23,900 times more potent than that of CO_2.

Share premium
The difference between the amount shares are issued for and the nominal value of those shares.

STEM
Science, technology, engineering and mathematics.

Subsidiary
A company or other entity that is controlled by National Grid.

Swaption
A swaption gives the buyer, in exchange for an option premium, the right, but not the obligation, to enter into an interest-rate swap at some specified date in the future. The terms of the swap are specified on the trade date of the swaption.

T

Task Force on Climate-relate Financial Disclosures (TCFD)
A body, established in 2015 comprising 31 members from across the G20, whose role is to develop recommendations for more informed investment and enable stakeholders to better understand the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risk.

Taxes borne
Those taxes that represent a cost to the Company and are reflected in our results.

Taxes collected
Those taxes that are generated by our operations but do not affect our results. We generate the commercial activity giving rise to these taxes and then collect and administer them on behalf of tax authorities.

Tax Convention
Tax Convention means the income tax convention between the US and the UK.

Tonne
A unit of mass equal to 1,000 kilogrammes, equivalent to approximately 2,205 pounds.

Tonnes carbon dioxide equivalent (CO_2e)
A measure of greenhouse gas emissions in terms of the equivalent amount of carbon dioxide.

Totex
Total expenditure, comprising capital and operating expenditure.

Treasury shares
Shares that have been repurchased but not cancelled. These shares can then be allotted to meet obligations under the Company's employee share schemes.

Total Societal Impact (TSI)
TSI is a methodology that attempts to calculate the total benefit to society from a company's products, services, operations, core capabilities and activities.

U

UK
The United Kingdom, comprising England, Wales, Scotland and Northern Ireland.

UK Corporate Governance Code (the Code)
Guidance, issued by the Financial Reporting Council in 2018, on how companies should be governed, applicable to UK listed companies, including National Grid, in respect of reporting periods starting on or after 1 January 2019.

UK GAAP
Generally accepted accounting practices in the UK. These differ from IFRS and from US GAAP.

Underlying EPS
Underlying results for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Underlying results
The financial results of the Company, adjusted to exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such, and to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues as well as major storm costs (where these are above $100 million threshold in a given year).

US
The United States of America, its territories and possessions, any state of the United States and the District of Columbia.

US GAAP
Generally accepted accounting principles in the US. These differ from IFRS and from UK GAAP.

US state regulators (state utility commissions)
In the US, public utilities' retail transactions are regulated by state utility commissions, including the New York Public Service Commission (NYPSC), the Massachusetts Department of Public Utilities (MADPU) and the Rhode Island Public Utilities Commission (RIPUC).

V

Value growth
Value growth is the Value Added, adjusted to normalise for a 3% long-run RPI inflation rate, expressed as a proportion of Group equity. See page 259.

W

WPD
PPL WPD Investments Limited and its subsidiaries. The group is the UK's largest electricity distribution business and includes four distribution network operators.

WPD Acquisition
The agreement by National Grid to acquire WPD, which is subject to certain regulatory approvals and is expected to complete by July 2021.

Want more information or help?

Equiniti

For queries about ordinary shares:

0800 169 7775
This is a Freephone number from landlines within the UK, mobile costs may vary. Lines are open 8.30am to 5.30pm, Monday to Friday, excluding public holidays. If calling from outside the UK: +44 (0) 800 169 7775. Calls from outside the UK will be charged at the applicable international rate.

Visit help.shareview.co.uk for information regarding your shareholding (from here you will also be able to email a query securely).

National Grid Share Register
Equiniti
Aspect House
Spencer Road, Lancing
West Sussex BN99 6DA

The Bank of New York Mellon

For queries about American Depositary Shares:

1-800-466-7215
If calling from outside the US:
+1-201-680-6825

adrbnymellon.com
Email: shrrelations@cpushareownerservices.com

BNY Mellon – ADR
PO Box 505000
Louisville, KY 40233-5000

Further information about National Grid, including share price and interactive tools, can be found on our website: nationalgrid.com/investors

Beware of share fraud

Investment scams are often sophisticated and difficult to spot. Shareholders are advised to be wary of any unsolicited advice or offers, whether over the telephone, through the post or by email. If you receive any unsolicited communication, please check the company or person contacting you is properly authorised by the Financial Conduct Authority (FCA) before getting involved. Be ScamSmart and visit fca.org.uk/scamsmart. You can report calls from unauthorised firms to the FCA by calling 0800 111 6768.

Financial calendar

The following dates have been announced or are indicative:

20 May 2021	2020/21 full-year results
3 June 2021	Ordinary shares and ADRs go ex-dividend for 2020/21 final dividend
4 June 2021	Record date for 2020/21 final dividend
10 June 2021	Scrip reference price announced
21 July 2021 (5pm London time)	Scrip election date
26 July 2021	2021 AGM
18 August 2021	2020/21 final dividend paid to qualifying shareholders
18 November 2021	2021/22 half-year results
2 December 2021	Ordinary shares and ADRs go ex-dividend for 2021/22 interim dividend
3 December 2021	Record date for 2021/22 interim dividend
9 December 2021	Scrip reference price announced
20 December 2021 (5pm London time)	Scrip election date for 2021/22 interim dividend
19 January 2022	2021/22 interim dividend paid to qualifying shareholders

Dividends

The Directors are recommending a final dividend of 32.16 pence per ordinary share ($2.2812 per ADS) to be paid on 18 August 2021 to shareholders on the register as at 4 June 2021. Further details on dividend payments can be found on page 39. If you live outside the UK, you may be able to request that your dividend payments are converted into your local currency.

Under the Deposit agreement, a fee of up to $0.05 per ADS can be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2020/21 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to the distribution of the cash dividend.

Have your dividends paid directly into your bank or building society account:

- your dividend reaches your account on the payment day;
- it is more secure – cheques sometimes get lost in the post; and
- no more trips to the bank.

Elect to receive your dividends as additional shares:
Join our scrip dividend scheme; no stamp duty or commission to pay.

Electronic communications

Please register at shareview.co.uk.

It only takes a few minutes to register – just have your 11-digit Shareholder Reference Number to hand. You will be sent an Activation Code to complete registration.

Once you have registered, you can elect to receive your shareholder communications electronically.

Registered office

National Grid plc was incorporated on 11 July 2000. The Company is registered in England and Wales No. 4031152, with its registered office at 1–3 Strand, London WC2N 5EH.

Share dealing

Postal share dealing: Equiniti offer our European Economic Area resident shareholders a share dealing service by post. This service is available to private shareholders resident within the European Economic Area, the Channel Islands or the Isle of Man. If you hold your shares in CREST, you are not eligible to use this service. For more information and to obtain a form, please visit shareview.co.uk or call Equiniti on 0800 169 7775.

Internet and telephone share dealing: Equiniti also offer telephone and online share dealing at live prices. For full details together with terms and conditions, please visit shareview.co.uk. You can call Equiniti on 0345 603 7037 for further details, or to arrange a trade. Lines are open Monday to Friday, 8.00am to 4.30pm for dealing, and until 6.00pm for enquiries.

ShareGift: If you only have a small number of shares that would cost more for you to sell than they are worth, you may wish to consider donating them to ShareGift. ShareGift is a registered charity (No. 1052686) which specialises in accepting such shares as donations. For more information, visit sharegift.org or contact Equiniti.

Individual Savings Accounts (ISAs): ISAs for National Grid shares are available from Equiniti. For more information, call Equiniti on 0345 300 0430 or visit shareview.co.uk/ISA.

Cautionary statement

This document comprises the Annual Report and Accounts for the year ended 31 March 2021 for National Grid and its subsidiaries.

It contains the Directors' Report and Financial Statements, together with the independent auditor's report thereon, as required by the Companies Act 2006. The Directors' Report, comprising pages 1 – 113 and 224 – 262 has been drawn up in accordance with the requirements of English law, and liability in respect thereof is also governed by English law. In particular, the liability of the Directors for these reports is solely to National Grid.

This document contains certain statements that are neither reported financial results nor other historical information. These statements are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements include information with respect to our financial condition, our results of operations and businesses, strategy, plans and objectives. Words such as 'aims', 'anticipates', 'expects', 'should', 'intends', 'plans', 'believes', 'outlook', 'seeks', 'estimates', 'targets', 'may', 'will', 'continue', 'project' and similar expressions, as well as statements in the future tense, identify forward-looking statements. These forward-looking statements are not guarantees of our future performance and are subject to assumptions, risks and uncertainties that could cause actual future results to differ materially from those expressed in or implied by such forward-looking statements. Many of these assumptions, risks and uncertainties relate to factors that are beyond our ability to control or estimate precisely, such as changes in laws or regulations, including any arising as a result of the United Kingdom's exit from the European Union and any legislation introduced to facilitate the attainment of net zero emissions targets; announcements from and decisions by governmental bodies or regulators, including the implementation of the RIIO-2 price control as well as increased economic uncertainty following the COVID-19 pandemic; the timing of construction and delivery by third parties of new generation projects requiring connection; breaches of, or changes in, environmental, climate change, and health and safety laws or regulations, including breaches or other incidents arising from the potentially harmful nature of our activities; network failure or interruption, the inability to carry out critical non-network operations, and damage to infrastructure, due to adverse weather conditions, including the impact of major storms as well as the results of climate change, due to counterparties being unable to deliver physical commodities, or due to the failure of or unauthorised access to or deliberate breaches of our IT systems and supporting technology; failure to adequately forecast and respond to disruptions in energy supply; performance against regulatory targets and standards and against our peers with the aim of delivering stakeholder expectations regarding costs and efficiency savings; and customers and counterparties (including financial institutions) failing to perform their obligations to the Company. Other factors that could cause actual results to differ materially from those described in this document include fluctuations in exchange rates, interest rates and commodity price indices; restrictions and conditions (including filing requirements) in our borrowing and debt arrangements, funding costs and access to financing; regulatory requirements for us to maintain financial resources in certain parts of our business and restrictions on some subsidiaries' transactions, such as paying dividends, lending or levying charges; the delayed timing of recoveries and payments in our regulated businesses and whether aspects of our activities are contestable; the funding requirements and performance of our pension schemes and other post-retirement benefit schemes; the failure to attract, develop and retain employees with the necessary competencies, including leadership and business capabilities, and any significant disputes arising with our employees or the breach of laws or regulations by our employees; the failure to respond to market developments, including competition for onshore transmission; the threats and opportunities presented by emerging technology; the failure by the Company to respond to, or meet its own commitments as a leader in relation to, climate change development activities relating to energy transition, including the integration of distributed energy resources; and the need to grow our business to deliver our strategy, as well as incorrect or unforeseen assumptions or conclusions (including unanticipated costs and liabilities) relating to business development activity, including the WPD Acquisition, the NECO Sale and the proposed sale of a majority stake in the Group's UK Gas Transmission business, and joint ventures.

For further details regarding these and other assumptions, risks and uncertainties that may affect National Grid, please read the Strategic Report and the risk factors on pages 236 – 239 of this document. In addition, new factors emerge from time to time and we cannot assess the potential impact of any such factor on our activities or the extent to which any factor, or combination of factors, may cause actual future results to differ materially from those contained in any forward-looking statement. Except as may be required by law or regulation, the Company undertakes no obligation to update any of its forward-looking statements, which speak only as of the date of this document.

The contents of any website references in this document do not form part of this document.

Bringing net zero to life children's art competition

For this year's Annual Report and Accounts we decided to do something different for our front cover. We ran a competition for children to draw or paint a picture or design, in colour, to bring to life what they thought 'net zero' means for an energy company like National Grid.

Prizes of Amazon vouchers were awarded to an overall winner, as well to winners for each of the age groups: 6 and under, 7 to 11 and 12 to 16.

Kailyn Brenn
US
Overall Winner

Leo Harry Jamieson
UK
Joint winner
Age group 12–16

Rona Khanji
US
Winner
Age group 7–11

Zuri De Hazra-Sarkar
UK
Winner
Age group 6 and under

Niamh O'Sullivan
US
Runner-up
Age group 12–16

Eleni LaFond
US
Joint winner
Age group 12–16

Hadeeja Khan
UK
Runner-up
Age group 6 and under

We were delighted with the quality and variety of entries received from children both in our UK and US operating regions. Scan the QR code to see more of the runners-up entries.

Special Prize
Cornelia Perry, UK, age group 6 and under, was awarded a special prize for her amazing model and video of the net zero office of the future.

MIX
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FSC www.fsc.org

This report is printed on Arena White Smooth which is made of FSC® certified and other controlled material.

Printed sustainably in the UK by Pureprint, a CarbonNeutral® company with FSC® chain of custody and an ISO 14001 certified environmental management system recycling over 99% of all dry waste.

If you have finished with this document and no longer wish to retain it, please pass it on to other interested readers or dispose of it in your recycled waste. Thank you.

The paper used in this report has been Carbon Balanced with the World Land Trust, an international conservation charity, who offset carbon emissions through the purchase and preservation of high conservation value land.

Through protecting standing forests, under threat of clearance, carbon is locked in that would otherwise be released. These protected forests are then able to continue absorbing carbon from the atmosphere, referred to as REDD (Reduced Emissions from Deforestation and forest Degradation). This is now recognised as one of the most cost-effective and swiftest ways to arrest the rise in atmospheric CO_2 and global warming effects. Additional to the carbon benefits is the flora and fauna this land preserves, including a number of species identified at risk of extinction on the IUCN Red List of Threatened Species.

Designed and produced by Superunion
superunion.com

National Grid plc
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London WC2N 5EH
United Kingdom

nationalgrid.com

nationalgrid

Bring energy to life

Annual Report and Accounts 2021/22

PRINCIPAL PARTNER
COP26 PRESIDENCY UK 2022
DELIVERING THE GLASGOW CLIMATE PACT

We see the future.
It's filled with infinite possibilities.
That's why we are...

Doing Right Now

Our vision is to be at the heart of a clean, fair and affordable energy future. Every day we do the right thing, find a better way, and make it happen.

We are working right now to deliver net zero and keep the network safe and reliable.

Read more about what we are 'Doing Right Now' to enable a clean energy transition in the case studies that feature throughout this report. You can identify these by looking for this icon.

Highlights

Group financial highlights

Statutory earnings per share EPS (p)*

60.6p

Underlying EPS (p)* A

65.3p

Group Return on Equity (RoE) % A

11.4%

* From continuing operations. Prior year comparatives restated for treatment of UK Gas Transmission as a discontinued operation.

Group operational highlights

Group safety performance
(lost time injuries per 100,000 hours worked in 12-month period)

0.13

Scope 1 and 2 greenhouse gas emissions
(CO_2 equivalent, m tonnes)

7.5

Employee engagement (%)

81%

Further reading

Online report
The PDF of our Annual Report and Accounts 2021/22 includes a full search facility. You can find the document by visiting the 'About us' section at nationalgrid.com/investors/resources.

Responsible business
National Grid has published its annual Responsible Business Report (RBR). The RBR reports progress on the responsible business agenda, including towards the commitments made in our Responsible Business Charter (RBC). You can find both documents by visiting nationalgrid.com/responsibility.

Reporting currency
Our financial results are reported in sterling. We convert our US business results at the weighted average exchange rate during the year, which for 2021/22 was \$1.35 to £1 (2020/21: \$1.34 to £1).

QR codes
Throughout the report there are QR codes you can scan to view content online. Simply open the camera app on your smartphone to scan the code.

Further reading
Throughout this report you can find links to further detail within this document.

Front cover
The North Sea offers an incredible opportunity for the UK and our European neighbours to migrate to a cleaner energy system, as we increase connections to renewable energy sources from the North Sea.

We were excited to be a principal partner for COP26. COP stands for Conference of the Parties. You can read more about our involvement on pages 16 – 17.

For more information, visit nationalgrid.com/responsibility/environment/cop26.

Alternative performance measures
In addition to IFRS figures, management also uses a number of 'alternative measures' to assess performance. Definitions and reconciliations to statutory financial information can be found on pages 268 – 279. These measures are highlighted with the symbol above.

PwC Assured Data
Denotes information subject to limited assurance by PricewaterhouseCoopers LLP; see page 61 for full definition.

Doing Right Now

Fossil-free future

We aim to fully eliminate fossil fuels from our US gas and electric systems, enabling the customers and communities we serve to meet their heating needs without using fossil fuels by 2050, if not sooner.

To achieve our ambition, we are proposing a hybrid approach, with a combination of electric heat pumps, fossil-free gas and hybrid gas-electric systems.

Strategic Report

What we do

National Grid plc is one of the world's largest investor-owned energy utilities, committed to delivering electricity and gas safely, reliably and efficiently to the customers and communities we serve.

Further reading
Our business units on pages 50 – 55

Our business units

UK Electricity Transmission
We own and operate the high-voltage electricity transmission (ET) network in England and Wales.

UK Electricity Distribution
We own and operate the electricity distribution networks for the Midlands, the South West and South Wales. The combined network of Western Power Distribution (WPD), which became part of National Grid in June 2021, makes it the largest distribution network operator (DNO) group in the UK.

UK Gas Transmission*
On 27 March 2022, we announced the agreement for sale of a 60% stake in this business, which owns and operates the gas transmission network across Great Britain (including our UK metering business which previously formed part of NGV). The sale is subject to certain conditions.

UK Electricity System Operator
We operate as the electricity system operator (ESO) across Great Britain.

* Discontinued operations.

New England
We own and operate electricity transmission facilities and distribution networks across Massachusetts, New Hampshire and Vermont as well as gas distribution networks across Massachusetts. We sold our Rhode Island electricity transmission and gas and electricity distribution business (NECO) to PPL. The NECO Sale is expected to complete by the end of the first quarter of 2022/23.

New York
We own and operate electricity transmission facilities and distribution networks across upstate New York. We own and operate gas distribution networks across upstate New York, in New York City and on Long Island.

How we fit in the energy system

Generation
Generation is the production of electricity from fossil fuel and nuclear power stations, as well as renewable sources such as wind and solar. In the US, we own and operate electricity generation facilities on Long Island as well as wind and solar generation through our investment in the Emerald Joint Venture.

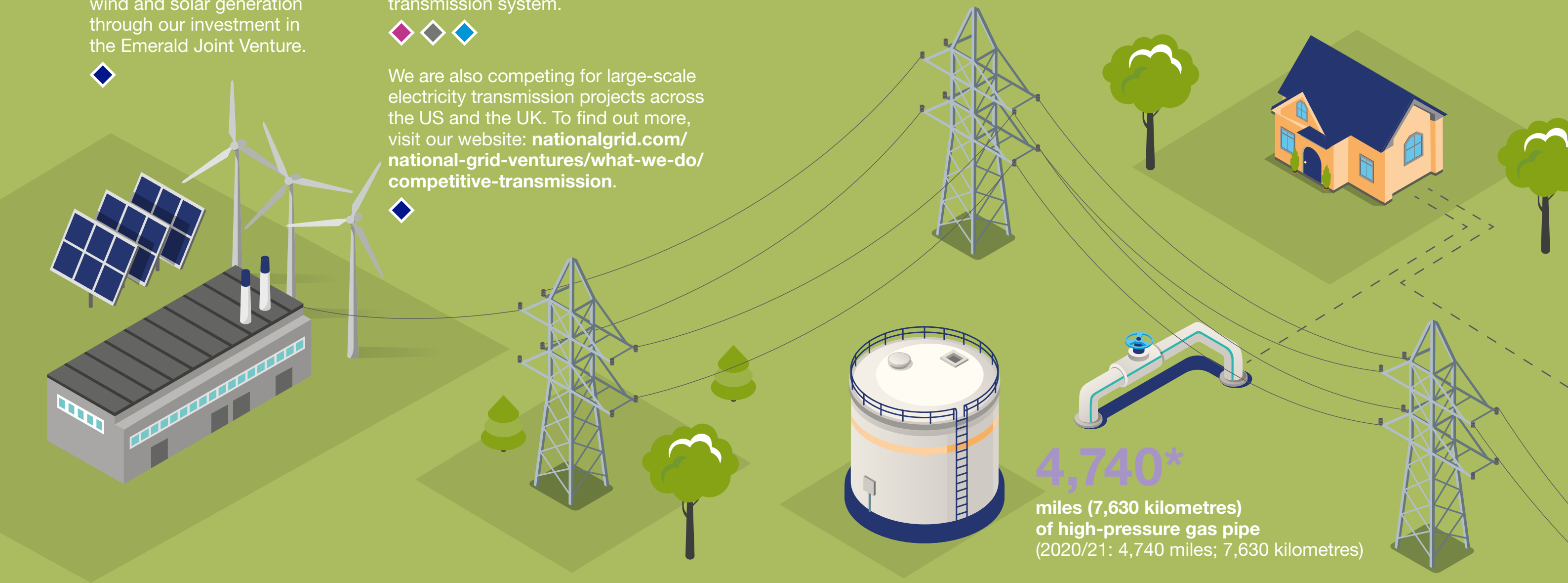
Electricity transmission
We are responsible for ensuring electricity is transported safely and efficiently from where it is produced, to reach homes and businesses reliably. We connect to industrial properties and distribution networks who deliver the electricity on to homes and commercial properties. We also facilitate the connection of generation assets to the transmission system.

We are also competing for large-scale electricity transmission projects across the US and the UK. To find out more, visit our website: **nationalgrid.com/national-grid-ventures/what-we-do/competitive-transmission**.

6,072
miles (9,768 kilometres) of electricity transmission cable and overhead lines
(2020/21: 6,240 miles; 10,042 kilometres)

2,939
miles (4,729 kilometres) of electricity transmission cable and overhead lines
(2020/21: 2,922 miles; 4,701 kilometres)

6,001
miles (9,655 kilometres) of electricity transmission cable and overhead lines
(2020/21: 6,050 miles; 9,734 kilometres)



4,740*
miles (7,630 kilometres) of high-pressure gas pipe
(2020/21: 4,740 miles; 7,630 kilometres)

Renewable energy
We are working with our partners to accelerate the development of our clean-energy future. In support of this goal, we've made significant investments in the US in large-scale renewable energy projects, including wind, solar and battery storage.

Visit our website to find out more information: **nationalgrid.com/national-grid-ventures/what-we-do/renewable-energy**.

Electricity System Operator
We are responsible for making sure the supply of and demand for electricity are balanced in real time every day across Great Britain.

In the US, similar services are provided by independent system operators.

Gas transmission
We are responsible for making sure Great Britain's gas is transported safely and efficiently from where it is produced, to reach homes and businesses reliably. As the gas system operator, we are also responsible for ensuring supply and demand are balanced in real time every day.

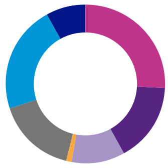
Some of our US businesses are not subject to state or federal ratemaking authority. This includes our interests in the New York Transco and Millennium Pipeline Company.

National Grid Ventures and Other activities

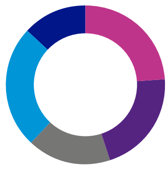
National Grid Ventures (NGV), which operates separately from our core regulated units, is focused on competitive markets across the UK and US. Its portfolio includes electricity interconnectors, liquefied natural gas (LNG) storage and regasification, large-scale renewable generation, conventional generation and competitive transmission.

Other activities primarily relate to National Grid Partners (NGP), the venture investment and innovation arm of National Grid, as well as UK property, insurance and corporate activities.

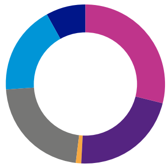
Regulatory asset value (RAV), rate base and other assets (%)



Statutory operating profit (%)*



Underlying operating profit (%)*



* From continuing operations.

Gas distribution

In the US, we deliver gas safely and reliably to millions of consumers connected to our distribution systems. Some of our customers pay us for distribution and gas supply costs. Where they choose to buy gas from third parties, they pay us for distribution only.

14,397

miles (23,165 kilometres) of gas pipelines
(2020/21: 14,372 miles; 23,125 kilometres)

22,359

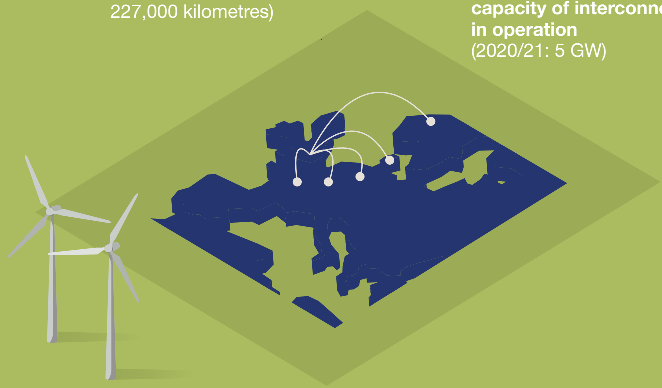
miles (35,975 kilometres) of gas pipelines
(2020/21: 21,388 miles; 34,413 kilometres)

Electricity distribution

We own and operate the power lines and infrastructure that connect the transmission network to the properties of individual consumers. Distribution networks convert high-voltage electricity generated by large power stations, and delivered through the transmission network, to lower voltages. This is then delivered safely and reliably into homes and businesses via our networks.

141,261

miles (227,337 kilometres) of electricity distribution circuits
(2020/21: 141,081 miles; 227,000 kilometres)



24,755

miles (39,831 kilometres) of electricity distribution circuits
(2020/21: 24,706 miles; 39,752 kilometres)

Electricity interconnection

Interconnectors are high-voltage cables used to connect the electricity systems of neighbouring countries. They allow us to trade excess power, such as renewable energy created by the sun, wind and water, between different countries.

We already have interconnectors linking us to France, Belgium, Norway and the Netherlands, and each year they power five million homes. We're currently working on another interconnector to link us with Denmark.

6.4 GW

capacity of interconnectors in operation
(2020/21: 5 GW)

44,536

miles (71,658 kilometres) of electricity distribution circuits
(2020/21: 44,063 miles; 70,897 kilometres)

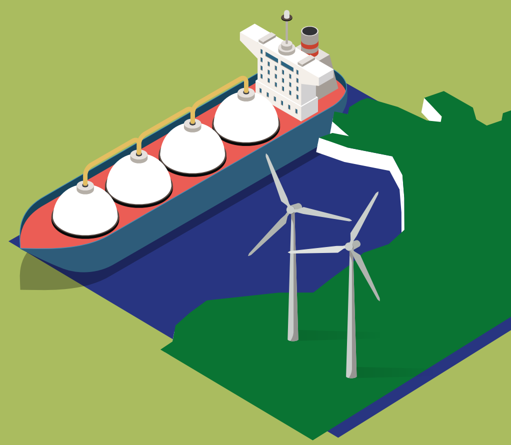
Storage

Grain LNG is one of three import terminals in the UK. Our world-class facility delivers the highest standards of performance for our customers.

We import LNG from a number of countries and also own storage facilities in the US.

63 ships

unloaded at the Grain LNG terminal
(2020/21: 49 ships)



Innovation

We created NGP which is involved in incubating and investing in startups at the intersection of energy and emerging tech, launching new businesses from scratch, business development, and infusing an entrepreneurial culture into National Grid. NGP aims to create a smarter, renewable future.

How we operate

Our resources and relationships

Internal resources

Physical assets
We own electricity and gas networks that transmit energy over long distances from where it is produced, together with low voltage local networks that distribute energy to the consumers who rely on it. These networks are built to last for many decades and account for the vast majority of our asset base. We also own five subsea electricity interconnectors, with a further subsea cable to Denmark under construction, as well as LNG importation facilities and large-scale renewables in the US.

Funding
We fund our business through a combination of shareholder equity and long- and short-term debt. We maintain an appropriate mix of the two and manage financial risks prudently.

Colleagues
Our highly skilled, dedicated colleagues have a strong public-service ethos. They manage and maintain the physical energy infrastructure, and assist and develop the many stakeholder relationships crucial to the Company's success.

Strong stakeholder relationships

Our business relies on strong relationships with all our stakeholders. These include:

- Our customers, who depend on us to connect them to the energy they use and who (through a small portion of their energy bills) pay to use our networks. This also includes (in the case of our transmission businesses) the electricity generators and gas suppliers who own the electricity that flows through our cables and gas pipes.
- Our suppliers, who have complementary experience, skills and resources and with whom we agree mutually beneficial contractual arrangements and, wherever possible, take advantage of economies of scale and use sustainable and global sourcing opportunities.
- National and regional governments, local communities, and business and domestic consumers of the energy we transport.
- The economic regulators who set the prices we can charge for providing an economic, efficient and non-discriminatory service as well as the government agencies responsible for health, safety and environmental standards.

Further reading
Our stakeholders on pages 56 – 59.

Our strategy

Enable the energy transition for all

Deliver for customers efficiently

Grow our organisational capability

Empower colleagues for great performance

Why does this matter? Benefits to National Grid

Financial strength
By managing our operations efficiently, safely and for the long term, we generate substantial cash flows. This, coupled with long-term debt financing, enables us to invest in growing our asset base and fund our dividends.

Investment
Efficient investment in our networks will deliver strong and sustainable growth in our regulated asset base over the long term.

Lower capital costs
Using innovation and flexibility initiatives, we look to reduce the amount of network reinforcement costs that would otherwise be needed to deliver the additional capacity required for net zero.

Shareholder returns
Our dividend policy, approved by the Board in March 2021, is to deliver annual dividend per share growth in line with the rate of CPIH inflation. Our dividend has grown consistently for more than 20 years.

We rely on our internal resources and our strong relationships which we use to do business, drawing on our technical expertise and culture in order to deliver value for our stakeholders and for wider society.

How we create value

Our technical expertise

We combine our extensive skills, knowledge and capabilities with innovation to ensure we continuously create value for shareholders and wider stakeholders alike.

Our expertise includes:

Asset management
We invest in and maintain our assets across their life as cost effectively and efficiently as possible.

Engineering
The skills of our engineers are vital in performing safely, efficiently, reliably and sustainably for all our businesses. Our colleagues strive to:

- find practical and innovative solutions to complex problems;
- employ risk-based decision making; and
- adopt common approaches and make continuous improvements.

Our engineering expertise supports the provision of a reliable network.

Capital delivery
We add value for our stakeholders by ensuring safe and effective delivery of large and complex infrastructure projects, ranging from large portfolios of smaller works to more substantial standalone projects.

Our culture

National Grid's culture is the values, beliefs and behaviours that characterise our Company and guide what we do, so we can respond as the energy transition accelerates.

We maintain high standards of ethical business. We also promote behaviours that are aligned with our values and culture by recognising our employees through a Company-wide reward system. This supports both what they achieve and how they have achieved it.

Strategy and risk management

As the energy industry continues its transition to a cleaner future, our strategy articulates our priorities clearly, while positioning our business to continue to bring long-term economic benefits into the regions where we operate.

We have well-established governance structures that include comprehensive risk management, strong controls and financial discipline.

Further reading
Our strategy on pages 20 – 21.
Innovation on pages 22 – 23.
Internal control and risk management on pages 28 – 32.
Our commitment to being a responsible business on pages 60 – 69.
Our values on page 65.

The value we create

Customers

We aim to deliver safe, reliable, resilient and affordable energy to customers in the communities we serve, driving operational excellence and financial discipline to keep bills affordable for our customers.

Investors

We aim to be a low-risk, dependable investment proposition, focused on generating shareholder value through dividends, supported by asset growth from investing in essential assets under primarily regulated market conditions, and servicing long-term sustainable consumer-led demands.

Our colleagues

We aim to create an environment where our colleagues can make a positive contribution, develop their careers and reach their full potential.

Contractors and suppliers

We maintain responsible and efficient supply chains where we align our interests, and those of our suppliers, with the interests of customers.

Communities and governments

We help national and regional governments formulate and deliver their energy policies and commitments. The taxes we pay help fund essential public services. We have an important role to play in sustainability, enabling the transition to a low-carbon future.

Economic, health, safety and environmental regulators

Through constructive, transparent engagement and consistent, reliable fulfilment of our commitments, we build trust with our regulators.

Why does this matter? Benefits to society

Achieving net zero
In addition to our own commitment to reduce our Greenhouse Gas (GHG) emissions to net zero by 2050, we are working with governments and regulators to help them meet their carbon reduction targets.

Communities
The transition to clean energy must be affordable to all, and we will play our role in ensuring no one is left behind, helping the places where we operate reach their emissions targets.

Job creation
We are providing employment opportunities and supporting our colleagues in building the skills necessary to build a net zero energy system.

Tax contribution
We recognise that our tax contribution supports public services and the wider economy and we endeavour to pay the right amount of tax, at the right time, in accordance with relevant tax laws.

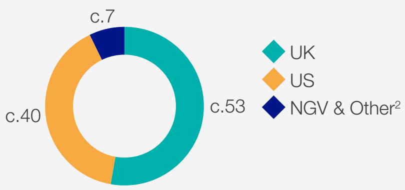
Our long-term value creation is underpinned by significant growth opportunity across the business, driven by our vital role as The Energy Transition Company

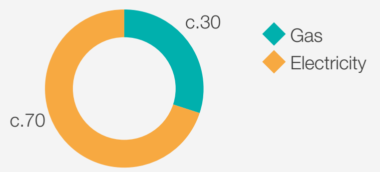
Reshaped portfolio

We've reshaped the portfolio and organisation for the opportunities ahead of us. These moves will increase our exposure to electricity, enhancing the long-term growth profile of the Group and better aligning to the energy transition.

Geographic and regulatory diversity

National Grid asset base
post transactions[1]





1. Calculated as an approximate proportion of actual 2021/22 asset base as at year end, including WPD, excluding NECO sale and 60% interest in UK Gas Transmission and Metering.
2. Includes NGP, UK property, insurance and corporate activities.

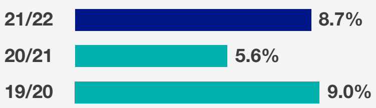
Delivering growth

Our forecast of £30 – 35 billion of capital investment between 2021/22 and 2025/26 will drive asset growth of 6 – 8% on average per annum (CAGR).

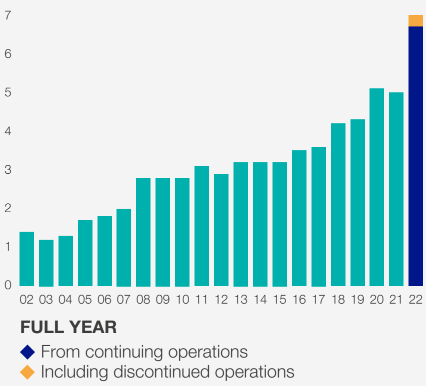
Over two thirds of this is already committed and visible through rate settlements and in our National Grid Ventures business.

History of strong financial performance

Group asset growth A



Capital investment £bn A



Strong operational and financial performance

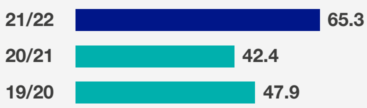
We have a strong track record of delivering efficiently, and our new operating model will deliver a step change in productivity improvements.

Alongside our asset growth, we forecast to grow our underlying EPS by 5 – 7% compound annual growth rate (CAGR).

History of strong operational and financial performance

RoE (%) A

Underlying (continuing) EPS (p) A



Employee Engagement Score (%)

Our vision for our future energy networks aligns with the global push towards net zero, and demonstrates the vital role we play. And with that vision, as we look to the decades ahead, we believe the scale of opportunity across the business is significant.

1. Our pivot to electricity brings visibility and certainty of growth, right now and out to 2050.
2. Our scale magnifies our vital role at the heart of the energy transition.
3. We have a strong track record of delivering growth.
4. Green capex[1] in decarbonisation of energy systems, will make up around £24bn of our investment between 2021/22 and 2025/26.

1. Capital expenditure invested in decarbonisation of the energy systems and considered to be aligned with the principles of the EU Taxonomy legislation at the date of reporting.

Five-year outlook 2021/22 – 2025/26

Capital investment £30 – 35bn	**c.£8bn** UK Electricity Transmission
	c.£17bn New York & New England regulated businesses
	c.£5bn UK Electricity Distribution
	c.£2 – 3bn NGV
Group asset growth	**6 – 8% CAGR**
Gearing	**Peaks in 2021/22, settles slightly above 70%. Credit metrics within current rating band**
Earnings Per Share (EPS)	**5 – 7% CAGR**
Dividend Per Share (DPS)	**Growth in line with CPIH**

Resilient balance sheet

We have visibility to maintain a resilient balance sheet and stable leverage (once all three transactions are complete), to fund asset growth of 6 – 8% on average per annum (CAGR) over the next five years.

Over the next five years we expect senior debt capacity to increase by £2 – 3 billion annually.

Balance sheet metrics

8.9%

RCF/Adjusted debt A

>7.0% Moody's rating threshold

4.7x

FFO Interest cover A

>3.5x Moody's rating threshold (2020/21: 4.5x)

We monitor RCF/adjusted net debt in order to ensure the Group is generating sufficient cash to service its debts, consistent with maintaining a strong investment-grade credit rating. We calculate RCF/adjusted net debt applying the methodology used by the credit rating agency, Moody's Investors Services.

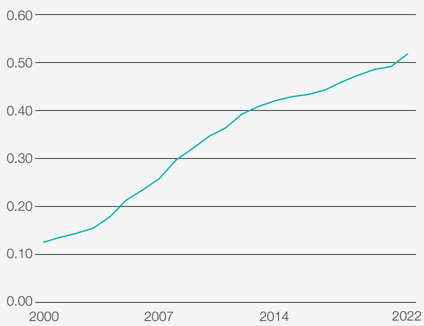
Progressive dividend

We have consistently grown our dividend for more than 20 years.

Full-year dividend 50.97 pence p/share in line with policy, 49.16 pence p/share in the prior period.

As our UK regulatory models move from Retail Price Index (RPI) to the Consumer Prices Index including Owner Occupiers' Housing Costs (CPIH), we aim from 2021/22 to grow the annual dividend per share in line with UK CPIH.

Dividend per share (DPS) (p)



Note: 2000 – 2010 DPS adjusted for 2010 Rights Issue, excludes special dividends.

Our responsible business

We continue to be vocal advocates for a fair and equitable energy transition across wider public policy.

We are a COP26 principal partner and are advocates of transforming commitments into action.

Our Responsible Business pillars

Communities
Deliver energy in a fair and affordable way to the communities we serve.

The economy
Work across our supply chains to ensure that, together, we reflect the diversity of the communities we serve and respond to the economic needs of those communities.

Governance
Achieve 50% diversity[1] in our Group Executive Committee

Our colleagues
Achieve 50% diversity[1] in all our new talent programmes by 2025.

The environment
Accelerate our net zero targets wherever possible.

1. A diverse employee is defined as a colleague who identifies as female, as a person with a disability, as gay, bi-sexual or lesbian or from an under-represented ethnic/racially diverse background.

Chair's statement

"National Grid finished the fiscal year in a position of strength. As nations now focus on energy security and affordability, as well as decarbonisation, we embrace our role in delivering the energy system of the future."

The events of the past year – indeed, the past months – have tested the resolve, culture and resilience of all businesses. As I write this first letter to you in my role as Chair, Ukraine is engulfed in a brutal confrontation with Russia. At National Grid, we supported and adjusted quickly to the Russian sanctions put in place by the UK government. We have also been engaging with the UK government on assuring long-term security of energy supply, including through accelerating the roll-out of renewables. In the US, we continue to work on an agenda of decarbonisation, ranging from new high-voltage electric transmission infrastructure for delivery of low- or zero-carbon resources to operating one of that nation's first hydrogen blending projects. In both countries, we undertake our efforts against the backdrop of elevated energy prices for our customers and heightened concerns about balancing the costs of system enhancements with the affordability of these improvements.

It is a privilege to be the first American to serve as the Chair of National Grid, an iconic industrial company. National Grid has a proud and longstanding heritage, but it is also a business that has long been focused firmly on the future. We didn't start the process of being a state-of-the-art energy system yesterday. For more than two decades we have been working to decarbonise energy. We have been iterating and experimenting with our fulfilment capabilities – with the digital grid, with hydrogen, with multipurpose interconnectors. And we will keep iterating and collaborating until we achieve the necessary levels of performance to assure you that clean energy delivery will be utterly reliable and affordable as well.

At National Grid, we are witnessing the increasing intensity of impatience in society in its pursuit to see changes in the contours of our energy system. We are working on multiple fronts to deliver infrastructure and service more quickly and more cleanly than ever before, including: digitalisation of business systems and operations to ensure service reliability and rapid response time; increased cyber security barriers to protect our critical national infrastructure; and use of advanced technologies, such as artificial intelligence (AI), to optimise our operations. And we are focused on the best possible delivery on the front lines. Perhaps you have noticed that storms are more frequent and severe. Meanwhile, society is dependent on rapid restoration of service. We live in a connected world and none of us easily tolerates a power outage. My National Grid colleagues are thus working in increasingly harsh weather conditions to reconnect customers in ever shorter response times. This is complicated by the fact that we are managing the increased complexity of the grid itself, as renewables become a larger part of the generation mix in both countries.

These are among the issues of today and tomorrow. As Chair, my role is to ensure our governance both challenges and supports decision making that will ultimately lead to a decarbonised and digital future. Our business reorganisation, the refresh of the Board and the thoughtful adjustment of our investment mix are intended to meet these challenges.

A Board for the future

As you will note, several distinguished Board members have reached the ends of their terms. Sir Peter Gershon, Dr Paul Golby, Mark Williamson, and Jonathan Dawson have all served nine-year terms. In addition, Amanda Mesler, who has been a member of our Board for the last four years, has decided not to stand for re-election as her career in technology takes her in some different directions. On behalf of my Board colleagues, I express my appreciation to all of them.

Nevertheless, from this loss comes opportunity. We are fortunate to have recruited five new Directors who bring fresh perspectives and experience to the Board Ian Livingston, Tony Wood, Martha Wyrsch, Anne Robinson and Iain MacKay, bring strategic thoughtfulness, engagement, constructive challenge, independence and gravitas to tackling the issues we face.

Operating with purpose

Moments of societal reckoning over recent times have further cemented my belief that National Grid must respond as a responsible business. It is clear: we are here to serve. Our sense of the larger purpose we play in society helps us keep doing the right thing at the heart of our decision making. As I have travelled around the National Grid system in both countries, I am heartened by the ethos of our people. I have also seen this ethos of community engagement first-hand in the work that is done by Grid for Good, Project C and our Grid Employability programmes, to name but a few examples. Our RBR, which you can find at nationalgrid.com/responsibility, provides an update on our excellent progress to date on key commitments.

Along with purpose comes partnership. Working with regulators, customers, communities, stakeholders and business partners is key to our long-term health as a company. I have appreciated the candour of those of you with whom I have met in the past year. This input – unvarnished and honest exchanges – helps guide the Board deliberations.

Solutions to the challenges of our time must be rooted in an overarching sense that we are in this together, working for the collective good. Geopolitical upheaval only deepens the sense within society that we must embrace change urgently. Across the UK and US, we are working with governments and communities to determine the best way forward for the delivery of net zero. In recognising that National Grid must change, I see that governments, regulators and stakeholders are grappling with how to drive progress as well. I would offer the observation that we all need to break old habits and get on with the business of change.

Looking forward

In the previous fiscal year, we set a strategic course to pivot to a greater focus on electricity as the energy mix of the future. With the acquisition of WPD and the announced sale of a majority stake of our UK natural gas transmission business, our portfolio is changing. The Board will continue to assess the businesses we will participate and grow in as the energy landscape evolves. For example, we welcome the UK government moving forward with the development of a Future System Operator (FSO). This initiative is expected to see us divest our ESO in the future. Similarly, our investments in the various interconnectors which link the UK to continental Europe and our partnership with RWE in the New York Bight auction for offshore wind, are examples of investments where we are leaning into the future energy system.

As you will note in the Notice of Meeting which accompanies this Annual Report, our climate transition plan is being put to a vote by shareholders at our 2022 AGM. I hope you will find that this plan provides tangible evidence of National Grid's resolve to move to net zero, including metrics that facilitate tracking of our progress. We ask for your support of our Climate Transition Plan, your Board of Directors, and various other business matters on which you are asked to vote.

In closing, I would like to recognise our National Grid colleagues with this oft-repeated phrase: if it were easy, everyone would be doing it. The Board recognises your singular efforts, your dedication and your tenacity. Your enthusiasm for delivering net zero and a fair energy transition is, I believe, unparalleled. Thank you for living our values and for Doing Right Now.

Paula Rospur Reynolds

Paula Rospur Reynolds
Chair

Final dividend of

33.76p

per share proposed to be paid on 17 August 2022

Full-year dividend (pence per share)

The 2022 Annual General Meeting (AGM) of National Grid plc will be held as a hybrid event at 10.00am on Monday 11 July 2022. More details on the arrangements for this year's AGM and how to view the live webcast of the AGM vote and attend virtually can be found on our website in the Investors section at: nationalgrid.com/investors.

Chief Executive's review

"We will enhance our role in the energy transition and drive long-term shareholder value."

Context in which we are operating

Over the last 12 months, as the world took tentative steps out of the depths of the COVID-19 pandemic, it also witnessed unprecedented climate events, an increasingly divided geopolitical landscape, and – in the UK and US – rising costs of living. As I write, we continue to witness terrible events in Ukraine. The combined turmoil and change of the past year means that all three points of the energy trilemma (security, affordability and sustainability) are now in sharp focus as one.

In a rapidly changing world, it is more important than ever that our vision is clear and our journey to achieve it is well executed. National Grid will be at the heart of a clean, fair and affordable energy future.

There is no doubt that rising gas prices and a higher cost of energy in the UK and US have highlighted the challenge of affordability. Our political stakeholders in all jurisdictions are also grappling with this challenge, and we continue to take a partnership approach with both governments and regulators to deliver an energy transition that leaves nobody behind. Whilst we do not have control over energy prices, we are playing our part by innovating at speed on projects and making significant capital investment to bring cheaper, greener energy to our customers.

I was particularly pleased to see clean energy sitting at the heart of the British Energy Security strategy – net zero is a clear route to a reduction in consumer bills over the long term, increased energy independence and lower carbon emissions. As a sector, we must now work at pace to deliver the ambitious targets set and remain conscious, too, of other opportunities to reach our collective goals, such as increased energy efficiency.

In the UK, we have been working closely with government, industry and the regulator to create the FSO that enables long-term holistic thinking, drives progress towards net zero, and lays the foundations for the regulatory reform necessary to deliver the energy system of the future. As announced in April 2022, the ESO is expected to transfer out of National Grid to become part of the newly created FSO by 2024. We will continue to work closely with all relevant parties to ensure a smooth transition, subject to parliamentary approval and conclusion of the transaction process.

In a fast-moving world, we must remember that the challenge of reaching net zero cannot be underestimated, and significant policy and regulatory change will be needed to get there. We are committed to working together with all our stakeholders to create the right policy and regulatory frameworks to deliver the investment needed at the lowest long-term cost to consumers in all our markets.

Business highlights

Delivering for our customers remains my key focus and I am very clear that this must underpin all that we do. A clear example is our vision for a fossil-free future in the US, launched in April 2022, which places consumer choice and affordability at the heart of fighting climate change.

This vision to fully eliminate fossil fuels from our US gas networks, replacing it with renewable natural gas and green hydrogen, will enable the customers and communities we serve to meet their heating needs without using fossil fuels by 2050, if not sooner. Combined with targeted electrification and enhanced energy efficiency, a 100% fossil-free gas network can deliver a clean energy future that is more affordable and more reliable to more than 20 million people across New York and Massachusetts.

We have made significant progress throughout the year towards a clean energy future in the US. In December, we launched a joint project with the town of Hempstead to build one of the first and largest clean hydrogen projects in the US. The HyGrid project, on Long Island, will blend green hydrogen into the existing distribution system to heat approximately 800 homes and fuel 10 municipal vehicles.

A key highlight of the year for me was National Grid's role as a Principal Partner of COP26. This enabled us to drive action on the fight against climate change more directly than ever before. From meeting with world leaders, to hosting the launch of the global Green Grids Initiative, and sharing our work to enable clean transport, it was a unique opportunity to discuss our learnings with delegations from across the globe and collaborate on how best we can work together to accelerate action.

It is important we match talking with doing. Since COP26, we have had new Science Based Targets approved; with both our UK ET and ED businesses and the ESO limiting their greenhouse gas emissions to a 1.5ºC warming scenario. And against a 1990 baseline, I can now report our carbon emissions are down by 65% across the Group.

The year also saw us deliver on the strategic transactions we announced 12 months ago. The transactions represented a strategic pivot for National Grid and underlined our belief that the journey to net zero will see increased electrification across the UK and US. The Group expects the NECO Sale to complete by the end of Q1 2022/23.

The year saw us make good progress on regulatory matters. In the first half, the Competition Markets Authority (CMA) upheld part of our appeal on RIIO-T2, which saw the removal of the outperformance wedge. In the US, new rate agreements for KEDNY-KEDLI, Massachusetts Gas and Niagara Mohawk were agreed during the year, giving us long-term visibility.

Our National Grid Ventures business continues to deliver clean, green energy through its interconnectors. We completed our fifth interconnector, North Sea Link (NSL), which connects the UK with Norway and is the world's longest subsea interconnector. NSL, which is a joint venture with Norwegian system operator Statnett, can provide enough clean electricity to power 1.4 million homes.

The fire at our IFA interconnector saw a 50% reduction in its capacity. However, I am pleased that our team's fast response and focus on recovery means we now expect the IFA interconnector to return to full service in December 2022, significantly earlier than planned.

WPD, our electricity distribution business, which will shortly be rebranding under the National Grid name, has submitted a highly ambitious business plan for 2023 – 2028 outlining £6.7 billion of investment to drive the pathway to net zero for our customers in the Midlands, South Wales and the South West. This will act as an additional £1.4 billion of investment from present-day levels, whilst maintaining affordability for our customers.

We have reported good operational performance in a year of significant strategic change. We have reported a strong set of results. In May, Ofgem agreed to our request to pay £200 million of interconnector profits back ahead of the planned timeframe, as we took action to lower bills for consumers.

We are investing around £24 billion over the next five years directly into decarbonising energy networks, starting now. This is measured in accordance with the EU taxonomy, and excludes 'clean' spend in areas such as connecting nuclear power and lowering methane emissions through gas pipeline replacement. In every sense, this investment cements our position as The Energy Transition Company.

Doing Right Now

National Grid is a responsible business, because it is the right thing to do. Our RBR, which is published alongside the Annual Report, details our progress to date on the commitments we set out in our RBC.

Communities sit at the heart of our RBC, and I am delighted that our Grid for Good initiative has positively impacted the lives of thousands of young people to date, with participation from hundreds of National Grid volunteers. Grid for Good was created to drive lasting and positive change for disadvantaged young people and we are well on the way to achieving our goal of 125,000 volunteering hours by 2030.

Diversity is critical to business success and I am pleased to report this year that we have no material gender pay gap in the UK business. Of course, this is just one measure, and we recognise that there is more work to do to bring greater diversity to all levels at National Grid.

Key highlights in 2021/22

11.4%

RoE A

£6.7bn

investment in critical infrastructure for the Group (continuing operations) A

In the US, our pay gap sits at 12.6% and we continue to address this as a matter of high priority. I am very clear that we can achieve more with a diverse organisation, and it is vital that we represent the communities we serve.

Over the last year, I am pleased to say we have continued to deliver energy reliably, safely and efficiently for our customers in all jurisdictions, and continue to focus on our safety performance.

Of course, it would not be possible to deliver these results without the hard work of the teams across the business. I would like to take this opportunity to say a sincere and heartfelt thank you to all National Grid colleagues, who, despite living through the most extraordinary and challenging of times, continue to serve the Company with hard work, dedication and outstanding skill.

Looking ahead

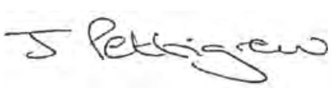
As we look ahead, we do so with optimism. National Grid is uniquely positioned as The Energy Transition Company, at a time when climate goals, customer demands and geopolitics align on the imperative need to fully decarbonise our economies.

In the UK, we will support the government in delivering its British Energy Security Strategy and the ambitious target of delivering 50 GW of offshore wind by 2030, including up to 5 GW floating wind, by developing and delivering transmission project proposals in alignment with the national blueprint. We will work with government and regulators to reform the consenting and regulatory frameworks to deliver the unprecedented levels of new transmission capacity required to deliver the strategy much faster than under the current arrangements. We will complete the integration of WPD into our new Electricity Distribution business and seek a successful outcome in our RIIO-ED2 regulatory process that gives us the flexibility to invest in our distribution networks to support the Strategy and the expected growth in heat pumps, electric vehicles and solar generation.

In the US, we will continue the work started to make fossil-free gas a reality on our networks by supporting legislative and regulatory policies to grow fossil-free gas, developing voluntary tariffs for customer participation in fossil-free gas offerings and running neighbourhood pilots for green H_2 network blending, networked geothermal, and targeted electrification of heating.

National Grid has a key strategic role to play in delivering the legacy of COP26 and we will become even more vocal on this over the next 12 months. We are working side by side with the UK, India and US governments on the Green Grids Initiative to accelerate the decarbonisation of electricity grids globally; we are engaged in the Glasgow Breakthroughs to share learning and drive progress in different sectors; and we will share our views on progress and policy needed globally. We must now move fast to seize the opportunity this decade to keep 1.5°C in sight.

We are leading a clean, fair and affordable energy transition across the jurisdictions we serve, and we do so with pride. No one will be left behind. Our pace will accelerate, our efforts will increase, and our action will be bold. The business is positioned for long-term success.



John Pettigrew
Chief Executive

Q&A

How can we solve the huge challenge of achieving net zero?
Partnership and collaboration hold the key to unlocking some of the biggest global challenges we face. Communities, government, regulators and industry all have a critical role to play in reaching net zero and it is only by working together and challenging each other to be bolder, more innovative, and to deliver at pace that we will achieve this. For the industry, delivering the energy system of the future, while operating and safeguarding the energy system of today, will require a huge shift in mindset. We must rise to this challenge and embrace the opportunity we have to create a fair and affordable future for all.

Why did National Grid feel it was important to be a principal partner of COP26?
Climate change is the biggest challenge we will face as a society – and there is a ticking clock. National Grid is uniquely positioned to lead the energy transition across the UK and Northeast US, but COP26 gave us the opportunity to go further and to collaborate and learn from partners on a global scale.

Why should I invest in National Grid?
The fundamentals of our business are strong; they underpin long-term value creation. We are at the forefront of the green revolution. There is huge business opportunity and we are fully aligned with government and societal demands to deliver greener, cleaner energy. We are Doing Right Now.

Can you share an update on the transactions?
The transactions that we announced in March 2021 and have implemented over the past 12 months represented a strategic pivot for the Company. The acquisition of WPD in the UK, the sale of Rhode Island in the US and an agreement to sell a majority stake in Gas Transmission in the UK, will leave our business split equally between the UK and the US, and with a focus that is 70% on electricity and 30% on gas. This is aligned with our view of the energy transition – gas will continue to have a key role to play, representing around 30% of the energy system by 2050 as we see increased electrification in the journey to net zero.

As CEO, what are you most proud of?
My colleagues. Living and working through a global pandemic has been challenging for everyone in different ways. I am very proud of the way everyone working at National Grid has carried out their duties with skill and professionalism in the most difficult and extraordinary circumstances to keep the lights on and the gas flowing for our customers.

Scan here to view our video

Our business environment

As well as managing the business through the COVID-19 pandemic, rising living costs, and the conflict in Ukraine, our societal ambition remains to achieve net zero. We will work with governments and regulators in the UK and US to help them meet their own carbon-reduction targets in a fair and affordable way.

Fairness and affordability

We are committed to delivering energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring no one is left behind in the short term due to increased energy prices, or in the longer-term transition to clean energy.

£30 – 35bn

2020/21 – 2025/26 investment across our UK and US businesses

2021/22 developments

UK

Supply and demand mismatches due to factors such as COVID-19 and the conflict in Ukraine have driven surges in energy prices that have challenged many customers; 2021 saw a 330% rise in European gas prices.

In February 2022, Ofgem announced a 54% increase in the energy price cap, caused by the record rise in wholesale energy prices. National Energy Action has anticipated that the number of households in fuel poverty will rise from 4.5 million to around 6 million because of the increased cap.

As a result, the Treasury announced that households will receive up to £350 of government support to help protect them from the rising energy costs. This includes a £200 discount on electricity bills for all consumers from October 2022, and a £150 council tax rebate from April for 80% of council taxpayers in England based on their tax bands.

US

Economy-wide inflation has been amplified in the energy sector. The energy price index rose 26% from February 2021 to February 2022, with all major energy component indexes increasing; natural gas and electricity rose 24% and 9%, respectively.

COVID-19 also brought serious economic hardship to many of our customers, elevating affordability concerns even further, and many moratoria on disconnection for non-payment have expired.

In response, Congress's American Rescue Plan included an additional $4.5 billion in Low Income Home Energy Assistance Program funding, including $535 million for New York and $187 million for Massachusetts.

Our response

- We donated £1 million to support the relief effort in Ukraine, split equally between the British Red Cross, the United Nations refugee agency, and UNICEF.
- We published our first Responsible Business Report in June 2021, providing an update on commitments in our Responsible Business Charter across five key areas: the environment, our communities, our people, the economy and our governance.
- In the UK, our Grid for Good Programme is in its second year of having a positive impact on socio-economically disadvantaged young people during this economic downturn. To date we have helped over 2,750 young people and have over 1,000 National Grid employees registered as volunteers.
- Our Electric Transmission business in the UK leveraged new technologies such as deploying soil stabilisation technology that decreased road-building costs by 30% for the Hinkley Connection Project or using drones to inspect overhead power line networks at lower cost and hazard.
- WPD announced a £500,000 fund to help those in fuel poverty through the 2021/22 winter period, as part of a wider annual £1 million Community Matters Fund. The Fund supported more than 79 grassroots organisations and local authorities, saving an estimated £2 million for 29,000 people in our communities.
- We launched Project C, our community engagement and neighbourhood development programme, across our New York service area. Company employees volunteered at food banks, Habitat for Humanity and Meals on Wheels, and stocked student backpacks and food warehouses, supplied PPE, cleaned up neighbourhoods and parks, offered energy affordability solutions, and much more.
- We gained approval from the New York Public Service Commission in January 2022 for our Expanded Solar for All programme through which we will share approximately $800,000 in community solar savings per month with 160,000 low-income to moderate-Income customers, the largest such programme in the country.

Net zero

We are focused on delivering the energy transition while balancing key societal issues for the regions in which we operate. We are continuing to progress towards our own net zero commitment to reduce our greenhouse gas emissions to net zero by 2050. In this 'critical decade' (2020 – 2030) for climate action, we are committed to working with governments and regulators in the UK and US to help them meet their carbon reduction targets.

Net zero

emissions commitment by 2050

2.5 GW

new renewable energy connected to our transmission and distribution grids in 2021/22

2021/22 developments

UK

Along with hosting COP26, the UK has made a binding commitment to net zero emissions by 2050. Additionally, it committed to phasing out inefficient fossil-fuel subsidies in hopes of limiting global temperature rise to 1.5°C.

In April 2022, in response to the war in Ukraine, the UK increased its ambition further by publishing the British Energy Security Strategy with the vision to produce 95% of electricity from low carbon sources by 2030. It included targets for 50 GW of wind by 2030, 70 GW of solar by 2035, and an additional 24 GW of nuclear by 2050. The strategy highlighted the critical role of network infrastructure in delivering on its ambitions, including recognising the need for a national planning regime and expedited approvals processes.

The UK's carbon intensity dropped to a record-low 39 gCO_2 on 5 April 2021. On that day, over three quarters of the UK's power came from zero-carbon sources: 39% wind, 21% solar, and 16% nuclear.

US

The Biden Administration continued to make climate change a top priority for the federal government.

The $1 trillion Infrastructure Investment and Jobs Act was passed, providing roughly $550 billion of new federal funding for roads, bridges, transit and other physical infrastructure programmes, and contained several National Grid priorities.

The Biden Administration committed the US to the Global Methane Pledge at COP26 to cut emissions 30% by 2030.

Offshore wind is a major growth focus for the Biden Administration, with a 30 GW goal by 2030 and 110 GW by 2050.

By 2030, New York is targeting 10 GW of solar, 9 GW of offshore wind, and 8 GW of onshore wind, and recently doubled its storage goal to 6 GW. Massachusetts' goal is to have 8 GW of solar, 4 GW of offshore wind, and 2.8 GW of storage by 2030.

National Grid booth at COP26 in Glasgow, Scotland, UK

Our response

- We sponsored COP26 as a principal partner, leading the conversation and working closely with the UK government and other sponsors to create a successful and ambitious climate change conference in November 2021.
- In April 2021, our commitments to reduce our emissions in line with climate science were approved by the United Nations' Science Based Targets initiative (SBTi). The targets we have set are consistent with the reductions required to keep warming to well below 2°C. We have also identified where we can accelerate our targets further.
- We worked with the Electric Power Research Institute, the Gas Technology Institute and other utilities to sponsor the Low-Carbon Resources Initiative to accelerate the development and demonstration of low-carbon and zero-carbon energy technologies.
- With 60% of all offshore wind developments in the UK planning to bring their energy onshore through the East Coast, we progressed projects such as the one in Yorkshire Green to increase capacity and relieve constraints on the network.
- We worked with industry players to support decarbonisation projects in heavy industry in Humber and Teeside. The East Coast Cluster won a bid to be one of the UK's first two industrial carbon capture clusters, and it has the potential to transport and store 50% of all UK industry carbon emissions securely, up to 27 million tonnes of CO_2 emissions a year by 2030.
- We worked with Hitachi Energy in a pilot project at Richborough Substation in Kent to replace sulphur hexafluoride (SF_6) gas with a greener alternative. This change forms part of our ambition to reduce SF_6 emissions by 50% by 2030 and remove SF_6 gas from our electricity assets by 2050.
- WPD published an environment strategy in April 2021 that details commitments to ensure environmental responsibility underpins all its activities in RIIO-ED2 and beyond. It provides an overarching pathway to achieving net zero by 2028 (excluding network losses), ahead of the government's target date of 2050.
- We announced our vision for a fossil-free future, fully eliminating fossil fuels from our US gas and electric systems, enabling the customers and communities we serve to meet their heating needs without using fossil fuels by 2050. Our plan is based on energy-efficient buildings, a 100% fossil-free gas network, hybrid electric-gas heating systems, and targeted electrification and networked geothermal.
- We joined seven major US utilities in the Electric Highway Coalition, which will enable more electric-vehicle charging stations along highways across the US.
- In June 2021, we commenced operations of two solar projects totalling 40 MW in Michigan. These employed over 150 workers from communities within 100 miles of each site during construction.

Onsite gas cart used to retro fill existing gas-insulated, high-voltage switchgear, with an alternative low global warming g^3 gas, designed for high-voltage transmission equipment, Richborough Substation, Kent, UK

Our business environment continued

Decentralisation

The energy system continues its transition from high to net zero carbon. This change coincides with a shift to more decentralised resources, including renewables and battery storage. As the volume of this intermittent and distributed generation increases, a more resilient and flexible system will be required; one that makes best use of available energy resources to meet consumers' needs in a balanced, efficient and economical way.

30%

of generation in the UK is connected at the distribution level

11%

of generation in Massachusetts and New York is connected at the distribution level

2021/22 developments

UK

Europe is projected to decentralise faster and further than any other region between now and 2050. The median power plant in Europe could reduce in size by up to 95% due to the scale of distributed generation.

Decentralised electricity systems are increasingly made possible by developments in smart systems and flexibility solutions, and supported by local initiatives to develop decarbonisation pathways.

This increasingly decentralised network presents a paradigm shift for the ESO as we work to enable the transition away from a system developed for a small number of large generation plants. The ESO will continue to innovate to enable Great Britain's electricity system as it transitions to becoming a separate, independent public corporation known as the Future System Operator.

The six UK DNO groups submitted their RIIO-ED2 business plans in 2021, describing the role of decentralised electricity systems in achieving net zero, including the role of the distribution system operator in the future.

US

The US is seeing one of the highest levels of grid investment in the world to meet demand for more decentralised assets such as distributed generation and electric vehicle charging.

In Massachusetts, the Department of Energy Resources officially approved the doubling of the current solar programme to 3.2 GW. The Department of Public Utilities passed a provisional programme regarding cost allocation to support distributed generation. The state also allocated $13.1 million in grants to install 306 direct current fast charging electric vehicle charging ports at 150 locations.

New York's Governor called for a doubling of the energy-storage target to 6 GW by 2030 and intends to establish a world-class battery research and manufacturing centre. Proposals also included a $1 billion investment to support electric vehicle (EV) adoption and charging; $500 million to develop offshore wind supply chains and port infrastructure; and the creation of a green hydrogen hub to compete for $10 billion federal funding.

Our response

- In the UK, we are running three Network Option Assessment Pathfinder projects to pilot innovative ways to ensure grid reliability as we prepare to operate a zero-carbon grid by 2025.
- We connected 406 smaller, distributed generation customers to the network in the UK, double the number we connected two years ago.
- The Equitable Novel Flexibility Exchange (Equinox) project allows WPD customers with heat pumps in their homes to participate in a flexible energy future. This project will assist in the deferral or avoidance of network reinforcement due to the predicted high uptake of heat pumps in the upcoming RIIO-ED2 and beyond.
- WPD published reports for each local authority as part of the Distribution Future Energy Scenarios process, outlining the expected uptake of different demand and generation technologies at a decentralised level. The reports are used to assist local stakeholders with local area energy planning and for WPD to identify areas of strategic investment in the distribution network.
- We connected 207 MW of distributed energy resources in New York in 2021. This is the most distributed generation we have ever connected and earned us the maximum incentive payment.
- Funding was approved for our Active Resource Integration pilot by New York's Public Service Commission. This aims to reduce interconnection costs for up to 15 MW of distributed solar projects.
- We began construction on the New York Energy Solution project to address bottlenecks between demand and distributed renewable generation in New York, enabling further decentralisation.
- We secured $150 million of funding in a joint venture with Emerald Energy Venture to support growth in our distributed renewable energy portfolio.
- We have entered a partnership with Massachusetts-based Form Energy to work on breakthrough long-term energy storage and invested in Viridi Parente's innovative high-density storage technology.

Digitalisation

Our digital aspiration is to be an intelligent connected enterprise bringing customers, employees and assets together to create the most resilient and secure utility. Our vision is to create insights from a single source of consumable and consistent data.

$345m

National Grid Partners' investment in companies whose transformational technologies are making grids greener and more resilient

2021/22 developments

Frontier technologies such as connected sensors, appliances and devices have exceeded the number of people on the planet in 2021. Additionally, the declining cost of computer storage is enabling the management of large volumes of data.

Customers desire a seamless experience, though only 21% felt their utility provider made life easy for them in 2021.

Effective digital transformations of utilities across the globe are enabling them to decarbonise, decentralise and democratise energy resources.

Driven by increased regulator demands, these trends are accelerating in utilities, driving 20% annual growth in global investment in digital electricity infrastructure and software for the past few years.

Our response

- We developed WhenToPlugIn, a new online application in the UK that suggests how to reduce consumers' carbon footprints by identifying periods of the day to use appliances when the energy mix is dominated by renewable and low-carbon sources.
- The launch of the Connected Data Portal enabled WPD to become the first UK DNO to provide all customers and stakeholders with open access to its data, further digitalising customer interactions in areas such as applications for new connections and flexibility service provision.
- We launched the new My Account page to streamline US users' digital experience across any device, enabling electric and gas customers to view energy use, manage account information and enrol in programmes.
- We began using satellite imagery and AI in the US to optimise vegetation management.

Case studies

North Sea Link – specialist barge laying undersea cable in Norway

North Sea Link goes live
The North Sea Link is our latest interconnector to go into operation. It is a joint venture with the Norwegian system operator, Statnett, and cost €1.6 billion over six years to build. The 1,400 MW link stretches 447 miles (720 kilometres) between the UK and Norway under the North Sea, and can power approximately 1.4 million homes. Enabling the trade of renewable energy will help reduce the UK's carbon emissions by 23 million tonnes of carbon by 2030, save customers money, and bolster energy security.

WPD and ET response to Storm Arwen
Winds of over 92 miles per hour (148 kilometres per hour) and heavy snow hit the UK in November 2021, impacting electricity distribution and transmission. All four of WPD's distribution networks were affected, requiring power restoration to over 243,000 properties, answering 98,745 customer calls, and resolving over 1,600 incidents. Our transmission network was also affected, with 45 network faults reported. Fortunately, our automatic protection mechanisms worked well to deal with the faults reported. Overall, well-versed preparation, action and communication resulted in a successful response in our service areas to the worst storm to affect power supplies in 15 years.

Offshore wind lease awarded in the New York Bight
In February 2022, the Bureau of Ocean Energy Management hosted the country's largest offshore wind lease auction to date for seabed development rights between New York and New Jersey. In partnership with RWE, we won the largest of the six sites. The awarded area has the potential to host 3 GW of capacity, enough to power over a million homes. The joint venture, Community Offshore Wind, combines RWE's world-leading offshore wind capabilities with our local expertise in the Northeast and experience with High-Voltage Direct-Current interconnectors. This award supports both companies' efforts to advance a clean energy future and achieve our states' offshore wind and climate targets in the coming decades.

Succeeding with our strategy

Our vision is to be at the heart of a clean, fair and affordable energy future. To deliver our vision in a focused way, we have a strategy which sets the bounds of our business, guided by four strategic priorities.

Further reading:
Internal control and risk management on pages 28 – 32

Strategic priority

Enable the energy transition for all

What this means

We will increase the positive impact we have on society, environmentally and socially, primarily through enabling a transition to a clean energy future. By innovating how our networks deliver energy, investing for a changing climate and influencing policy and regulation, we will enable clean electricity, heat and transport, and promote better outcomes for all where we develop skills and where no one is left behind.

Business environment link:

2021/22 achievements

- We received the prestigious climate change 'A' score from CDP Climate Change for the sixth consecutive year for our corporate sustainability work in cutting emissions and moving towards a low-carbon economy.
- We have 22 GW of renewables connected to our UK and US electricity transmission and distribution networks.
- Ofgem's strategic innovation fund awarded us £400,000 for three projects that will help develop a net zero electric transmission network, including replacing SF_6 with a low-carbon alternative and utilising satellite data analytics to future-proof against the impacts of climate change.
- WPD is the only DNO to fit three-phase services as standard to all new connections, boosting capacity for EVs and heat pumps.
- In the US, our onshore renewables team has secured over 2 GW of power offtake agreements with partners such as Walmart and Home Depot.
- We started operations of the 200 MW Prairie Wolf Solar Project in Illinois, which is projected to offset 285,000 tonnes of CO_2 annually.
- The New York Power Authority partnered with us in May 2021 on the Smart Path Connect project to rebuild 110 miles of transmission lines. This will support existing renewable resources and result in production cost savings, emissions reductions and decreases in transmission congestion.

Key highlights

19.5 GW

of wind power on Britain's electricity system on 29 January 2022, setting a new wind power record

Looking ahead

- We are developing a Cap and Floor regulatory regime with the UK Department for Business, Energy & Industrial Strategy and Ofgem to apply to future multi-purpose interconnectors. This will reduce the number of radial connections limiting distribution to coastal communities, providing significant cost reductions for consumers, and enable wind developers to access multiple markets.
- The Hinkley Point connection transmission project we are developing will enable six million homes to access low-carbon electricity.
- WPD will work to ensure the network is ready to enable stakeholders to achieve their net zero ambitions. It will prepare the network for at least 1.5 million additional EVs, 600,000 heat pumps and a significant increase in renewable energy over the next six years.
- In the US, we will be working with stakeholders to build towards an integrated clean gas and electric system that would eliminate fossil fuel gas from both the gas delivery and electric systems, as the most practical and affordable path for our customers.
- In our US jurisdictions, we have committed to 20,000 EV charging points by 2025 and have applied for funding for an additional 32,000 in Massachusetts.

Deliver for customers efficiently

What this means

Delivering safe, reliable, resilient and affordable energy for customers in our communities has always been at the heart of what we do. As we invest to decarbonise the energy system, using our operational excellence and financial discipline to keep bills affordable for customers is more important than ever.

Business environment link:

2021/22 achievements

- The Edison Electric Institute (EEI) announced us as a recipient of its Emergency Response Award and the Emergency Recovery Award, recognising recovery and assistance efforts following service disruptions caused by extreme weather or other natural events.
- We launched the Digitalising Work Management app across 50 Electricity Transmission operations sites in the UK to schedule, dispatch and complete work more efficiently.
- WPD achieved the British Institution Standard for Inclusive Service Provision for the ninth year running and was re-accredited with the Customer Service Excellence Standard.
- We successfully reached new agreements in regulatory rate cases across our US service areas to continue to serve our customers.
- In the US, we were honoured with the ReliabilityOne award for Outstanding Reliability Performance from PA Consulting, recognising reliable electric service, technology and innovation, and customer engagement.
- We launched a revamped bill assistance campaign in the US to remind customers about the services and programmes we offer during prolonged cold weather or increasing energy prices.

Key highlights

99%

of our UK customers affected by the worst storm to affect power supplies in 15 years had power returned within 48 hours

Looking ahead

- Customer focus is something we will continue to improve, building on best practice through our US Customer team and learning from WPD's excellence in customer service.
- We have committed to 5,000 volunteer hours in the US and $5 million annually to community organisations for the next decade.
- For RIIO-ED2, WPD intends to ensure that power cuts will be at their lowest ever levels and customer satisfaction will be at its highest at over 93%. Crucially, it will achieve all of this whilst maintaining affordability for its customers.

Strategic priority

Grow our organisational capability

What this means

In the context of a rapidly changing energy sector, we will need to build on and evolve our organisational capabilities. We will digitally transform our processes, strengthen our customer focus and sharpen our commercial edge. To successfully make this transformation and achieve results, our ability to implement change effectively will be paramount.

Business environment link:

2021/22 achievements

- At COP26 we launched the AiDash satellite tech partnership to improve the green value of our sites.
- We began creating a digital copy of Great Britain's energy system, a central tool that brings together every element of our system to create a collective and dynamic view. The virtual environment allows for testing and modelling to make accurate forecasts which enables commercial decision making and understanding of the impact for customers.
- WPD has conducted significant roll-out of innovative flexibility initiatives, including procurement of flexibility services via the Flexible Power brand, which has procured 270 MW of flexibility services during 2021/22, affecting 2.4 million customers and achieving £49 million of deferred or avoided reinforcement.
- In the US, we launched Pathfinder, a custom end-to-end solution that digitises and streamlines field force work, enabling work assignment, scheduling, dispatch, field work, data capture, tracking and reporting.
- We signed an offshore partnership agreement with RWE Renewables to successfully bid jointly in the New York Bight seabed lease auction. Fifty people worked collaboratively across companies.

Key highlights

6 GW

of network boundary capacity in the UK

Looking ahead

- We will be a leader in pioneering smarter, low-carbon energy networks which at their core are made of resilient transmission and distribution grids. Our focus now is on building the diverse pipeline of employees that will get us to net zero.
- The UK energy industry needs 400,000 additional people in new and existing jobs by 2050.
- WPD is forecast to avoid £94 million of network reinforcement costs by using flexibility services.

Empower colleagues for great performance

What this means

All our people shape the culture and ways of working needed to perform and achieve outcomes that will exceed all our stakeholders' expectations, including those of customers, communities, regulators and investors.

Our leaders will encourage people to be at their best when it matters. From attracting diverse talents, developing our people and recognising great achievements, we will ensure our colleagues are engaged and able to work towards a clean energy future.

Business environment link:

2021/22 achievements

- We were named in the Top 10 Outstanding Employers list by the Ethnicity Awards, which recognise companies working to ensure all people are afforded equal opportunity, regardless of race or ethnicity.
- We launched MyHub Mentoring, our new mentoring programme that connects our experienced and skilled leaders with colleagues looking to develop professionally in specific areas.
- We launched the 'Grid Guide to Our People: Inclusion and Diversity' podcast.
- We were ranked 1st in the UK and 3rd globally for gender equality in a report published by Equileap.
- As a diversity and inclusivity measure, WPD signed up to participate in the 10,000 Black Interns programme, which aims to help transform the prospects of young black people in the UK by offering internships to black students.
- In the US, we received a score of 100 on the Human Rights Campaign Foundation's 2022 Corporate Equality Index, and were named the Best Place to Work for LGBTQ Equality.
- We signed up to the Valuable 500 initiative, in line with a core focus of our Responsible Business Charter: strengthening diversity and representation of the workforce. This initiative puts disability on the business leadership agenda with the aim of catalysing inclusive action.

Key highlights

46%

of our Board seats are held by women

Looking ahead

- We will continue to establish our purpose, vision and values, and reinforce our third value to 'make it happen'.
- We strive to achieve 50% diversity in all new talent programmes by 2025.
- We will look to be included in the 2022 Bloomberg Gender-Equality Index, which tracks transparency in gender reporting.
- WPD plans to demonstrate exceptional and embedded employment practices by achieving Gold accreditation with Investors in People by the end of RIIO-ED2.

Innovation

Our commitment to net zero continues to shape our innovation strategy, with our key aim being to deliver cleaner and cheaper energy. Our innovation and Research and Development (R&D) portfolio enables us to identify and target carbon savings for our own operations and we are also developing innovation projects to ensure we are prepared for, and play a pivotal role in, the decarbonisation of energy for power, heat, transport and industry.

We place a high value on collaboration to inform, generate ideas and solve the challenges we see ahead of us, and we work with technical organisations, academia and suppliers in the energy sector that align with our goals and objectives.

We set out here some of the key innovation projects our business units have been working on over the financial year. In addition, NGP, our corporate investment and innovation arm, continued to progress investments in emerging technologies and embedded these innovations across our US and UK core operations. You can find more detail about our R&D portfolio for our business units on pages 264 to 267.

Vulnerability and Energy Networks, Identification and Consumption Evaluation (VENICE) in UK Electricity Distribution

WPD has started its largest vulnerability Network Innovation Allowance (NIA) funded project, focusing on developing ways to predict consumer vulnerability and ensure we can target our support and investment in our communities, or even households, that need it most. Working with our partners, the community energy group WREN, Frazer-Nash Consultancy and Frontier Economics, we are looking at how WPD can support vulnerable customers. We are assessing which commercial models would work best to: enable fuel poor consumers to participate in the decarbonisation of the energy system so as to benefit the community and achieve net zero; explore whether we can use smart meter data to identify vulnerable customers, and thus enable us to target support to those in our communities where it would be most effective and who need it most; and the effect of changes in electricity use as a result of the pandemic and whether, for instance, the shift to home working will have an impact on customers in vulnerable situations.

WPD Innovation Engineer, Stuart Fowler said: "VENICE is no ordinary innovation project – it will shine a real light on energy use and help us to reach out to the people who need it most."

Virtual Energy System in ESO

The ESO manages the supply and demand to meet the needs of Great Britain, but it also has a clear mission: to decarbonise the energy system and bridge the gap to net zero. Continuing to innovate and adapt the energy system will require a range of new tools and a reimagining of how the entire industry can come together to have a lasting impact.

To achieve this, in 2021, the ESO launched an ambitious, industry-wide mission to digitalise our energy system by constructing real-time digital twin replicas of our entire energy landscape, working in parallel to our physical system, thereby creating a virtual environment through which we can share data and model and test scenarios to make our decision making more robust. This will create valuable insight to help guide and govern how we generate, manage, store and consume energy, helping us make better decisions for Great Britain's aim of achieving net zero targets more quickly and efficiently.

On 1 December 2021, along with panellists from across Ofgem, BEIS, the Energy Digitalisation Taskforce, Energy Systems Catapult and more, the ESO hosted a one-day conference for the energy industry and wider stakeholders to find out more about the programme, and how to get involved. A series of advisory groups and engagement opportunities are taking place throughout 2022.

Deeside Centre for Innovation – UK ET

National Grid's Deeside Centre for Innovation in North Wales has facilities set up ready for industry participants to trial and assess new technological developments before they go into service on the network. This unique environment allows designs to be validated under more realistic conditions than have been available ever before, with equipment being tested at 4,000 A and up to 600 kV outside of laboratory conditions, in an outdoor environment for extended periods of time – days, months or even years.

UK ET is currently trialling two new innovative projects to cut harmful environmental emissions. Working with UK-based Rawwater, we have started work on delivering a novel method of sealing harmful environmental SF_6 leaks by reducing emissions from small-bore pipework.

Another key innovation project currently underway is the testing of a new patented concrete mixture called Cemfree (owned by DB Group), which potentially has a carbon footprint of 80% less than conventional types. Typical barriers to adoption of innovative concrete products include how they will behave on site and long-term durability. To address this, UK ET is currently testing two large-scale slabs (c.50 cubic metres) to identify the differences in performance between Cemfree and a conventional concrete.

Deeside Centre for Innovation, North Wales, UK

National Grid Partners

NGP, our corporate investment and innovation arm, continued achieving impact for the Group by investing in emerging technologies such as AI, data security and cyber security, and embedding these innovations across our US and UK core operations. NGP's portfolio as at 31 March 2022 comprised 38 companies and four fund investments at a fair value of $491 million.

During the past fiscal year, NGP invested in 13 new startups – AptEdge, Baffle, Cogniac, Compute North, Cyolo, Finite State, Incorta, Pathr, Risilience, Sensat, Sync Computing, TS Conductor and Viridi Parente – whose technology can make power grids greener, more secure and more customer friendly. Existing portfolio company Dragos announced a $200 million funding round in which NGP participated as a returning investor. The Series D round is believed to be the largest ever for an operational technology (OT) cyber security company. NGP first invested in Dragos in 2018, when National Grid began using the company's industrial threat intelligence service to monitor global threats to industrial control systems.

NGP continues to build use cases of its portfolio innovations across our core businesses. Working with NGP portfolio company Cogniac, for example, National Grid Metering is using AI to train an AI model to identify different makes and models of gas-meter regulators (which may benefit from early replacement), using a variety of photographs taken from multiple angles and in various lighting conditions. This is increasingly critical for keeping customers safe and warm.

More than 70% of NGP's portfolio companies have strategic engagements with National Grid to help transform our operations – such as AiDash, which combines satellite data and AI to protect critical infrastructure. After a successful deployment in our US service territories to spot overgrown vegetation that can spark outages or fires, at COP26 AiDash unveiled an environmental stewardship product developed with National Grid and NGP's Innovation team.

In November, at COP26 in Glasgow, NGP hosted the Innovating our Way to Net Zero panel discussion with National Grid CEO John Pettigrew and the chief executives of Edison International and the Electric Power Research Institute on how corporate investments in startups can supercharge new clean energy technologies. Additionally, NGP's NextGrid Alliance (NGA) continues to grow from 60+ member utilities at its launch in 2020 to 80+ global utility companies today. Nearly half the world's regulated energy utilities have participated in NGA workshops in the past year to help advance innovation and accelerate the decarbonisation transition. NGP launched a new online community for Alliance members, at ngalliance.energy, in November.

Since its launch in November 2018, NGP has led more than 50% of its startup investment rounds and achieved four portfolio exits – including October's initial public offering of Vancouver-based Copperleaf Technologies, which helps National Grid and other critical infrastructure companies ensure their capital spending generates the highest strategic value, including planning for net zero.

Framing the pathway to the energy transition is a combination of looking at the mega trends known as the three Ds: digitalisation, decentralisation and decarbonisation. Getting there will require enabling technologies like iOT, data analytics, storage cloud, cyber security, and, in turn, investment in areas such as asset modernisation, increased customer focused solutions and smart enterprise. More details can be found at ngpartners.com, including details of each of our portfolio investments.

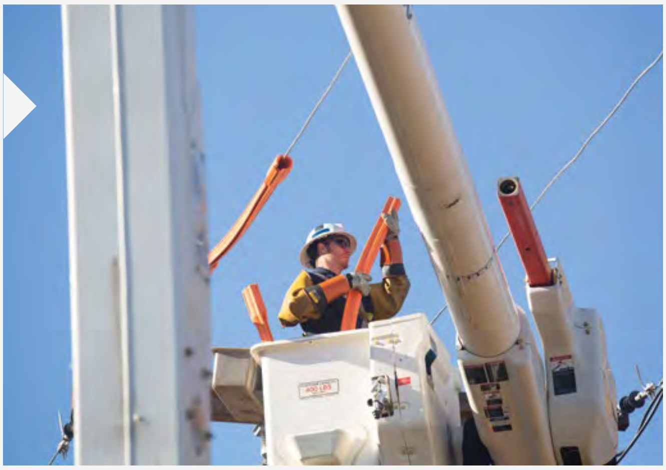
HyGrid – hydrogen blending project in New York

We are excited to have launched the HyGrid project, the largest green hydrogen-blending project for direct use by utility customers in the northeastern US and one of the first in the country. In the town of Hempstead on Long Island, HyGrid is expected to heat approximately 800 homes and fuel 10 municipal vehicles at no additional cost to customers. Much of the equipment required to create zero-carbon hydrogen is already in place at the site; this includes existing wind and solar equipment for generating hydrogen fuel for vehicles, and an adjacent National Grid facility that provides energy for the local neighbourhood. Rudy Wynter, President of National Grid New York, said: "We believe that hydrogen can transform the energy industry, and we are at the forefront."

Fault Location, Isolation and Service Restoration (FLISR) in New England

FLISR is a scheme-based system that monitors and responds to electrical faults along our networks. It identifies and isolates the location of a fault to minimise impact to the grid and the number of customers affected, while enabling a speedier return to service for uninvolved customers when this is safely possible. Creating FLISR capabilities involves installing reclosers and feeder monitors at substations, with preprogrammed logic, to enable near real-time responses to faults.

The technology was installed as part of the Advanced Data Analytics programme. In the midst of the 2021 nor'easter, the FLISR scheme was active on feeders from West Salem and Saugus in the North Shore District in New England. A tree limb created a mainline fault condition between the West Salem substation circuit breaker and the first downstream pole-top recloser on the line. FLISR logic was activated and quickly restored service to 1,531 customers in 16 seconds. The remaining 2,356 customers experiencing the outage had their service restored in 141 minutes after the repairs to the feeder were completed. Had this FLISR scheme not been implemented, all 3,887 customers would have experienced the full outage.



FLISR: installation of recloser. New England, US

Key performance indicators

The Board uses a range of metrics[1], reported periodically, against which we measure Group performance. These metrics are aligned to our strategic priorities.

Link to strategy

Enable the energy transition for all

Deliver for customers efficiently

Grow our organisational capability

Empower colleagues for great performance

A **Indicates an alternative performance measure**

PwC Assured Data
Denotes information subject to limited assurance by PricewaterhouseCoopers LLP see page 61 for full definition.

Link to remuneration

Remuneration of our Executive Directors, and our employees, is aligned to successful delivery of our strategy. We use a number of our KPIs/alternative performance measures as specific measures in determining the Annual Performance Plan (APP) and Long-Term Performance Plan (LTPP) outcomes for Executive Directors. While not explicitly linked to APP and LTPP performance outcomes, the remaining KPIs[1] and wider business performance are considered. For further detail, please see our Directors' Remuneration Report, on pages 108 – 131.

1. Two of our previously reported KPIs: Contribution of our corporate responsibility work and Education, skills and capabilities, have been retired as similar metrics are reported in our RBR.

Financial measures

Strategy link	KPI and performance	Progress in 2021/22

Group RoE (%) A

In calculating Group RoE, we measure our performance in generating value for shareholders by dividing our regulated and non-regulated financial performance, after interest and tax, by our measure of equity investment in all our businesses, including the regulated businesses, NGV and Other activities and joint ventures.

Target: 9.75 – 11% each year

Group ROE of 11.4% was higher than 2020/21 (10.6%) with higher regulated financial performance mainly due to the acquisition of WPD and an improved contributions from our non-regulated businesses mainly due to higher interconnector revenues.

Total regulated asset growth (%) A

Maintaining efficient growth in our regulated assets ensures we are well positioned to provide consistently high levels of service to our customers and increases our future revenue allowances. This includes investment for a changing climate, enabling clean electricity, heat and transport.

Target: 6 – 8% growth each year

Asset growth during the year was 8.7% (2020/21: 5.6%). Capital investment of £7.0 billion (including UK GT), driven by the growth in WPD, along with higher RAV indexation (due to higher inflation) resulted in this increase. Asset growth in 2020/21 was adversely impacted by lower RAV indexation and the impact of COVID-19.

Cumulative investment in delivering new low-carbon energy sources (£m)

We invest in new low-carbon energy sources primarily through our interconnector businesses (North Sea Link, IFA, IFA2 BritNed and Viking Link), investments in, and partnerships with, companies delivering low-carbon energy sources (for example, our partnership with Sunrun) and investments into large-scale renewables (for example, our new investment in NGR).

Investment in delivering new low carbon energy sources increased in the year by £300 million (69%), largely driven by investment in US Offshore Wind (purchase of 3.2 GW seabed lease) and increased investment in onshore renewables, with the latter reflecting the construction of the Noble and Yellowbud projects.

Financial measures continued

Strategy link	KPI and performance	Progress in 2021/22

NGV capital investment (£m) A
NGV is focused on investment in a broad range of energy businesses across the UK and US, including our interconnector business, large-scale renewable generation, LNG storage and regasification, and energy metering.

NGV capital investment, including Long Island Power Authority (LIPA) Gen ('Genco') has increased year-on-year by £383 million (72%). This is principally due to investment in US offshore wind (purchase of 3 GW seabed lease), increased investment in onshore renewables, reflecting the construction of the Noble and Yellowbud projects, and the Cap.25 project within Grain LNG.

Prior year data has been restated to include Genco and exclude NG Metering. This is to align to NGV's current structure. 2019/20 data is not included to align with the data in the financial statements.

Non-financial measures

Strategy link	KPI and performance	Progress in 2021/22

Cumulative low-carbon generation connected to our UK ET network (GW)
Low-carbon generation supported by our network to date.

A total of 20.9 GW of low-carbon generation is currently connected to our network, following additional offshore wind capacity connecting at Triton Knoll (540 MW), Hornsea 2 (1320 MW) and Lincs Offshore Wind farm (9 MW). The government's 10 point plan alongside the new Energy Strategy and commitment to annual Contract for Difference (CfD) allocation rounds, indicates further increases in low-carbon capacity over the coming years.

Connections of renewable schemes to US electric distribution network (MW)
The table represents the amount of customer-owned renewable energy capacity installed on our distribution network across our US footprint. Given the variability and unpredictability of customer-driven projects, the Company does not presently have a MW target. Current targets primarily focus on regulatory compliance and customer need date attainment.

The Company interconnected 569 MW of distributed renewable energy resources in 2021/22 across our service territory, an all-time high and a 20% increase compared with the previous fiscal year. The Company interconnected a record number of distributed renewable energy applications in 2021/22 across our service territory, totalling to 13,400 applications.

The State of Massachusetts, New York and Rhode Island installed a record amount of distributed renewable energy capacity (216 MW, 244 MW and 109 MW respectively).

Cumulative low-carbon generation connected to our UK Electricity Distribution network (GW)
Low-carbon generation connected to our UK ED network, to date.

A total 10.2 GW distribution generation is connected to our network to date, of which 6.7 GW is low-carbon generation. This includes biofuels, wind, solar, hydro and storage.

Further reading:
You can find out additional detail to support some of these KPIs in our Responsible Business Report. This document can be found by visiting: nationalgrid.com/responsibility

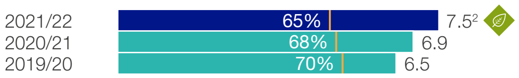
Non-financial measures continued

Strategy link	KPI and performance	Progress in 2021/22

Climate change – Scope 1, 2 and 3 emissions

This is a measure of our reduction of Scope 1, Scope 2 and Scope 3 emissions of the six primary Kyoto greenhouse gases. Our target is to reduce our combined Scope 1 and 2 greenhouse gas emissions by 80% by 2030, 90% by 2040 and to net zero by 2050, compared with our 1990 emissions of 21.6 million tonnes[1]. Furthermore, we target reducing our Scope 3 emissions by 37.5% by 2034 from 2019 emissions of 33.2 million tonnes.

The percentages in the chart below reflect a reduction in our Scope 1 and 2 emissions, from the relevant baseline. The figures are million tonnes of CO_2 equivalent.



The figures in the chart below represent our Scope 3 emissions and are million tonnes of CO_2 equivalent.

1. This 1990 baseline will be updated to reflect portfolio changes in 2022/23. The 1990 baseline does not include emissions from our newly acquired UK ED business (WPD).
2. PwC Assured Data: total Scope 1 and 2 emissions only.

Further reading
You can read more about the Task Force on Climate-related Financial Disclosures and our wider sustainability activities and performance on pages 70 – 83.

Our Scope 1 greenhouse gas emissions for 2021/22 equate to 5.3 million tonnes of CO_2 equivalent (2020/21: 4.7 million tonnes) and our Scope 2 emissions (including electricity line losses) equate to 2.2 million tonnes (2020/21: 2.2 million tonnes). This is a total of 7.5 million tonnes of CO_2 equivalent for Scope 1 and 2 emissions. These figures include line losses and are equivalent to an intensity of around 411 tonnes per £1 million of revenue (2020/21: 467 tonnes). Our Scope 3 emissions for 2021/22 were 30.0 million tonnes of CO_2 equivalent (2020/21: 28.9 million tonnes). 75% of Scope 1 and 2 emissions were in our US business, with 25% in the UK. For our Scope 3 emissions, 91% were in our US business with 9% in our UK business.

Our total energy consumption is 3,502 GWh where the UK and US are responsible for 2,341 GWh and 1,161 GWh respectively. This excludes fuels consumed for power generation in the US which is 19,610 GWh and system losses which are 11,117 GWh.

We measure and report in accordance with the World Resources Institute and World Business Council for Sustainable Development Greenhouse Gas Protocol. Scope 1, 2 and 3 emissions are subject to independent limited assurance against ISAE 3410 Assurance Engagements on Greenhouse Gas Statements. This data complies with the UK government's Streamlined Energy and Carbon Reporting (SECR) requirements. For further detail, please see page 68.

Network reliability

We aim to deliver reliability by planning our capital investments to meet challenging demand and supply patterns, designing and building robust networks, having risk-based maintenance and replacement programmes, and detailed and tested incident response plans. We measure network reliability separately for each of our business areas. The table below represents our performance across all our networks in terms of availability.

%	2021/22	2020/21	2019/20
UK Electricity Transmission	**99.99993**	99.99997	99.99997
UK Gas Transmission	**100.00000**	100.00000	99.99960
UK Electricity Distribution	**99.99469**	99.99455	99.99469
NE Electricity Transmission	**99.97636**	99.95428	99.91471
NY Electricity Transmission	**99.95261**	99.95429	99.98194
NE Electricity Distribution	**99.92725**	99.91239	99.95205
NY Electricity Distribution	**99.95681**	99.92788	99.93180
Interconnector availability			
IFA interconnector	**61.3**	95.4	91.4
IFA2 interconnector	**90.4**	96.5	—
BritNed interconnector	**80.4**	75.1	98.6
NSL interconnector	**63.3**	–	–
Nemo Link interconnector	**99.0**	99.2	96.1

In both the UK and US, we continued to maintain high levels of reliability on all our networks.

The fire at our IFA interconnector resulted in reduced capacity. The NSL interconnector started commercial operations in 2021/22.

Strategy link | **KPI and performance** | **Progress in 2021/22**

Customer satisfaction

We measure customer and stakeholder satisfaction, while also maintaining engagement with these groups and improving service levels.

	2021/22	2020/21	2019/20	Target
UK Electricity Transmission (/10)	**7.78**	8.4	8.2	7.78
UK Electricity System Operator (/10)	**7.3**	7.5	7.6	8.15
UK Electricity Distribution	**9.03**	9.18	9.11	—
UK Gas Transmission (/10)	**8.6**	8.2	8.0	7.9
NE residential — Customer Trust Advice survey (%)	**59.9**	63.3	55.0	—
NY residential — Customer Trust Advice survey (%)	**64.3**	68.1	63.1	—
Metering NPS score (index)	**+53**	+61	+40	—

2021/22 was the trial year for the UK ET Quality of Connections Incentive introduced by Ofgem. This measures key touchpoints throughout the Customer Connection journey and gives us the ability to target specific areas of improvement. UK ET and GT figures represent our baseline targets set by Ofgem for reward or penalty under RIIO-T2 (maximum score is 10). Prior year information is based on RIIO-T1. The change in target in 2021/22 reflects the new Incentive mechanism and change in methodology going forward.

The US metrics measure customers' sentiment with National Grid by asking customers their level of trust in our advice to make good energy decisions. These metrics are tied to the value customers feel they receive from National Grid.

The NPS score reported represents the UK metering business. Although this has seen a decline in 2021/22, action plans are in place to improve the score, going forward.

Group lost time injury (LTI) frequency rate (LTIs per 100,000 hours worked)

This is the number of worker LTIs per 100,000 hours worked in a 12-month period (including fatalities) and includes our employee and contractor population.

Target: <0.1 LTIs

As at 31 March 2022, our Group lost time injury frequency rate (LTIFR) was 0.13, which is higher than the Group target of 0.10. This is a combined employee and contractor LTI rate, which reflects our continued focus on encouraging good safety behaviours across the entire workforce. This result excludes WPD data which can be found on page 51. We are working to harmonise WPD's LTIFR records for data collection, with those of the Group.

We have had a number of disappointing months regarding incidents, the proportion of which relate to slips trips and falls and musculoskeletal strains and twists, where lack of concentration and complacency play a part. In recent months, we completed a review of safety and we are using the outputs to define a Group-wide programme to address these going forward. The programme will include focus on effective behavioural programmes.

The 2019/20 result has been restated. The change results from a review of data collation processes that identified a small anomaly regarding collation of hours worked information

Employee engagement index (%)

This is a measure of how engaged our employees feel, based on the percentage of favourable responses to questions repeated annually in our employee engagement survey. Our target is to increase engagement compared with the previous year.

We measure employee engagement through our employee engagement survey (EES) called Grid:voice.

Our engagement score was 81%. The result also includes WPD colleagues.

Workforce diversity (%) – ethnicity

We measure the percentage of ethnic minorities in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 65 — 66).

Our ethnic diversity data for 2021/22 does not include WPD colleagues. We are working to harmonise WPD's ethnicity records for data collection, with those of the Group. We will look to include WPD data next year.

Workforce diversity (%) – gender

We measure the percentage of women in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 65 — 66).

Our gender diversity data for 2021/22 has been updated to include WPD colleagues, following the acquisition of WPD.

Internal control and risk management

The Board is committed to protecting and enhancing our reputation and assets, while safeguarding the interests of our shareholders.

Managing our risks

National Grid is exposed to a variety of uncertainties that could have a material adverse effect on the Group's financial condition, our operational results, our reputation, and the value of our shares.

The Board oversees the Company's risk management and internal control systems; it sets and monitors the amount of risk the Company is prepared to seek or accept in pursuing our strategic objectives – our risk appetite. The Board assesses the Company's Group Principal Risks (GPRs) and monitors the risk management process through risk review and challenge sessions twice a year.

Risk management process

Risk strategy, policy and processes are set at Group level with the business responsible for implementation. Our Enterprise Risk Management (ERM) process provides a framework to identify, assess, prioritise, manage, monitor and report risks. It supports achieving our vision, strategy and business model as described on pages 4 – 7. This year we established a new risk governance structure with the creation of the Group Executive Ethics, Risk and Compliance Committee (Group ERC), along with equivalent committees in the business units, providing enhanced oversight and governance of risk top-down and bottom-up across the Group.

Our corporate risk profile contains the GPRs that the Board considers to be the main uncertainties currently facing the Group as we endeavour to achieve our strategic objectives. These top risks are agreed through discussions on the Group's risk profile with the Group ERC, Audit & Risk Committee and the Board. The risks are reported and debated with the Group ERC every two months, and with the Board at least every six months.

Ukraine-Russia

When the conflict began, we immediately established a crisis assessment team, of multi-disciplined leaders, to oversee and coordinate our response. We evaluated the immediate threat, analysed the risk profile across time horizons including scenario planning, and completed a strategic impact assessment. Although the immediate impact to National Grid was minimal, we increased our focus on risks and strengthened controls associated with cyber and physical security, security of energy supply, political and societal expectations, our supply chains, and sanction compliance.

We supported the UK government with advice on stabilising energy markets, reducing UK (and EU) dependence on Russian energy and developing the British Energy Security Strategy. We made charity donations and provided electrical equipment to support the Ukrainian people (including 500 diesel generator units).

The war, heightened energy bills, and changes to UK and EU energy policy have increased uncertainty across the energy sector. We are continually evaluating how we manage our risks, deliver for our customers, and fulfil our role as The Energy Transition Company.

Governance (Board and Audit & Risk Committee)

Establishes the strategy, operating model and risk framework. Evaluates reports.

Maturity

Business

First Line

The business units and functions that are responsible for taking, owning and managing risks. The First Line works closely with the Second Line to agree policies and risk limits that align with risk appetite.

Business Assurance

Second Line

The risk oversight teams provide independent oversight of risks, and establish policies and limits for the First Line. The assurance teams monitor risks and controls in support of the business. Assurance provides advice, but also effective challenge to the First Line.

Internal Audit

Third Line

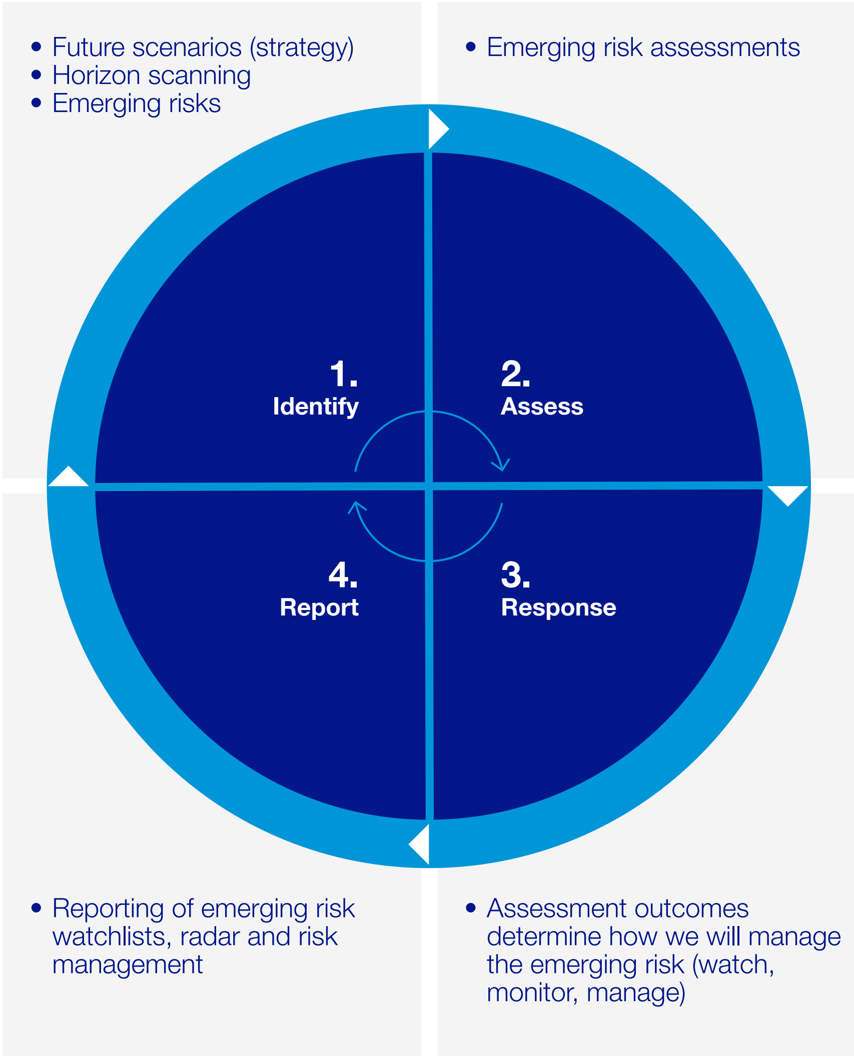
The Internal Audit function provides independent assurance over risks and controls. The Third Line function communicates directly with the Board and senior management regarding the effectiveness of risk and controls management.

Top-down, bottom-up assessment

Risk management activities take place at all levels of our organisation. Through a 'top-down, bottom-up' approach, all business areas identify the main risks to our business model and our business objectives. For each risk the effectiveness of our internal controls is assessed when calculating the financial, operational and reputational impacts, and how likely the risk is to materialise. Where current risk levels are outside of agreed target scores and our risk appetite, the business area identifies and takes actions to close the gap. Cascade and escalation mechanisms are in place throughout the organisation as appropriate for risk appetite, risks, controls and action plans.

Emerging risks

Emerging risks (ERs) are less defined than GPRs and typically do not pose an immediate threat. They are future focused, with greater uncertainty and are more difficult to quantify; however, they could threaten the future achievement of our strategy. Utilising future scenarios, horizon scanning and emerging risk assessments, we identify ERs that could potentially threaten the achievement of our strategic objectives in the future. Our ongoing ER process includes the identification, assessment, response, and reporting of ERs. Assessment includes the potential impact and velocity (time to impact) and our response is to then either watch, monitor or manage the risks that are reported to the Board and Group ERC using our emerging risk radar.



Changes during the year

The Company's risk profile has been developed drawing upon the most significant risks across our business profiles. Eight GPRs are now carried at Group ERC and Board level as detailed below. We reviewed all GPRs at least twice during the year, including an assessment of the key controls, the key risk indicators (KRIs), risk scores, alignment to risk appetite, and future mitigation actions. Through these reviews, our data management and disruptive forces risks were identified for de-escalation or retirement. There are no significant flags or hot spots that indicate a shift in risk exposure.

This year we split our principal climate change risk to establish a discrete transition climate change risk and incorporated the physical impacts from climate change on our assets (adaptation) into our significant disruption of energy risk, to ensure a clear focus on the actions needed to mitigate these different risks. The significant disruption of energy risk focuses on network reliability and resilience.

Following our agreement to sell a 60% stake in the UK GT business and completion of our preliminary integration activities associated with the acquisition of WPD, we retired our 'transaction-related' GPR.

Continued economic and political turmoil is significant, with years of global energy policy and strategy increasingly being affected. For National Grid, while our current risk levels are predominantly unchanged, the rapidly evolving situation and uncertainty require very careful monitoring and assessment of our GPRs and ERs. They have created an increase in the underlying (inherent) threat across our cyber, disruption of energy, political and societal expectations, and satisfactory regulatory risks, which we are continuously monitoring.

Our principal risks and uncertainties

Accepting that it is not possible to identify, anticipate or eliminate every risk that may arise, and that risk is an inherent part of doing business, our risk management process aims to provide reasonable assurance that we understand, monitor and manage the main uncertainties we face in achieving our objectives. This aim includes considering inherent risks, which in turn exist because of the nature of day-to-day operations in our industry, including financial risks, which exist because of our financing activities. Our GPRs, and a summary of actions taken by management, are provided on pages 30 – 32. We have provided an overview of the key inherent risks we face on pages 253 – 256, and specifically our key financial risks, which are incorporated within note 32 to the consolidated financial statements on pages 211 – 223. Risk trends reported on the pages that follow take into account controls and any additional mitigation actions, and may be influenced by internal or external developments.

Internal control and risk management continued

People risks

It is through the high-quality work of our employees that we will achieve our vision, respond to the changing needs of our stakeholders and create a competitive advantage. Building and fostering an engaged and talented team that has the knowledge, training, skills and experience to achieve our strategic objectives is vital to our success. We must attract, integrate and retain the talent we need at all levels of the business. These risks link to our strategic priority to 'empower colleagues for great performance'.

Risk

Capability and leadership

There is a risk that we do not have sufficient capability and leadership capacity.

***Risk trend: Neutral** (2020/21: Neutral)

Strategic priority link

* Risk trends are assessed to include any external factors outside our control as well as the strength and effectiveness of our controls and additional mitigations as reviewed by management up to 31 March 2022.

Actions taken by management

We are involved in a number of initiatives to help secure the future engineering talent we require, including industrial placements and internships in the UK and US, advanced and higher apprenticeships in the UK and a graduate development programme across both the US and UK. We are focused on ensuring we have high levels of diversity in these future talent pools. Our entry-level talent development schemes (graduate training and apprenticeships) are a potential source of competitive advantage in the marketplace.

We also continue to develop the rigour of our succession planning and development planning process, particularly at senior levels. We are now applying it deeper into the organisation as well as giving continued attention to the ethnic diversity of both our management and field force.

There are multiple activities underway to support this agenda, including 'neutral' talent and selection processes, development interventions and a global launch of our diversity, equality and inclusion (DEI) strategy and resources.

Financial risks

While all risks have a direct or indirect financial impact, financial risks are those which relate to financial objectives and performance. Financial risk management is a critical process used to make investment decisions and aims to maximise investment returns and earnings for a given level of risk. None of our financial risks are currently classified as GPR. Our key financial risks are described in note 32 to the financial statements on pages 211 – 223.

Strategic risks

Strategic risk is the risk of failing to achieve our overall strategic business plans and objectives, as well as failing to have the 'right' strategic plan. We intentionally accept some risk so we can generate the desired returns from our strategy.

Management of strategic risks focuses on reducing the probability that the inherent risk would materialise, while improving our ability to respond to the risk effectively should it occur. The risk owners, executive leaders and their teams develop and monitor ways to control the risks. These risks link to our strategic priorities of 'enable the energy transition for all' and 'deliver for customers efficiently'. The political climate and policy decisions of our regulators were key considerations in assessing our risks.

Risk

Climate change

There is a risk that we fail to identify and/or deliver upon actions necessary to address the transitional impacts (from a changing energy system) of climate change on our business and demonstrate our leadership of climate change in the energy sector.

Risk trend: Neutral (2020/21: Neutral)

Strategic priority link

Actions taken by management

Putting in place measures to:

- evolve our environmental sustainability metrics to better reflect our strategy, measure our impact and track our progress;
- address our GHG emissions and meet our sustainability commitments, including net zero by 2050, hosting our first environmental, social and governance (ESG) investor seminar, including the publication of our Responsible Business Charter setting out what responsibility means for us and our commitments and ambitions over the coming years – progress is reported in our annual Responsible Business Report;
- advocate for legislative and policy changes that advance decarbonisation, while proposing and delivering actions in the regions we operate to accelerate decarbonisation for the public and our customers. This work is wide-ranging from system improvements to supporting renewable generation connections, EV proposals, oil to gas/electricity heat conversions, energy efficiency, interconnectors, thought leadership and investment in new and emerging areas. Note that a number of the above measures also address the physical impacts of climate change on our operations;
- regularly assess the potential range of net zero pathways and future impact on our gas assets, including evaluation of new and evolving technologies and alternative fuel sources (e.g. hydrogen);
- work to include renewable gases in our US gas distribution networks;
- commit to making disclosures which are aligned with the Task Force on Climate-related Financial Disclosures (TCFD), including physical and transitional scenario analysis (see pages 70 – 83);
- support the charging infrastructure required for increased use of EVs;
- promote energy-efficiency programmes for customers in the US;
- facilitate decarbonisation in the US and UK, including zero-carbon operation of the GB electricity system through ESO in the UK; and
- continue work on programmes to develop skills in our current and future workforce.

Risk	Actions taken by management
Satisfactory regulatory outcomes **There is a risk that we fail to influence future energy policies and secure satisfactory regulatory agreements.** **Risk trend: Neutral** (2020/21: Neutral) **Strategic priority link**	In both the UK and the US, we strive to maintain a good understanding of the regulatory agenda and emerging issues, so that we can select and develop robust, public interest aligned responses in good time. Our reputation as a competent operator of important national infrastructure is critical to our ability to do this. We have plans and governance structures in place to address key regulatory proceedings such as UK price controls and US rate case filings. Ongoing work to support our regulatory relationships includes: • in the UK, influencing policy through a range of avenues, including inputting and responding to government consultations and other outputs, direct engagement with government departments and engagement with wider stakeholders such as parliamentarians, trade associations and third parties; • in the US, influencing policy through a range of avenues, including inputting and responding to legislative proposals, regulatory rulemakings and requests for information and other outputs; advocating with Congress and the Administration; and engagement with wider stakeholders such as trade associations, think tanks and other non-government organisations; • establishing a regulatory strategy focusing on a transition to performance-based regulation; • establishing US and UK regulatory steering committees; and • increased focus on understanding the needs and expectations of all our stakeholders through regulatory relationship surveys, investor surveys and review of media sentiment.
Political and societal expectations and perceptions **There is a risk that we do not position ourselves appropriately to political and societal expectations.** **Risk trend: Neutral** (2020/21: Increasing) **Strategic priority link**	Processes and resources are in place to review, monitor and influence perceptions of our business and our reputation by: • enhancing and consolidating our digital roadmap and social channels; • developing an internal forum to increase management of stakeholder and media reputational issues; • meeting our commitment to be a responsible business (see pages 60 – 69); and • promoting partnerships and proactive policy-change discussions across the jurisdictions where we operate. Considerations on emerging risks and horizon-scanning activities have also been addressed as part of financial and reputational impact assessments. These processes, along with twice-yearly Board strategy discussions, are reviewed regularly to ensure they continue to support our short- and long-term strategy. We regularly monitor and analyse market conditions, competitors and their potential.

Operational risks

Operational risks relate to the losses resulting from inadequate or failed internal processes, people and systems, or due to external events. These risks normally fall within our low-risk appetite level as there is no strategic benefit from accepting the risk, as it will not be in line with our vision and values.

Our operational principal risks have a low inherent likelihood of occurring. However, should an event occur, without effective prevention or mitigation controls, it would be likely to have a high level of impact. The risk owners, executive leaders and their teams develop and monitor actions to control the risks. Operational risks are managed through policy, standards, procedure-based controls, active prevention and monitoring. The operational risks link to our strategic priority to 'deliver for customers efficiently'. Principal risk assessment includes reasonable worst-case scenario testing, e.g. gas transmission pipeline failure, loss of licence to operate, cyber security attack, and the financial and reputational impact should a single risk or multiple risks materialise.

Risk	Actions taken by management
COVID-19 **There is a risk that we fail to respond to significant disruptive factors caused by the COVID-19 pandemic.** **Risk trend: Decreasing:** driven by the move to 'living with COVID-19' policies in the UK and US (2020/21: Decreasing) **Strategic priority link**	The COVID-19 pandemic affected several areas of our business, and we responded with a comprehensive plan, supporting the safety of our workforce and customers. • Mitigating procedures are now part of business as usual, with further improvements to the Crisis Management Framework (CMF) planned. • As COVID-19 rates reduce and the UK and US begin to move to an endemic status, we expect the risk will be retired as a GPR in 2022/23. Throughout 2021/22 we have monitored effects on our people, operations, strategic objectives, regulatory and political engagement, and financial implications. Our approach has been proactive to ensure our business can continue to serve its customers appropriately.

Internal control and risk management continued

Risk	Actions taken by management
Cyber security **There is a risk that we are unable to adequately anticipate and manage disruptive forces on our systems because of a cyber-attack, or poor recovery of critical systems or malicious external or internal parties.** **Risk trend: Increasing:** driven by increased threat from global geopolitical tensions (2020/21: Decreasing) **Strategic priority link**	We are committed to providing secure and resilient services and continue to commit significant resources and financial investment to maintaining the security of our systems and our data. Our approach is holistic and includes: • close partnerships with UK and US government agencies, including the Department for Business, Energy and Industrial Strategy (BEIS), the Centre for Protection of National Infrastructure (CPNI), the Department of Energy and Climate Change and the Department of Homeland Security, to understand risks and collaborate on risk management activities; • utilising good practice frameworks including the National Institute of Standards and Technology Cybersecurity Framework to ensure we can identify, protect, detect, respond and recover from cyber security threats (i.e. implementation of control frameworks across our security programmes in IT, operational technologies and Critical National Infrastructure (CNI); and • a strong focus on compliance with our regulatory obligations including the European Union Directive on Security of Network and Information Systems Regulation (the 'NIS Directive') and US North American Electric Reliability Corporation Critical Infrastructure Protection.
Asset failure **There is a risk of a catastrophic asset failure leading to a significant safety or environmental event.** **Risk trend: Neutral** (2020/21: Neutral) **Strategic priority link**	We continue to focus on risk mitigation actions designed to reduce the risk and help meet our business objectives, including the following: Ongoing preventative measures: • inspection and maintenance programmes including defect management; • UK and US winter-preparedness plans; • US storm-hardening programme; and • outage planning. Event response: • emergency response plans; • incident-management system; • disaster recovery; and • business continuity management. Embedded Group-wide process safety management system: • to make sure a rigorous and consistent framework of risk management exists across our high-hazard asset portfolio, with safety-critical assets clearly identified on the asset register. Implemented asset management and data management standards, including: • supporting guidelines to provide clarity on what is expected; and • a strong focus on what we need in place to keep us safe, secure and legally compliant. Established capability frameworks to make sure our workforce has the appropriate skills and expertise to meet the performance requirements in these standards.
Significant disruption of energy **There is a risk that we fail to predict and respond to a significant disruption of energy supply.** **Risk trend: Neutral** (2020/21: Increasing) **Strategic priority link**	We continue to apply a holistic approach to managing this risk through preventative mitigating actions to maintain network reliability, and timely and effective response plans. Key management actions include the following: Ongoing preventative measures: • inspection and maintenance programmes including defect management; • flood contingency plans for substations; • System Operator supply and demand forecasting; • UK and US winter-preparedness plans; • US gas-mains replacement programmes; • US storm-hardening programme; • outage planning; and • diversity of suppliers in our US gas procurement. Event response: • emergency response plans; • incident-management system; • disaster recovery; and • business continuity management. We have also reviewed market resource adequacy and balancing (where applicable). The short-term controls and investments needed for a resilient network are in place, but further work remains to be done to build our climate adaptation forecasting and control framework for the next decade.

Viability statement

The Board's consideration of the longer-term viability of the Company is an extension of our business planning process. The process includes financial forecasting, a strict risk management assessment and regular budget reviews and scenario planning incorporating industry trends, considering any emerging issues and economic conditions. Our business strategy aims to enhance our long-term prospects by making sure our operations and finances are sustainable.

Using our established top-down, bottom-up risk-management process, we monitor and challenge the GPRs facing the Company as described on pages 28 – 32. Over the year, the Board has considered the preventative and mitigating controls and risk management actions in place for the GPRs and discussed the potential financial and reputational impact of the GPRs on our ability to achieve the Company's business plan.

The assessment of the potential impact of our GPRs on the longer-term viability of the Company tests the significant solvency and liquidity risks involved in achieving our business objectives and priorities. Although it has considered adopting varying time periods, the Board believes five years is the most appropriate timeframe over which we should assess the long-term viability of the Company.

Our GPRs are subject to annual stress testing to assess whether we have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due (our continued viability). Viability is assessed considering the following criteria:

Reasonable worst-case scenario (RWCS)	A theoretical generic representation of a challenging yet plausible manifestation of a risk. The RWCS is considered worst-case once the high-impact, low-likelihood manifestations of a risk have been discounted.
Five-year horizon	A five-year assessment period represents a reasonable time horizon that coincides with our more detailed annual business plan models that reflect the UK price control periods. It is a period over which we can foresee and quantify reasonably accurately the potential impact of future risk events.
Cliff-edge risks	Cliff-edge risks are threats that would occur beyond the assessment period, have a reasonably certain impact and are sufficiently large to threaten our viability. We consult the business to look for significant and potential cliff-edge risks beyond the five-year period. If any such risks are identified, then an assessment period beyond five years is considered.
Financial and reputational risk capacity	We primarily assess our viability from the RWCS in two ways: financial risk capacity and reputational risk capacity.
Business plan stress testing	We assess the financial impact and financial risk capacity of our risk testing using the latest business plan.
Individual risk testing	For each principal risk we assess the potential financial and reputational impact.
Risk cluster testing	We also test for risk clusters. This is the impact of more than one of the principal risks materialising during the assessment period, or where the materialisation of one risk could exacerbate another.
Mitigation actions	Where a risk scenario would potentially exceed our financial risk capacity, we consider reasonable management mitigation.

We considered each GPR for inclusion within the testing and, where appropriate, identified and assessed a RWCS for impacts on operations or financial performance over the five-year assessment time period as detailed below:

Operational impacts

Scenario 1 A significant cyber-attack.
Scenario 2 Significant supply disruption event occurring in the US during peak season.
Scenario 3 A significant process safety gas pipeline failure in NY.

Performance impacts

Scenario 4 Poor outcome of future US rate case filings, and low performance under RIIO-T2 and RIIO-ED2.
Scenario 5 A breach of compliance rules for onshore competition in electricity transmission by ET. NY legislation and political relationships leading to loss of NY licences.
Scenario 6 Inability to recover NY/NE COVID-19-related bad debts through future regulatory agreements.
Scenario 7 Not meeting our net zero targets.

In addition to testing individual GPRs, we also considered the impact of a cluster of the GPRs materialising over the assessment period. By assessing the interconnectivities of our GPRs we have selected the risk cluster RWCS that poses the most significant threat to our viability. Our cluster RWCS is a catastrophic cyber-attack, contributing to a catastrophic asset failure and a significant safety event, causing a significant disruption of energy, and ultimately to a loss of our regulatory licences. The scenario is assumed to occur in our US NY gas businesses.

We considered the reputational and financial impacts for each scenario. The GPR relating to leadership capacity was not tested, as the Board did not feel this would threaten the viability of the Company within the five-year assessment period.

The Board assessed our reputational and financial headroom and reviewed GPR testing results using that headroom. The testing of risk clusters also included an assessment of the impact upon the business plan. No GPR or cluster was found to have an impact on the viability of the Company over the five-year assessment period. Preventative and mitigating controls in place to minimise the likelihood of occurrence and/or financial and reputational impact are contained within our assurance system.

In assessing the impact of the GPRs on the Company, the Board has considered the fact that we operate in stable markets and the robust financial position of the Group, including the ability to sell assets, raise capital and suspend or reduce the payment of dividends.

Each Director was satisfied that they had sufficient information to judge the viability of the Company. Based on the assessment described above and on pages 28 – 32 the Directors have a reasonable expectation that the Company will be able to continue operating and meet its liabilities over the period to May 2027.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Cyber security: there is a risk that we are unable to adequately anticipate and manage disruptive forces on our systems because of a cyber-attack, poor recovery of critical systems or malicious external or internal parties.	**Scenario 1** – A significant cyber-attack. Included in the risk cluster testing. £1.5 billion total cost impact.	**The Board reviewed and discussed cyber security reports:** • as part of digital immersion sessions in September 2021 and March 2022, which included the conflict in Ukraine and risk associated with cyber security posed by Russia. **The Audit & Risk Committee reviewed and discussed cyber security reports:** • as part of a cyber risk deep dive at the Audit & Risk Committee in September 2021 and March 2022, including IAM updates.
Significant disruption of energy: there is a risk that we fail to predict and respond to a significant disruption of energy supply.	**Scenario 2** – Significant supply disruption event occurring in the US during peak season. Included in the cluster testing. £50 million total cost impact.	**Two Board strategy sessions were held during the year covering:** • energy transition in June 2021; • the CEO's update on UK and US gas markets, amidst rising prices in October 2021; and • a UK businesses overview in November 2021. **In addition, the following occurred:** • The Finance Committee conducted a review of the black-swan event (Texas). • The Audit & Risk Committee conducted a Risk Deep Dive in March 2022.
Asset failure: there is a risk of a catastrophic asset failure leading to a significant safety or environmental event.	**Scenario 3** – A significant process safety gas pipeline failure in the US. Included in the cluster testing. £3.14 billion total cost impact.	**The Board reviewed and evaluated the current safety performance of the Company at each meeting during the year. In addition, there was:** • an ET performance update in July 2021; • a US Business overview evaluation in September 2021; • a UK Businesses overview in November 2021, including WPD; and • a leading indicators deep dive in May 2022. **Furthermore:** • the Safety & Sustainability Committee conducted an Annual Safety Review in July 2021; and • the IFA fire investigation was reviewed and discussed at the Safety & Sustainability Committee; with the insurance items discussed at the Finance Committee.
COVID-19: there is a risk that we fail to respond to significant disruptive factors caused by the COVID-19 pandemic.	**Scenario 6** – Inability to recover US COVID-19-related bad debts through future regulatory agreements. $369 million net COVID-19 bad debt impact as at 31 March 2022.	• Board briefings including weekly update from the Chief Executive (CEO) and Chief Financial Officer (CFO) on our COVID-19 impacts and response. • COVID-19 updates on operational issues, people absences and wellbeing to the Board; and Finance Committee consideration of liquidity. • Review of our business continuity planning response and effectiveness of the crisis-management controls through a management exercise.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Satisfactory regulatory outcomes: there is a risk that we fail to influence future energy policies and secure satisfactory regulatory agreements.	**Scenario 4** – Poor outcome of future US rate case filings, and low performance under RIIO-T2 and RIIO-ED2. £500 million cost impact from lower average allowed RoE in US rate cases. £780 million cost impact from nil outperformance under RIIO-T2 and RIIO-ED2.	**The Board received updates and performed reviews in relation to:** • the CMA appeal; • WPD Regulatory strategy; • NY Monitor; • RIIO-T2 overview; • US business overview evaluation; • UK and US gas market amidst rising prices; • the UK regulatory landscape and regulatory framework; and • ESO future outlook.
Climate change: there is a risk that we fail to identify and/or deliver upon actions necessary to address the transitional impacts (from a changing energy system) of climate change on our business and demonstrate our leadership of climate change in the energy sector.	**Scenario 7** – Not meeting our net zero targets. No immediate financial impacts; various reputational impacts were considered.	**The Board and its Committees discussed sustainability metrics and strategy to reflect and track our impact and progress, including:** • a bi-annual review of GPR climate change and climate risk, plus the energy policy environment in the UK; • ESG discussions around energy transition and climate change, including investor expectations; • a discussion on the climate resolution at the 2021 AGM; • disclosures in line with the TCFD recommendations; • the review and approval of the publication of the Responsible Business Charter; • a review of GHG emissions performance by the Safety & Sustainability Committee; and • active participation as a Principal Partner in COP26.
Political and societal expectations and perceptions: there is a risk that we do not position ourselves appropriately to political and societal expectations.	**Scenario 5** – A breach of compliance rules for onshore competition in electricity transmission by UK ET. NY legislation and political relationships leading to loss of NY licences. £400 million UK fines and penalties. Reasonable (rate base) consideration for US assets.	**The Board received updates and reviews in relation to:** • Western Link outcomes; • the NY Monitor update and review meeting with NY Monitor; • the US business overview evaluation; • Audit & Risk Committee-led meetings which were specific to the Federal Investigation (Fraud and Bribery) during July to October 2021; • COP26, leading up to the event in Glasgow; • the Bid Defence Plan; • the UK political landscape; • UK and US gas markets amidst rising prices; • a deep dive on the energy policy environment in the UK; and • the short-, medium- and long-term impacts of the war in Ukraine.
Capability and leadership: there is a risk that we do not have capability and leadership capacity.	**N/A**	**Capability and leadership is an integral part of the Board's vision and strategy. The Board's approach included:** • the approval of Board Committee changes which were made effective from 1 September 2021; • regular leadership updates throughout the year, including a deep dive on leadership in September 2021; • bi-annual updates on people matters; • the People & Governance (P&G) Committee's consideration of the structure, size and composition of the Board and Committees (the P&G Committee also led on Board succession planning – identifying and proposing individuals to be Directors of the Company and establishing the criteria for new positions); and • a review of the Diversity Policy.

Financial review

1 Revenue and profits

The vast majority of our revenues are set in accordance with our regulatory agreements (see pages 245 – 252), and are calculated based on a number of factors including investment in network assets, performance on incentives, allowed returns on equity and cost of debt, and customer satisfaction.

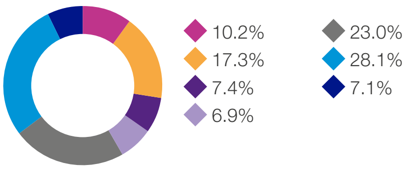
2 Cash flows

Our ability to convert revenue to profit and cash is important. By managing our operations efficiently, safely and for the long term, we generate substantial operating cash flows. Coupled with long-term debt financing, as well as additional capital generated through the take-up of the shareholder scrip dividend option during periods of higher investment, we are able to invest in growing our asset base and fund our dividends.

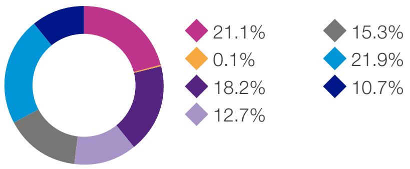
3 Investment

We invest efficiently in our networks to achieve strong and sustainable growth in our regulated asset base over the long term. We also invest in assets in our non-regulated businesses. We continually assess, monitor and challenge investment decisions so we can continue to run safe, reliable and cost-effective networks.

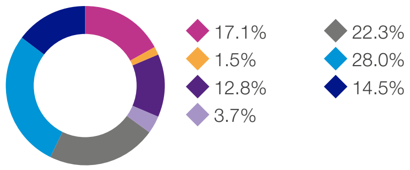
Revenue (%)



Statutory operating profit (%)



Capital investment (%)



UK Electricity Transmission · UK Electricity System Operator · UK Electricity Distribution · UK Gas Transmission · New England · New York · National Grid Ventures and Other activities

Capital allocation

Our capital allocation is determined by the need to make the investments and outputs required under our regulatory frameworks in the UK and US (which accounted for over 90% of our capital expenditure in 2021/22), balanced with the desire to invest in our other businesses, such as NGV and NGP, which may achieve higher growth. The investments we make seek a balance between growth through investments, such as the WPD acquisition, investments in our higher-growth NGV businesses and through NGP, and the continued growth of our steady cash flow core regulated operations, while ensuring we continue to deliver a consistent and reliable dividend to our shareholders.

Summary of Group financial performance

Performance management framework

In managing the business, we focus on various non-IFRS measures which provide meaningful comparisons of performance between years, monitor the strength of the Group's balance sheet as well as profitability and reflect the Group's regulatory economic arrangements. Such alternative and regulatory performance measures are supplementary to, and should not be regarded as a substitute for, IFRS measures, which we refer to as statutory results. We explain the basis of these measures and, where practicable, reconcile these to statutory results in 'Other unaudited financial information' on pages 268 – 279. Our regulatory performance measures have only been calculated for the total Group (or individual entities where relevant), as these are not based on IFRS measures.

Specifically, we measure the financial performance of the Group from different perspectives:

- **Capital investment and asset growth:** Currently we expect to invest c. £7 billion per year.
- **Accounting profit:** In addition to statutory IFRS measures we distinguish between adjusted results, which exclude exceptional items and remeasurements, and underlying results, which further take account of: (i) volumetric and other revenue timing differences arising from our regulatory contracts; and (ii) major storm costs, which are recoverable in future periods, neither of which give rise to economic gains or losses. In doing so, we intend to make the impact of such items clear to users of the financial information in this Annual Report.
- **Economic profit:** Measures such as Return on Equity (RoE) and Value Added take account of the regulated value of our assets and of our regulatory economic arrangements to illustrate the returns generated on shareholder equity.
- **Balance sheet strength:** Maintaining a strong investment grade credit rating allows us to finance our growth ambitions at a competitive rate. Hence, we monitor credit metrics used by the major rating agencies to ensure we are generating sufficient cash flow to service our debts.

This balanced range of measures of financial well-being informs our dividend policy, which from 2021/22 is to grow the dividend per share at least in line with rate of CPIH each year.

Summary of Group financial performance for the year ended 31 March 2022

Financial summary for continuing operations

Last year we announced that we would make a strategic pivot towards higher growth electricity. On 14 June 2021, we acquired Western Power Distribution plc (WPD) an electricity distribution business based in the South West of the UK. Our planned disposals of the Narragansett Electric Company (NECO) business in Rhode Island and UK Gas Transmission (and metering) are expected to complete during 2022/23. The combination of these transactions has resulted in a change to the Group's structure and a new organisational structure has been implemented.

As a result, the operating segments reported to our Board have changed from those reported in 2020/21. Our segmental reporting for continuing operations is aligned with our five regulated business units, along with National Grid Ventures (NGV) and Other non-regulated businesses. The UK Electricity System Operator is now separately reported from UK Electricity Transmission. The acquisition of WPD introduces a UK Electricity Distribution segment. Our US Regulated segment has been divided between the jurisdictions of New England and New York, to align more closely with our regulatory framework. Lastly, as part of the new organisational structure, our generation business on Long Island in New York is now reported as part of NGV.

The expected disposal in the third quarter of 2022/23 of a majority stake in our UK Gas Transmission businesses (including metering, which was previously reported within NGV) means that this business is now classified as a discontinued operation. The expected disposal of NECO does not meet the definition of a discontinued operation under IFRS, so is reported within New England as part of continuing operations. Both UK Gas Transmission and NECO are classified as held for sale in the balance sheet as at 31 March 2022. NECO was also reported as held for sale in the comparative balance sheet at 31 March 2021.

Unless otherwise stated, the following commentary and analyses are for the continuing operations of the Group (as defined by IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations'). Within the Financial review, 'Total Group' refers to results and balances including discontinued or held for sale businesses (as defined by IFRS 5). Where applicable, comparative amounts have been restated accordingly.

Financial summary for continuing operations

£m	2021/22	2020/21	Change
Statutory results:			
Operating profit	**4,371**	2,401	82%
Profit after tax	**2,183**	1,304	67%
Earnings per share (pence)	**60.6p**	37.0p	64%
Dividend per share (pence), including proposed final dividend	**50.97p**	49.16p	4%
Capital expenditure	**6,185**	4,727	31%
Alternative performance measures:			
Underlying operating profit	**3,992**	2,688	49%
Underlying profit after tax	**2,351**	1,493	57%
Adjusted earnings per share (pence)	**61.4p**	36.7p	67%
Underlying earnings per share (pence)	**65.3p**	42.4p	54%
Underlying dividend cover	**1.3**	0.9	49%
Capital investment	**6,739**	4,843	39%

Financial summary total – including discontinued operations

£m	2021/22	2020/21	Change
Statutory results:			
Operating profit	**5,008**	2,895	73%
Profit after tax	**2,354**	1,641	43%
Earnings per share (pence)	**65.4p**	46.6p	40%
Capital expenditure	**6,446**	4,931	31%
Alternative performance measures:			
Adjusted operating profit, pre timing and major storm costs[1]	**4,726**	3,283	44%
Adjusted profit after tax, pre timing and major storm costs[1]	**2,760**	1,911	44%
Adjusted earnings per share (pence)	**71.0p**	46.4p	53%
Adjusted earnings per share, pre timing and major storm costs (pence)	**76.7p**	54.2p	42%
Capital investment	**7,000**	5,047	39%
Retained cash flow/adjusted net debt	**8.9%**	6.6%	230bps
Regulatory performance measures:			
Asset growth	**8.7%**	5.6%	310bps
Group Return on Equity[2]	**11.4%**	10.6%	80bps
Value Added	**3,833**	1,808	112%
Regulatory gearing	**81%**	65%	1600bps

1. Comparable to 'underlying' results, but including discontinued operations.
2. Group RoE methodology amended in 2021/22 to calculate accretion charge on inflation-linked debt at long-run inflation rates. This provides alignment to treatment of RAV indexation in the metric. Prior year comparatives have not been restated.

Statutory results from continuing operations of £2,183 million were up £879 million from the prior year. Statutory EPS for continuing operations of 60.6p was 23.6p higher than the prior year. The Group's statutory results for the year were impacted by net exceptional charges of £320 million (2021: £52 million net charge) and remeasurement gains of £292 million (2021: £62 million gains). Our 'adjusted' results exclude exceptional items, but are impacted by revenue timing and major (deferrable) storm costs, as explained on page 39. Our 'underlying' results are presented excluding the total impact of exceptional items, remeasurements, timing and major storm costs. A reconciliation between these alternative performance measures and our statutory performance is detailed on page 38 and in the section 'Other unaudited financial information' on pages 268 – 279.

Underlying operating profit for continuing operations was up 49%, driven by the acquisition of WPD, improved performance in NGV, NG Partners and UK Electricity Transmission, along with higher property sales, no depreciation on NECO in New England (held for sale treatment) and a lower adverse impact from COVID-19 compared with 2020/21. Our joint ventures and associates contribution increased (mainly UK interconnector revenues). These factors were partly offset by higher net financing costs from both inflation on RPI-linked debt and interest on a higher level of borrowings related to the acquisition of WPD. Other interest was favourable year-on-year. The tax charge was higher driven by increased taxable profits and additional deferred tax charges in the UK and the US. Underlying profit after tax increased by 57% and resulted in a 54% increase in underlying EPS to 65.3p.

Profit after tax for discontinued operations of £171 million was down £166 million compared with the prior year principally due to exceptional charges related to deferred tax from the change in the UK corporation tax rate, higher interest costs driven by inflation, partly offset by cessation of depreciation following held for sale treatment and higher revenues under RIIO-2.

Capital investment of £7.0 billion (including discontinued operations of £0.3 billion) along with RAV indexation helped increase our asset growth to 8.7%. We delivered Value Added (our measure of economic profit) of £3.8 billion (including UK Gas Transmission) in 2021/22, significantly higher than in 2020/21 mainly as a result of higher RAV indexation. Group RoE of 11.4% was up from 10.6% for 2020/21. RCF/net debt at 8.9% was higher than 6.6% in 2020/21. The recommended full-year dividend per share of 50.97p is in line with the new policy announced in March 2021 of increasing in line with UK CPIH inflation and is covered 1.3 times by underlying EPS.

Profitability and earnings

The table below reconciles our statutory profit measures for continuing operations, at actual exchange rates, to adjusted and underlying versions.

Reconciliation of profit and earnings from continuing operations

	Operating profit			Profit after tax			Earnings per share		
£m	2021/22	2020/21	Change	2021/22	2020/21	Change	2021/22	2020/21	Change
Statutory results	**4,371**	2,401	82%	**2,183**	1,304	67%	**60.6p**	37.0p	64%
Exceptional items	**(166)**	60		**320**	52		**8.9p**	1.5p	
Remeasurements	**(392)**	(34)		**(292)**	(62)		**(8.1)p**	(1.8p)	
Adjusted results	**3,813**	2,427	57%	**2,211**	1,294	71%	**61.4p**	36.7p	67%
Timing	**16**	111		**19**	88		**0.5p**	2.5p	
Major storm costs	**163**	150		**121**	111		**3.4p**	3.2p	
Underlying results	**3,992**	2,688	49%	**2,351**	1,493	57%	**65.3p**	42.4p	54%

Reconciliation of profit and earnings from discontinued operations

Statutory operating profit for discontinued operations of £637 million (2021: £494 million) includes £17 million of exceptional items (2021: £5 million) and timing under-recovery of £80 million (2021: £96 million). Depreciation of the assets in UK Gas Transmission was ceased following reclassification to held for sale (in accordance with IFRS 5) on 1 September 2021. Tax on exceptional items for discontinued operations comprises a £1 million credit in respect of other exceptional items (2021: £nil) and a deferred tax exceptional charge related to the change in the UK corporation tax rate of £145 million (2021: £nil). In our adjusted results for discontinued operations, tax on timing was £15 million (2021: £18 million). Statutory earnings per share from discontinued operations was 4.8p (2021: 9.6p) and underlying earnings per share from discontinued operations was 11.4p (2021: 11.8p).

Exceptional income/(expense) from continuing operations

	Impact on operating profit		Impact on profit after tax		Impact on EPS	
£m	2021/22	2020/21	2021/22	2020/21	2021/22	2020/21
Environmental insurance recovery and change in environmental provisions	**38**	14	**28**	11	**0.8p**	0.3p
Transaction and separation costs	**(223)**	(24)	**(204)**	(24)	**(5.7)p**	(0.7)p
New operating model implementation costs	**(66)**	(50)	**(52)**	(39)	**(1.4p)**	(1.1)p
Net gain on disposal of St William joint venture and release of deferred income	**417**	–	**366**	–	**10.1p**	–p
Deferred tax arising on the change in UK corporation tax rate	**–**	–	**(458)**	–	**(12.7p)**	–p
Total	**166**	(60)	**(320)**	(52)	**(8.9)p**	(1.5)p

This year we have classified the following items as exceptional:

- **Environmental insurance recovery:** a £38 million gain related to an insurance receivable for site remediation costs related to our US Superfund sites environmental provision, recorded as exceptional in line with the treatment of the related costs;
- **Transaction and separation costs:** £223 million of transaction costs associated with the acquisition of Western Power Distribution (WPD), the sale of NECO and the sale of UK Gas Transmission (2021: £24 million);
- **New operating model implementation costs and efficiency programme:** £66 million of costs in relation to the design and implementation of our new operating model that is designed to transform our operating framework (2021: £50 million);
- **Gain on disposal of St William property joint venture and release of deferred income:** £228 million gain on the divestment of a 50% interest in an equity investment in March 2022 along with release of £189 million of deferred income arising on historical sales made to that joint venture; and
- **Change in UK corporation tax rate:** a £458 million deferred tax charge for the increase in UK corporation tax rate from 19% to 25% which takes effect from 1 April 2023.

In the prior year we also classified as exceptional the £14 million credit for partial release of US environmental provisions previously treated as exceptional.

We also exclude certain unrealised gains and losses on mark-to-market financial instruments from adjusted profit; see notes 5 and 6 to the financial statements for further information. Net remeasurement gains of £392 million on commodity contract derivatives (i.e. 'mark-to-market' movements on derivatives used to hedge the cost of buying wholesale gas and electricity on behalf of our US customers) occured during the year, in addition to net remeasurement gains of £59 million on financing-related instruments (used to hedge interest and currency risk on net borrowings); along with a further £56 million of remeasurement losses related to our share of post-tax results of joint ventures.

The expected future exceptional costs related to the new operating model and cost efficiency programme are expected to be in the region of £100 million.

Exceptional items for discontinued operations

Discontinued operations includes an exceptional item of £17 million (2021: £5 million) related to cost efficiency programme and separation costs ahead of the sale of the UK Gas Transmission and Metering business.

Timing over/(under)-recoveries

In calculating underlying profit, we exclude regulatory revenue timing over- and under-recoveries and major storm costs (as defined below). Under the Group's regulatory frameworks, most of the revenues we are allowed to collect each year are governed by regulatory price controls in the UK and rate plans in the US. If more than this allowed level of revenue is collected, an adjustment will be made to future prices to reflect this over-recovery; likewise, if less than this level of revenue is collected, an adjustment will be made to future prices in respect of the under-recovery. We also collect revenues from customers and pass these on to third parties (e.g. NYSERDA). These variances between allowed and collected revenues and timing of revenue collections for pass-through costs give rise to over- and under-recoveries.

The following table summarises management's estimates of such amounts for the two years ended 31 March 2022 for continuing and discontinued operations. All amounts are shown on a pre-tax basis and, where appropriate, opening balances are restated for exchange adjustments and to correspond with subsequent regulatory filings and calculations. All amounts are translated at the current year average exchange rate of $1.35:£1.

£m	2021/22	2020/21[1]
Balance at start of year (restated)	43	259
In-year (under)/over-recovery – continuing operations	**(16)**	(111)
In-year (under)/over-recovery – discontinued operations	**(80)**	(96)
Balance at end of year	**(53)**	52

1. March 2021 balances restated for segmental changes and to correspond with 2020/21 regulatory filings and calculations.

In 2021/22, we experienced timing under-recoveries of £85 million in UK Electricity Transmission, over-recoveries of £22 million in UK Electricity Distribution, under-recoveries of £47 million in UK Electricity System Operator, under-recoveries of £32 million in New England and over-recoveries of £126 million in New York. In calculating the post-tax effect of these timing recoveries, we impute a tax rate, based on the regional marginal tax rates, consistent with the relative mix of UK and US balances.

Major storm costs

We also take account of the impact of major storm costs in the US where the aggregate amount is sufficiently material in any given year. Such costs (net of certain deductibles and allowances) are recoverable under our rate plans but are expensed as incurred under IFRS. Accordingly, where the net total incurred cost exceeds $100 million in any given year, we exclude the net costs from underlying earnings. In 2021/22, we incurred deferrable storm costs, which are eligible for future recovery of $220 million (2021: $201 million).

Segmental operating profit

The tables below set out operating profit on adjusted and underlying bases.

Adjusted operating profit

£m	2021/22	2020/21	Change
UK Electricity Transmission	**1,067**	1,094	(2)%
UK Electricity Distribution	**909**	—	n/a
UK Electricity System Operator	**7**	(60)	(112)%
New England	**743**	611	22%
New York	**780**	665	17%
NGV and Other activities	**307**	117	162%
Continuing operations	**3,813**	2,427	57%
Discontinued	**654**	499	31%
Total	**4,467**	2,926	53%

Underlying operating profit

£m	2021/22	2020/21	Change
UK Electricity Transmission	**1,152**	1,052	10%
UK Electricity Distribution	**887**	—	n/a
UK Electricity System Operator	**54**	70	(23)%
New England	**886**	727	22%
New York	**706**	722	(2)%
NGV and Other activities	**307**	117	162%
Continuing operations	**3,992**	2,688	49%

Statutory operating profit increased in the year, primarily as a result of the 9.5 months' contribution from WPD, the exceptional gain on disposal of our St William joint venture, higher UK Electricity Transmission revenues, increased interconnector revenues and fair value gains in NG Partners, no depreciation of our Rhode Island business and a lower adverse impact from COVID-19 compared with 2020/21. These benefits were partly offset by higher exceptional charges than in 2020/21 along with adverse year-on-year movements on timing recoveries. The reasons for the movements in underlying operating profit are described in the segmental commentaries below. Unless otherwise stated, the discussion of performance in the remainder of this Financial review focuses on underlying results.

UK Electricity Transmission

£m	2021/22	2020/21	Change
Revenue	**2,035**	1,974	3%
Operating costs	**(980)**	(894)	10%
Statutory operating profit	**1,055**	1,080	(2)%
Exceptional items	**12**	14	(14)%
Adjusted operating profit	**1,067**	1,094	(2)%
Timing	**85**	(42)	(302)%
Underlying operating profit	**1,152**	1,052	10%
Analysed as follows:			
Net revenue	**1,883**	1,823	3%
Regulated controllable costs	**(227)**	(192)	18%
Post-retirement benefits	**(26)**	(32)	(19)%
Other operating costs	**(55)**	(44)	25%
Depreciation and amortisation	**(508)**	(461)	10%
Adjusted operating profit	**1,067**	1,094	(2)%
Timing	**85**	(42)	(302)%
Underlying operating profit	**1,152**	1,052	10%

UK Electricity Transmission statutory operating profit was £25 million lower in the year, mainly due to adverse year-on-year timing movements. In 2021/22, there were £12 million of exceptional costs related to establishing our new operating model (2021: £14 million). Timing under-recoveries of £85 million in 2021/22 compared with over-recoveries of £42 million in 2020/21 are primarily due to the under-recovery of pass-through costs, inflation true-ups and last year's collection of prior period under-recoveries, partly offset by an over-collection of Transmission Network Use of System (TNUoS) revenues in the current year.

Adjusted operating profit reduced by £27 million (2%), but this included £127 million adverse year-on-year timing movements. Underlying operating profit increased by 10%. Net revenues (adjusted for timing) were higher under the first year of RIIO-T2, with indexation and lower totex capitalisation rates (increased 'fast money') offsetting the lower returns in the current year. In the prior year, revenue was impacted by an adverse MOD adjustment in the final year of the RIIO-T1 price control.

Regulated controllable costs were higher from additional workload agreed for RIIO-T2, inflationary increases and the non-recurrence of favourable credits in 2020/21, which more than offset 2021/22 efficiency savings and the absence of prior period COVID-19-related costs. Other costs were higher, mainly relating to a £10 million settlement related to Western Link.

The increase in depreciation and amortisation reflects continued investment. In 2021/22, a benefit arising from the review of assets' useful economic lives was broadly offset by asset write-offs.

UK Electricity Distribution

£m	2021/22	2020/21	Change
Revenue	**1,482**	–	n/a
Operating costs	**(573)**	–	n/a
Statutory operating profit	**909**	–	n/a
Exceptional items	**–**	–	n/a
Adjusted operating profit	**909**	–	n/a
Timing	**(22)**	–	n/a
Underlying operating profit	**887**	–	n/a
Analysed as follows:			
Net revenue	**1,357**	–	n/a
Regulated controllable costs	**(180)**	–	n/a
Post-retirement benefits	**(24)**	–	n/a
Other operating costs	**(86)**	–	n/a
Depreciation and amortisation	**(158)**	–	n/a
Adjusted operating profit	**909**	–	n/a
Timing	**(22)**	–	n/a
Underlying operating profit	**887**	–	n/a

'UK Electricity Distribution' refers to WPD, which was acquired on 14 June 2021. The results presented are for the 9.5-month period of ownership and no amounts for WPD are included in the consolidated results of the Group for year ended 31 March 2021.

Statutory operating profit of £909 million for the 9.5 months included £22 million of timing over-recoveries of 'Distribution Use of System' (DUoS) volumes and the adverse impact on our revenues from UK corporation tax capital allowance 'super deductions', partly offset by an under-collection of earned incentives and inflation true-ups. Excluding timing, underlying profit was £887 million for the 9.5 months of ownership since June 2021. Controllable costs and post-retirement benefit costs of £204 million were lower than the estimated equivalent period in the prior year, mainly as a result of the disruption arising from COVID-19 during 2020/21. These costs include engineering management costs, supporting our customers and the maintenance of our four electricity distribution networks, including activities such as vegetation management in order to prevent line damage. Depreciation and amortisation charges include amortisation of fair value adjustments applied to property, plant and equipment (PP&E) at the date of acquisition.

UK Electricity System Operator

£m	2021/22	2020/21	Change
Revenue	**3,455**	2,018	71%
Operating costs	**(3,450)**	(2,071)	67%
Statutory operating profit/(loss)	**5**	(53)	(109)%
Exceptional items	**2**	(7)	(129)%
Adjusted operating profit/(loss)	**7**	(60)	(112)%
Timing	**47**	130	(64)%
Underlying operating profit	**54**	70	(23)%
Analysed as follows:			
Net revenue	**240**	107	124%
Controllable costs	**(129)**	(99)	30%
Post-retirement benefits	**(16)**	(13)	23%
Other operating costs	**(5)**	(9)	(44)%
Depreciation and amortisation	**(83)**	(46)	80%
Adjusted operating profit/(loss)	**7**	(60)	(112)%
Timing	**47**	130	(64)%
Underlying operating profit	**54**	70	(23)%

UK Electricity System Operator statutory operating profit increased £58 million in the year. In 2021/22 there were £2 million of exceptional costs related to establishing our new operating model, compared to a £7 million credit related to release of previous reorganisation provisions in the prior year. Timing under-recoveries of £47 million in 2021/22 compared with under-recoveries of £130 million in the prior year. Timing in 2021/22 predominately included £44 million for the Balancing Services Use of System (BSUoS) price cap deferral support scheme compared with £109 million in 2020/21 for TNUoS demand under-recovery during COVID-19 and £22 million for the BSUoS Covid Support Scheme.

Adjusted operating profit increased by £67 million almost entirely driven by the £83 million year-on-year timing movement, partly offset by asset impairments. Excluding the impact of timing, underlying operating profit decreased by 23%. Net revenue (adjusted for timing) was £50 million higher, reflecting higher revenues under RIIO-2 related to additional workload agreed under the new price control and higher earned incentives. Regulated controllable costs including pensions were £33 million higher in total, in line with the expected higher volume of work required to deliver the ambitious RIIO-2 business plan. Depreciation and amortisation was £37 million higher as a result of our investment in transformational IT systems, in addition to asset impairments for work that may no longer be required.

New England

£m	2021/22	2020/21	Change
Revenue	**4,550**	4,214	8%
Operating costs	**(3,786)**	(3,600)	5%
Statutory operating profit	**764**	614	24%
Exceptional items	**80**	8	900%
Remeasurements	**(101)**	(11)	818%
Adjusted operating profit	**743**	611	22%
Timing	**32**	11	191%
Major storm costs	**111**	105	6%
Underlying operating profit	**886**	727	22%
Analysed as follows:			
Net revenue	**2,500**	2,430	3%
Regulated controllable costs	**(813)**	(810)	–
Post-retirement benefits	**(40)**	(43)	(7)%
Bad debt expense	**(45)**	(127)	(65)%
Other operating costs	**(494)**	(450)	10%
Depreciation and amortisation	**(365)**	(389)	(6)%
Adjusted operating profit	**743**	611	22%
Timing	**32**	11	191%
Major storm costs	**111**	105	6%
Underlying operating profit	**886**	727	22%

New England statutory operating profit increased by £150 million, as a result of the £90 million year-on-year favourable movements in commodity contract remeasurements (which are passed on to customers), mostly offset by exceptional charges booked in the current year for the disposal of our Rhode Island business and the cost efficiency programme. In 2020/21, exceptional charges were lower, comprising £8 million of costs related to establishing our new operating model and transaction costs. Timing under-recoveries of £32 million in 2021/22 compared with timing under-recoveries of £11 million in 2020/21, related to revenue decoupling and recovery of cost on our energy efficiency programme. Storm costs (deferrable and non-deferrable) were broadly flat year-on-year, with a lower number of storm events occurring during 2021/22, but a higher 'per storm' cost. These factors, along with an adverse impact from COVID-19 in the prior year and exchange movements, resulted in an overall increase in statutory operating profit and adjusted operating profit.

Adjusted operating profit increased by £132 million (22%), including £21 million year-on-year adverse timing under-recoveries. Major storm costs of £111 million exceed our threshold to be excluded from underlying, but were a repeat of the high level of deferrable storm costs we incurred in 2020/21. Underlying operating profit increased by 22%. Net revenues (adjusted for timing) increased by £91 million from the benefits of rate case increments in Massachusetts Gas and Massachusetts Electric, capital trackers and higher revenues from new customer connections along with income from sale of property. New England controllable costs were held broadly flat year-on-year, with increases from higher workload, IT costs and inflationary impacts, being mostly offset by efficiency savings, favourable settlements and non-recurrence of costs incurred in the prior period including COVID-19 disruption costs. Provisions for bad and doubtful debts of £45 million were £82 million lower than 2020/21, which had additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to the growth in assets, but was more than offset by a benefit from cessation of depreciation in NECO as a result of it being reclassified to held for sale. Other costs were higher due to increased property taxes and increases in environmental reserves.

New York

£m	2021/22	2020/21	Change
Revenue	**5,561**	4,605	21%
Operating costs	**(4,466)**	(3,910)	14%
Statutory operating profit	**1,095**	695	58%
Exceptional items	**(24)**	(7)	n/a
Remeasurements	**(291)**	(23)	n/a
Adjusted operating profit	**780**	665	17%
Timing	**(126)**	12	n/a
Major storm costs	**52**	45	16%
Underlying operating profit	**706**	722	(2)%
Analysed as follows:			
Net revenue	**3,400**	3,136	8%
Regulated controllable costs	**(963)**	(981)	(2)%
Post-retirement benefits	**(44)**	(47)	(6)%
Bad debt expense	**(87)**	(198)	(56)%
Other operating costs	**(989)**	(792)	25%
Depreciation and amortisation	**(537)**	(453)	19%
Adjusted operating profit	**780**	665	17%
Timing	**(126)**	12	n/a
Major storm costs	**52**	45	16%
Underlying operating profit	**706**	722	(2)%

New York statutory operating profit increased by £400 million, principally as a result of the £268 million year-on-year favourable movements in commodity contract remeasurements (which are passed on to customers) and net exceptional gains including £38 million environmental insurance recovery for costs related to our obligations to clean up Superfund sites, compared to a £14 million environmental credit (reversal of cost previously booked as exceptional) in the prior year. Timing over-recoveries of £126 million in 2021/22 compared with timing under-recoveries of £12 million in 2020/21, driven by commodity price fluctuations and high auction sale prices on transmission wheeling. Major (i.e. deferrable) storm costs of £52 million were £7 million higher year-on-year, but as in 2020/21, the total costs passed our threshold ($100 million in aggregate with New England) and so are excluded from our underlying results. These factors, along with a prior year adverse impact from COVID-19 disruption resulted in an overall increase in statutory operating profit and in adjusted operating profit.

Adjusted operating profit increased by £115 million (17%), aided by £138 million year-on-year favourable timing swings and lower year-on-year impact of COVID-19, but partly offset by higher environmental charges in 2021/22. After further adjusting to exclude the impact of timing and major storm costs, underlying operating profit decreased by 2%. Net revenues (adjusted for timing) increased by £126 million from the benefits of rate case increases in KEDNY, KEDLI and Niagara Mohawk (partly offset by use of deferral credits to reduce the impact on customer bill increases and a 'make whole' adjustment for the rate case settlement in downstate New York). Regulated controllable costs were lower year-on-year, with increased workload and IT costs and also inflationary impacts, more than offset by cost efficiency savings, favourable credits in 2021/22 and the non-recurrence of costs arising in 2020/21. Provisions for bad and doubtful debts decreased by £111 million, driven by 2020/21's additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to the growth in assets and the accelerated depreciation of certain gas assets and IT systems. Other costs were higher due to an increase in environmental provisions (mostly driven by inflation), increased property taxes, cost of removal and customer funded work, partly offset by receipt of a historical property tax refund.

NGV and Other activities

£m	2021/22	2020/21	Change
Statutory operating profit	**543**	65	735%
Exceptional items	**(236)**	52	(554)%
Adjusted operating profit	**307**	117	162%
Timing	**–**	–	n/a
Underlying operating profit	**307**	117	162%
Analysed as follows:			
NGV	**286**	185	55%
Property	**40**	22	82%
Corporate and Other activities	**(19)**	(90)	(79)%
Underlying operating profit	**307**	117	162%

NGV's statutory operating profits were £100 million higher than 2020/21, driven by higher interconnector revenues, which benefited from a full year's contribution from our second French interconnector (IFA2) and the commissioning of North Sea Link earlier than expected, along with the impact of higher commodity prices and increased revenues in our onshore renewables in the US. These were partly offset by a write-down for assets damaged by a fire at Sellindge in September 2021, which caused an unplanned outage for our legacy French interconnector (IFA1) and a £3 million exceptional charge in relation to establishing our new operating model (2021: £2 million).

In Other activities, we incurred an exceptional gain of £417 million related to the disposal of our 50% interest in the St William property joint venture and release of associated deferred income on historical sales made to the joint venture. We also incurred an exceptional charge of £22 million related to establishing our new operating model (2021: £26 million), £95 million (2021: £24 million) of transaction costs for the acquisition of WPD, and £61 million of costs incurred for the separation of NECO and UK Gas Transmission. In 2021/22, underlying operating profit of £21 million (including corporate costs), compared with net costs of £68 million in 2020/21. This increase included benefits from higher fair value gains on our NG Partners investments and the release of an aged liability related to historical balances for unclaimed dividends in the Group. Excluding the gain on disposal of St William, the underlying performance of the property business was up £18 million, driven by increased sales compared with 2020/21.

Financing costs and taxation – continuing

Net finance costs

Net finance costs (excluding remeasurements) for the year were 25% higher than last year at £1,081 million, with the £216 million increase driven by interest costs of £130 million (net of amortisation of debt fair value adjustments) for debt acquired with WPD, £99 million of interest and fees for £8 billion of additional borrowings used to finance the acquisition, a £145 million impact of higher inflation on our RPI-linked debt and an increase in borrowings as a result of organic asset growth. These higher costs were partly offset by favourable year-on-year non-debt interest income, with benefits from interest on pension and other post-employment benefit (OPEB) liabilities, increased capitalised interest and higher levels of other interest income from US financial investments compared with 2020/21. The effective interest rate for continuing operations of 3.2% is in line with the prior year rate.

Joint ventures and associates

The Group's share of net profits from joint ventures and associates increased by £82 million compared with 2020/21, mainly as a result of higher interconnector revenues in both Nemo Link up £37 million and in BritNed up £28 million and higher sales in our St William property joint venture (prior to disposal of this investment in March 2022) and an improved contribution from our joint venture investment in NG Partners.

Tax

The underlying effective tax rate (excluding joint ventures and associates) of 24.3% was 260bps higher than last year (2020/21: 21.7%). The tax charge in 2021/22 included additional deferred tax charges in the UK for the change in the UK corporation tax rate and the unitary state deferred tax remeasurement which occurred as a result of the expected sale of our Rhode Island business in the US. The Group's tax strategy is detailed later in this review.

Discontinued operations

On 27 March 2021, we announced the agreed sale of 100% of our UK Gas Transmission business (including metering) to a new entity (the 'Acquiring Entity') in exchange for £2.2 billion cash consideration, £2.0 billion of debt financing and a 40% interest in the Acquiring Entity on completion. The other 60% in the Acquiring Entity will be owned by a consortium of Macquarie Infrastructure and Real Assets and British Columbia Investment Management Corporation. The sale is expected to complete in the third quarter of this financial year subject to the receipt of all regulatory approvals. The results of our 100% share of this business (including metering) are presented as 'discontinued operations' in 2021/22, with comparatives restated accordingly. On 1 September 2021, this business met the IFRS 5 criteria to be classified as held for sale and depreciation was stopped from that date. As described in note 10 to the financial statements, separation and transaction costs relating to the disposal of this business are included within discontinued operations.

UK Gas Transmission (including metering)

£m	2021/22	2020/21	Change
Revenue	**1,374**	1,122	22%
Operating costs	**(737)**	(628)	17%
Statutory operating profit	**637**	494	29%
Exceptional items	**17**	5	240%
Adjusted operating profit	**654**	499	31%
Timing	**80**	96	(17)%
Adjusted operating profit (excluding timing)	**734**	595	23%
Analysed as follows:			
Net revenue	**977**	889	10%
Regulated controllable costs	**(160)**	(157)	2%
Post-retirement benefits	**(17)**	(18)	(6)%
Other operating costs	**(55)**	(28)	96%
Depreciation and amortisation	**(91)**	(187)	(51)%
Adjusted operating profit	**654**	499	31%
Timing	**80**	96	(17)%
Adjusted operating profit (excluding timing)	**734**	595	23%

UK Gas Transmission statutory operating profit increased £143 million in the year. In 2021/22, there were £14 million of costs incurred in separating the business from the Group and transaction-related costs in preparation of the sales process; and £3 million (2021: £5 million) of exceptional costs related to the reorganisation and cost efficiency programme. Timing under-recoveries of £80 million arose in 2021/22, mainly related to recovery of shrinkage costs from higher gas prices. This compared with under-recoveries of £96 million in the prior year from under-collections relating to the change to the gas capacity charging regime and lower demand, partly offset by a lower return of prior period over-recoveries.

Adjusted operating profit increased by £155 million (31%), including £16 million less adverse timing year-on-year. Excluding the impact of timing, adjusted operating profit increased by 23%, mostly from the cessation of depreciation since 31 August 2021, when the business was classified as held for sale. In 2021/22, depreciation of £91 million was £96 million lower than the prior year. Net revenue was £88 million higher, reflecting new prices under RIIO-T2 and the impact of the change to CPIH and regulatory depreciation profile change under the new price control. Regulated controllable costs (including pensions) and other costs were £29 million higher as a result of increased customer-funded works, higher Network Innovation Competition costs, higher meter displacements and a beneficial provision release in the prior period.

Within UK Gas Transmission, our non-regulated metering business's operating profit of £150 million was in line with the prior year, with the benefit from lower depreciation being offset by the adverse impact of fewer meters as these are being phased out and replaced by smart meters.

Capital investment, asset growth and Value Added

Value Added is a measure that reflects the value to shareholders of our dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), net of the growth in overall debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making. Value Growth, which is derived from Value Added, forms part of our long-term management incentive arrangements.

A key part of our investor proposition is growth in our regulated asset base. The regulated asset base is a regulatory construct, representing the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulatory asset base over the long term and this in turn contributes to delivering shareholder value. Our regulated asset base comprises our regulatory asset value in the UK, plus our rate base in the US. We also invest in related activities that are not subject to network regulation and this further contributes to asset growth.

Capital investment

Capital investment comprises capital expenditure in critical energy infrastructure, equity investments, funding contributions and loans to joint ventures and associates and, in the case of National Grid Partners, investments in financial assets.

	At actual exchange rates			At constant currency		
£m	2021/22	2020/21	Change	2021/22	2020/21	Change
UK Electricity Transmission	1,195	984	21%	1,195	984	21%
UK Electricity Distribution	899	—	n/a	899	—	n/a
UK Electricity System Operator	108	88	23%	108	88	23%
New England	1,561	1,437	9%	1,561	1,429	9%
New York	1,960	1,738	13%	1,960	1,729	13%
NGV and Other activities	1,016	596	70%	1,016	596	70%
Continuing	6,739	4,843	39%	6,739	4,826	40%
Discontinued	261	204	28%	261	204	28%
Total Group	7,000	5,047	39%	7,000	5,030	39%

Capital investment in UK Electricity Transmission increased by £211 million compared with 2020/21, primarily due to London Power Tunnels 2 and Hinkley-Seabank, partly offset by lower Smartwires spend. The acquisition of WPD during the year resulted in a £899 million increase in reported capital investment year-on-year. In New England, capital investment was up £132 million on a constant currency basis, reflecting higher spend on gas assets driven by decreased COVID-19 restrictions compared with 2020/21 and higher investment in electric assets related to asset condition. In New York, capital investment was £231 million higher (on a constant currency basis), as a result of accelerated leak-prone pipe replacement work in our gas businesses, investment in Northwest Nassau connection, higher investment in our electric assets to reinforce the network and increase capacity and reliability, investment in SmartPath Connect and Energy Highway, and decreased COVID-19 restrictions compared with 2020/21. Capital investment in NGV was significantly higher than in 2020/21, with continued investment in the Viking Link interconnector (Denmark), increased spend on our Grain LNG facility, partly offset by completion of the North Sea Link interconnector (Norway) this year, but a £373 million step up in US Ventures' capital investment, including purchase of a 3.2 GW potential offshore wind seabed lease in New York. In addition, a total amount of £93 million was invested by National Grid Partners in 2021/22, compared to £38 million in the prior year.

In UK Gas Transmission, capital investment increased by £57 million from non-load spend, with increased work at St Fergus, continued investment at Peterborough and Huntingdon compressor stations, increased investment at Hatton and higher cyber spend compared to 2020/21.

Asset Growth and Value Added

To help readers' assessment of the financial position of the Group, the table below shows an aggregated position for the Group, as viewed from a regulatory perspective. The measures included in the table below are calculated in part from financial information used to derive measures sent to and used by our regulators in the UK and US, and accordingly inform certain of the Group's regulatory performance measures, but are not derived from, and cannot be reconciled to, IFRS. These alternative performance measures include regulatory assets and liabilities and certain IFRS assets and liabilities of businesses that are classified as held for sale under IFRS 5.

There are certain significant assets and liabilities included in our IFRS balance sheet, which are treated differently in the analysis below, and to which we draw readers' attention. Our UK OpCo RAVs are different to the IFRS carrying value of PP&E and intangibles in these entities. This is a result of the annual indexation (inflationary uplift) adjustment applied to RAV compared with the IFRS value of these assets (which are held at amortised cost), or in the case of WPD, the result of acquisition fair value adjustments (where PP&E at acquisition has been valued above RAV). In addition, under IFRS we recognise liabilities in respect of US environmental remediation costs, and pension and OPEB costs. For regulatory purposes, these are not shown as obligations because we are entitled to full recovery of costs through our existing rate plans. The impact of US tax reform in 2017/18 which resulted in a reduction in IFRS deferred tax liabilities, and from a regulatory perspective remains as a future obligation, results in a regulatory liability within US rate base (£0.7 billion in New England and £0.9 billion in New York at 31 March 2022). In our Value Added calculation, we have recognised an asset to reflect expected future recovery of £202 million COVID-19-related provision for bad and doubtful debts that we have included in 2021/22 (2021: £179 million). Regulatory IOUs which reflect net over- or under-recoveries compared with our regulatory allowances are treated within this table as obligations but do not qualify for recognition as liabilities (or assets) under IFRS. The increase in regulatory assets and other balances (including goodwill) and the increase in net debt as a result of the WPD acquisition along with associated transaction costs have been excluded when calculating the in-year Value Added for 2021/22. However, these balances are included within amounts reported as at 31 March 2022. Adjusted net debt movements exclude movements on derivatives which are designated in cash flow hedging arrangements and for which there is no corresponding movement in total assets and other balances. Within our Value Added calculation, total assets and other balances, goodwill and adjusted net debt movement all exclude the impact of reclassifications to held for sale for NECO in 2020/21 and the UK Gas business in 2021/22. Separation and transaction costs related to the disposal of these entities are also excluded from in-year Value Added and have been deferred to match against the anticipated proceeds on disposal of these businesses in 2022/23.

The table below includes related balances and net debt for UK Gas Transmission and Metering and NECO, despite being reclassified as held for sale under IFRS.

	2021/22					2020/21		
£m	31 March 2022	Acquisition of WPD[1]	31 March 2021[2]	Value Added	Change	31 March 2021	31 March 2020	Change
UK RAV	**31,593**	**8,476**	**20,876**	**2,241**	**11%**	20,872	20,431	2%
US rate base	**22,178**	**—**	**20,687**	**1,491**	**7%**	20,041	18,598	8%
Total RAV and rate base	**53,771**	**8,476**	**41,563**	**3,732**	**9%**	40,913	39,029	5%
NGV and Other	**5,226**	**—**	**4,920**	**306**	**6%**	4,458	3,942	13%
Total assets	**58,997**	**8,476**	**46,483**	**4,038**	**9%**	45,371	42,971	6%
UK other regulated balances[3]	**84**	**230**	**(140)**	**(6)**		(160)	(368)	
US other regulated balances[4]	**2,621**	**—**	**1,995**	**626**		1,974	1,613	
Other balances	**(878)**	**(168)**	**(336)**	**(374)**		(336)	(514)	
Total assets and other balances	**60,824**	**8,538**	**48,002**	**4,284**		46,849	43,702	3,147
Cash dividends				**922**				1,413
Adjusted net debt movement[1]				**(1,373)**				(2,752)
Value Added				**3,833**				1,808

1. The acquisition of WPD on 14 June 2021 resulted in an increase in assets which has been excluded from the total change in the year used to calculate Asset Growth and Value Added for 2021/22. The increase in goodwill and intangible licence recognised on the acquisition of WPD and the associated fair value of net debt acquired and cash proceeds (along with associated transaction costs) are excluded from the total adjusted net debt movement in the year used to calculate Asset Growth and Value Added.
2. March 2021 balances restated for segmental changes and to correspond with 2020/21 regulatory filings and calculations.
3. Includes totex-related regulatory IOUs of £271 million (2021: £293 million), under-recovered timing balances of £346 million (2021: £153 million over-recovered) and under-recovered legacy balances related to previous price controls of £9 million (2021: £nil).
4. Includes assets for construction work-in-progress of £2,139 million (2021: £1,671 million), other regulatory assets related to timing and other cost deferrals of £759 million (2021: £714 million) and net working capital liabilities of £277 million (2021: £390 million).

Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2021 and finalisation of US balances.

During 2021/22, our combined regulated asset base and NGV and Other businesses' assets grew by £4.0 billion or 9% on a constant currency basis compared with an increase of 6% in the prior year. UK RAV growth was 10.7% including CPIH indexation of 6.2% and RPI indexation of 9.0% while US rate base grew strongly by 7.2%.

Value Added, which reflects the key components of value delivery to shareholders (i.e. dividend and growth in the economic value of the Group's assets, net of growth in net debt) was £3.8 billion in 2021/22. This was higher than last year's £1.8 billion, with £1.0 billion of the year-on-year increase arising from higher RAV indexation in UK Transmission, £0.8 billion of RAV growth from WPD (for the 9.5 months owned in 2021/22), stronger NGV and Other performance, higher US returns and a smaller adverse impact from COVID-19 compared with 2020/21, offset by higher interest and increased tax paid. Of the £3.8 billion Value Added, £0.9 billion was paid to shareholders as cash dividends and £2.9 billion was retained in the business. Value Added per share was 106.5p compared with 51.3p in 2020/21.

Cash flow, net debt and funding

Net debt is the aggregate of cash and cash equivalents, borrowings, current financial and other investments and derivatives (excluding commodity contract derivatives) as disclosed in note 29 to the financial statements. 'Adjusted net debt' used for the RCF/adjusted net debt calculation is principally adjusted for pension deficits and hybrid debt instruments. For a full reconciliation see page 274. The following table summarises the Group's cash flow for the year, reconciling this to the change in net debt.

Summary cash flow statement

£m	2021/22	2020/21	Change
Cash generated from continuing operations	5,788	3,967	46%
Cash capital expenditure and acquisition of investments	(5,781)	(4,741)	22%
Disposal of St William joint venture	413	—	n/a
Dividends from joint ventures and associates	166	80	108%
Business net cash inflow/(outflow) from continuing operations	586	(694)	(184)%
Net interest paid	(1,013)	(737)	37%
Net tax paid	(298)	(91)	227%
Ordinary dividends	(922)	(1,413)	(35%)
Other cash movements	30	14	114%
Net cash outflow from continuing operations	(1,617)	(2,921)	(45)%
Acquisition of WPD[1]	(7,837)	—	n/a
Discontinued operations	657	408	n/a
Proceeds from bridge loan taken out to acquire WPD	8,200	—	n/a
Other net cash flows from investing and financing transactions	628	2,608	n/a
Increase/(decrease) in cash and cash equivalents	31	95	(67)%
Reconciliation to movement in net debt			
Increase/(decrease) in cash and cash equivalents	31	95	(67)%
Increase in borrowings for bridge loan	(8,200)	—	n/a
Less: other net cash flows from investing and financing transactions	(628)	(2,608)	n/a
Cash and borrowings reclassified as held for sale at end of year	4,063	1,119	n/a
Fair value of net debt acquired with WPD	(8,147)	—	n/a
Other non-cash movements in net debt	(1,382)	1,438	n/a
Increase in net debt	(14,263)	44	n/a
Net debt at start of year	(28,546)	(28,590)	—%
Net debt at end of year	**(42,809)**	(28,546)	50.0%

1. Includes £44 million cash and cash equivalents acquired with WPD

Cash flow generated from continuing operations was £5.8 billion, £1,821 million higher than last year, mainly due to the contribution from WPD, lower adverse year-on-year timing under-recoveries, higher revenues compared to 2020/21, higher spend on provisions and exceptional charges, offset by favourable working capital inflows on payables. Cash expended on investment activities increased as a result of continued organic growth in our regulated and non-regulated businesses, the impact of acquiring WPD, partly offset by disposal of financial investments.

The disposal of our St William investment in March 2022 generated £413 million of proceeds in the year. The cash acquisition of WPD in June 2021 for £7.9 billion increased net debt, along with a further £8.2 billion increase from the fair value of net debt acquired. Net interest paid increased as a result of the bridge loan taken out to finance the purchase of WPD, interest for borrowings acquired with WPD and increased base rates on borrowings. The Group made net tax payments of £298 million during 2021/22. The cash dividend of £922 million, reflected a higher scrip uptake of 48% (2021: 17%).

Discontinued operations represents UK Gas Transmission and Metering which generated higher cash inflows in 2021/22, principally as a result of improved year-on-year performance and no pension deficit payments in 2021/22. Non-cash movements primarily reflect changes in the sterling-dollar exchange rate, accretions on index-linked debt, lease additions and other derivative fair value movements, offset by the amortisation of fair value adjustments on the debt acquired with WPD. Closing net debt of £42.8 billion excludes £1.2 billion of net debt in NECO and £4.1 billion of net debt in NG Gas plc which has been classified as held for sale on 31 March 2022.

During the year we raised over £4.2 billion of new long-term senior debt to refinance maturing debt and to fund a portion of our significant capital programme. The new bonds issued include further borrowings under our Green Financing Framework. In addition, we raised £8.2 billion under a bridge financing facility to fund the purchase of the UK Electricity Distribution business. This bridge facility remained outstanding at 31 March 2022 as we continue to progress the sales of our US Rhode Island business and our UK Gas Transmission business. We expect the proceeds from these sales to be received, and for the bridge facility to be repaid in full, this financial year (2022/23).

As at 18 May 2022, we have £6.8 billion of undrawn committed facilities available for general corporate purposes, including £350 million related to National Grid Gas plc, all of which have expiry dates beyond May 2023. National Grid's balance sheet remains robust, with strong investment grade ratings from Moody's, Standard & Poor's (S&P) and Fitch.

The Board has considered the Group's ability to finance normal operations as well as funding a significant capital programme, taking account of the disruption caused by the energy crisis. This includes stress-testing of the Group's finances under a 'reasonable worst case' scenario, assessing the timing of the NECO and National Grid Gas plc transactions, and the further levers at the Board's discretion to ensure our businesses are adequately financed. As a result, the Board has concluded that the Group will have adequate resources to do so.

Financial position

The following table sets out a condensed version of the Group's IFRS balance sheet.

Summary balance sheet

£m	31 March 2022	31 March 2021	Change
Goodwill and intangibles	**12,804**	6,031	112%
Property, plant and equipment	**57,532**	47,043	22%
Assets and liabilities held for sale	**2,812**	3,557	(21)%
Other net assets/(liabilities)	**(334)**	(1,896)	(82)%
Tax balances	**(6,685)**	(4,817)	39%
Net pension asset/(liabilities)	**3,075**	715	330%
Provisions	**(2,539)**	(2,227)	14%
Net debt	**(42,809)**	(28,546)	50%
Net assets	**23,856**	19,860	20%

Goodwill and intangibles increased as a result of the acquisition of WPD during the year. Property, plant and equipment increased as a result of the continuing capital investment programme, the acquisition of WPD and foreign exchange gains offset by reclassifications to held for sale. Assets held for sale comprises assets and liabilities of NECO and UK Gas Transmission (including metering) both of which we expect to sell during 2022/23 (see note 10 to the financial statements). Tax balances increased principally as a result of the acquisition of WPD, deferred tax on actuarial gains on pension assets, accelerated tax depreciation from ongoing capital investment and the impact of the UK tax rate change on deferred tax balances. Net pension assets increased in both the US and UK as a result of higher asset valuations from investment returns, higher discount rates on liabilities and foreign exchange movements along with the acquisition of WPD. Provisions were higher principally as a result of increases in environmental and other provisions, the impact of acquiring WPD and foreign exchange movements. Other movements are largely explained by net working capital inflows, reclassifications to held for sale, the impact of the acquisition of WPD and changes in the sterling-dollar exchange rate.

Regulatory gearing, measured as net debt as a proportion of total regulatory asset value and other business invested capital increased significantly in the year to 81% as at 31 March 2022. This was up from 65% at the previous year end, principally as a result of an £8 billion 'bridge loan' used to acquire the equity of WPD and £8 billion fair value of net debt acquired with WPD. The proceeds from the sales of NECO and UK Gas Transmission expected to occur in 2022/23 will be used to repay this loan, which would substantially reduce the level of gearing in the Group. Taking into account the benefit of our hybrid debt, adjusted gearing as at 31 March 2022 was 80%. Once this bridge loan is repaid, gearing should return to a level appropriate for the current overall Group credit rating of BBB+/Baa1 (S&P/Moody's).

Retained cash flow as a proportion of adjusted net debt was 8.9%. This is above the long-term average level of 7% indicated by Moody's, as consistent with maintaining our current Group rating.

Off-balance sheet items

There were no significant off-balance sheet items other than the commitments and contingencies detailed in note 30 of the financial statements.

Economic returns

In addition to Value Added, one of the principal ways in which we measure our performance in generating value for shareholders is to divide regulated financial performance by regulatory equity, to produce RoE.

As explained on page 274, regulated financial performance adjusts reported operating profit to reflect the impact of the Group's various regulatory economic arrangements in the UK and US. In order to show underlying performance, we calculate RoE measures excluding exceptional items of income or expenditure.

Group RoE is used to measure our performance in generating value for our shareholders by dividing regulated and non-regulated financial performance, after interest and tax, by our measure of equity investment in all our businesses, including the regulated businesses, NGV and Other activities and joint ventures. Group RoE includes our UK Gas Transmission business.

Regulated RoEs are measures of how the businesses are performing compared with the assumptions and allowances set by our regulators. US jurisdictional and UK entity regulated returns are calculated using the capital structure assumed within their respective regulatory arrangements and, in the case of the UK, assuming inflation of 3% RPI under RIIO-1 and 2% CPIH under RIIO-2. As these assumptions differ between the UK and the US, RoE measures are not directly comparable between the two geographies. In our performance measures, we compare achieved RoEs to the level assumed when setting base rate and revenue allowances in each jurisdiction.

Return on Equity

£m	2021/22	2020/21	Change
UK Electricity Transmission	**7.7%**	13.8%	-610bps
UK Electricity Distribution	**13.6%**	n/a	n/a
UK Gas Transmission	**7.8%**	9.6%	-180bps
New England	**8.3%**	7.5%	80bps
New York	**8.8%**	6.7%	210bps
Group Return on Equity[1]	**11.4%**	10.6%	80bps

1. Group RoE methodology amended in 2021/22 to calculate accretion charge on inflation-linked debt at long-run inflation rates. This provides alignment to treatment of RAV indexation in the metric. Prior year comparatives have not been restated.

As a result of the new RIIO-2 price control, the allowed returns that UK Electricity Transmission and UK Gas Transmission can earn have decreased compared with the allowed returns under RIIO-1. In 2021/22, UK Electricity Transmission achieved operational returns of 7.7%, 140bps higher than base allowed return under RIIO-2, mainly from totex performance related to savings on capital delivery. UK Electricity Distribution achieved an operational return of 13.6% in 2021/22 under RIIO-1, or 400bps outperformance, mostly as a result of strong incentives performance, but also totex outperformance driven by efficient capital expenditure. UK Gas Transmission's return decreased due to lower returns allowed under the new RIIO-2 price control, but achieved operational returns in 2021/22 were 7.8%, 110bps higher than allowed, from totex outperformance, driven by cost efficiencies and incentives.

New England's achieved return of 8.3% was 85% of the allowed return of 9.8% in 2021/22 as a result of higher IT and workforce costs, but this was an improvement on the achieved return of 7.5% or 77% of the allowed return in 2020/21, driven by rate increases and a smaller adverse impact from COVID-19 compared with the prior year. New York's achieved return of 8.8% was 99% of the allowed return of 8.9% in 2021/22. This was an improvement compared with an achieved return of 6.7% in 2020/21, as a result of new rate agreements and a property tax rebate in the current year, and non-deferrable storm costs exceeding allowances plus non-recurring charges in the prior year. The quoted returns for New England and New York represent the weighted average return across OpCos within each jurisdiction. US returns were not affected by the COVID-19-related bad debt provisions recognised in 2020/21 which included an adjustment reflecting our expectation for future recovery of these bad debt costs.

Overall Group RoE, which incorporates NGV, Property, Corporate and Other plus financing and tax performance was 11.4%.

Tax transparency

As a responsible taxpayer, we have voluntarily included additional tax disclosures, which we believe are of significant interest to many of our stakeholders.

Tax strategy

National Grid is a responsible taxpayer. Our approach to tax is consistent with the Group's broader commitments to doing business responsibly and upholding the highest ethical standards. This includes managing our tax affairs, as we recognise that our tax contribution supports public services and the wider economy. We endeavour to manage our tax affairs so that we pay and collect the right amount of tax, at the right time, in accordance with the tax laws in all the territories in which we operate. We will claim valid tax reliefs and incentives where these are applicable to our business operations, but only where they are widely accepted through the relevant tax legislation such as those established by government to promote investment, employment and economic growth. We do not have operations in tax havens or low tax jurisdictions without commercial purpose.

We have a strong governance framework and our internal control and risk management framework helps us manage risks, including tax risk, appropriately. We take a conservative approach to tax risk. However, there is no prescriptive level or pre-defined limit to the amount of acceptable tax risk.

Our financial statements have been audited. The figures in the tax transparency disclosures in the Annual Report and Accounts have been taken from our financial systems, which are subject to our internal control framework.

We act with openness and honesty when engaging with relevant tax authorities and seek to work with tax authorities on a real-time basis. We engage proactively in developments of external tax policy and engage with relevant bodies where appropriate. Ultimate responsibility and oversight of our tax strategy and governance rests with the Finance Committee, with executive management delegated to our Chief Financial Officer who oversees and approves the tax strategy on an annual basis. For more detailed information, please refer to our published global tax strategy on our website.

Country-by-country reporting summary

We have disclosed in the table below data showing the scale of our activities in each of the countries we operate in. This allows our stakeholders to see the profits earned, taxes paid and the context of those payments.

2021/22	Revenue					
Tax jurisdiction	Unrelated party[1] £m	Related party[2] £m	**Total £m**	Profit/(loss) before income tax[3] £m	Income tax accrued – current year[4] £m	Tangible assets/(liabilities) other than cash and cash equivalents[5] £m
United Kingdom	9,165	122	**9,287**	2,501	290	27,846
United States	10,646	45	**10,691**	1,395	6	29,686
Isle of Man	—	18	**18**	(48)	—	—
Luxembourg	—	—	**—**	—	—	—
Netherlands	—	33	**33**	—	—	—
Guernsey[6]	—	4	**4**	—	—	—
Cross-border consolidation	—	—	**—**	—	—	—
Total	19,811	222	**20,033**	3,848	296	57,532

2020/21	Revenue					
Tax jurisdiction	Unrelated party[1] £m	Related party[2] £m	**Total £m**	Profit/(loss) before income tax[3] £m	Income tax accrued – current year[4] £m	Tangible assets/(liabilities) other than cash and cash equivalents[5] £m
United Kingdom	5,482	106	**5,588**	1,718	213	20,796
United States	9,297	43	**9,340**	341	3	26,247
Isle of Man	—	15	**15**	23	—	—
Luxembourg	—	—	**—**	1,667	—	—
Netherlands	—	52	**52**	1	—	—
Guernsey	—	—	**—**	—	—	—
Cross-border consolidation	—	—	**—**	(1,667)	—	—
Total	14,779	216	**14,995**	2,083	216	47,043

1. Unrelated party revenue comprises revenue from continuing operations of £18,449 million (2021: £13,665 million) and revenue from discontinued operations of £1,362 million (2021: £1,114 million).
2. Related party revenue only includes cross-border transactions and comprises related party revenue from continuing operations of £189 million (2021: £164 million) and related party revenue from discontinued operations of £33 million (2021: £52 million).
3. Profit/(loss) before income tax (PBT) from operations after exceptionals comprises continuing operations PBT of £3,441 million (2021: £1,664 million) and discontinued operations PBT of £407 million (2021: £419 million).
4. Current year income tax accrued comprises current year income tax from continuing operations of £261 million (2021: £160 million) and current year income tax from discontinued operations of £35 million (2021: £56 million). See the tax charge to tax paid reconciliation below for further information.
5. Tangible assets comprises property, plant and equipment and excludes tangible fixed assets for business classified as held for sale of £7,892 million (UK Gas Transmission £4,719 million, NECO £3,173 million) (2021: NECO £2,713 million).
6. The Guernsey captive was acquired as part of the acquisition of the WPD Group during the year ended 31 March 2022.

Our Hong Kong entity is UK tax resident and is now dormant and our entities in Australia and Canada are dormant. Our entity in Ireland is in liquidation and our entities in Jersey were fully liquidated and dissolved during the period. Therefore, those jurisdictions have not been included in the table above.

Our Isle of Man and Guernsey companies are captive insurance companies which are treated as controlled foreign companies for UK tax purposes and as such UK corporation tax is paid on their profits by National Grid. In the Netherlands, we have a finance company which borrowed money externally and on-lent it to another Group company. Both loans have now been settled. It is taxed on its profits in the Netherlands at the corporate tax rate of 25%.

As part of our response to the Labour Party's proposal to nationalise nearly all of National Grid's UK assets we implemented measures, which included a Luxembourg holding company, in order to strengthen our ability to get a fair value for the assets in the event of a nationalisation.

Transfer pricing is not a significant issue for the Group since there are limited transactions between Group companies, but any transactions between related parties are made on an arm's-length basis and aligned to OECD principles.

Group's total tax charge to tax paid

The total tax charge for the year disclosed in the financial statements in accordance with accounting standards and the equivalent total corporate income tax paid during the year will differ.

The principal differences between these two measures are as follows:

Reconciliation of Group's total tax charge to tax paid (continuing and discontinued)

£m	2021/22	2020/21
Total Group tax charge[1]	**1,494**	442
Adjustment for Group non-cash deferred tax	**(1,233)**	(218)
Adjustments for Group current tax (charge)/credit in respect of prior years	**35**	(8)
Group current tax charge	**296**	216
Group tax instalment payments (repayable)/payable in the following year	**(1)**	(7)
Tax recoverable offset against current tax payments due	**–**	(55)
Tax instalment payments overpaid in the current year	**18**	–
Group tax payments/(refunds) in respect of prior years paid in the current year	**15**	(8)
Group tax payments relating to tax disclosed elsewhere in the financial statements	**3**	11
Group tax paid[2]	**331**	157
Profit before income tax[3]	**3,848**	2,083

	%	%
Effective cash tax rate[4]	**8.6**	7.5
Effective tax rate[5]	**38.8**	21.2

1. Total Group tax charge from operations after exceptionals comprises tax charges of continuing operations of £1,258 million (2021: £360 million) and discontinued operations of £236 million (2021: £82 million).
2. Total Group tax paid comprises tax paid for continuing operations of £298 million (2021: £91 million) and discontinued operations of £33 million (2021: £66 million).
3. PBT from continuing operations after exceptionals comprises continuing operations PBT of £3,441 million (2021: £1,664 million) and discontinued operations PBT of £407 million (2021: £419 million).
4. Effective cash tax rate for continuing operations after exceptionals is 8.8% (2021: 5.5%) and discontinued operations is 8.1% (2021: 15.8%).
5. Effective tax rate for continuing operations after exceptionals is 36.6% (2021: 21.6%) and discontinued operations is 57.5% (2021: 19.6%).

Effective cash tax rate

The effective cash tax rate for the total Group is 8.6%. The difference between this and the accounting effective rate of 38.8% is due to the following factors.

An increase in future tax rates impacting the calculation of deferred taxes.

National Grid is a capital-intensive business, across both the UK and the US, and as such invests significant sums each year in its networks. In 2021/22 the Group's total capital expenditure was £6,446 million. To promote investment, tax legislation allows a deduction for qualifying capital expenditure at a faster rate than the associated depreciation in the statutory accounts. The impact of this is to defer cash tax payments into future years.

In the current period, the US federal taxable income was offset by brought-forward net operating losses which primarily arose from deductions for qualifying capital expenditure incurred by National Grid in earlier years. Hence no significant federal tax payments were made in the current period.

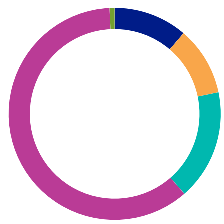
The Group continued to make significant payments into some of the UK defined benefit pension schemes. These payments have further reduced the overall cash tax paid in the UK.

Group's total tax contribution

The total amount of taxes we pay and collect globally year-on-year is significantly more than just the tax which we pay on our global profits. To provide a full picture, we have disclosed the Group's global total tax contribution which includes contributions from both continuing and discontinued businesses.

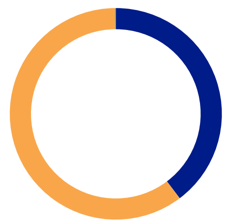
Group's total tax contribution 2021/22 (taxes paid/collected)

Taxes borne



Key:	£m
People	221
Product	206
Profit	331
Property	1,191
Miscellaneous	15
Total	**1,964**

Taxes collected



Key:	£m
People	697
Product	1,056
Miscellaneous	2
Total	**1,755**

2021/22	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	**Total tax contribution £m**	Number of employees[2] as at 31 March 2022
United Kingdom	315	302	114	1,110	**1,841**	13,424
United States	16	889	328	645	**1,878**	17,332
Ireland	–	–	–	–	**–**	–
Isle of Man	–	–	–	–	**–**	–
Luxembourg	–	–	–	–	**–**	–
Netherlands	–	–	–	–	**–**	–
Total	331	1,191	442	1,755	**3,719**	30,756

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business, including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

2020/21	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	**Total tax contribution £m**	Number of employees[2] as at 31 March 2021
United Kingdom	158	225	58	672	**1,113**	6,657
United States	(1)	816	309	602	**1,726**	17,026
Ireland	–	–	–	–	**–**	–
Isle of Man	–	–	–	–	**–**	–
Luxembourg	–	–	–	–	**–**	–
Netherlands	–	–	–	–	**–**	–
Total	157	1,041	367	1,274	**2,839**	23,683

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business, including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

For 2021/22, our total tax contribution globally was £3,719 million (2020/21: £2,839 million), taxes borne were £1,964 million (2020/21: £1,565 million) and taxes collected were £1,755 million (2020/21: £1,274 million). Our taxes borne have increased in the year primarily due to higher income taxes paid. Taxes collected have increased as a result of higher indirect taxes.

Approximately two thirds of the tax borne by the Group continues to be in relation to property taxes, of which £889 million are paid in the US across over 1,100 cities and towns in Massachusetts, New Hampshire, New York, Rhode Island and Vermont. These taxes are the municipalities' principal source of revenue to fund school districts, police and fire departments, road construction and other local services.

In the UK, we participate in the 100 Group's Total Tax Contribution Survey. The survey ranks the UK's biggest listed companies in terms of their contribution to the total UK government's tax receipts. The most recent results of the survey for 2020/21 ranks National Grid as the 19th highest contributor of UK taxes (2019/20: 19th), the 15th highest in respect of taxes borne (2019/20: 11th) and the 3rd highest in respect of capital expenditure (£1,594 million; 2019/20: £1,663 million) on fixed assets (2019/20: 6th). Our ranking in the survey is proportionate to the size of our business and capitalisation relative to the other contributors to the survey.

However, National Grid's contribution to the UK and US economies is broader than just the taxes it pays over to and collects on behalf of the tax authorities.

Both in the UK and the US we employ thousands of individuals directly. We also support jobs in the construction industry through our capital expenditure, which in 2021/22 was £6,446 million, as well as supporting a significant number of jobs in our supply chain.

Furthermore, as a utility we provide a core essential service which allows the infrastructure of the country/states we operate in to run smoothly. This enables individuals and businesses to flourish and contribute to the economy and society.

Development of future tax policy

We believe that the continued development of a coherent and transparent tax policy across the Group is critical to help drive growth in the economy.

We continue to engage on consultations with policymakers where the subject matter impacts taxes borne or collected by our business, with the aim of openly contributing to the debate and development of tax legislation for the benefit of all our stakeholders.

To ensure that the needs of our stakeholders are considered in the development of tax policy we are a member of a number of industry groups which participate in the development of future tax policy, such as the Electricity Tax Forum and CBI Employment Taxes Working Group, together with the 100 Group in the UK, which represents the views of Finance Directors of FTSE 100 companies and several other large UK companies. We undertake similar activities in the US, where the Group is an active member in the Edison Electric Institute, the American Gas Association, the Global Business Alliance, the American Clean Power Association, the Energy Storage Association and the Solar Energy Industries Association.

Feedback from these groups, such as the results of the 100 Group Total Tax Contribution Survey, and consideration of third party reporting frameworks like the GRI (Global Reporting Initiative) helps to ensure that we consider the needs of our stakeholders and are engaged at the earliest opportunity on tax issues which affect our business.

Pensions

In 2021/22, defined benefits pensions and other post-retirement benefits operating costs increased to £321 million (2020/21: £302 million) with £66 million related to an increase from the acquisition of WPD in 2021/22.

During the year, our pensions and other post-retirement benefit plans improved from a net surplus position of £715 million at 31 March 2021 to a net surplus of £3,075 million at 31 March 2022. This was principally the result of actuarial gains on plan assets of £0.8 billion (as a result of higher investment returns) and actuarial gains on plan liabilities of £1.6 billion (reflecting higher discount rates from corporate bond yields net of higher expectations for long-term RPI inflation). The acquisition of WPD in June 2021 increased the Group's net pension surplus by £566 million, but this was offset by the reclassification of National Grid Gas plc's section of the NGUKPS (£664 million in surplus) at 31 March 2022 to held for sale. Employer contributions during the year were £300 million (2020/21: £274 million), including £84 million (2020/21: £88 million) of deficit contributions. As at 31 March 2022, the total UK and US assets and liabilities and the overall net IAS 19 (revised) accounting surplus (2020/21: surplus) is shown below. Further information can be found in note 25 to the financial statements.

Net pension and other post-retirement obligations

	UK	US	Total
Plan assets (£m)	16,865	10,148	27,013
Plan liabilities (£m)	(14,275)	(9,663)	(23,938)
Net surplus (£m)	2,590	485	3,075

As at 31 March 2022, we recognised in the statement of financial position pension assets of £3,885 million (UK pensions £2,668 million; US pensions £732 million; and US other £485 million) and pensions liabilities of £810 million (UK pensions £78 million; US pensions £248 million; and US other £484 million).

Dividend

The Board has recommended an increase in the final dividend to 33.76p per ordinary share ($2.0929 per American Depository Share), which will be paid on 17 August 2022 to shareholders on the register of members as at 6 June 2022. If approved, this will bring the full-year dividend to 50.97p per ordinary share, an increase of 3.7% over the 49.16p per ordinary share in respect of the financial year ended 31 March 2021. This is in line with the increase in average UK CPIH inflation for the year ended 31 March 2022 as set out in our dividend policy. Our aim is to grow the annual dividend in line with CPIH, thus maintaining the dividend per share in real terms. The Board will review this policy regularly, taking into account a range of factors including expected business performance and regulatory developments.

At 31 March 2022, National Grid plc had £12 billion of distributable reserves, which is sufficient to cover more than five years of forecast Group dividends. If approved, the final dividend will absorb approximately £1.2 billion of shareholders' funds. This year's dividend is covered approximately 1.3x by underlying earnings.

The Directors consider the Group's capital structure and dividend policy at least twice a year when proposing an interim and final dividend and aim to maintain distributable reserves that provide adequate cover for dividend payments.

New accounting standards

We did not adopt any new accounting standards in 2021/22. Amendments to certain existing accounting standards were adopted during the year, but these had no material impact on the Group's results or financial statement disclosures.

Post balance sheet events

On 6 April 2022, the UK government announced that ESO will become part of an independent system operator public body, following the Future System Operator consultation. On 11 May 2022, Ofgem approved the Group's request to return £200 million of interconnector revenues subject to the cap and floor regime to consumers ahead of schedule. For further details, see note 38 to the financial statements.

Our business units

UK Electricity Transmission

We performed well in 2021/22 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations to drive forward the net zero agenda.

Highlights

ET has performed strongly over 2021/22, increasing annual investment by 20% as part of our £8 billion RIIO-T2 promise. We have maintained our focus on safety, customers, reliability and innovation to continue driving forward the net zero agenda.

We submitted a technical appeal to the CMA regarding the RIIO-T2 cost of equity and outperformance wedge. The CMA found in our favour on the outperformance wedge, which has since been dropped from the RIIO-T2 regulatory framework.

We have installed 53 T-pylons as part of the route connecting Hinkley Point C nuclear power station to over 6 million homes and businesses. We have completed almost 6.2 miles (10 kilometres) of underground tunnelling as part of our London Power Tunnels (LPT2) project and met 100% of our milestones.

Enable the energy transition for all

We outperformed this year's proportion of our SF_6 Science Based Targets to reduce emissions by 50% by 2030 through a programme of targeted repair, refurbishment and asset replacement. We have been collaborating with suppliers, universities and innovators across the world to trial SF_6-free assets. We have switched 10% of our operational fleet to electric as part of the process of going fully electric by 2030.

We connected over 5 GW of generation to the network as part of our commitment to connect over 15 GW of customer capacity over RIIO-T2 to provide the UK with clean power and flexible storage.

Despite a quadrupling of new connection requests, our teams achieved a Quality of Connection (customer satisfaction) score of 7.8 in 2021/22.

Deliver for our customers efficiently

Over the year, we have replaced over 900 assets to maintain a safe and reliable network. The network stood up well against the recent storms and although we experienced multiple circuit trips, the majority were returned via the automatic protection Delayed Auto Reclose (DAR) system. No loss of demand occurred through any of the storms, with only 27 MW of Energy Not Supplied against our incentive target of 103 MW.

Western Link delivers green energy to where it is needed and enables a more efficient electricity system. Due to delays with the complex construction phase, the joint venture agreed to a £15 million payment into Ofgem's redress fund (NGET's share was £10 million) and to return £143 million to consumers in payments through mechanisms outlined in the price control. This has ensured ET did not benefit from the delay.

We have delivered £24 million efficiencies with our Evolution programme.

Grow our organisational capability

The introduction of SmartWires provides greater control and flexibility of the power flow across our transmission boundaries and the installation of Connectnow is the first Digital Transmission Owner portal in the UK, allowing our customers to understand where to connect and to manage their project portfolios.

Our Deeside Innovation Centre is now operational and enabling the trialling of innovative energy solutions. This will accelerate the deployment of new technologies to facilitate net zero and reduce the cost of maintaining and managing the network.

Empower colleagues for great performance

It is over 12 months since any of our 2,500 field and office-based employees suffered an LTI. However, we are disappointed that the frequency of LTIs amongst our contractors has increased above our 0.1 target following 18 contractor LTIs in the year. We are actively working with our contractors to eliminate this gap by ensuring requirements are clear and consistent across all parties.

We are digitalising our operations in order to better enable our people; for example, our Agile Field Force programme has freed up 20,000 hours of engineer time every year. This enables engineers to focus on using their core skills to maintain and install new assets.

The first of 53 T-pylons, erected in September 2021 as part of the Hinkley Connection project in the UK

Looking ahead

In order to migrate to a cleaner energy system, we need to connect increasing amounts of renewable energy from the North Sea and the UK's East Coast. The complexity and scale of the infrastructure investments associated with our East Coast programme will require us to make a step change in how we work with developers, suppliers, environmental groups and local communities so we can find the best local and environmental solutions possible.

We will reform the customer connections process to be more efficient, connecting our customers more quickly and making full use of the data and products available to drive transparency. We will release capacity for our teams through reduced admin time, using standardisation and by enabling customers to self-serve to ensure all our work adds value.

UK Electricity Distribution

We have performed well in 2021/22 as we maintained excellent customer service and delivery of our innovative projects.

Highlights

WPD has delivered excellent service for our 8 million customers and remains on track to outperform the majority of our RIIO-ED1 targets. We have continued to outperform our targets for customer minutes lost and customer interruptions by 30% and 27% respectively from the underlying performance benchmark, accident rates have reduced to 0.62 accidents per 100 staff, and our Scope 1 and 2 emissions (excluding losses) have continued to get smaller with a 52% reduction since 2014/15. We have also supported almost 26,000 fuel poor customers, leading to estimated annual savings of £14.6 million for these customers.

Our hard work in conducting our business with the highest standards is reflected in WPD winning the Disruptor Award at the Utility Week Awards for our Flexible Power initiative.

Enable the energy transition for all

We have several innovative delivery projects underway to drive a fair energy transition for all. In RIIO-ED2, we will build on these foundations to ensure customers are able to connect low-carbon technologies (LCTs) quickly and easily. We have centralised our process for domestic LCTs, offering a next day approval for most EVs and heat pumps.

Our RIIO-ED2 Business Plan includes core commitments which are targets to ensuring that vulnerable customers do not miss the benefits associated with the shift to a smart energy system. This includes offering 600,000 Priority Service Register (PSR) customers a bespoke smart energy action plan, supporting local communities via a Community Matters social initiative and installing solar PV on schools in areas of high economic deprivation.

In May 2022, Ofgem announced that WPD had agreed to pay £3.7 million for each of the four licences we operate, totalling £14.9 million. This followed the outcome of an investigation into the level of information, advice and services provided to customers on the PSR. We have made changes to our policies and processes to ensure we are fully complying with the expectations Ofgem has clarified in our licence.

Deliver for our customers efficiently

Even though we had to change some practices due to the COVID-19 pandemic, we have continued to provide the highest level of service to our 8 million customers. Our hard work is reflected in our excellent performance against the Broad Measure of Customer Satisfaction (BMCS) results, scoring 9.03 out of 10 overall.

Grow our organisational capability

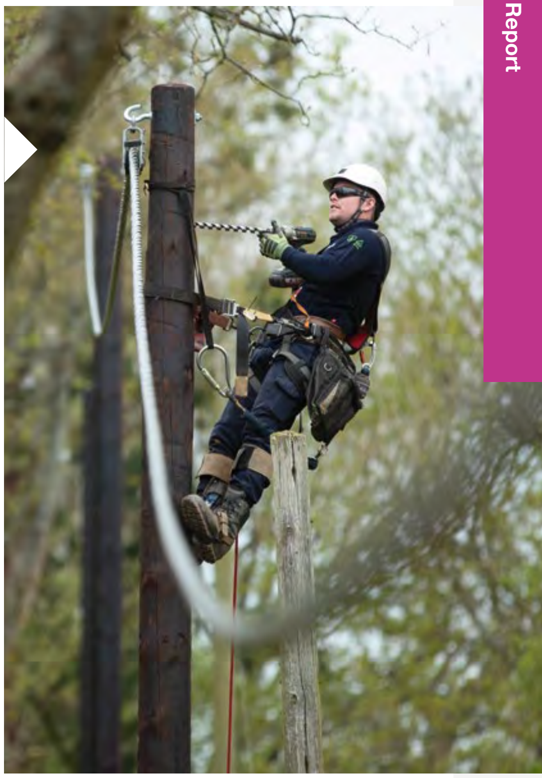
We have established plans and work programmes to build a 'green recovery' from the effects of the COVID-19 pandemic. The nationwide call for evidence to support network investment projects saw WPD receive feedback from more than 200 stakeholders, and this helped us target the network investment to the areas that see the most benefit. All 73 projects have been given the go-ahead, each meeting the Ofgem-backed initiative's criteria of enabling net zero and providing a wider social benefit. The successful projects, which will be completed in the next two years, range from installing new substations to reinforcing existing parts of the network. In total, 55% of the projects relate to customers wanting to connect public EV charging hubs in some form and we estimate that customers could connect up to 50% more ultra-rapid EV chargers because of these investments, many at motorway service areas.

Empower colleagues for great performance

During the year, the WPD Chief Executive met up with small groups of colleagues to hear their views on WPD. The sessions were attended by colleagues across various roles and encouraged suggestions to be brought forward to drive an overall performance improvement within the organisation. This direct feedback from colleagues will be crucial in producing ideas, innovations and solutions to the many challenges and opportunities that we will have in the business going forward.

Looking ahead

We are determined to achieve a sustainable energy future by delivering a dynamic, innovative and high-functioning energy grid that stands ready to serve many generations to come. Change is already well underway, with unprecedented levels of flexibility and efficiency, and new distribution system operator capabilities already in place. In RIIO-ED2, we will accelerate the rate of this change, placing customers at the heart of a swift and effective transition to a smart, decarbonised energy future.



Works to improve the overhead network in Droitwich, North Worcestershire, UK

We will utilise innovative and digitalised solutions to enhance our operations. We will instil a culture across our business that maximises every opportunity to innovate and work smarter for our customers. We have embedded £723 million of efficiency savings into our RIIO-ED2 Business Plan thanks to our proven track record of innovation development and roll-out. Without this, required investment in RIIO-ED2 would have been £7.4 billion, which would have resulted in increases to customer bills. Instead, by working smarter and embracing a culture of continual innovation, we will deliver our RIIO-ED2 commitments with a budget of £6.7 billion whilst maintaining affordability for our customers.

In addition, we will deliver an extra £95 million of efficiency savings over RIIO-ED2. We anticipate a 108% increase in the level of load-related schemes, with only an 8% increase in engineering management and support costs. By adopting a 'flexibility first' approach to all load-related investment decisions, we have committed that by 2028 we will avoid over £94 million of network reinforcement costs by operating the existing primary and secondary networks more flexibly.

UK Gas Transmission*

We have commenced RIIO-T2 strongly and made good progress preparing for the sale of a majority stake in the Gas Transmission business.

Highlights

The RIIO-T2 price control will provide a high degree of cash flow certainty for the GT business for the five-year period to March 2026. Detailed plans are in place to deliver against our targets, through continued strong incentive performance, as well as preparing for the energy transition. GT made a strong start to RIIO-T2, with strong financial results, customer metrics, and continued high levels of safety and operational performance. We continued to support our colleagues through the COVID-19 pandemic, ensuring alignment to government guidelines at all times.

GT continues to work with industry peers to support the transition to a hydrogen network and has now commenced construction of FutureGrid – a £9 million full-scale hydrogen test facility, funded through the Network Innovation Competition.

Looking ahead

Following the announcement on 18 March 2021 of the intention to sell a majority stake in the GT business, preparations have been ongoing throughout the year for the design of a standalone business. The sale of a 60% equity interest in the GT business to a consortium of Macquarie Asset Management and British Columbia Investment Management Corporation was announced on 27 March 2022. The results of GT are presented as discontinued operations in 2021/22.

We are committed to supporting our people through the remaining stages of the sales process, providing access to all necessary information as well as increased engagement across the business. We are working closely with BEIS, Ofgem and all other industry stakeholders to provide assurance of our unrelenting focus on delivery of RIIO-T2 performance and ensuring security of supply throughout the transitional period and beyond.

Bacton Gas Terminal, Norfolk, UK

* Discontinued operation.

UK Electricity System Operator

We are working with stakeholders to support progress towards net zero while maintaining energy security and minimising costs for consumers.

Highlights

As Great Britain's electricity system operator, we are at the heart of the energy transition, operating one of the safest, most reliable and fastest decarbonising networks in the world.

The ESO launched its Future Energy Scenarios in July 2021, which outlines four different, credible pathways for the future of energy between now and 2050.

Looking ahead

In April 2022, BEIS and Ofgem announced their decision to establish an expert, impartial Future System Operator to drive progress towards net zero while maintaining energy security and minimising costs for consumers, which will incorporate and build upon the existing capabilities of the ESO. We will continue to work closely with government, the regulator and industry as we enter the transition period, which will require communication and engagement with our impacted colleagues, who are an essential part of this new organisation, and a complex separation activity, particularly of IT systems.

ESO Control Centre, UK

New England

In 2021/22, we performed well throughout the region while still dealing with the effects of the COVID-19 pandemic, severe weather events and significant organisational changes. There was a continued focus on safety, storm response and the clean energy transition.

Highlights

We used lessons learnt throughout the pandemic to help navigate the ever-changing COVID-19 protocols in the region. Colleagues continued to work safely, whether in the field or utilising our hybrid or remote work model. In addition, we found ways to give back and support the communities we serve by assisting with COVID-19 vaccinations and donating hygienic safety products to non-profit organisations.

New England faced several challenging storms this fiscal year. Our field crews and emergency response organisation conducted thorough emergency planning and collaborations across divisions, which resulted in our crews safely and efficiently restoring power to our customers. Our restoration efforts were recognised once again as we were awarded EEI Emergency Response Awards for both Tropical Storm Henri and the October Nor'easter.

Safety is a pillar of our daily operations, and we continue to focus on the wellbeing and safety of our workforce and customers alike. We have improved our safety score for near misses and good catches and, as at 31 March 2022, our LTIFR was 0.18.

Enable the energy transition for all

In 2021, we worked with the City of Melrose to deploy 15 pole-mounted EV chargers to expand EV adoption, accelerate usage and lower installation costs. This project is the first deployment of elevated, pole-mounted EV chargers by an investor-owned utility in the US.

We have focused on advancing clean transportation by working with cities such as Beverly on an electric school bus project, incorporating a fully electric-powered backhoe into our fleet, and proposing our largest ever EV programme with Massachusetts regulators.

The Company also continued to reduce methane emissions from our gas network. We replaced over 170 miles (274 kilometres) of leak-prone gas pipes across New England, improving pipeline safety and reducing greenhouse gas emissions.

In March 2022, as part of the DPU 20-80 proceeding, we and our fellow Massachusetts gas utilities filed a plan with the Department of Public Utilities that outlines exactly how to get to a decarbonised heating future. We believe our approach will most effectively balance affordability and equity, safety, reliability, and resilience. Our plan strives to retain customer choice around heating solutions, reduce overall energy costs, increase investment and adoption of energy-efficiency measures, and make provisions for utilising non-pipe alternatives where safe and cost effective.

Deliver for our customers efficiently

We aim to provide a fairer, cleaner and more affordable gas service to our customers. The Department of Public Utilities approved our five-year rate plan on 1 October 2021. The plan supports capital investment and provides resources to meet our work plans over the next five years.

We also received approval of our geothermal demonstration programme, which secured funding for four district geothermal system installations for existing Massachusetts gas customers.

Grow our organisational capability

In July 2021, the Company's Massachusetts Phase 3 Electric Vehicle proposal was filed with the DPU to build upon our first two Electric Vehicle Market Development Programs by providing offerings to meet the diverse transportation needs of all the Company's customers, building the infrastructure required to support state-wide EV adoption, and helping to enable the Commonwealth's broader transition to a clean transportation future. The Company is proposing to run the Phase III Program for a period of four years, with a total budget of approximately $278 million.

In October 2021, we appointed a New England President to our Group Executive Committee. The Committee's wide range of experience will help lead the clean energy transition for all of our communities.

The sale of our Rhode Island electricity and gas business will serve as a vital step in furthering our strategic vision. To prepare for the sale, we established a transition team of over 250 people across 19 functional areas to set up both the future Massachusetts and Rhode Island businesses for success. The sale has received all required regulatory approvals, including from the Rhode Island Division of Public Utilities and Carriers. That decision, however, has been appealed to the RI Superior Court by the RI Attorney General. We are confident that the Division's approval of the sale will be upheld and look forward to closing the transaction as expeditiously as possible.

Boston Common Park, Massachusetts, US

Empower colleagues for great performance

Our colleagues worked to create an equitable impact in our communities. The New England Gas Diversity, Equality and Inclusion Council is a grassroots group of both union and management field employees. The group recently launched two initiatives to recruit and retain employees from diverse backgrounds, including hosting a pipeline career development day at local high schools. By investing in our communities through education and upskilling talent to adapt to the changing energy system, we are tackling our DEI commitments.

Looking ahead

Customers are always at the forefront of everything we do, and we must consistently deliver a safe and reliable service. The various organisational changes in our region will allow us to provide a better service to our customers. This is the foundation for us to continue to be greener, stronger and more reliable.

New York

In 2021/22, we achieved overall strong results throughout the region. Throughout the various organisational model changes, severe weather events, rate cases and public opposition in our region, we prioritised safety, bold clean energy and climate action plans, and our commitment to the communities we serve.

Highlights

New York encountered several challenging storms, but we remained focused on emergency planning and restoration efforts. This year we received an EEI Emergency Response Award and the 2021 ReliabilityOne® Award for Outstanding Suburban and Rural Service Area Utility in the Northeast as we hit our regulated reliability goals for the 14th consecutive year.

Safety remained one of our top priorities in the region. We continued to use the tools and processes developed at the onset of the pandemic to safely navigate through the various spikes in COVID-19. We have improved our safety score for near misses and good catches, and as at 31 March 2022, our LTIFR was 0.13.

Enable the energy transition for all

In New York, we are doing our part to fulfil the clean energy transition. In 2021, we worked with the town of Hempstead, New York, and introduced one of the country's first and largest clean hydrogen demonstration projects. The HyGrid Project located in Point Lookout on Long Island will blend green hydrogen into the existing distribution system to heat approximately 800 homes and fuel a fleet of municipal vehicles.

We are also working with the New York Power Authority to build the Smart Path Connect project, a $1 billion transmission upgrade that will enable the integration of 1 GW of renewable energy to the grid. In addition, we have proposed nearly $700 million in short-term transmission upgrades in upstate New York that would unlock roughly 2.6 GW of clean energy resources.

The solid rate case agreements that have been completed for KEDNY, KEDLI and NMPC are essential steps in energy transition. These rate agreements will provide us with the funding needed to create the energy infrastructure and service our New York customers demand and deserve.

Deliver for our customers efficiently

In New York, we are serving our customers and communities through our new initiative, Project C. Project C focuses on four key priorities: clean energy and sustainability; workforce development; neighbourhood investment and community engagement; and environmental justice and social equity. By providing grants to non-profits, recreational programmes, and local economic development partners, we will support the revitalisation of communities and small businesses across our service area.

With the cost of heating increasing this past winter, we collaborated with AARP New York and the Public Utility Law Project (PULP) to make income-eligible customers aware of our Energy Affordability Programme (EAP). Our Consumer Advocates helped seniors with enrolment in EAP and provided information on other no-cost, energy-saving programmes to improve the comfort of their homes.

Grow our organisational capability

We play a key role in combatting climate change and providing climate solutions. As part of the lead-up to COP26, we joined forces with government leaders from around the world at Climate Week NYC, where we were the headline partner, to focus on fulfilling and increasing commitments to climate action. Several National Grid leaders contributed to the global conversation on climate change and how to take action.

Another significant highlight in our region was bringing 900 of our Long Island gas field employees through a gas business enablement go-live. We successfully provided colleagues with tools and applications to meet the needs of our customers, communities and regulators.

Empower colleagues for great performance

After nearly three years of planning, our new Brooklyn, New York office at 2 Hanson Place opened in 2021. This highly anticipated space was built on the Smart workspace strategy, and we ensured it incorporated principles of sustainability and human wellbeing in its design and operations. The building was also designed to WELL and Leadership in Energy and Environmental Design building standards, which resulted in an Award of Excellence by the New England chapter of CoreNet Global.

View of Albany, New York, US

Looking ahead

The New York team had a good year, and we are excited about what is ahead. We will continue to make strategic investments in our network, invest in our communities through Project C, and create a stronger, more diverse workforce for the future.

National Grid Ventures and Other activities

Highlights

This section relates to NGV, non-regulated businesses and other commercial operations not included within the business segments.

NGV, which operates separately from our core regulated units, is focused on competitive markets across the UK and US. Its portfolio includes electricity interconnectors, LNG storage and regasification, large-scale renewable generation, conventional generation and competitive transmission. Other activities primarily relate to NGP, the corporate investment and innovation arm of National Grid, as well as UK property, insurance and corporate activities.

Despite ongoing challenges presented by the COVID-19 pandemic in the US and UK, NGV businesses performed well in 2021/22, including commissioning the North Sea Link interconnector between the UK and Norway and the Prairie Wolf Solar Project in Illinois. NGV also successfully secured a seabed lease in the New York Bight offshore auction together with RWE Renewables. In March 2022, National Grid Property completed the sale of National Grid's 50% interest in the St William Homes LLP joint venture to The Berkeley Group plc.

The safety and wellbeing of colleagues continues to be a key priority across NGV. As at 31 March 2022, NGV's LTIFR was 0.14.

Enable the energy transition for all

NGV plays an important role for the National Grid Group in developing, constructing, operating and investing in infrastructure to support the energy transition and security of supply in both the UK and the US.

In the UK, NGV is the leading developer and operator of interconnectors, which are high-voltage subsea cables that enable the UK to share excess power, such as wind, solar and hydro generation, with neighbouring markets.

In October 2021, NGV commissioned North Sea Link, which at 447 miles (720 kilometres) is the world's longest subsea interconnector. NGV also operates links to Belgium, France and the Netherlands. By 2030, we estimate that 90% of the energy imported by NGV interconnectors will be from zero-carbon energy sources.

NGV is part of the Northern Endurance Partnership, a consortium developing CO_2 transport and storage technology for the East Coast Cluster (ECC) in the North of England. The ECC, which aims to transport carbon emissions from the Humber and Teesside for safe storage deep under the Southern North Sea, is one of two industrial clusters selected by the UK government to be delivered this decade.

Ofgem has agreed to National Grid's offer to make an early payment of £200 million of interconnector revenues to consumers, via the regulator, as part of the interconnector regulatory regime. The payments will be made over the next two years, to help reduce consumer energy bills.

In the US, NGV and RWE Renewables successfully secured a seabed lease as part of the US Bureau of Ocean Energy Management's New York Bight auction. Community Offshore Wind, a joint venture between the two companies, will develop the awarded seabed, which has the potential to host 3 GW of capacity. NGV's National Grid Renewables business started commercial operations of its 200 MW Prairie Wolf Solar Project in Illinois and began construction on 674 MW of solar and energy storage projects in Texas and Ohio.

NGV is part owner of New York Transco, which started construction of the largest transmission project in New York in 40 years to enable 1 GW of renewable energy onto the system.

NGP had a portfolio which comprised 38 companies and four fund investments at a fair value of $491 million, as at 31 March 2022.

Deliver for our customers efficiently

In the UK, NGV's interconnector portfolio comprises 6.4 GW of operational capacity. Together with France's Réseau de Transport d'Électricité (RTE), NGV operates the IFA and IFA2 interconnectors connecting France and Great Britain. IFA, a 2 GW HVDC cable, suffered a major fire in September 2021. Half of the link, representing 1 GW, was safely returned to service the following month. The remaining 1 GW is expected to return to service in December 2022. IFA2 is a 1 GW cable stretching 149 miles (240 kilometres). BritNed is an independent joint venture between National Grid and TenneT, the Dutch transmission system operator. It owns and operates a 1 GW HVDC link between Great Britain and the Netherlands. Nemo Link is an independent joint venture between National Grid and Elia, the Belgian transmission system operator. It owns and operates a 1 GW HVDC link between Great Britain and Belgium.

NGV's Grain LNG is one of three LNG importation facilities in the UK. It operates under long-term take or pay contracts with customers and provides importation services of ship berthing, temporary storage, ship reloading and regasification into the National Transmission System (NTS). Grain LNG's road tanker loading facility also offers the UK's transport and off-grid industrial sector a more environmentally friendly alternative to diesel or heavy fuel oil. The facility allows tanker operators to load and transport LNG in bulk across the UK via road or rail.

NGV is a part owner of Millennium Pipeline, which provides consumers in the northeastern US with additional natural gas infrastructure to meet growing consumer demand for cleaner and more reliable energy. It is strategically positioned to serve utility and power plant loads across New York State and into New England.

Inside the UK valve hall at NGV's 1GW IFA2 interconnector

Grow our organisational capability

NGV established a portfolio management function to optimise the existing portfolio and identify future opportunities for growth.

Empower colleagues for great performance

NGV prides itself on a diverse and inclusive culture, which includes 46% diversity across new hires in 2021/22.

Looking ahead

In the UK, NGV will grow its interconnector portfolio by 1.4 GW in the next two years, with construction underway on the Viking Link interconnector. Developed together with Danish transmission system operator Energinet, Viking Link will be a 475 mile (765 kilometre) long subsea link connecting Great Britain and Denmark. NGV will have 7.8 GW of operational interconnector capacity when Viking Link becomes operational in 2023/24. Work is also underway to expand Grain LNG's storage capacity from 1.0 million m³ to 1.2 million m³ by 2025, further supporting the UK's gas security of supply.

Stakeholder engagement

Effective engagement with our stakeholders is key to successful achievement of the Group's strategy in the long term.

Section 172(1) statement

During the year, the Directors acted in the way they considered, in good faith, most likely to promote the long-term success of the Company for the benefit of its members as a whole, with due regard to the matters set out in section 172 of the Companies Act 2006. Examples of how the Directors have had regard to these matters during the year are set out on pages 56 – 59, which together form our section 172(1) statement.

The Board recognises its responsibilities to each of National Grid's stakeholder groups and to wider society. The Directors endeavour to ascertain the interests and views of our stakeholders and consider these when taking decisions.

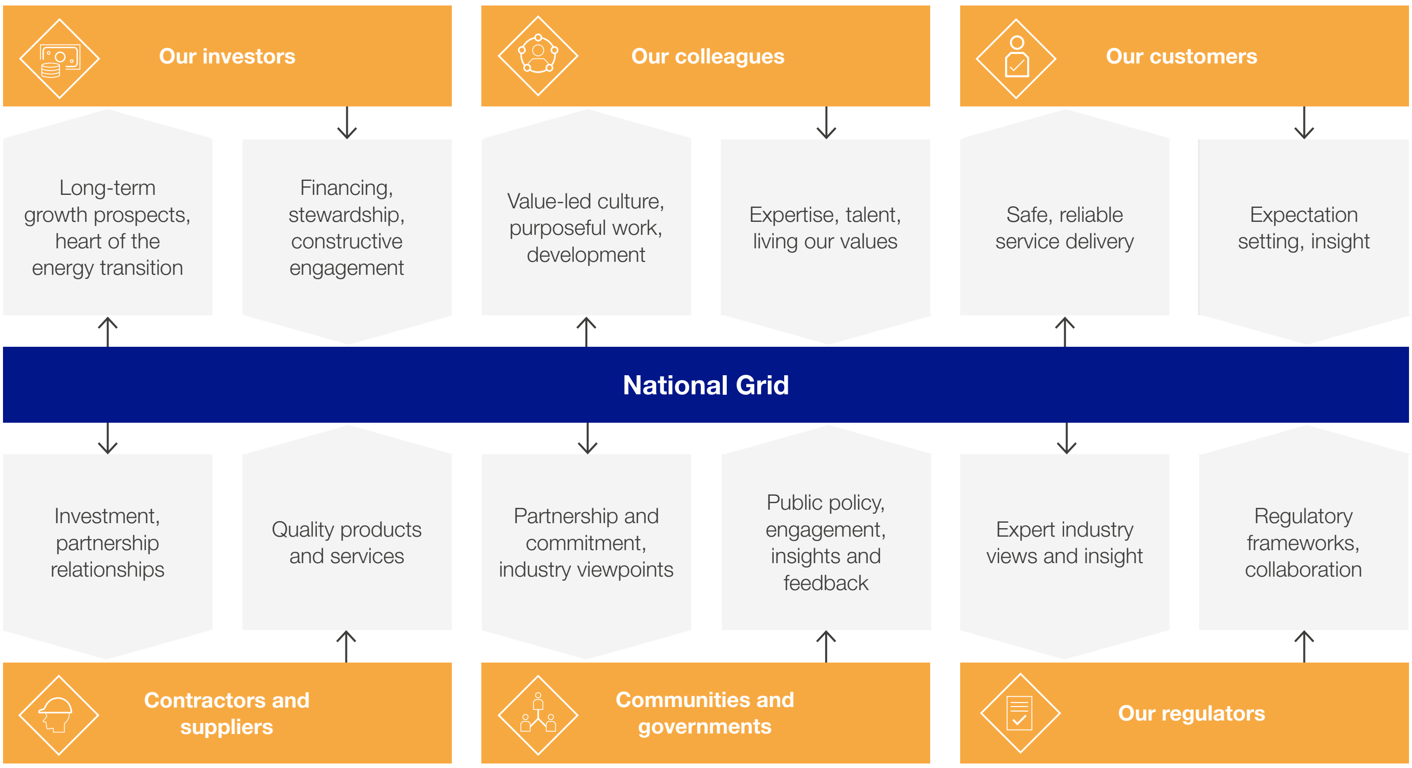
The Board oversees a governance framework that enables decisions to be taken at the right time in the most appropriate forum. We recognise that it is not always possible to achieve each stakeholder's preferred outcome and consideration of each stakeholder group depends on the matter at hand. The Board strives to balance the different priorities and interests of our stakeholders in a way compatible with the long-term, sustainable success of the business and which maintains a standard of business conduct aligned to our values and purpose.

Our approach to stakeholder engagement
Most engagement with key stakeholders is carried out by management teams and takes place at business level and the Directors engage directly with stakeholders where possible. Reporting mechanisms are in place to collate feedback and developments from such engagement and enable a flow of this information to the Board and Board Committees, to inform decision making.

An overview of business-level engagement and outcomes is reported to the Board or appropriate Board Committee on a regular basis. The cadence and content of such reports to the Board are considered bi-annually as part of the forward business review by the Chair, Chief Executive and Group General Counsel & Company Secretary, to ensure sufficient consideration is given to pertinent matters and affected stakeholders. One of the Board's objectives is to routinely bring external viewpoints into Board discussions, which have included external speakers, training sessions and organisational deep dives led by colleagues from across the business, during the year.

The Board has identified the stakeholder groups it considers key and some examples of how we have engaged with these groups, together with the outcomes and impacts of engagement on our business and Board decisions, are set out on pages 57 – 58. These examples are not exhaustive and we have integrated reporting on how stakeholder views are considered throughout this report. The following should therefore be read in conjunction with this statement:

- Pages 92 – 94 set out key matters considered by the Board during the year.
- Pages 4 – 7 describe our business model including how our business interacts with our key stakeholders, and why they are important to us.
- Pages 60 – 69 set out our commitment to being a responsible business and the action we have taken during the year.
- Pages 15 – 19 explain developments in our business environment and our responses.
- Pages 101 – 103 explain the activities of the Audit & Risk Committee in response to allegations of fraud and bribery offences by former National Grid employees in our US business.



Engagement with our stakeholders

Stakeholder group – Our investors

How we engaged

In November 2021 we held our 'Doing Right Now' Investor Day, attended by the Chief Executive and senior leaders, where we announced our new organisational structure and associated cost-efficiency target, and further clarified our five-year plan announced in May 2021.

The Chief Executive attended the UK Global Investment Summit in October 2021, which focused on opportunities for investors and businesses as part of the UK's Green Economic Recovery.

Our Remuneration Committee engaged with shareholders on key remuneration topics, particularly development of the new remuneration policy, which will be put to a shareholder vote at our 2022 AGM.

Outcomes and actions

An independent investor-perception study following the Investor Day found the Company's critical role at the heart of the energy transition was well understood and there was a high degree of trust that the Company will fulfil this role successfully. The need to maintain the momentum to integrate our ESG reporting and talk more about future opportunities for the network, particularly in the US, was highlighted. Responses have informed our ongoing investor relations communication strategy and we will address key themes at investor events throughout 2022.

At the 2021 AGM, the Board proposed, and shareholders approved, an amendment to Company's Articles of Association to enable the holding of hybrid AGMs. This flexibility will enable more of our shareholders to participate in future AGMs, using online facilities. We intend to hold a hybrid AGM for the first time in 2022.

Our unique investment proposition is set out on pages 8 – 9.

Stakeholder group – Our colleagues

How we engaged

As COVID-19 restrictions in the UK eased, the Board was able to safely participate in site visits in early 2022. Following extensive oversight by the Board of the investigation into a catastrophic fire at the IFA interconnector site in Sellindge during 2021, three Non-executive Directors visited the site in March 2022. They met with a range of workers on site and heard views on safety practices.

The annual Grid:voice engagement survey provides insights into what is important to our colleagues and how they are feeling about the Company's strategy and leadership. The results of this survey were provided to the Board and plans put in place to progress any areas of improvement identified. Further information about the Board's employee engagement programme is set out on pages 96 – 97.

Outcomes and actions

Feedback from our annual Grid:voice survey has led to development of our home-working IT capabilities and of our flexible working policy, following a strong indication of a preference among the workforce to continue with hybrid ways of working.

Specific indicators are used as a measure of culture in relation to employee perception of safety and leadership. You can learn about how the Board oversees corporate culture and the progress we are making on these indices on page 95.

Employee engagement and workforce diversity are two of our non-financial KPIs. Further information is on page 27.

Read about our commitments to our colleagues and how we are living our corporate values on pages 65 – 66.

Stakeholder group – Our customers

How we engaged

Bi-annual updates are provided to the Board on UK, US and NGV customers, including progress on deliverables linked to our strategic priorities.

As recommended by the NY Monitor, the Company produced a supplementary report to its Natural Gas Long-Term Capacity Report for Brooklyn, Queens, Staten Island and Long Island (published in 2020), which analysed gas supply constraints in downstate NY and identified options for meeting future demand. The supplementary report was based on the results of an extensive outreach programme to measure customer and other stakeholder support for the various supply options for future demand. Engagement occurred through multiple channels, including social media and web platforms. Regular reports and analysis were provided to the Board to inform strategy development in this area.

WPD has an established customer panel that meets quarterly, with members who represent a wide range of customers and other key stakeholder groups. This enduring, expert engagement plays an important role in challenging our approaches, helping WPD achieve its purpose of delivering good value and high-quality services for its customers.

Outcomes and actions

The Board spent considerable time discussing the customer viewpoints presented as part of the downstate New York supply analysis together with the report's findings and consideration of the robustness of the report's methodology.

The Board noted the impact of adverse weather conditions on customers across the network during 2021 and early 2022. Several storms in the UK and the US caused power outages in a number of areas. The Company was able to provide a strong operational response to Storm Henri in New England, due largely to the Company's investment in Rhode Island infrastructure over the past five years. You can read more about our storm response on page 19, in our business unit updates on pages 50 – 55, and in our Safety & Sustainability Committee report on page 106.

To address the challenges of engaging with end customers, who often have little prior knowledge of WPD, an enduring cohort of 96 customers have undergone a programme of research and focus groups over several months, enriching their understanding and ability to offer informed scrutiny of our plans.

Stakeholder group – Suppliers and contractors

How we engaged

Regular reports relating to interactions with our suppliers were provided to the Group Executive Committee and to the Board. Additional information about specific challenges as they arise, such as those presented by the heightened energy prices in the UK and the related security of supply are included in management reports to the Board to inform discussions.

In January 2022, the Safety & Sustainability Committee welcomed external speakers from Quanta Services Inc., a major supplier of infrastructure services to the Group in the US.

The Board receives an annual update on the approach taken to address modern slavery risks across our supply chain and the proposed commitments for the following year.

Outcomes and actions

We strive to work only with businesses that adhere to our Code of Conduct and continue to work closely with our suppliers and peers to share and build upon existing knowledge and promote best practices within the industry.

We have worked with Ofgem via the ENA with WPD participation in working groups to facilitate the recovery of Supplier of Last Resort (SoLR) costs for suppliers.

In response to developments in the UK gas and energy markets, we established an organisation-level Energy Market Risk Committee to monitor and consolidate the risks and impacts of the current market for reporting to the Board.

The Board considers and approves the Company's Modern Slavery Statement annually. This statement is available at nationalgrid.com/modern-slavery-statement.

Stakeholder group – Communities, governments and environment

How we engaged

We were a principal partner at COP26 in 2021. The Company hosted a number of sessions and events, including the Chief Executive co-hosting the launch of the Green Grids Initiative with the UK government.

One of the Board's aims is to provide positive advocacy for key public policy and regulatory changes in support of net zero. The Chief Executive and other members of senior leadership have met directly with members of the UK and US governments during the year as part of the Company's ESG outreach to highlight our continuing efforts towards a clean energy transition.

In response to the situation in Ukraine, the business has established a Crisis Assessment Team to assess the situation on an ongoing basis and additional Board reporting has been implemented to ensure prompt information flows. The Board advises as to actions that may be undertaken quickly, where appropriate.

Outcomes and actions

As part of enabling the energy transition for all, the US business established independent New York and New England Advisory Boards to provide objective input and external expertise to US senior leaders. The boards will enable the Company to build on existing relationships while creating new relationships, and advance the Company's profile as a socially responsible and purpose-led organisation among our stakeholders in the US.

The Company was invited and agreed to participate in the Green Grids Initiative's UK secretariat after COP26. Further information on this and our other COP26 activities is on pages 16, 17 and 69.

WPD was the first DNO to develop a Social Contract as a vehicle for delivering social and environmental value for our employees, customers and wider society. Co-created with stakeholders, the Social Contract sets out our ambitions to maximise the positive impact of what we do.

Read about our community programmes on page 62.

Stakeholder group – Our regulators

How we engaged

The Board receives regular updates from the business on regulatory matters.

The NY Monitor attended the Company's Board meeting in June 2021 to engage in discussion with the Directors about the Company's supplementary report to its Natural Gas Long-Term Capacity Report for Brooklyn, Queens, Staten Island and Long Island (published in 2020). The session covered the culture of the Company's US business, issues of supply and demand in New York and the need for third-party and regulatory support for innovative change. There was a second meeting with the NY Monitor in September 2021, hosted by a subset of the Directors.

The Company seeks to maintain a collaborative relationship with all its regulators. The Board met with Ofgem senior leadership in March 2022.

Outcomes and actions

During the year, US regulatory matters, the RIIO-ED2 regulatory consultation and our engagement with Ofgem have been considered in depth by the Board. The Board discussed the complexity of the downstate New York supply challenges and confirmed that this would continue to form part of the Board's agenda in 2022.

The Board noted the Company's engagement with Ofgem on changes to SoLR rules which will improve the viability of suppliers to retail customers.

As we work to drive progress towards net zero and a secure energy future, the Company has, and will continue to, consult extensively with Ofgem and BEIS on development and implementation of the FSO. Read more about the ESO on page 52.

Case study: Strategic portfolio repositioning

The Nemo Link Interconnector that runs between Britain and Belgium powers the Richborough and Canterbury, high-voltage overhead line.

In March 2021, we announced our plan to reposition our portfolio through three strategic transactions: the acquisition of WPD, and the sale of NECO and of a majority stake in NGG. The Board has spent a significant amount of time during the year overseeing the progress of these transactions and considering the ongoing implications for our business and stakeholders.

A Transaction Steering Committee (chaired by the Chief Executive) and a Transaction Management Office were established to provide executive-level oversight and a layer of governance over the transaction programmes. Regular reports and updates were provided to the Board on progress, including deep dives and the results of ongoing stakeholder engagement to inform decision-making at all stages.

Read more about our strategic portfolio positioning in our Chair's statement and Chief Executive's review on pages 10 – 14 and our strategy and risk management for climate change on page 74.

Section 172 considerations:

Likely long-term consequences of decisions
The decision to undertake a strategic portfolio pivot, and specifically the three transactions announced during the 2021/22 financial year, considers the long-term sustainable growth profile of the Group as key. The transactions are aligned to our wider ambition to be at the heart of the energy transition. The decision to acquire WPD, the UK's largest electricity distribution business, increases our exposure to electricity, which is expected to see a high level of asset growth as a part of the UK government's plans to decarbonise the energy system.

Interests of our colleagues
The Board has considered the impacts of the integration of WPD on existing and incoming employees and of separation on employees of NECO and GT at every stage. This includes the technological and operational aspects of their work environments and continuity of rewards. The Board oversaw an engagement plan for the integration of WPD employees and the Chief Executive toured key WPD sites in September 2021. The CEO of WPD will lead the UK distribution business as part of the enlarged Group.

Fostering business relationships with suppliers, customers and others
The Company expects to provide benefits for customers and suppliers as a result of greater interconnectivity of the network following the onboarding of WPD. In conjunction with the NGG Sale, the Company engaged in dialogue with BEIS in relation to the newly implemented National Security and Investment Act 2021 in the UK.

Impact on community and environment
The Company recognises the importance of WPD to the communities it serves and has announced its intention to maintain the WPD headquarters in Bristol and offices in other key locations. WPD's community programmes have been maintained and are being integrated into the Group's wider projects. The strategic portfolio repositioning is aligned to the Group's wider ESG strategy. For more information see page 74.

Maintaining a reputation for high standards of business conduct
The Board oversees the process for obtaining the appropriate regulatory approvals required for each of the transactions before they are able to complete. Regular updates on progress were provided to the Board.

Need to act fairly between members
The Company endeavours to provide investors with clear and transparent reporting on its plans and progress. The Investor Day in 2021 was an opportunity for investors to hear about the Group's five-year plan and to ask questions of a broad group of business leaders. The Company maintains an investment grade credit rating supporting its sustainable dividend policy.

Our commitment to being a responsible business

Our RBC focuses our actions on where we can create the most positive impact for society.

Responsibility at National Grid

Our purpose is to Bring Energy to Life and we do this through the delivery of the electricity and gas that powers our customers and communities, safely, reliably, fairly and affordably, and this is the core of our role as a responsible citizen. It is also vital to focus on how we fulfil our purpose, minimising negative impacts and enhancing our overall contribution to society.

We published our RBC in October 2020 and the commitments we made then remain the foundation of our activity. The RBC contains a series of commitments under five headings: the environment, our communities, our colleagues, the economy and our governance. These commitments are now built into business plans and performance against each commitment is regularly reviewed. During 2021/22, we received external validation from the SBTI for our National Grid Group interim GHG reduction targets, aligned to a ‘Well below 2°C’ pathway. Alongside this, we have undertaken a programme to release value from unclaimed shares over 12 years old and will explore ways to use this value to enhance our community investment programmes.

Our approach to reporting

We have published our second separate RBR for 2021/22, which has been guided by internationally recognised reporting standards. The RBR contains information relating to our material focus areas and provides detail on our management approach, performance and the new commitments set out in the RBC. Certain metrics are subject to independent external assurance. Our performance data is subject to different levels of assurance, including external (limited) assurance for key metrics, and a reporting process and controls review by National Grid’s Finance second line risk and controls team.

This section of our Annual Report provides a high-level summary of our approach to responsible business and meets regulatory requirements with regard to certain responsible business-related topics. Except where expressly stated or clear from the context, the data in this section does not include WPD data. You can find the RBR and RBC here: nationalgrid.com/responsibility

Our communities

While continuing to place public safety and network reliability and resilience as top priorities, we are focusing in particular on the affordability and fairness of our service to the community and developing the skills of young people from some of the more deprived communities where we operate to help us in the clean energy transition.

The economy

We are continuing to develop our infrastructure, invest in innovation that benefits our customers and wider society, and pay the right tax, as well as working to influence our supply chain to focus on diversity and responsible behaviour.

Our governance

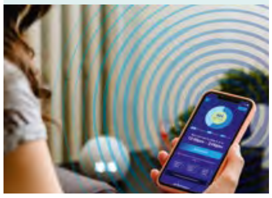
We will hold ourselves accountable on these commitments and ensure that stakeholder voices continue to be heard at the highest level, and that they influence our approach. We will ensure we maintain the highest standards of ethical conduct.

Our people

While continuing to ensure our people are kept safe and healthy, and that work conditions meet their expectations, we are stepping up our efforts in relation to diversity and inclusion – focusing on fairness in pay and opportunity, transparency and training around issues of gender and ethnicity.

The environment

While continuing to manage our environmental performance responsibly, we have emphasised the need to facilitate the transition to a clean energy system, to achieve net zero by 2050 for our Scope 1 and 2 emissions, dramatically reduce our Scope 3 emissions and continue to improve the biodiversity of land that we own.



Material issues for Global Reporting Initiative (GRI) reporting purposes

Our communities

- Affordability
- Community engagement
- Science, technology, engineering and mathematics (STEM) education
- Workforce development
- Network reliability
- Customer satisfaction
- Cyber security
- Public safety
- Connectivity

The economy

- Right tax
- Fair return
- Investment (long-term and local)
- Green financing
- Supplier prompt payment
- Supply chain engagement

Our governance

- Board representation and role
- Stakeholder engagement
- Emerging risks
- Skills for the future on the Board
- Transparency and reporting
- Culture
- Ethics and human rights
- Compliance

Our people

- Social mobility
- Diversity, equity and inclusion
- Fair pay
- Employee rights
- Employee health and safety
- Mental health and wellbeing
- Purpose, values and culture

The environment

- Enabling a clean energy system
- Our own emissions
- Air quality
- Land use
- Water
- Circular economy
- Habitat and biodiversity
- The energy transition

Our approach to managing responsible business matters

Our overall approach to responsible business can be summarised as:

- identifying our key stakeholders, understanding how they interact with our operations, activities and value chain, and the issues that are relevant to them;
- adopting a logical process for prioritising those issues, to identify the most material matters; and
- responding to the priorities by developing appropriate strategies, policies, programmes, targets and performance indicators, and reporting regularly and transparently on our progress.

In establishing our priorities, we are also guided by recognised frameworks such as the United Nations Global Compact Principles and Sustainable Development Goals.

Over the years, we have developed a series of processes and policies to ensure we manage responsibility issues effectively. Descriptions of the policies and the outcomes pursued in relation to the matters listed on page 60 are discussed, where material, throughout this section and our RBR.

A full list of our policies, and our Code of Ethics, can be found online, at nationalgrid.com/about-us/corporate-governance.

Assurance

We engaged PricewaterhouseCoopers LLP (PwC) to undertake a limited assurance engagement for 2021/22 data only, using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and ISAE 3410: 'Assurance Engagements on Greenhouse Gas Statements'. PwC have provided an unqualified opinion in relation to the 2021/22 KPIs and other data that are identified with the symbol and feature on page 1, pages 26 – 27, page 68 and page 83. Details of PwC's full limited assurance opinion and National Grid's Reporting Methodology are set out in the RBR. Data that has been assured by PwC is identified with the symbol .

Non-financial information

This section provides information as required by regulation in relation to:

Environmental matters
– pages 15 – 19; and
– pages 67 – 83;

Our employees
– pages 21 – 22
– page 27
– pages 50 – 55
– pages 65 – 66
– page 95 – 96

Social matters
– pages 15 – 19; and
– page 62

Human rights
– page 64 and page 263

Anti-corruption and anti-bribery
– page 63 – 64 (see also pages 101 – 105)

In addition, other information describing the business relationships, products and services which are likely to cause adverse impacts in relation to the matters above can be found as follows:

Business model
– pages 4 – 7

KPIs
– pages 24 – 27

Principal risks
– pages 28 – 32

Audit & Risk Committee report (our due diligence)
– pages 101 – 105

People & Governance Committee
– pages 99 – 100

Our stakeholders
– pages 56 – 59

Safety & Sustainability Committee
– page 106

Our communities

We go beyond our role in delivering safe, reliable energy for our communities so that everyone can play a role in an affordable energy transition.

Our commitments	Progress in 2021/22	Status
We will deliver sustainable energy reliably. We're committed to making sure our systems are resilient and can play a leading role in disaster recovery	UK ET – 99.99993% US ET – 99.95894% US ED – 99.93472%	Our networks continue to run at a high level of reliability
Provide access to skills development for 45,000 people by 2030, particularly lower-income communities	5,233 people (cumulative since 2020/21) 3,972 people 2021/22 only	Our skills programmes have continued at a lower level through COVID-19
Deliver energy in a fair and affordable way to the communities we serve	We invested £18.3 million during 2021/22 to support communities affected by COVID-19 and recent rises in energy prices	We are investing more in community support for COVID-19 and rising energy prices

> "We have released significant new funds into our community investment programme."

Engaging with our communities

We seek regular feedback from our customers and communities and act to improve performance. Our approach has been to go beyond providing the safe, resilient energy systems society expects, and work to ensure our economic and social role has the greatest possible impact. This involves developing infrastructure such as our work in East Anglia and helping consumers use energy more efficiently. Our WhenToPlugIn app in the UK informs consumers when the electricity in their homes is coming from clean and green energy sources.

We also partner with charity organisations such as Trussell Trust and Red Cross and encourage employees to volunteer in the community. 1,167 National Grid employees have registered to volunteer their time to support our Grid for Good programme.

An energy transition for all

The technological and environmental benefits of the clean energy transition should benefit everyone, and we will play our role in ensuring that no one is left behind. A fully decarbonised transportation infrastructure, for example, should be accessible by everyone across the communities we serve.

Part of this role includes protecting and supporting vulnerable customers. In the US, we do this through low-income programmes and energy-efficiency programmes. In the UK, in 2017, we established a £150 million Warm Homes Fund designed to support local authorities and others in helping approximately 50,000 households suffering from fuel poverty. During 2021/22, this fund has helped the Fuel Bank Foundation to provide crisis support. We are also supporting Citizens Advice in its work to support those struggling with the rising cost of living, including energy bills.

In 2020, we also launched the Green Light Signal, a smart light bulb that turns green when electricity in your region is more than 50% low carbon. The bulb and new WhenToPlugIn app are designed to engage customers and communities in the transition to low carbon and build understanding of progress.

Benefiting communities

We are supporting opportunity and growth in our communities. We launched Grid for Good in 2020 to achieve social mobility for disconnected young people in the communities we serve. This year the programme has supported 3,972 young people, helping to inspire and develop the skills needed for net zero. In the UK, we support communities affected by our infrastructure projects, where grants are available for local projects that bring social, economic or environmental benefits. In addition, as part of capital delivery projects, we work with third-party organisations to provide community benefits at scale.

In the US, we support the National Grid Foundation, a non-profit charitable organisation. The Foundation awards grants to non-profit organisations focused on educational and environmental challenges. The Foundation currently disburses nearly $4 million a year; for 2021, this was $3.77 million.

In 2021/22, we launched Project C for our community to promote and develop our community programmes in New York State. Across Massachusetts, New York and Rhode Island, we provided total funding of approximately $12 million a year through centrally-led programmes in support of charitable organisations.

During the year, we recorded over 23,416 hours volunteered by our colleagues in support of a variety of causes. As we come out of COVID-19 restrictions, we will need to grow our programmes to meet our 2030 commitment of 500,000 hours.

The economy

Our work to deliver secure, reliable, affordable energy underpins the wider economic success of our customers and their communities, their states and nations we serve. We are investing in innovation and raising Green Finance to help enable the energy transition.

Our commitments	Progress in 2021/22	Status
Maintain reinvestment in our infrastructure and demonstrate the social benefits of our new infrastructure programmes	Group – £6.7 billion (continuing operations)	In line with our commitment of reinvestment in infrastructure
Continue to invest in developing technologies and innovations that benefit our customers and wider society	We have developed our Green Financing arrangements and through NGP we have committed £93 million of investment in technology and innovation	On track to deliver our investment in developing technologies and innovations
Continue to influence our supply chain to operate as responsible businesses	CDP A listed for supply chain standards and members of the Race to Zero	We continue to develop our supply chain standards and have committed to at least 75% of our top 250 suppliers to have active carbon reduction targets by 2030

Through National Grid Partners, in 2021/22, we committed to

£93m

of investment in technology and innovation

Our contribution

Our economic contribution to society comes primarily through the delivery of safe and reliable energy but also through our role as an employer, a tax contributor, a business partner and community supporter.

We help national and regional governments formulate and manage their energy policies and commitments. Our approach to regulatory consultation is to seek a framework that puts consumers at the centre of our price control, while enabling secure, reliable energy supply and the clean energy transition, each of which are key in protecting future economic growth, safety and wellbeing in society.

During the year, we invested £6.7 billion (continuing operations) in our energy infrastructure. This investment allows us to continue to provide secure and reliable supplies and underpin the wider success of the economy.

Finance, tax and investment innovation

We published our Green Financing Framework in November 2019, and since then have issued bonds from our UK and US electricity businesses, now totalling £1,791 million, funding projects to enable the transition to clean energy.

We have issued £565 million Green ECAs for our interconnector portfolio to prepare us for a variable renewable energy (VRE) future. More information is available in our first Green Financing Report, now part of our Responsible Business Report.

NGP is the venture investment and innovation arm of National Grid, with a portfolio that comprises 38 companies and four fund investments at a fair value of $491 million at the close of the fiscal year.

Our approach to tax is part of our commitment to being a responsible business and is guided by our values. We are committed to a coherent and transparent tax strategy and details of this are set out on page 47.

Partnership with our supply chain

We aim to build partnerships with small and local businesses, and all suppliers who set clear ambitions related to the environment, diversity, economic wellbeing and governance. We are fair to our suppliers and committed to paying them promptly. Across the Group, over 90% of supplier payments were made to contractual terms.

We have aligned our Global Supplier Code of Conduct to our RBC pillars and require suppliers to share our commitment to respecting, protecting and promoting human rights. We expect our suppliers to comply with all applicable local, state, federal, national and international laws or regulations, including the UK Bribery Act 2010 and the US Foreign Corrupt Practices Act of 1977. We also require them to adhere to the Principles of the UN Global Compact, the International Labour Organization minimum standards, the Ethical Trading Initiative Base Code and the US Victims of Trafficking and Violence Protection Act of 2000.

In the UK, we are an accredited Living Wage Foundation Employer and paying a real living wage is a requirement for all our suppliers based in the UK.

Expanding the diversity of our supplier base is an important part of our procurement strategy. In the US, we partner in a number of programmes including the Greater Boston Chamber of Commerce Pacesetters Program and the New York & New Jersey Minority Supplier Development Council. We are also partners in the Ascend Long Island project, providing specialised programmes to promote minority business growth and job opportunities.

Our governance

Adopting the right approach to governance and the highest ethical standards is critical to the success of our business.

Our commitments	Progress in 2021/22	Status
Continue to review and adapt our policies to reflect and support our responsible business commitments and ambitions	Appointment of a Chief Sustainability Officer, joining our Chief Diversity Officer. All RBR commitments embedded into business planning and targets	In 2021/22 we have moved our governance to better reflect our RBC priorities
Continually review the Company culture to ensure it is inclusive	Purpose has moved to be the most important cultural aspect in our annual leadership culture survey	In 2021/22 purpose has moved to be at the heart of how we do business
Commitment to a Group Executive Committee diversity ratio of 50% and ambition to achieve the same for Board diversity	The diversity of our Board is now 53.8%, Group Executive Committee diversity is 53.8%, and the diversity of our Senior Leadership Group is 49.5%	We have made positive progress in achieving diversity at Board level and good progress on diversity at senior leader level

Stakeholder engagement

We prioritise our responsibilities to our different but interrelated stakeholder groups and are careful to ensure we understand the interests of our stakeholders and reflect them in our decisions. Stakeholder engagement plays an important role in how our Board ensures responsibility in governance. This includes listening to our stakeholders' views, inviting external guests to meetings, and using independent research to bring the voice of the customer and other stakeholders into the Boardroom.

Highest ethical standards – ethical business conduct

We regard the potential for bribery and corruption as a significant risk to the business and have established policies and governance that set and monitor our approach to preventing financial crimes, fraud, bribery and corruption, including our Code of Ethics (covering anti-bribery and anti-corruption). We have a Company-wide framework of controls designed to prevent and detect bribery.

Our Code sets out the standards and behaviours we expect from all employees to meet our values of 'do the right thing', 'find a better way' and 'make it happen'. Our Group Ethics, Risk and Compliance Committee oversees the Code of Ethics and associated awareness programmes. We issue this Code and operate an e-learning course for all colleagues so they adequately understand our zero-tolerance approach.

We also have an Anti-Financial Crimes policy that applies to all colleagues and those working on our behalf. It sets out our zero-tolerance approach to bribery, fraud, money laundering, tax evasion and other corrupt business practices. To ensure compliance with the UK Bribery Act 2010 and other relevant legislation, we operate an anti-financial crime risk assessment process across the Company and ensure adequate procedures are in place.

Any cases alleging bribery are referred immediately to the relevant ECC so the members can satisfy themselves that cases are managed effectively, including ensuring any lessons learnt are communicated across the business. We investigate all allegations of ethical misconduct thoroughly, take corrective action and share lessons learnt. We also record trends and metrics relating to such allegations.

Each business function is required to consider its specific risks and maintain a compliance framework, setting out the controls it has in place to detect and prevent bribery. Business areas self-assess the effectiveness of controls and provide evidence that supports reported compliance. Each year, all function heads are asked to certify the compliance in their area, and to provide details of any exceptions. This culminates in the presentation of a Certificate of Assurance from the Chief Executive to the Board (following consideration by the Audit & Risk Committee). You can read more about the Audit & Risk Committee's role, including its ongoing assessment of the adequacy of our anti-bribery and anti-corruption policies and processes, on pages 101 – 105.

In New York, we were the victim of criminal activity where former employees circumvented controls to commit fraud in the procurement of DNY Facilities work. We engaged professional consultants to perform a comprehensive review of our control framework. Whilst our procurement controls were found to be effective, we are implementing recommendations to make improvements to our control framework and Ethics and Business Conduct Program.

Highest ethical standards – human rights

Respect for human rights is incorporated into our employment practices, and values, and is integral to our Code of Ethics. This is vital in maintaining our reputation as a company our stakeholders want to do business with, and our employees want to work for.

Although we do not have specific policies relating to human rights, slavery or human trafficking, we cover these issues through related policies and procedures such as our approach to diversity, anti-discrimination, privacy, equal opportunity and, in addition, our Global Supplier Code of Conduct integrates human rights into the way we screen and interact with our supply chain.

Whistleblowing

We have a confidential internal helpline, and an external 'Speak-Up' helpline available at all times in all the regions where we operate. We publicise the contact information to our colleagues and on our external website so concerns can be reported anonymously. Our policies make it clear that we will support and protect whistleblowers and not tolerate any form of retaliation.

Our people

Our colleagues are vital to our business and we strive to be the employer of choice, attracting a diverse range of highly skilled people who feel they can be themselves at work.

Our commitments	Progress in 2021/22	Status
Be as transparent as possible internally and externally on gender and ethnicity/race	We have begun internal reporting on a much wider range of diversity metrics, to underpin our commitment to diversity	ON TRACK – Following launch of internal reporting, we expect further granularity of external data over the next 2 years
Achieve 50% diversity in our Senior Leadership Group and new talent programmes by 2025	Our Senior Leadership Group diversity is 49.5% and new talent programmes are at 55.6%	We have made steady progress on diversity of these key groups and we expect to achieve target ahead of 2025

Our values

Do the right thing

Find a better way

Make it happen

Our culture

Leaders who model change
- Leaders are responsible for change and encourage colleagues to make decisions and take responsibility.
- Measured feedback for all leaders to adjust and align behaviour and increase accountability.
- Leaders act safely, inclusively and with integrity.

Develop a results-orientated and purpose-driven mindset
- Greater accountability.
- Improve success for our customers and continue to improve efficiency.
- Embrace bold thinking and new ideas.
- One team, focused on finding solutions.

Our values are at the heart of everything we do
- Colleagues are recognised for living our values.
- Encourage storytelling of how we are changing; encouraging colleagues to speak up where people are not living our values.
- Our values are instilled into our people, processes, policies and ways of working.

Grid:voice engagement score

81%

(2020/21: 81%)

Safe to say 'yes' index in Grid:voice

73%

(2020/21: 67%)

> **"Our employee engagement score has stayed consistent."**

Reflecting the communities we serve

Diversity is central to our business at every level of operation and we want our Board and Group Executive Committee to reflect the communities we serve.

Our Board diversity is now 53.8% and our Group Executive Committee diversity is 53.8%. We also measure the diversity of our Senior Leadership Group[1], to indicate the diversity of internal progression potential to the executive level. The diversity of this group is 49.5%, which we consider positive for a technical or engineering organisation, but we will not consider ourselves sufficiently diverse as an organisation until we reflect our customers and the communities we serve.

1. Senior Leadership Group: this includes the Group Executive Committee members and the c.110 senior colleagues in the Company. Please note, this differs from the definition of senior management which includes both senior colleagues and subsidiary directors.

Case study: Community action in East London

In March 2022, a group of National Grid leaders volunteered at Mudchute Park and Farm, a community charity set in 32 acres of countryside in the Isle of Dogs, London.

Mudchute runs a working farm, stables and educational activities – giving under-privileged and under-represented communities in East London the chance to learn and play in a safe, natural setting. It receives a small grant but relies on volunteers and fundraising, so has struggled to cover the costs of animal care and the services it runs during the pandemic.

Working in teams and encouraged by TV presenter Tommy Walsh – a keen supporter of the charity – our leaders transformed a wild stretch of ground into an attractive wooded garden in just a few hours. They cleared weeds, built features to attract bees, insects and pondlife, laid paths, erected raised beds, planted flowers and fruit saplings, and repaired and painted a playhouse.

Their work leaves a legacy that will make a difference to hundreds of local school children and others in the neighbourhood for years to come. National Grid has committed to continue its support for the charity and provide opportunities for colleagues to return to undertake further work.

Volunteering work at Mudchute Park and Farm, East London, UK

Engaging our colleagues

We rely on our colleagues to achieve success for the business. We aim to attract and retain the best people by striving to be recognised as an employer of choice that values diversity.

We work towards going beyond the main aspects of the employer-employee relationship, to create a culture focused on the value we can add to society.

Colleague and contractor safety and wellbeing

We have a fundamental duty of care to ensure our colleagues are kept safe at work, and that their health is not affected as a result of their employment. The health, safety and wellbeing of employees and contractors is our primary concern. Any safety incident is one too many, and we work to improve our performance through effective policies, standards, procedures and training.

We measure safety performance through a combination of leading and lagging indicators, and LTIFR is one of the core KPIs of the business (see page 27). We take a proactive, risk-based approach to managing health and wellbeing, and have documented standards relating to occupational health and safety, process safety, and wellbeing and health. Incidents are reported to the highest level, and the Safety & Sustainability Committee of the Board undertakes regular deep dives on safety-related topics (see page 106).

Living wage and gender pay gap

We believe everyone should be appropriately rewarded for their time and effort. In the UK, we are accredited by the Living Wage Foundation, a commitment which extends to our contractors and the work they do on our behalf. We also go above the Living Wage requirements and voluntarily pay our trainees the Living Wage. We undertake a Living Wage review each year to ensure continued alignment and increase individual salaries as required, and also promote the commitment to our suppliers.

We review gender and ethnicity pay gaps annually in both the UK and US, and further information is provided in the RBR.

Promoting an inclusive and diverse workforce

Our policy is that people who identify as having a disability should be given full and fair consideration for all vacancies against the requirements for the role. Where possible, we make reasonable accommodations and provide additional resources for employees who identify as having a disability. We are committed to equal opportunity in recruitment, training, promotion and career development for all colleagues, including those with disabilities.

The gender demographic table on the right shows the breakdown in numbers of employees by gender at different levels of the organisation. We have included information relating to subsidiary directors, in accordance with the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013. 'Senior management' is defined as those managers who are at the same level, or one level below, the Group Executive Committee. It also includes those who are Directors of subsidiaries, or who have responsibility for planning, directing or controlling the activities of the Group, or a strategically significant part of the Group, and are employees of the Group. For further, more-detailed information relating to our approach and performance on gender and ethnic diversity, please see our RBR.

We continue to be recognised in awards and benchmarks including being listed Outstanding Employer for Race at the UK Ethnicity Awards, recognised in the top 10 for Company and Diversity Team of the Year at the British Diversity Awards and moved from 480 to 187 in the Financial Times special report on Diversity Leaders. We have close partnerships with external best practice organisations and are active members of sector- and industry-wide groups that ensure we are sharing best practice and campaigning at a sector-wide level for greater inclusion for all.

Gender demographic as at 31 March 2022

	Our Board[1]	Senior management[2]	Whole Company[3]
Male	7	110	23,639
Female	6	58	7,117
Total	**13**	**168**	**30,756[4]**
Male (%)	53.8%	65.5%	76.9%
Female (%)	46.2%	34.5%	23.1%

1. 'Board' refers to members as defined on the Company website.
2. 'Senior management' refers to subsidiary Directors as well as the Senior Leadership Group.
3. In scope are active, permanent employees. Band A-F, Staff, Union, Schemes & Expats, NG Renewables, WPD.
4. Total Company Headcount includes UK GT and metering and varies from RBR due to WPD employees shown separately in RBR but included in Annual Report.

The environment

We are at the heart of the transition to net zero for our customers and the communities we serve, enabling the renewable and low-carbon energy supply and reducing emissions from our own emissions to net zero by 2050.

Our commitments	Progress in 2021/22	Status
We will reduce Scope 1 and 2 greenhouse gas (GHG) emissions 80% by 2030, 90% by 2040 and net zero by 2050 from a 1990 baseline	Connection of renewables and low-carbon supplies continues but for 2021/22 this reduction is outweighed by growth in LIPA emissions	ON TRACK – Our long-term plan to reduce emissions despite additional running of generation under contract with LIPA
We will reduce Scope 3 GHG emissions by 37.5% by 2034 from a 2019 baseline	Recovery of gas demand post-COVID-19 has led to a short-term return of emissions, rising back to historical pre-COVID-19 levels	ON TRACK – We are developing a long-term plan to drive down emissions in line with our 2034 targets and we have announced our vision in the US to fully eliminate fossil fuels from both our gas and electric systems by 2050, if not sooner
We will reduce SF_6 emissions from our operations by 50% by 2030, from a 2019 baseline	During 2021/22 we reduced emissions through leakage reduction and announced a further important partnership with Hitachi to deliver a retrofit gas replacement for SF_6	ON TRACK – Our work remains in line with our long-term plan to reduce emissions through leakage and then innovate with partners to find a lower emissions alternative
We will move to a 100% electric fleet by 2030 for our light-duty vehicles	We have joined EV100 to support the wider campaign to electrify, and launched a partnership with Ford for light trucks	ON TRACK – New programmes on light trucks and electric-only fleet choices to help achieve this commitment
We will reduce energy consumption in our offices by 20% by 2030	72% reduction in energy consumption against our 2020 baseline	ON TRACK – We have a number of schemes in the pipeline to make our buildings more efficient
We will improve the natural environment by 10% on the land we own by 2030	We have remediated 21.6 hectares of land in 2021/22	ON TRACK – With programmes delivering improvement to the natural environment ahead of 2030
We will achieve zero-carbon emissions from business air travel	We have delivered this commitment with a significant reduction in air travel due to COVID-19 and all remaining travel has been offset	ACHIEVED – We will continue to restrict air travel to below 50% of pre-2019 levels to maintain our commitments in the RBR

Energy consumption

Our energy consumption is a key area of focus as this, in turn, affects our carbon emissions.

Our energy consumption consists of both fuel consumed and energy purchased from third parties, including renewable energy. Total energy consumption was 3,502 GWh (12,606,859 Gigajoules), an increase of 12% on the previous year. Of this, 99% was from non-renewable sources, with no significant change from the previous year. Total energy consumption in the UK was 2,341 GWh and total energy consumption in the US was 1,161 GWh.

Operational energy use was 1,190 GWh (2020/21; 1,748 GWh), our transport energy use was 362 GWh (2020/21; 369 GWh), electricity consumption was 987 GWh (2020/21; 852 GWh) and heating was 163 GWh (2020/21; 156 GWh).

Electricity consumption includes the energy consumed in operating the generation assets in the US. Total energy does not include fuels consumed for power generation on behalf of LIPA, the contracting body, amounting to 19,610 GWh (net of energy required to operate the generation assets), a 21% increase on the prior year. Energy consumption related to power generation can vary greatly year-on-year and is determined by LIPA. We therefore report an energy consumption figure net of power generation allowing us to report underlying energy consumption across our business. For transparency, we have reported energy consumption from power generation as a separate line item. Transport covers company car business travel, and our own operational ground and aviation fleet. In addition to energy consumed, we calculate that system losses accounted for a further 11,117 GWh, of which 51% occurred in the US. This was a 0.3% decrease on the previous year.

Note: 2020/21 energy consumption has been re-stated to account for a minor misstatement following data reconciliation.

Climate change

Streamlined Energy and Carbon Reporting (SECR)

	$mtCO_2e$ 2021/22	$mtCO_2e$ 2020/21
Scope 1 (direct emissions)	**5.3**	4.7
Scope 2 (direct emissions)		
Market based	**2.2**	2.3
Location based	**2.2**	2.2
Total Scope 3 emissions	**30.1**	28.9
US Cat 3 (fuel and energy related activities)	**4.3**	4.1
US Cat 11 (use of sold products)	**18.9**	18.2
UK and US Cat 1 (purchased goods and services)	**6.7**	6.6
UK and US Cat 7 (employee commuting)	**5**	5
UK and US Cat 6 (business travel)	**11**	6
UK & US Cat 5 (waste generated in operations)	**7**	6

Further reading
page 26

We generate GHG emissions across Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of gas and electricity) and Scope 3 (other indirect emissions from activities and sources outside of our ownership or control). Our RBC sets out a number of ambitious climate-related commitments, the most significant of which is to achieve net zero by 2050. Through this commitment we will reduce Scope 1 and 2 emissions by 80% by 2030, 90% by 2040, and net zero by 2050, from a 1990 baseline. At the end of 2021/22, we have achieved a 65% reduction.

Our Scope 3 target covers emissions across our entire value chain with a commitment to reduce the carbon emissions by 37.5% by financial year 2034 (from a financial year 2019 baseline). Our interim Scope 1, 2 and 3 emission reduction targets are validated by the SBTi, demonstrating a clear, credible commitment to achieve our longer-term net zero strategy in line with a well below 2°C pathway. Other commitments, including those relating to reductions in SF_6 emissions and increasing the proportion of EVs in our own fleet, are set out in the RBC.

We will publish our Climate Transition Plan in June 2022 as part of the RBR.

We are working to reduce our business travel emissions by changing to alternative fuel vehicles and reducing business flights. The response required by the COVID-19 pandemic has resulted in more flexible ways of working and has reduced business travel. We will reduce the energy consumed in our buildings and procure green energy where possible.

Our Scope 1 emissions were 5.3 $mtCO_2e$, a 12% increase on the prior year (4.7 $mtCO_2e$). Of this, 89% arose in the US and 11% in the UK. The increase resulted mainly from generation emissions exceeding projected levels due to increased LIPA operating hours, required to replace shortfalls in off-island generation and transmission.

Scope 2 emissions are reported on a market and location basis:

- market based – 2.2 $mtCO_2e$, similar to the prior year
- location based – 2.2 $mtCO_2e$, similar to the prior year

Approximately 57% of Scope 2 emissions (location basis) were generated in the UK, with the remainder through US operations. Reduction in Scope 2 emissions was mainly due to a reduction in emissions from line losses, resulting from a reduction in grid electricity carbon intensity.

Our total Scope 3 emissions are calculated as 30.1 $mtCO_2e$ for the year, an increase of 4% on the prior year.

We measure and report in accordance with the World Resources Institute and World Business Council for Sustainable Development Greenhouse Gas Protocol. 100% of our Scope 1, 2 and 3 emissions are independently assured against ISAE 3410 Assurance Engagements on Greenhouse Gas Statements, using an ‘Operational Control’ approach to determine our GHG emissions organisational boundary. The sources of Scope 1, 2 and 3 emissions are detailed in the RBR. We have also published a document, ‘Our Reporting Methodology’, which details the methodologies and protocols used for calculating key responsible business metrics.

Case study: COP26 activities – Green Grids Initiative

As part of our principal partner role for COP26, we supported the UK government in developing a new international partnership, the Green Grids Initiative. The first programme of this initiative, a new UK-India initiative was launched at COP26, with the CEO attending the launch alongside the Prime Minister of the UK, Boris Johnson, and the Prime Minister of India, His Excellency Shri Narendra Modi, and Director General of the International Solar Alliance, Dr Ajay Mathur. The programme, which is also supported by the US government, aims to share lessons and expertise between the two countries and, in doing so, accelerate international decarbonisation efforts. We are providing personnel and expertise to support the programme.

This initiative forms part of a number of programmes launched or supported by the UK COP26 presidency. We have also supported engagements with Indonesia, South Africa, Vietnam and Laos as part of our principal partnership of COP26, sharing lessons and expertise with peer utilities and energy ministries in those countries to build confidence in the path to net zero.

Right to left: National Grid CEO, John Pettigrew; UK Prime Minister, Boris Johnson; Indian Prime Minister, Shri Narendra Modi; and Director General of the International Solar Alliance, Dr Ajay Mathur – at the launch of the Green Grids Initiative, 'One Sun One World One Grid' at COP26

Case study: Green Light Signal and EV Road Trip

As we connect low-carbon power to our electricity networks we are creating the means to decarbonise much of the economy, including power, transport, industry and some heat.

Engaging our customers and communities in the transition to net zero is key to building confidence and understanding of the transition to net zero. As part of our engagement, our customers and communities told us they were not sure how green their power was today and whether the transition would happen. So we wanted to show them.

To show customers and communities how things were changing, in the UK we created a smart light bulb that turns green when the local power is low carbon, and in the US we created a number of EV Road Trips, to help build confidence in the transition to EVs. The Green Light Signal and associated 'WhenToPlugIn' app featured in UK national media, saw thousands of downloads, lit up 10 Downing Street ahead of COP26, and won a Bronze award at the Eurobest advertising awards. Our EV Road Trip received over 2 million impressions on social media and positive coverage from a range of stakeholders and the media.

Green Light Signal, a smart bulb that glows green when the local power is low carbon

The EV Road Trip, took place in 2021, covering New York, Massachusetts and Rhode Island

Task Force on Climate-related Financial Disclosures

Climate change is the defining challenge of the 21st century and in our role as The Energy Transition Company we understand the critical role we need to play in navigating the change and uncertainty facing the economies we serve in reaching their carbon reduction targets.

That change and uncertainty presents significant risks and opportunities to our business model that we manage with the due focus and attention required to enable the positive, responsible change needed by all of our stakeholders.

We are committed to developing a business model that is consistent with the objectives of the Paris Agreement, and therefore set a commitment in November 2019 to reduce our Scope 1 and 2 emissions to net zero by 2050. The details of the interim targets that we have set to achieve this are included in our RBC that we published in October 2020. This includes approved science-based targets for Scope 1, 2 and 3 emissions across our Group. This year sees the second iteration of our RBR which details our progress against all commitments set out in our RBC, including our emissions reduction targets.

In this year's disclosure we have fully complied with the FCA listing rule LR 9.8.6R(b). Our climate-related financial disclosures are considered to be consistent with the TCFD's recommendations and recommended disclosures. Please see the index on page 71 for where we respond to each recommendation and recommended disclosure.

In reaching full compliance this year, we have refreshed our energy transition scenarios and completed the first stage of our comprehensive Group-wide assessment into the physical risks facing the Group under 2°C and 4°C scenarios, with the outcomes detailed in this disclosure. We have also published our first Climate Transition Plan, which provides greater detail and clarity on how we will achieve our emissions reduction targets.

Crocker Wind Farm, National Grid Renewables, South Dakota, US

Highlights of the year

Development of a best-in-class Climate Change Risk Tool to assess the physical impacts from climate change scenarios

CDP Climate A rating for 6th year in a row

Acquisition of WPD which completes the pivot of our UK business towards electricity

Continued development of our net zero strategy

Specific science-based targets aligned to a 1.5 degree pathway for our UK Electricity Transmission and UK Electricity System Operator businesses

Principal partner for COP26 climate change conference

Publication of provisional EU Taxonomy aligned KPIs, including our forecast EU Taxonomy aligned capital expenditure for the next five years

Increased alignment of Executive remuneration to climate reduction targets

Our climate-related financial disclosures cover all of the TCFD's recommendations and recommended disclosures. The following index navigates between our disclosures and the TCFD's recommendations and recommended disclosures:

Governance

Disclose the organisations governance around climate-related risks and opportunities

a) Describe the board's oversight of climate-related risks and opportunities: page 72 – 'Governance of climate-related risks and opportunities'

b) Describe management's role in assessing and managing climate-related risks and opportunities: page 73 – 'Management's role'

Risk management

Disclose how the organisation identifies, assesses, and manages climate-related risks

a) Describe the organisation's processes for identifying and assessing climate-related risks: page 74 – 'Our strategy and risk management for responding to climate change', page 74 – 'Identifying and assessing the impacts of climate-related risks and opportunities'

b) Describe the organisation's processes for managing climate-related risks: page 75 – 'Climate change and enterprise risk management'

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management: page 74 – 'Identifying and assessing the impacts of climate-related risks and opportunities'

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material

a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term: page 79 – 'Our significant climate-related risks and opportunities and our strategic response'

b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning: page 74 – 'Our strategy and risk management for responding to climate change', page 79 – 'Our significant climate-related risks and opportunities and our strategic response'

c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario: page 76 – 'Physical modelling', page 78 – 'Transition scenarios modelling'

Metrics and targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material

a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process: page 83 – 'Climate change metrics and targets', page 79 – 'Our significant climate-related risks and opportunities and our strategic response'

b) Describe Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks: page 83 – 'Climate change metrics and targets' shows cross-reference to separate ARA disclosure: page 26

c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets: page 83 – 'Climate change metrics and targets' shows targets, where considered relevant

The world's first row of T-pylons, Hinckley Connection Project, UK

Governance of climate-related risks and opportunities

The Board's role

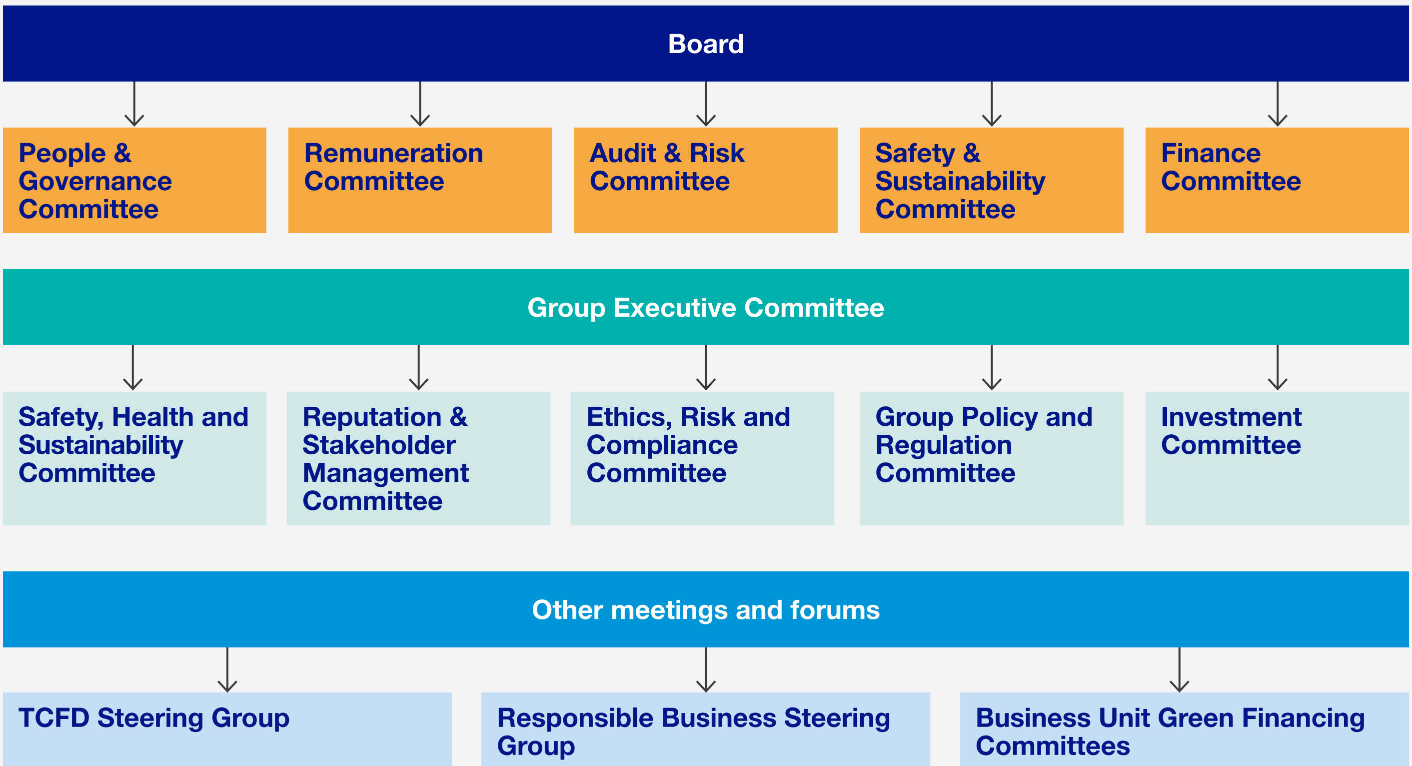
The **Board of Directors** is responsible for setting and leading the Company's climate-related strategy and goals, and has oversight of climate-related risks and opportunities impacting the Group. The Board in turn delegates some elements of responsibility to various sub-committees as described below. Our Board members bring a variety of skills and experience to the Board, including expertise in ESG and climate change matters. See page 88 – 89 for an overview of the Board's skills and experience.

In the year, the Board received regular updates from the Chair of the Safety & Sustainability Committee, providing an overview of matters discussed at the Committee meetings. This included updates on progress against goals and targets for addressing climate-related issues. The Board also receives a CEO report at each Board meeting which informs on how the Company is tracking against performance against metrics and targets and progress is reported through a regular dashboard. Additional updates received by the Board in the year are outlined here:

- The Board was informed that the carbon emission reduction targets that had been set had been verified by the SBTi.
- The Board was updated on current ESG positioning in the Company, including key strategy enhancements to keep pace with and to choose where to lead as a responsible business, and assurance around the right governance in place to provide a central organisational focus to drive strategy and performance. The Board was also updated on the impact of acquiring WPD on the Company's ESG agenda and opportunities including climate-related matters.
- The Board discussed various aspects of the US business with US management, which included an update on the significant acceleration of the energy transition following President Biden's election and the Company's key clean energy ambitions in the US strategy.
- An enrichment session was hosted by the Chief Sustainability Officer and management to provide focus for the Board on the Company's ESG and climate-related commitments, ahead of Board approval of year-end sustainability reporting. The session promoted the understanding of the architecture of the ESG commitments, the flow of approvals at various Committees, key stakeholders that are engaged in the process and to assure that ESG stewardship is well embedded at Board level.

The Board also reviewed its entire governance framework in the year to ensure the remit of the Committees remained appropriate and well placed to progress the Board's agenda going forward, in particular around tackling climate change and monitoring progress against net zero aims. Three of the Board Committees refreshed their remit and focus, including the Safety, Environment & Health Committee, which became the Safety & Sustainability Committee. Within the business there has been a continuing move towards clearer ownership of climate issues; a Chief Sustainability Officer was appointed in September 2021, providing a single point of accountability across the Group for our overarching sustainability strategy to help deliver the energy transition and ensure we drive our own emissions down to net zero by 2050. The Chief Sustainability Officer attends all Safety & Sustainability Committee meetings and provides regular updates at Board and management level, including holding a Board ESG enrichment session, covering ESG commitments, reporting and developments. The remit of the Board and its Committees under our governance framework is set out on page 91. Terms of reference for the Board and its Committees are available at nationalgrid.com.

Climate governance



The Safety & Sustainability Committee is responsible for assessing and monitoring the Group environmental sustainability strategy and performance, as well as how the Company adapts its business strategy considering potential climate change risks and opportunities. This includes reviewing whether appropriate progress is being made against our net zero aims. Progress around GHG emissions was considered and challenged in the year. The remit of the Committee was extended in the year to provide further oversight of climate-related matters including climate scenarios within TCFD and progress against the Company's climate transition plan which they reviewed in the year. The Committee also noted the changes to the Group Climate Change Risk which moved from what was a single strategic risk, to two risks – one strategic and one operational.

The Remuneration Committee recommends to the Board the remuneration policy for Executive Directors and the leadership team including approving how ESG targets are incorporated into our incentive arrangements. The Committee also reviews workforce remuneration and monitors related policies, satisfying itself that incentives and rewards are aligned to National Grid's strategy, culture and long-term sustainable success. During the year the Committee considered the remuneration policy to be presented to shareholders for approval at the 2022 AGM and increased the proportion of incentives linked to ESG and progress against climate-related targets.

The People & Governance Committee oversees a diverse succession pipeline, helping to ensure we have the right people to deliver our strategy and net zero ambition. During the year the Committee approved the appointment of several new Non-executive Directors, taking into consideration skills and experience including climate. Martha Wyrsch, appointed in 2021, brings sound knowledge and experience around climate-related issues through her experience as CEO of a major international gas transmission business, as well as leading the growth and development of Vestas' renewables business in the US, where she spearheaded the expansion of its wind farm portfolio. Anne Robinson joined the Board in January 2022, bringing strong ESG experience and insight into investor perception around climate. Anne and Martha both joined the Safety & Sustainability Committee on appointment and along with the other members received an induction tailored to the Committee including around climate issues. See page 100 for more information around the skills and experience of our Board.

The Audit & Risk Committee has oversight over non-financial disclosures and assurance, including our RBR reporting, TCFD reporting and reporting in line with leading ESG frameworks such as the Sustainability Accounting Standards Board (SASB), the Global Reporting Index (GRI) and the EU Taxonomy. The Committee received papers in March and May 2022 on the financial reporting and disclosure considerations in relation to climate change.

The Finance Committee oversees our financing strategy, including the issuance of National Grid plc's €850 million Green Bond in September 2021. The Finance Committee also considers the financial impact of environmental factors on our credit metrics and relevant considerations with regard to debt investors, pension and insurance strategy.

Management's role

The Board delegates to management responsibility for asset investment and maintenance planning, implementation of the net zero strategy and overseeing the development of the RBC. Management is also responsible on a day-to-day basis for the climate-related risks and opportunities faced by the Group and for delivering the roadmaps to achieve the net zero strategy set by the Board. Throughout the year, the **Group Executive Committee** created a number of sub-committees with delegated responsibility over specialist areas that receive updates on climate-related matters ahead of presentation, where applicable, to the Board and Committees.

The Safety, Health and Sustainability Sub-Committee reviews and manages Group-wide safety, environment and health tracking/monitoring and related decisions. The Chief Sustainability Officer attends this Committee, providing a link between management and Board discussions around climate-related issues. In the year, the Committee spent time reviewing progress against the Company's climate-related targets and shaped related strategy. In particular, the Committee reviewed potential impacts on our climate strategy and progress towards net zero from external events including the war in Ukraine and the energy crisis.

The Reputation & Stakeholder Management Executive Sub-Committee provides oversight of responsible business policy development and engagement including in relation to the RBR and climate-related disclosures.

The Ethics, Risk and Compliance Committee oversees the implementation of the Group's risk management framework and assessment of principal risks including climate change.

The Policy and Regulation Sub-Committee agrees and provides strategic oversight of Group public policy priorities and positions.

The Investment Committee has delegated authority to approve investment decisions including those related to our Renewables business.

Other forums

A TCFD steering group comprising representatives from Group External Reporting, Sustainability, Corporate Strategy, Group Risk and Company Secretariat oversees progress against the TCFD recommendations and the publication of our annual disclosure.

A Responsible Business steering group, chaired by the Chief Sustainability Officer, provides oversight of the integration of responsible business into National Grid including the development of ESG targets and future ESG strategy.

Business Unit Green Financing Committees chaired by the Group Treasurer, provide governance over our Green Financing Programme and approve the publication of our Green Financing Report, which provides an analysis of how we utilised the proceeds from our portfolio of Green Bonds and their environmental impact.

Our businesses. Further delegation and responsibility is given to the core operational businesses including the Business Unit Presidents, who are responsible and held accountable for delivering the net zero roadmaps for their businesses.

Our functions. Corporate Affairs, Group Finance, Sustainability and Group HR are responsible for supporting the businesses in achieving their net zero pathways.

Paula Rosput Reynolds, onsite at London Power Tunnels, London, UK

Task Force on Climate-related Financial Disclosures continued

Our strategy and risk management for responding to climate change

National Grid has four strategic priorities, as set out on pages 20 – 21, the first of which is to enable the energy transition for all. We have committed to support the decarbonisation of the communities that we serve, migrating to cleaner energy solutions. We have also committed to enabling a fully decarbonised electricity grid, to lead the way on the decarbonisation of gas and to enable the decarbonisation of transport. To support these strategic ambitions, we have recently executed a strategic pivot, via three transactions which will enhance our role in the energy transition. These transactions were the acquisition of WPD, the UK's largest electricity distribution network operator, in June 2021; and the proposed sales of our Rhode Island gas and electricity business in the US and of a majority stake in our UK Gas Transmission business expected to complete during 2022. Upon successful completion of all transactions, the contribution of electricity to National Grid's portfolio will increase to around 70% of the Group.

Across all of our businesses, we aim to play a leading role in enabling and accelerating the transition to a clean energy system, balancing decarbonisation, affordability and reliability of supply. Working closely with governments, other stakeholders, subject matter experts, and partners around the world and through our work for COP26, we focus on the technical and commercial solutions that will help achieve net zero for the energy sector. The biggest impact we can have is in enabling the economy-wide clean energy transition, but we must also reduce our own impact on the environment and strengthen our resiliency to risks that we have less control over. To accomplish this, our RBC commitments to reduce Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of electricity) and Scope 3 (other indirect emissions from our value chain activities) emissions align with the requirements of the Paris Agreement and SBTi. These commitments, along with our overall suite of environmental sustainability initiatives, are reviewed in accordance with our quarterly business reviews, incorporating the risk and opportunities management processes detailed below, and reported accordingly to the Group Executive Committee and Board.

Carbon pricing is one of the tools we use to support the delivery of our emissions reduction targets. We participate in traded carbon markets where our operations are covered by these frameworks, have regulatory incentives to reduce SF_6 and methane emissions that are underpinned by a carbon price, and have applied an internal carbon price of $60/£45 per tonne (set in 2017) in investment decision making. Additionally our latest UK regulatory agreements apply a price of £241/tonne.

We've found that a carbon price alone is unlikely to drive the changes needed to meet our net zero goals. As important are policies and commitments, such as those we have to remove and reduce SF_6 leakage on our networks, and replace our fleet with electric vehicles. We are currently reviewing our approach to investment decision making to ensure we have the right mix of approaches to meet our commitments.

Identifying and assessing the impact of climate-related risks and opportunities

The scale of ambition and speed of change required to meet net zero emission targets, along with the changes in weather patterns, present both risks and opportunities to our business. These risks and opportunities, which are informed by our physical and transition risk scenario analysis and our horizon scanning processes, are built into our business planning and investment decision processes where we assess the degree of exposure to climate-related financial risks and opportunities. For our regulated businesses, our plans to address these are formulated with and agreed to by our regulators. Our management is incentivised through our target setting and remuneration policy to deliver the actions necessary to achieve our net zero objectives. This year, we agreed new ESG-related targets for our long-term incentive programme as detailed on page 113. We also launched a suite of internal climate change e-learning modules to help all employees learn more about climate change and our role in the energy transition. To accompany this, we conducted extensive pre- and post-COP26 employee engagement campaigns.

See page 75 for detail on our scenario modelling and page 79 for further detail on the significant risks and opportunities we identified and our response.

Case study Innovation for net zero

With funding from Ofgem's Strategic Innovation Fund (SIF), we are delivering three innovation projects to help deliver a net zero electricity network.

- The Sustainable Electrical Gas Insulated Lines (SEGIL) project will investigate the feasibility of an SF_6-free Gas Insulated Line (GIL) solution to provide cost competitive, high-capacity transmission connections over 2000MVA to increase available network capacity for new offshore wind generation. The project will look at the options to replace SF_6 with alternative low-carbon footprint gases as a viable means of GIL insulation.
- The Super Conductor Applications for Dense Energy Transmission (SCADENT) project will develop an understanding of the barriers, opportunities, and benefits of modernising existing electricity infrastructure by replacing conventional cables with the use of High Temperature Superconductor (HTS) cable technology. This will increase network capacity, delivering time, cost, and carbon savings with reduced energy losses and wider environmental benefits including reduced disturbance to local communities caused by construction activities.
- The Eye in the Sky Project, which utilises satellite data to improve grid resilience in emergency situations, will investigate new satellite data analytics solutions that can help GB networks to improve the visibility of infrastructure and assets, response in emergency and risk assess effects of climate change. Novel uses of satellite data and digital platforms can significantly improve network planning, modelling and forecasting capabilities, and improve the response to climate change effects like flooding, strong wind, snow storm or wildfire and provide warning to the networks for better planning and resource allocation during extreme weather events.

Climate change and enterprise risk management

Climate change is considered as part of our ERM process and has been one of our GPRs since autumn 2019. The ERM process is the framework through which the Group identifies, assesses, prioritises, manages, monitors and reports risks. This process is described on page 28 and includes the identification of a series of Group-wide controls and actions to mitigate the climate change principal risk (this is further described on page 30).

Historically, the climate change risk at the GPR level was managed through one broad risk covering both physical and transitional impacts of climate change on our business. In December 2021, the Executive Ethics, Risk & Compliance Committee agreed to split the climate change GPR into two distinct elements: adaptation and mitigation child risks. This has enabled greater alignment to our strategic objectives. The adaptation activity, absorbed within the 'significant disruption of energy' risk's control framework, will help ensure we continue to 'deliver for our customers efficiently', and the new standalone mitigation risk is aligned to our strategic objective, 'enable the energy transition for all'. This has generated greater oversight, focus and adoption of two distinct and proportionate control frameworks in line with the new Group risk appetite – mitigating downside risk, and maximising opportunities, where applicable.

Original Group climate change principal risk

There is a risk that we fail to identify and/or deliver upon actions necessary to address the physical and transitional impacts of climate change on our business and demonstrate our leadership of climate change within the energy sector.

1. Climate change adaptation risk

The adaptation risk relates to the physical impact of climate change to our assets across the Group. This adaptation element of the original climate change risk is managed as part of the 'significant disruption of energy' GPR, wider resilience activity and associated internal controls.

2. Climate change mitigation risk

The mitigation risk relates to our Group-wide strategy for climate change including our commitments of achieving net zero, and the role our Group plays in driving the energy transition. This is now managed as a standalone GPR.

We have further developed our risk and opportunity horizon scanning to assess critical trends to the energy transition. With our senior stakeholders and supported by external risk experts, we identified key indicators and metrics which are measured on a monthly basis versus thresholds. These are analysed against our current strategy and business plans for their potential impact and plausibility. Emerging risks are managed under our risk management framework with results reviewed by senior leadership (detailed further on page 29).

Integration of climate change into our overall risk management

Consistent with the Group's overall approach to risk management and internal control, climate change risk management activities take place through all levels of our organisation. Our risk governance model drives an effective 'top-down, bottom-up' approach which allows the Group Executive Committee to define and cascade the GPRs to each business area; and in parallel, all business areas identify and escalate the operational risks that could impact their business model and objectives. The disclosure on page 28 provides further detail.

The Group's Risk Taxonomy supports all levels of the business to categorise any climate change risk into one of our four taxonomy groups: strategic, operational, financial and compliance; sub-categories beneath these four groups allow the business to select a more granular taxonomy grouping with an assigned risk appetite. The individual business unit or Group Function Risk Committees oversee, discuss and challenge new and existing climate change risks using the ERM framework and scoring methodology to ensure each risk has an appropriate inherent, current and target score for likelihood, financial and reputational impact. Where current risk levels are outside of agreed target scores and our risk appetite (based on the taxonomy), the business area implements actions and internal controls to close the gap.

To support accountability for both aspects of climate change risk, each business unit and applicable Group functions are currently in the process of considering, and where necessary, adopting an individual adaptation and mitigation child risk. As WPD is new to the Group, we are still in the process of integrating WPD into our ERM processes and will report back on our progress with respect to WPD's climate change risk management next year.

Our climate-related scenario analysis

Scenario analysis to 2050 and beyond guides our strategic and financial planning with respect to climate change. Our scenarios consider the potential physical impacts to the Group of average global temperature increases of 2°C and 4°C. We also consider potential transitional impacts of scenarios of average global temperature increases of 1.5°C in accordance with the Paris climate agreement.

Transitional scenarios modelled
Physical scenarios modelled

Slow progress

- Decarbonisation progress is made but too slow to meet net zero targets
- Increase in distributed generation and local solutions where local authorities compensate for lack of overall national progress
- System becomes increasingly unequal

Orderly transition

- Reaches most net zero targets through an orderly approach
- Governments pursue suite of solutions for large-scale and consumer options
- Coordinated pathway between key market players e.g. orderly reduction in natural gas
- Increased investment in renewable electric generation and networks
- Gas network evolution to allow H2 clusters and/or clean gas blending

Acceleration

- Reaches 2030 net zero targets to be on track for 2050
- Electrification of heat and transport at fast pace
- Accompanied by large-scale investments (network, storage)
- Increased grid scale and interconnection with smart homes and end-use electrification
- Faster gas demand reduction

Task Force on Climate-related Financial Disclosures continued

The scenarios executed in 2021/22 build on those of previous years and will evolve as we continually monitor emerging trends in technology and wider market developments. We developed the following stretching, plausible alternative futures for our society by using different assumptions across variables, including (but not limited to) technology, policy, consumer behaviour, competition and science. We tested the resilience of our business strategy against these different transition scenarios, whilst focusing our physical risk scenarios on the climate change hazards which present the greatest physical risk to the Group's operations.

Physical modelling

The climate hazards that we tested in our 2 degree and 4 degree scenario analysis are summarised below. The climate hazard data is sourced from the national climate assessments (NCA4 in the US, and UKCP18 in the UK). These assessments include data from the Federal Emergency Management Agency, NOAA Physical Sciences Laboratory, Environmental Protection Agency, Met Office, Environment Agency and academic literature. The scenario data is modelled using IPCC's Representative Concentration Pathway (RCP) scenarios of RCP8.5 (4°C) and RCP4.5 (2°C).

Climate hazard	Definition and Threshold	Potential change by 2070s (4°C scenario)*	Confidence level
Coastal flooding	Frequency of occurrence of coastal flood and future impacts due to sea level rise	Significant increase in frequency	Medium
River flooding	Frequency of occurrence of river flooding due to over 25mm (1 inch) daily rainfall	Significant increase in frequency	Medium
Storms (Compound Events)	Number of days per year when high winds are above 34 m/s (76 mph) and high rainfall above 25mm (1 inch) on the same day. Displayed separately for summer (March – August) and winter (September to February) seasons	Summer – slight increase in frequency Winter – no change in frequency, but potential increase in intensity	Low
High wind	Number of days per year when maximum daily wind gust is above 34 m/s (76 mph)	Decrease or no change in frequency, but increase in intensity	Low
Lightning	Number of lightning events	Increase in frequency	Low
High temperatures	Number of days per year when maximum daily temperature is above 30°C (86°F) in the UK and 95°F (35°C) in the US	Significant increase in frequency	High
Low temperatures	Number of days per year when maximum temperature is below 0°C (32°F) in the UK and 10°F (-12°C) in the US	Decrease in frequency	High
Freeze-thaw cycles	Number of days per year when maximum daily temperature is above 0°C (32°F) and minimum daily temperature is below 0°C (32°F) in the same day	Significant decrease	High
Heatwaves	Number of times per year when maximum daily temperature is above 30°C (90°F) and minimum daily temperatures is above 20°C (70°F) for 3 consecutive days	Significant increase in frequency	High

* The UKCP18 national climate assessment does not include data for the 2°C (RCP4.5) scenario. Therefore, the above highlights the potential changes under a 4 degree scenario for both the UK and the US. The changes outlined will still occur under the 2 degree scenario but there will be more intense and higher frequency of occurrence under 4°C.

Physical insights

In assessing the physical impacts of our scenarios, we grouped our portfolio of assets into 12 asset types to assess vulnerability to these hazards. For our 2 degree scenario, the climate data was not yet available in the UK national climate assessment chosen for this analysis, but based on the US findings under this scenario, we can assume similar impacts in the UK, as outlined below. Note, vulnerability to hazards does not mean that risks will be realised. Whether vulnerability translates into risk depends on the exposure (location) of individual assets relative to projected changes in climate hazards, as well as any site-specific resilience measures in place. Although to a lesser degree, our analysis has identified consistent risks that exist today, e.g. flooding, consistent with our wider risk management we are implementing necessary responses to those risks, e.g. flood defences, to ensure reliable operation of our assets and sufficient resilience today as well as into the future.

Most hazards are projected to increase in frequency in the future, with high temperatures and coastal flooding of particular concern. In most cases the level of risk is greater in a 4°C scenario than a 2°C scenario.

The hazards that we consider are:

- **Coastal flooding**
- **High winds**
- **High and low temperatures**
- **Lightning**
- **River flooding**
- **Freeze-thaw cycles**
- **Heatwaves**
- **High winds and high precipitation**

Underground infrastructure is protected from high wind, compound (storm) events and lightning.

Most hazards are projected to increase in frequency in the future, with high temperatures and coastal flooding of particular concern. In most cases, the level of risk is greater in a 4°C scenario than a 2°C scenario.

Risks from high temperature and heatwaves will increase significantly over time for many asset types, particularly overhead lines for transmissions and distribution.

Some gas pipeline infrastructure in the US has a high risk of low temperature and freeze-thaw hazards today.

Storms (compound hazards) are difficult to assess with confidence but they are likely to be more intense, though changes in frequency are unclear. We do know that climate change will lead to increased rainfall, wind speeds, and coastal flooding/storm surges due to sea level rises, so this may make future coastal storms more damaging.

Risks from river and coastal flooding are significant for all asset types now and in future climates. By the 2070s, almost all assets by the coast may be at high risk from coastal flooding. In coastal areas, assets can be exposed to increases in occurrence of coastal flooding and high temperatures in the future. For some asset types, most of the infrastructure is located in coastal areas, such as terminals and converter stations in the UK, and LNG/CNG facilities and generation assets in the US. Generation assets on Long Island are highlighted for the particular risk of coastal flooding.

Our risk assessment shows the risk to our existing asset portfolio only. If the distribution and types of assets change, then the cumulative picture of risk will change too.

The insights from our physical risk scenario modelling show that all scenarios will result in physical impacts to the Group's assets across consistent areas of our operations; however, the impacts are most material in a 4°C scenario.

We are continuing to progress our physical risk analysis to inform our strategic planning and investment choices. Over the next year, we aim to implement a higher resolution assessment of key risks identified, particularly where risk is extremely localised, e.g. flood-related risk and coastal areas which are exposed to multiple hazards. We will consider the interdependencies between hazards to better understand the resiliency of asset criticality and prioritisation of actions to reduce risks. We also aim to add socio-economic data into the model, to understand where communities at greater socio-economic risk, like environmental justice communities, and at-risk assets are coupled. The next version of our risk assessment will also incorporate National Grid Renewables and WPD. For further detail on our assessment of the physical impacts of our scenario modelling, please refer to the Climate Change Risk Tool case study below.

Case study: Climate Change Risk Tool

We have developed an innovative Climate Change Risk Tool (CCRT) which allows each business to make more tailored use of the scenario analysis. The CCRT is available to all, so offers a simple way for employees such as asset owners, strategy managers and senior leaders to access the information they need for their particular interest area and at the right level of detail.

The CCRT gives a UK and US geographical overview of climate change risk and allows users to filter information focused to their business area, specific asset types and to a grid square level of 12km in the UK and 7km in the US.

The hazards that we consider are:

The CCRT shows the changing climate change risk profile for 2030, 2040, 2050 and 2070. An example of the results from the CCRT showing the changing risk profile of high temperatures on our UK Electricity Transmission assets under a 4 degree climate scenario is shown on the right. The CCRT shows that as we progress out to 2070, there will be an increased frequency of high temperature as a hazard in the UK, i.e. the number of days per year when the maximum daily temperature is above 30°C (shown on the-left hand graph and map). We can then see on the right-hand graph and map the level of risk this translates for our ET assets across the network and over time.

Transition scenarios modelling

Our transition scenarios are developed using driving forces which we monitor regularly as part of our risk management process and annually in our strategic horizon scan. In our analysis, we do not make a judgement on the likelihood of any one scenario relative to others; and by design, the analysed scenarios do not encompass all possible future pathways and their associated risks. There are limitations within the scope of our modelling, e.g. available data across other sectors, but to minimise this impact we have utilised a wide range of resources and compared our results with external scenarios.

Transition insights

Whilst current global climate policies and actions suggest a lower than 4°C scenario, a 4°C scenario was still modelled in line with our approach to scenario modelling outlined above. The transition impact to the Group is most significant in scenarios resulting in a lower degree of warming given the increased action required. The following five transition insights are therefore most relevant to a 2°C (or lower) scenario. However each still applies, albeit to a lesser extent, to a 4°C scenario as well.

Insight and factors

1

Urgent collective action required across society
To reach net zero requires new policies and technology development. Action is required by a wide range of stakeholders in the industry as a result of the public expectations on climate change; there is a push for new policies, action and government and State targets in the regions we operate.

2

Retaining consumer buy-in will be key
To reach net zero, consumers can drive domestic heating and transport decarbonisation by switching to low-carbon alternatives such as EVs and heat pumps.

EVs are expected to represent 90% of the fleet by 2050 with 30% of households electrified.

3

Electricity use and share of final demand will increase
Grids are expected to grow to deliver an increase of 50 – 160% of current demand by 2050 as fuel switching reduces final energy demand with both heating and transport sectors decarbonising.

4

Energy supply structure will shift
There will be a shift to renewables power, notable offshore wind and solar. Offshore wind is expected to triple in output from 2030 to 2050.

5

Pathways will adapt to global and local realities
The US Northeast region is expected to import hydrogen to support decarbonisation, but in the UK Blue hydrogen and CCUS may develop due to policy and geology.

None of the transition scenarios tested threaten the viability of the Group and we are in a strong position to adapt our portfolio to maximise the opportunities of the energy transition. Further detail on the transition risks and opportunities identified in our scenario analysis, including estimated qualitative and quantitative impacts where applicable, can be found on pages 79 – 82.

How we manage our climate-related risks

As part of our ERM process, risk owners and other key stakeholders establish internal controls to manage the risk within appetite. Regular risk reviews consider the effectiveness of individual controls as well as the collective strength of the internal control framework which determines the financial and reputational impact, and likelihood of the risk to materialise. Where current risk levels are outside of agreed target scores and our risk appetite, remedial or continuous improvement plans will be agreed to mitigate the current risk score.

The controls for our new climate change principal risk (mitigation) have evolved in line with our strategy and regulatory frameworks. They include controls on strategic oversight and governance (for example, Board and Group Executive Committee sign-off on strategy and oversight of delivery against net zero action plans), business unit roadmap and operational plans to deliver net zero targets (that are aligned to Group's strategy) and investment plans (providing leadership to structural changes, e.g. bringing to scale new technologies). Controls related to the climate change risk are also reflected throughout other relevant risks, for example regulatory outcomes; political and societal expectations; and significant disruption of energy.

The significant disruption of energy risk and controls demonstrates how we are adapting as an organisation to manage the impact of climate change to our assets. Our key climate adaptation controls include the following:

- Fit for Future of Electricity Strategy: a corporate strategy that considers the future electricity business, including our network resilience and changing environment, and the steps to ensure our business remains resilient in the future, such as enhanced design standards, and investments on asset hardening and flood protection.
- Engineers Governance forums: Chief Engineers and Engineering Duty Holders meet to provide guidance and data-sharing on key topics such as resilience.
- Resilience and Asset Management Business Management Standards (BMS): sets out minimum requirements and framework for resilience capability and managing asset risk to ensure each business unit is prepared for the next disruptive event, including the changing environment.
- Organisational Resilience Competency Framework: to guide, measure and where applicable, heighten our resilience response across the Group under different climate change scenarios.
- Business Continuity and Crisis Management: ongoing development of a new business continuity software application to ensure a consistent view across the Group, and internal crisis management tool to respond more effectively to incidents, drive consistency, and identify and track actions.

The quality of assurance over key controls has been enhanced following roll-out of a new control testing methodology, that integrates the first line and second lines of defence.

Key controls related to Group and business areas GPRs are self-assessed by first line teams (control owners and/or performers), and tested by second line teams, who review the design and operating effectiveness; all captured in our GRC system. Any ineffective controls are identified and remediated. Risk owners across the Group have the ability to view assurance of their controls in real time, using newly developed PowerBI dashboards.

As outlined above, with regard to our greenhouse gas emissions, where specific actions are identified to achieve our strategy, drive desired behaviours and manage our risks, we set SMART targets for those accountable. Performance against those targets is published transparently, principally through the RBR and the results contribute to the assessment of remuneration for those accountable. For the most material performance measures, an external assurance opinion is received over the accuracy of preparation; a copy of this opinion can be found on our website.

Our significant climate-related risks and opportunities and our strategic response

Guided by our scenario modelling, strategic planning and risk management approaches articulated above, the climate-related risks and opportunities that pose a potentially significant financial or reputational impact are detailed below, along with our basis of measuring the risk/opportunity and our strategic response to each risk/opportunity that underpins our resilience assessments. To assess the relative materiality, we established scope of impact, timeframe and likelihood for each risk and opportunity using internal analysis, market data and input from subject matter experts across our business. Refer to the subsequent section for further information on measurement indicators, including our performance against them. We assessed which businesses would be impacted against whether there was a risk that could materially affect our ability to meet business objectives and/or, is of material importance to stakeholders. The timeframes we have used to assess the climate-related risks and opportunities are short: up to 2025, medium: from 2025 to 2030 and long-term: from 2030 to 2050. Our 'likelihood' assessment is an indicative estimate of the probability for material financial impacts with reference to the following categorisation:

- **Low:** Very unlikely to unlikely
- **Moderate:** About as likely as not to occur
- **High:** Likely to very likely to occur

Risk/opportunity	Potential impact	Our response
1. Transition Risk & Opportunity Retaining customer buy-in will be key: cost transparency and scrutiny on Network Operators is likely to increase as there will be a focus on the impact of transition costs on customers' bills. Whilst National Grid can support the progression towards an affordable transition, there is a risk that customers and/or regulators may perceive that too little is being done to manage pressures on affordability, resulting in damaged reputation and damaged regulatory relationships. **Business:** Group-wide **Timeframe:** Short, medium and long term **Likelihood:** Moderate **Measurement indicators:** % of NG transmission/distribution costs on customer bills, customer trust survey, feedback through the fair transition plan.	The reputation of our business has wide implications to our operations; affecting our regulatory negotiations and the resulting regulatory returns and incentives of the frameworks within which we operate. Our reputation can affect our cost of doing business, from customer feedback, employee retention, productivity, supplier relationships, and ultimately our share price. All have impacts that can move in either way, depending on our perceived success in enabling the fair and affordable energy transition. Due to the nature of the risk/opportunity, and the degree of external variables affecting the matter, it is difficult to meaningfully quantify the risk. However, if not managed effectively, it could undermine the corporate strategy and materially impact our financial performance.	Being at the 'heart of a clean and fair transition' is our purpose and our regulatory strategy team has a strong focus on affordability for consumers, working with regulators to minimise impacts to customer bills and to introduce affordability mechanisms. We will also advocate for anticipatory investment to minimise the costs to consumers and will use our CCRT to inform our investment decisions to ensure the resilience of our assets. An example of our focus on affordability for customers is our recently launched Expanded Solar-For-All programme in the US, where nearly 160,000 National Grid upstate New York electricity customers will benefit from new solar-energy bill credit, thanks to a joint offering from National Grid and the New York State Energy Research and Development Authority (NYSERDA). The Expanded Solar-For-All programme, approved by state regulators in January 2022, will automatically provide monthly credits to income-eligible customers enrolled in National Grid's Energy Affordability Programme. The programme is designed to deliver the benefits of community solar to low-income customers, who are often shut out of renewable energy sources due to cost. Community solar is a large array of solar panels at an offsite location that allows customers to access solar power without installing panels on their homes. Developers build and operate the community solar projects, and energy delivery companies like National Grid purchase and distribute the credits generated by the projects to participating customers. The bill credits would grow over three years as the programme expands, with customers receiving monthly discounts. In Expanded Solar-For-All's first phase, National Grid anticipates providing $240 million in total bill credits during the 25-year lifetime of the programme. A proposed second phase would further expand the programme, doubling the total anticipated bill credits to $480 million over the programme's lifetime. The second phase will be contingent on approval by state regulators. The Expanded Solar-For-All programme brings to life two pillars of Project C, National Grid's commitment to the communities where we work and live: clean energy and sustainability, and environmental justice and social equity.

Task Force on Climate-related Financial Disclosures continued

Risk/opportunity	Potential impact	Our response
2. Transition Risk & Opportunity Urgent collective action is required: with its central role as the backbone of the energy sector, National Grid can play a crucial role in the transition. As a result, public focus will increase on our Company, increasing reputational risk. **Business:** Group-wide **Timeframe:** Short, medium and long term **Likelihood:** Moderate **Measurement indicators:** GHG emissions, Climate Transition Plan, customer feedback	The reputation of our business has wide implications to our operations; affecting our regulatory negotiations and the resulting regulatory returns and incentives of the frameworks within which we operate. Our reputation can affect our cost of doing business, from employee retention, productivity, supplier relationships, customer feedback, cost of/access to finance and ultimately our share price. All have impacts that can move in either way, depending on our perceived success in enabling the energy transition. Due to the nature of the risk/opportunity, and the degree of external variables affecting the matter, it is difficult to meaningfully quantify the risk. However, if not managed effectively, the matter could undermine our corporate strategy and materially impact our financial performance.	To date, we have endeavoured to take account of this by being at the heart of a fair, clean and affordable future, working with governments, policy makers and regulators to shape net zero strategy. Accordingly, we have positioned ourselves as 'The Energy Transition Company' acting as a principal sponsor of COP26, and our ESO business has set an ambition to operate a zero-carbon system by 2025, with the goal to run 100% carbon free energy 24/7/365 by 2035. We will continue to focus on enabling the transition, including working in partnership with our regulators and other stakeholders to develop investment plans in line with the net zero commitments of their jurisdictions, whilst managing the costs to consumers. We have developed roadmaps and track progress against key milestones for each of our business units which include the actions, conditions and assumptions that will support the delivery of our emissions reduction targets. These plans are consolidated into a group roadmap which is presented in our Climate Transition Plan, which we've published alongside this year's Responsible Business Report.
3. Transition Opportunity Electricity use and share of final demand will increase: with the transition pivoting energy needs from fossil fuels to cleaner gas and electricity, the Group will deliver a larger share of society's needs in the future. This will increase investment opportunities as growth is across transmission and distribution electricity networks. **Business:** ET, ED, NY, NE, NGV, ESO **Timeframe:** Short, medium and long term **Likelihood:** High **Measurement indicators:** EU Taxonomy KPIs, green capex forecasts, GHG emissions	Sensitivities have been run versus our business plan to investigate the impact of the scenarios and we will continue to monitor triggers to capital expenditure. We estimate that the Orderly Transition or Acceleration scenario would result in an increase over the Slow Progress scenario of between 0.5% to 1.0% in underlying operating profit CAGR over the period to 31 March 2031. Capital expenditure increases may include expanding electricity networks, natural gas leak reductions and investment and expansion of renewable generation operations, but these are expected to be within our regulatory regime. Beyond 2030, and in line with our scenario modelling, the trends towards greater electrification, driven by expanded renewables generation and investment into decarbonising our gas networks is expected to continue and may accelerate.	Our acquisition of WPD positions National Grid for this increase in electricity use across transmission and distribution. We are also continuing to invest in both onshore renewables via National Grid Renewables and in our interconnector portfolio, which will form an important part of UK decarbonisation. Across our businesses, we are also heavily investing in the infrastructure required to support the decarbonisation of transport and during 2021 in the US we delivered 1,684 EV charging ports in our jurisdictions, a company record for a calendar year. We are also carrying out critical studies and pilots exploring how to decarbonise our gas networks, for example the HyGrid project described in Transition Risk 6 and the FutureGrid project, which is testing the possibility of converting the NTS in the UK to transport hydrogen. In the UK, we are continuing to work with the Department for Transport and the Office of Zero Emissions Vehicles to ensure that the underlying network infrastructure is in place, ahead of need, to support the successful delivery of Project Rapid. We welcomed the Transport Decarbonisation Plans commitment to publish an Electric Vehicle Charging Infrastructure Strategy and establish a Delivery Body to progress the grid upgrades required to meet future ambitions. We also continue to engage with key stakeholders from across all modes of transport through our 'ask, not tell' engagement principles to understand the main barriers and potential future demand and infrastructure requirements for each sector.

Risk/opportunity	Potential impact	Our response
4. Transition Risk Electricity use and share of final demand will increase, alongside increasing volumes of intermittent renewable energy. System resilience will be key to ensure security of supply. **Business:** ET, ED, ESO **Timeframe:** Short, medium and long term **Likelihood:** Moderate **Measurement indicators:** Network reliability	Our role as the ESO is pivotal to delivering the energy transition. If the system operator is not prepared with the systems and processes to operate a decarbonised energy supply system, there will be significant costs from increased market inefficiency and the potential for network outages impacting our customers. In the shorter term, failures could affect us through lost regulatory incentive income, which link directly to reliability. See our Segmental analysis and Revenue notes on pages 156 and 158 for further detail on the size of our ESO business.	Our ESO business is investing to ensure it is able to operate the system safely and securely at zero carbon whenever there is sufficient renewable generation online and available to meet the total national load. This year, the ESO agreed to contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system. We are also supporting the accelerated development of electricity grids worldwide. At COP26 we joined the UK and Indian governments to launch the Green Grids Initiative, One Sun One World One Grid (GGI-OSOWOG), aiming to accelerate global expansion and modernisation of energy grids. This is an ambitious plan backed by over 80 countries and looks to harness the full potential of renewable resources globally, through much greater interconnection of electricity grids, so electricity can be moved from where it's generated to where it's needed. The GGI will help make this happen by bringing together a global coalition of stakeholders, including governments and businesses, to speed up the expansion of energy grids across regions and continents. We are playing a leading role in this as a member of the GGI.
5. Transition Opportunity Energy supply structure will shift: Growth in investment will occur in our markets as well as in adjacent markets, providing opportunity for our NGV and NGP businesses. As pathways adapt to global and local realities, technologies and market expectations will develop new commercial opportunities from the transition towards net zero that will continue to present opportunities to shape our portfolio and strategy. **Business:** NGV, NGP **Timeframe:** Short and medium term **Likelihood:** Moderate **Measurement indicators:** NGP value creation, NGV capital investment, EU Taxonomy KPIs, cumulative investments into large-scale renewables, investment in R&D	With effective investment and proactive market engagement, there will be opportunities to grow new and existing revenue streams and to generate sustained green capital investment. We also anticipate the opportunity for investment in large-scale renewables to expand as the energy transition accelerates, with further innovation to create opportunities of additional revenue streams in the future. Our capital investment forecast to 2026 contains c.£1.6bn relating to renewables.	Our NGV and NGP businesses actively monitor and participate in emerging growth opportunities and will continue to do so in the future. During the year, National Grid Renewables invested £199 million into renewable generation assets via the Emerald joint venture. Further to this, NG Renewables invested £223 million in the offshore wind seabed lease awarded in the New York Bight. During the year, NGP, our venture capital business that invests in energy technology startups, made 13 new investments bringing the total portfolio value to $491 million across 38 investments. Example investments include: TS Conductor, a California-based company whose technology replaces legacy materials in high-voltage electricity transmission lines with a next-generation conductor that doubles the lines' capacity without the need to retrofit towers or other infrastructure; and Risilience, a UK-based startup that helps companies manage their transformation to net zero emissions. We also continue to invest in our interconnector portfolio and, once Viking Link becomes commercially operational in 2023/24, NGV will hold 7.8 GW of interconnector capacity and the focus will switch to multi-purpose interconnectors, which will increase interconnection and facilitate the construction and expansion of wind farms in the North Sea.

Risk/opportunity	Potential impact	Our response
6. Transition Risk Pathways will adapt to global and local realities: there are multiple net zero pathways for heating which have different impacts for our US gas activities. Whilst all pathways expect a reduction of the usage of fossil gas in the long term, there are opportunities for the development of fossil-free alternative fuels. The different pathways result in a risk that our natural gas infrastructure will not be useful as long as is currently assumed in our financial planning and accounting. **Business:** NY, NE **Timeframe:** Long term **Likelihood:** Moderate **Measurement indicators:** Gas UEL sensitivities, GHG emissions, Climate Transition Plan	We have performed sensitivity analysis to assess the impact shortening the useful economic lives of our gas business assets would have upon the Group's financial results, which may result in an increase in depreciation expenses of up to £180 million to 2050 for US regulated assets. This sensitivity calculation excludes any assumptions regarding the residual value for our asset base and the effect shortening asset depreciation lives would be expected to have on our regulatory recovery mechanisms. For further information, see page 181.	We are pursuing zero fossil fuel gas and electric systems by 2050, if not sooner, in the US. The vision proposes a hybrid approach to heating that enables customers to have more affordable and practical choices to become fossil-free. More details can be found in our Vision Report https://www.nationalgrid.com/us/fossilfree. We will continue to engage in key regulatory proceedings and processes in New York and Massachusetts to maximise recovery on our gas business assets. These include the ongoing DPU 20-80 'Future of Gas' proceeding in Massachusetts and a KEDNY/KEDLI depreciation study that will be submitted to the New York PSC in advance of our rate case filing in 2023.
7. Physical risk Our assets are at risk of physical impacts from extreme weather events such as storms and flooding. There will also be increased frequency of weather incidents and changing long-term climate trends leading to asset damage and operational risks. **Business:** Group-wide **Timeframe:** Short, medium and long term **Likelihood:** High **Measurement indicators:** Network reliability, major storm costs, climate change risk tool outputs	We experience significant costs as a result of asset damage and operational interruptions due to major storms (2021/22: £163 million 2020/21: £150 million). We therefore continue to invest in storm hardening across the Group, with a further £36 million invested in the year. We are in the process of expanding our scenario modelling to forecast the likely financial implications of a 2 and 4 degree scenario over the long term. We expect to report these results in our 2022/23 reporting.	An example of our work in this area is the $741 million of investment our New York business has committed to in the five year capital investment forecast to FY26. This investment covers a range of storm hardening measures, upgrades and repairs to our infrastructure to make it less susceptible to storm damage. These include inspection and maintenance, minor storm hardening, vegetation management, flood mitigation, side tap fusing, and multi-value transmission reliability. In the UK, our ESO business has undertaken Mapping Impacts and Visualisation of Risks (MIVOR) of extreme weather on system operation to evaluate the impacts of extreme weather events on system operation up to 2050 under RCP 4.5. The results will enhance the accuracy of energy system impact modelling and will also focus on the impacts of the whole supply chain, renewable generation, network assets, and demand, ensuring that the learnings produced are relevant to the whole energy system.

Climate change metrics and targets

We have metrics and targets that allow us to measure our impact on the environment, demonstrate our commitment and monitor our performance. These were published in October 2020 within our RBC and, on an annual basis, we report our progress against those targets in our RBR and our key metrics in respect of our GHG emissions can be found on page 26. We have a commitment to reduce our impact by achieving net zero for our Scope 1 and 2 emissions by 2050, with interim targets of an 80% reduction by 2030 and a 90% reduction by 2040, from a 1990 baseline. Alongside this, we have a Scope 3 emissions reduction target of a 37.5% reduction by FY 2034 from an FY 2019 baseline year. This target includes all of our Scope 3 emissions. Our GHG emissions reduction targets are science-based and approved by the SBTi.

Numerous underlying metrics support and complement this goal as part of our broader sustainability ambition, including reducing our energy consumption, enhancing the natural value of our landholdings, recycling and/or reusing our recovered assets and reducing our office waste. These are discussed in more detail on page 67 and in our RBR. The metrics comprise several business unit level metrics that are then tracked and monitored by business unit, and presented to senior management on a quarterly basis, with accountability at the local level.

With reference to the principles of the EU Taxonomy, we have disclosed the proportion of our IFRS revenue, operating expenditures and capital expenditures that align with the climate change mitigation and adaptation objectives of the EU's taxonomy. Given the climate change mitigation objective's alignment to the principles of the Paris Agreement, the disclosures provide a transparent view of the Group's compatibility with the net zero goals of the economies we serve during the year ended 31 March 2022. Our assessment is presented within our RBR; please see page 53 of our RBR for the complete disclosure.

We continually review our metrics and targets to ensure that the data we are measuring is meaningful, aligns with our strategy, and is providing the information the business and our stakeholders need to effectively monitor our performance and demonstrate our progress. In June 2022, we published our Climate Transition Plan alongside our RBR. Note, whilst we do not consider water use as a significant climate-related financial risk for the Group, performance metrics are contained in the RBR.

Further, we are closely monitoring developments regarding the UK's greening finance initiative, the formation of the ISSB and the proposals to deliver a comprehensive global baseline of sustainability-related disclosure standards. Whilst we currently leverage the GRI, SASB, EU Taxonomy, EEI and TCFD frameworks in our RBR to maximise the usefulness of our reporting, we are encouraged to see advancement to further align sustainability reporting disclosures. Please also refer to the RBR for the limited scope assurance opinion received over our most material sustainability metrics.

A complete index of the quantitative measurement indicators used to manage each climate-related financial risk and opportunity is below:

Measurement indicator	Risk/Opportunity	2021/22	2020/21
Scope 1, 2 and 3 emissions and intensity[1]	1, 3, 6	See page 26	
Consumer Trust Survey (US)[1]	1, 2	62.4%	66.2%
NG UK's transmission costs' contribution to consumer bills[1]	2	£29.04	£29.52
NG UK's distribution costs' contribution to consumer bills[1]	2	£98.85	£95.81
US Electric: Average Customer Bill (Low Income Customers Excluded)[1]	2	$1,613.35	$1,563.14
US Gas: Average Customer Bill (Low Income Customers Excluded)[1]	2	$1,314.24	$1,156.45
US Electric: Average Low Income (only) Customer Bill[1]	2	$1,107.07	$1,026.82
US Gas: Average Low Income (only) Customer Bill[1]	2	$904.72	$771.56
Green Capex five-year forecast (2021/22-2025/26)	3	c.£24bn	n/a (1st year of reporting)
Network reliability[1]	4, 7	See page 26	
NGP value creation	5	See page 55	
Cumulative investments into large-scale renewables	5	See page 81	
NGV capital investment	5	See page 25	
Investment in R&D	5	See page 162	
Gas UEL sensitivities	6	See page 181	
Major storm costs	7	See page 39	

1. Refer to RBR reporting methodology for calculation methodology: https://www.nationalgrid.com/responsibility/responsible-business-report

Doing Right Now

Transforming our network

We are rewiring the Capital, reinforcing London's electricity supply for decades to come. A six-year, £1 billion project in South London via 19 miles (30 kilometres) of deep underground tunnels.

Corporate Governance Report

Governance at a glance

Key highlights

98%

Board meeting attendance for the year ended 31 March 2022

46%

female representation on our Board as at date of report

15%

ethnic minority representation on our Board as at date of report

66%

Average % of issued share capital voted at 2021 AGM

78%

employee engagement score for 2021/22

50.97p

dividend per ordinary share in 2021/22
Increase of 3.7% on prior year

100

perfect score on Human Rights Campaign Foundation's 2022 Corporate Equality Index

4

Board members appointed in 2021/22

99%

shareholder vote **'For'** 2021 AGM resolution on climate change commitments and targets

UK Corporate Governance Code – 2021/22 Compliance Statement

The Company is subject to the Principles and Provisions of the UK Corporate Governance Code (the 'Code'), which it has applied consistently. The table below outlines how the Group has structured the Governance section of the Annual Report on the Principles of the Code.

For the year ended 31 March 2022, the Board considers it has complied in full with the Provisions of the Code.

This Corporate Governance report as a whole explains how the Company has applied the Principles and complied with the Provisions of the Code, but the below acts as a guide to where the most relevant explanations are given:

Principles of the Code

Chair's statement

Dear shareholders,

I am pleased to present to you the 2021/22 Corporate Governance Report, my first as Chair of the Company.

The year in review

There has been no shortage of opportunities for engaged governance by the National Grid Board. The Company had a full agenda coming into the fiscal year: overseeing performance amidst a lingering pandemic and then the safe return to work; ensuring that our provision of service is consistent with society's expectations of us; advancing our agenda of change as we make commitments to reach net zero; seeing through several major transactions; and supporting an evolving Group culture of accountability, agility and performance. The foregoing promised a busy year. Over the summer of 2021, a crisis in the retail energy markets in the UK began to unfold. Leading up to COP26, there were increasing pressures on both sides of the Atlantic for more rapid decarbonisation of energy. Then the threats of war became a stark reality. Ukraine was invaded and, almost overnight, energy supply security became the dominant theme. Our stakeholders have to be assured that we can identify and manage all of these risks. At the same time, we have to help balance aspirations regarding transformation with the exigencies of current delivery. All of these responsibilities are our job as board members, along with ensuring that we have a qualified, engaged, diverse workforce to succeed amidst an era of great change.

My tenure as Chair commenced as directors were nearing or had completed their nine-year terms. Identifying suitable qualified replacements who could quickly come up to speed and yet bring fresh perspectives was essential. Fortunately, a well-vetted business plan was already in place and the change in board composition was orderly. We were able to quickly review Committee remits and composition and to refine the responsibilities and ownership of the Committees where much of the Board's work is undertaken.

Nevertheless, one thing I've observed in my years as a Non-executive Director is that operationally urgent matters can easily overtake consideration of truly important matters in a busy board agenda. So last summer, our Board took the time for what I believe was a critical set of conversations – namely coming to agreement on what were the big strategic questions that National Grid was likely to face in the next several years. We asked ourselves, what topics would be worthy of the Board's time? Why were they important? How would we get the most salient information? Which external and internal resources would be available to shape our perspectives? These questions may appear simplistic. But in my experience, effective stewardship starts by making sure that a board spends time on the matters that really count. I hope to use this report as a means to share with you some of the issues we are tackling in our Board discussions.

None of the foregoing has any meaning unless we cast a critical eye on our own performance. We have adopted board goals and we retained an independent advisor to help us assess our group effectiveness as well as the effectiveness of each director; see page 97 for further detail. These honest conversations on how we are doing are foundational to our being the kind of board which you can entrust the stewardship of your Company.

Board composition

As you will have noted, several distinguished Board members reached the end of their terms in the year. Sir Peter Gershon, previous Board Chair until I assumed the role when he stepped down on 31 May 2021, is a distinguished businessman and advisor to government, known for his laser-like focus on productivity and performance. Dr. Paul Golby, a member of the Royal Academy of Engineering, has deep, relevant experience across the power sector, and contributed immeasurably to all the technical and strategy decisions the Company has made during his tenure. Mark Williamson, with a long career in finance, has wisely counselled on our financial and controls framework, as well as being the trusted Senior Independent Director, and Nicola Shaw, a key member of the management team in the role as UK Executive Director since 2016. All four retired from the Board in 2021. Jonathan Dawson, who will leave the Board at the AGM, has been the independent voice for the alignment of strategy and reward. In addition, Amanda Mesler, who has been a member of our Board for the last four years, has decided not to stand for re-election. Amanda was a great supporter of the investments in technology that have proved invaluable over these last several years. On behalf of my Board colleagues, I express my appreciation to all of them.

Nevertheless, from this loss comes opportunity. We have been fortunate to have recruited five new directors who bring fresh perspectives and diverse experience to the Board. Ian Livingston, former Chief Executive of BT, comes with the battle scars of industry transformation and expertise in finance. Tony Wood, a sitting CEO and a member of the Royal Academy of Aeronautical Engineering, brings the perspective that safety, productivity and innovation are not to be traded off, but must be driven apace in lock-step. Martha Wyrsch has worked directly in the energy sector in all its aspects – power, natural gas, and renewables, regulated and unregulated. She brings wisdom and practical advice to the boardroom. Anne Robinson, an active executive in one of the largest asset management companies in the world, has substantial business and transactional experience and, in her current role, the most relevant background in ESG that we could imagine. Iain Mackay, who is joining the Board upon election at this AGM, is a sitting CFO with experience in industry prior to joining the fast-paced world of pharmaceuticals. These new Directors, along with those who continue to serve, bring strategic thoughtfulness, engagement, constructive challenge, independence and gravitas to our deliberations. As a group, they demonstrate our continued commitment to diversity on our Board and within National Grid's organisation overall.

Stakeholder engagement

Whilst virtual engagement has become the norm over the past two years, it has been a great pleasure to resume in-person engagement in recent months. One can get an authentic sense of what is going on within an organisation or with society at large by meeting people, listening to how individuals and groups have fared, and seeing first-hand the challenges on the ground. In recent months, Board members have undertaken site visits. We have also had virtual and in-person engagement sessions throughout the year with employees. Page 96 provides more detail.

Annual General Meeting

Last year I was one of the many individuals affected by COVID-19 travel restrictions and was unable to participate in the 2021 AGM in person. Given the situation at the time, we did not encourage attendance by any shareholder. For our 2022 meeting, we revert to business as usual but with another option. I'm pleased to share that we are offering the opportunity for you to participate in a 'hybrid AGM'. You will be able to join the meeting online and yet be able to participate in live voting and the Q&A session, as if you were in the room. Please note, too, that we are putting to vote for the first time our Climate Transition Plan this year. The discussion of this resolution should illuminate National Grid's resolve to move to net zero and to provide metrics by which we can all track progress. Further details on this are outlined in the Notice of Meeting for the AGM and on the Company's website.

Looking forward

Your Board will continue to focus on the key issues, challenge the Group's leadership, and collectively seek to make wise decisions. In an ever-changing world, we pledge to you that whatever lies ahead, we have the best interests of your Company, its customers, and its people central to our deliberations.

Paula Rospud Reynolds

Paula Rosput Reynolds
Chair

Our Board

Paula Rosput Reynolds (65)
Chair

Appointed: 1 January 2021 as Chair Designate and Chair with effect from 31 May 2021

Tenure: 1 year

Skills and competencies: Paula's strong business acumen is shown by her impressive track record of leading complex international businesses. In her board and leadership roles, Paula has demonstrated her decisive and pioneering nature, which will be crucial in moving National Grid's vision forward, as it embarks on its journey to enable the clean-energy transition and net zero by 2050. Her knowledge of the energy market and experience supporting organisations through transitional periods is an asset to the Board, as National Grid continues to grow and embrace opportunities. Paula is Chair of the People & Governance Committee and the high-calibre appointments made under Paula's leadership in the last year are pivotal in ensuring the succession and composition of the Board matches the culture, strategy and leadership needs of the Company. These skills combined with her insight into strategic and regulatory issues support her in leading and governing an effective board.

External appointments:
- Senior Independent Director and Chair of the Remuneration Committee at BP p.l.c.
- Non-executive Director of General Electric
- President and CEO of PreferWest LLC
- Member of UK Prime Minister's Business Council

John Pettigrew FEI FIET (53)
Chief Executive

Appointed: 1 April 2014 and Chief Executive with effect from 1 April 2016

Tenure: 8 years

Skills and competencies: John joined the Group as a graduate in 1991, progressing through many senior management roles and demonstrating a strong track record of developing and implementing global strategies for profitable growth. John contributes widely into external industry discussions shaping energy policy and brings significant know-how and commerciality to his leadership of the executive team and management of the Group's businesses.

John continues to lead the implementation of the Group's strategy. This year he progressed the Company's strategic pivot, including the integration of WPD and the successful sale of a majority stake in our UK Gas Transmission business. He also led the Company's Principal Partnership of COP26 in Glasgow.

External appointments:
- Non-executive Director and Senior Independent Director of Rentokil Initial plc
- Member of the UK Government's Inclusive Economy Partnership
- Member of the Electric Power Research Institute Board
- Member of the CBI's President's Committee
- Member of the Edison Electric Institute Executive Committee

Jonathan Dawson (70)
Non-executive Director; Independent

Appointed: 4 March 2013

Tenure: 9 years

Skills and competencies: Jonathan, through his broad range of expertise within the finance and pensions sector, brings significant in-depth understanding in remuneration and financial matters to the Group. Jonathan previously held positions as Chairman of the Remuneration Committee and Senior Independent Director of Next plc and Chairman of the Audit & Risk Committee and Senior Independent Director at Jardine Lloyd Thompson Group plc.

As a Non-executive Director, Jonathan brings an innovative perspective, scrutiny, constructive challenge and independent oversight to the Board.

External appointments:
- Chairman of River and Mercantile Group plc
- Chairman and a founding partner of Penfida Ltd

Thérèse Esperdy (61)
Non-executive Director and Senior Independent Director; Independent

Appointed: 18 March 2014

Tenure: 8 years

Skills and competencies: Thérèse has significant international investment banking experience, having held a variety of leadership roles spanning 27 years. Her career began at Lehman Brothers and in 1997 she joined Chase Securities and subsequently JPMorgan Chase & Co, where she held a number of senior positions. With a distinguished career in the investment banking sector, Thérèse brings significant banking, strategic and international financial management expertise and knowledge of financial markets to the Board and to her role as Chair of the Finance Committee.

Thérèse's specialist knowledge combined with her sharp and incisive thinking enables her to contribute to, and constructively challenge on, a wide range of Board debates.

External appointments:
- Chair of Imperial Brands PLC
- Non-executive Director of Moody's Corporation

Group General Counsel & Company Secretary

Justine Campbell (51)
Group General Counsel & Company Secretary

Appointed: 1 January 2021

Tenure: 1 year

Skills and competencies: Justine trained and qualified as a lawyer at Freshfields in London and Brussels. She has held senior executive positions at several multi-national companies and is an experienced lawyer with particular expertise in regulated sectors.

She is responsible for safety, legal, risk, compliance and governance activities across the Group, the effective operating of National Grid plc's Board and Committees and advising on key issues of corporate governance.

External appointment:
- Member of the GC100 Group Executive Committee

Andy Agg (52)
Chief Financial Officer (CFO)

Appointed: 1 January 2019

Tenure: 3 years

Skills and competencies: Andy trained and qualified as a chartered accountant with PwC and is a member of the ICAEW. He has significant financial experience, having held a number of senior finance leadership roles across the Group, including Group Financial Controller, UK CFO and Group Tax and Treasury Director. Andy brings in-depth knowledge of National Grid, in both the UK and the US, and has broad experience across operational and corporate finance roles. He contributes broadly on a wide range of topics at Board, Finance and Audit & Risk Committee meetings and has been instrumental in achieving the successful sale of a majority stake in our UK Gas Transmission business during the year.

External appointments:
- Member of The 100 Group Main Committee and Chair of the Tax Committee

Liz Hewitt (65)
Non-executive Director; Independent

Appointed: 1 January 2020

Tenure: 2 years

Skills and competencies: Liz qualified as a chartered accountant with Arthur Andersen & Co. In her executive career she worked in private equity for 3i Group plc, Gartmore Investment Management Limited and Citicorp Venture Capital Ltd gaining insights into a wide variety of industries. Her work at Smith & Nephew gave her global insight. She was seconded for a year to HM Government. Liz has extensive experience as an audit committee chair and as a member of nominations and remuneration committees. She is considered to be a financial expert in the context of audit committee work. Her broad industrial and global experience and her financial knowledge bring a wide perspective to her role as Chair of the Audit & Risk Committee and in Board discussions and decision-making.

External appointments:
- Director of Silverwood Property Limited
- Non-executive Director of St George's Fields Limited; and of St George's Fields No.2 Limited

Ian Livingston (57)
Non-executive Director; Independent

Appointed: 1 August 2021

Tenure: Less than 1 year

Skills and competencies: Ian is a chartered accountant who qualified with Arthur Andersen & Co and went on to become the youngest FTSE 100 CFO when appointed to the Dixons Group plc Board. Ian brings a wealth of experience to National Grid, having held both CFO and CEO positions in large, high-profile public companies operating in the UK and internationally. He has extensive experience of operating in a regulatory environment and is widely regarded in both the corporate and financial world for his record of consistently achieving enhanced shareholder value. Ian is Chair of the Remuneration Committee, where he brings significant experience and broad business perspective to discussions. He has a variety of non-commercial interests and involvement with a number of charities in education and social care.

External appointments:
- Chair of Currys plc (until 8 September 2022)
- Non-executive Director of S&P Global

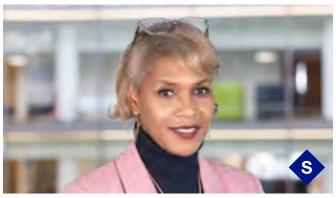
Amanda Mesler (58)
Non-executive Director; Independent

Appointed: 17 May 2018

Tenure: 4 years

Skills and competencies: Amanda brings to the Group extensive international leadership and general management experience from the technology and fintech sectors. She has over 27 years of experience at senior management and board level at large international companies. She led a $1 billion global practice at Electronic Data Services and has experience sitting on audit, risk and remuneration committees. Amanda provides an entrepreneurial perspective to the Board and valuable insight into the Company's increasingly important technical evolution.

External appointments:
- Non-executive Director of Amadeus IT Group S.A.
- Chair of Minna Technologies
- Advisor to Macquarie Capital



Anne Robinson (51)
Non-executive Director; Independent

Appointed: 19 January 2022

Tenure: Less than 1 year

Skills and competencies: Anne has over 20 years of legal experience in the financial services industry, where she has counselled senior executives on a wide range of legal, regulatory and business issues. Anne has worked throughout her career to champion diversity, equity and inclusion whilst being a strong advocate for sponsorship and mentorship of other women in the legal profession. Anne brings to the Board expansive and varied legal experience in the financial services and consulting fields as well as experience of working closely with boards and investors on a broad range of ESG issues. Anne earned a BS from Hampton University and a JD from Columbia University Law School.

External appointments:
- Managing Director, General Counsel, and Corporate Secretary of Vanguard
- Director of Minority Corporate Counsel Association
- Director of Children's Rights
- Millstein Center Advisory Board at Columbia Law School

Earl Shipp (64)
Non-executive Director; Independent

Appointed: 1 January 2019

Tenure: 3 years

Skills and competencies: With an extensive career in the chemicals industry and having held a senior leadership role in a safety-critical process environment, Earl brings significant safety, project management, environmental, sustainability and strategic expertise to the Board and its Committees, particularly in relation to safety management. This, along with his innovative way of thinking, enables Earl to contribute on a wide range of issues to Board and Committee debates and to effectively chair the Safety & Sustainability Committee.

External appointments:
- Non-executive Director of Olin Corporation
- Non-executive Director of Great Lakes Dredge and Dock Co.

Key

- A Audit & Risk Committee
- F Finance Committee
- P People & Governance Committee
- R Remuneration Committee
- S Safety & Sustainability Committee
- E Group Executive Committee
- Committee Chair

Other changes during the year:

Sir Peter Gershon, Paul Golby and Mark Williamson stepped down as Non-executive Directors on 31 May 2021, 26 July 2021 and 31 December 2021 respectively.

Nicola Shaw stepped down as Executive Director on 26 July 2021.

Biographies as at 18 May 2022

Jonathan Silver (64)
Non-executive Director; Independent

Appointed: 16 May 2019

Tenure: 3 years

Skills and competencies: Jonathan has considerable knowledge of the US-regulated energy environment, experience and understanding of integrating public policy and technology into a utility as well as a strong background in finance. Previously, Jonathan was the head of the US government's $40 billion clean energy investment fund. Jonathan's strong background in finance and government policy along with his long career at the intersection of policy, technology, finance, and energy brings innovative and positive insight to the Board's policy discussions and to its interaction with management.

External appointments:
- Independent Director of EG Acquisition Corp.
- Senior Advisor to Guggenheim Partners
- Director of Plug Power Inc.
- Director of Intellihot Inc.

Tony Wood (56)
Non-executive Director; Independent

Appointed: 1 September 2021

Tenure: Less than 1 year

Skills and competencies: Tony has proven business leadership credentials as an experienced CEO, and brings to the Board significant engineering experience. He is currently CEO of Meggitt plc and has led the operational and cultural transformation of the company, transitioning from an industrial holding structure to a focused and customer-led business, leveraging technology investment.

Tony also held the position of President of the aerospace division at Rolls-Royce, during which time he developed a strong reputation as an operator, turning around and growing several challenging business units and internationalising the company's footprint.

External appointments:
- CEO of Meggitt PLC
- Director of ADS Group Limited

Martha Wyrsch (64)
Non-executive Director; Independent

Appointed: 1 September 2021

Tenure: Less than 1 year

Skills and competencies: Martha has held a number of senior positions in the energy industry and has significant experience of the US market, having been a Fortune 100 General Counsel and CEO of a major international gas-transmission business, as well as leading the growth and development of Vestas' renewables business in the US.

As an accomplished director for publicly listed companies, in both the UK and the US, Martha brings to the Board relevant experience across the renewable energy sector, as well as a strong understanding of the US regulatory environment, bringing enriching discussion and strategic thought to the Board.

External appointments:
- Independent Director of Quanta Services, Inc.
- Independent Director of First American Financial Corp.
- Advisor to Summit Carbon Solutions

Governance refresh

We reviewed our governance framework during the year to more closely align with National Grid's purpose, vision and values following the strategic repositioning of the Company's portfolio, the continued refreshment of the Board and to better facilitate us to progress our sustainability and climate change agenda. All Committee changes were effective 1 September 2021.

Committees:
The **Safety & Sustainability Committee** (previously the Safety, Environment & Health Committee) expanded its remit to increase focus on sustainability strategy and related external disclosures. This allows the Committee to have the in-depth discussions required on these topics with Board members best placed to provide insight and overview, enabling the Committee to review specific safety- and sustainability- related risks and providing a greater oversight of related Group Principal Risks. The Committee report is on page 106.
The **Audit & Risk Committee** (previously the Audit Committee) repositioned to give a greater focus to risk with increased time now spent reviewing principal, emerging and child risks in relation to the Company's risk management and controls processes. The Committee report is on page 101.
The **People & Governance Committee** (previously the Nominations Committee) expanded its remit to focus further on wider succession within the organisation as well as core governance issues such as the workforce engagement programme for the year. The Committee report is on page 99.
All Committee compositions were reviewed and revised to ensure a suitable spread of skills and experience that complement the revised remit of our Committees, details of which can be found in each Committee report.

Governance processes: our review extended to refreshing the Board Governance document to ensure this reflected the wider Committee remits and clear Chair and CEO roles. We moved from eight scheduled Board meetings annually to six meetings made possible through reviewing our cadence of reporting and Board pack materials with an efficiency programme introduced to ensure that reporting is as effective and concise as possible. This allows greater time at Board meetings to focus on goals, priorities and strategic topics, enabling quality discussion to deliver our strategy. The Board will continue to review its framework annually to satisfy itself that it continues to be best aligned to the Company's purpose and strategy.
Group Executive Committee: supports the CEO's decision making. To do this, the roles of the overall Committee and supporting sub-committees were refreshed to provide a more optimal way to communicate and understand key business information – specifically, having the right people discussing the most relevant topics in the sub-committees, enabling better decision making at the top of the organisation.

Board composition and roles

Our Board comprises of a Non-executive Chair (independent on appointment), two Executive Directors (CEO and CFO), and 10 independent Non-executive Directors, as at the date of this report. There is a clear division of responsibilities between the Chair and CEO, reflected in the Board Governance document available on our website. A list of our Directors' biographies can be found on pages 88 and 89.

Our Chair sets Board meeting agendas and ensures the Board receives accurate, timely and clear information to monitor, challenge, guide and take sound decisions. She is responsible for promoting a culture of open debate between Executive and Non-executive Directors. Our Chair also facilitates effective communication with shareholders and other stakeholders and promotes high standards of corporate governance, ensuring Directors understand the views of the Company's shareholders and other key stakeholders, and their duties under section 172 of the Companies Act.
Our Chief Executive is responsible for the executive leadership and day-to-day management of the Company, to ensure the delivery of the strategy agreed by the Board.
Our Chief Financial Officer is responsible for providing strategic financial leadership to the Company and for the day-to-day management of the finance function.
Our independent Non-executive Directors are responsible for contributing sound judgement and objectivity to Board deliberations and the overall decision-making process, providing constructive challenge, and monitoring the Executive Directors' delivery of the strategy within the Board's risk and governance structure.
Our Senior Independent Director provides a sounding board for the Chair and serves as a trusted intermediary for the other Directors, as well as shareholders, as required. She meets with the Non-executive Directors (without the Chair present) when necessary and at least once a year to appraise the Chair's performance and communicates the results to the Chair and People & Governance Committee.
Our Group General Counsel & Company Secretary has responsibility for ensuring the effectiveness of the Company's governance framework. All Directors have access to her advice.

Independence and time commitment

We monitor and note potential conflicts of interest that each Director may have and recommend to the Board whether these should be authorised and if any conditions should be attached to such authorisations. Directors are reminded regularly of their continuing obligations in relation to conflicts and review and confirm their external interests at least annually. This is then used to consider whether each Director continues to be independent. Following due consideration, the Board determined that all Non-executive Directors continued to be effective and independent in both character and judgement in their roles. The table below sets out Director attendance at Board meetings during the year to 31 March 2022.

Director	Attendance	Director	Attendance	Director	Attendance
Paula Rosput Reynolds ◆	**10/10**	Ian Livingston	**5/5[2]**	Martha Wyrsch	**4/4[2]**
John Pettigrew	**10/10**	Amanda Mesler	**10/10**	**Former Director**	
Andy Agg	**10/10**	Anne Robinson	**2/2[2]**	Sir Peter Gershon	**2/2[3]**
Jonathan Dawson	**10/10**	Earl Shipp	**9/10[1]**	Nicola Shaw	**4/4[3]**
Thérèse Esperdy	**10/10**	Jonathan Silver	**9/10[1]**	Paul Golby	**4/4[3]**
Liz Hewitt	**9/10[1]**	Tony Wood	**4/4[2]**	Mark Williamson	**8/8[3]**

◆ Board Chair
1. The Directors noted were unable to join due to conflicting commitments. The meetings in question were ad hoc and scheduled at short notice. Where possible, all Board members who were unable to attend a meeting provided comments to the Chair in advance of the meeting.
2. The Directors noted were appointed during the year and the attendance is based on available meetings from appointment.
3. The Directors noted resigned during the year and the attendance is based on available meetings before resignation.

How the Board operates
Board and Committees

Board of Directors

To operate efficiently and give the right level of attention and consideration to relevant matters, the Board delegates authority to its Board Committees. Each Committee Chair reports to the Board on their Committee's activities after each meeting.

Key matters considered by the Board include:

- establishing the organisation's vision, mission and purpose;
- the Company's strategy and long-term strategic objectives;
- risk appetite and determination of Group Principal Risks;
- overall corporate governance arrangements;
- systems of internal control and risk management;
- ensuring legal compliance and ethical integrity;
- annual business plan and budget;
- significant changes in capital structure;
- ensuring the Company has adequate resources and that resources are managed responsibly;
- succession planning for Board and senior management;
- half-year and full-year results statements, Annual Report and Accounts and other statutory announcements;
- oversight of the Company's response to major crises and other significant challenges;
- oversight of material ESG issues;
- recruiting new Board members and assessing Board performance;
- enhancing the organisation's public standing and;
- determination of the framework or policy for the remuneration of the Chair, Chief Executive, Executive Directors, Group General Counsel & Company Secretary, and direct reports to the Chief Executive, following recommendation from the Remuneration Committee.

Audit & Risk Committee

- Financial reporting.
- Internal controls, risk management and external compliance.
- Corporate audit.
- External audit and assurance.
- ESG and climate change related disclosures.

People & Governance Committee

- Board and Committee composition.
- Succession planning.
- Board appointments.
- Workforce engagement.

Remuneration Committee

- Consideration and implementation of Remuneration Policy.
- Consideration and exercise of discretion.
- Incentive design and setting of targets.

Finance Committee

- Financing policies and decisions.
- Credit exposure.
- Hedging.
- Foreign exchange transactions.
- Tax strategy and policy.
- Guarantees and indemnities.

Safety & Sustainability Committee

- Safety, health and sustainability strategy and policies.
- Performance targets.
- ESG and climate change- related targets, disclosures and action plans.

Group Executive Committee

- Oversees the safety, operational and financial performance of the Company. It is responsible for making the day-to-day management and operational decisions it considers necessary to safeguard the interests of the Company and to further the strategy, business objectives and targets established by the Board.
- Delegates authority to a number of sub-committees.
- Members have a broad range of skills and expertise that are updated through training and development. Some also hold external non-executive directorships, giving them valuable board experience. Those members of the Committee who are not directors regularly attend Board and Committee meetings for specific agenda items.

Sub-committees and other management committees

Safety, Health & Sustainability Executive Sub-Committee; Ethics, Risk & Compliance Executive Sub-Committee; Reputation & Stakeholder Executive Sub-Committee; Policy & Regulation Executive Sub-Committee; Investment Committee; Disclosure Committee; Employee Share Schemes Sub-Committee.

Our Group Executive Committee

Two Executive Directors are members of the Group Executive Committee, as well as being on the Board. The Group General Counsel & Company Secretary is also a member of the Group Executive Committee. See their biographies on page 88 – 89.

Full biographies for the Group Executive Committee are available at: nationalgrid.com

Governance structure

The schedule of matters reserved for the Board and terms of reference for each Board Committee are available in our Board Governance Document at: nationalgrid.com

Reports from each of the Board Committees, together with details of their activities, are set out on pages 99 – 131.

Corporate Governance overview continued

Board focus during the year

Our Board is collectively responsible for the effective oversight of the Company and its businesses. It determines the Company's strategic direction and objectives, business plan, dividend policy, viability and governance structure to help achieve long-term success and deliver sustainable shareholder value. The Board also plays a major role in setting and leading the Company's culture and wider sustainability goals. It considers key stakeholders in its decision making and, in doing so, ensures that Directors comply with their duty under section 172 of the Companies Act 2006.

Our stakeholders considered in Board discussions

Colleagues · Investors · Regulators · Communities · Customers · Suppliers

Key matters considered	Outcome
Strategy	
Oversight and execution of several major strategic transactions	Following the strategic pivot in the UK portfolio towards electricity with last year's acquisition of WPD and the proposed sale of NECO and a majority stake in UK Gas Transmission, it was paramount that the Company continue to execute the current strategic pivot and transactions successfully. The Board maintained oversight of the transactions at every meeting and was updated on the progress of the integration of WPD into the Group and status of the NECO and UK Gas Transmission sales including key challenges and risks. In March 2022, the Board approved the delegation to a sub-committee to approve the transaction for the sale of a majority interest in UK Gas Transmission and our Metering business to a consortium comprised of Macquarie Asset Management and British Columbia Investment Management Corporation. In March 2022, the Board also approved the sale of National Grid's interest in St William Homes LLP, to its joint venture partner, The Berkeley Group plc.
Strategic priorities and Board performance	With the addition of new Board members and the dynamic external environment, the Board established an agenda to review each business unit to understand its current performance, regulatory structure, financial framework, culture and our future strategy. The Board deliberated how to spend its time throughout the year by identifying key areas for strategic discussion. The Board set goals for itself to ensure clarity of direction at every meeting. External insights were also provided throughout the year: • the Board heard from an expert in UK energy policy and discussed the challenges of the energy transition; • the Chief Economist at bp plc provided energy forecasts and insights on the energy transition; and • the CEO of Tennet (a leading European electricity transmission system operator) gave perspectives on the opportunities associated with developing offshore transmission in the UK and North West Europe. The Board also met with the New York Independent System Operator, the Chair and CEO of Ofgem, and the representatives of the business community in New York to discuss key issues, challenges and to hear their perspectives. The Board were also briefed by brokers in the year.
Our commitment to reach net zero	In the year, the Board discussed ESG matters, including key strategic enhancements to keep pace with stakeholder expectations and to be aligned with commitments as a responsible business. The Safety & Sustainability Committee and the Audit & Risk Committee reviewed climate change reporting disclosures, within their respective remits. The Board approved the Climate Transition Plan in May 2022 – ahead of the 2022 AGM. See the Remuneration Committee report on how we have linked ESG to Director remuneration at page 108.
Enrichment sessions	Outside of Board meetings, Directors joined additional sessions with our Strategy team to learn more on emerging topics including heat pump technology, CCUS and prospects for hydrogen. The Board also met out of cycle in April 2022 for a focused session looking at the disclosures required by the Company in relation to ESG. The Board also received a briefing on key energy policy announcements and energy security decisions being made in the UK.

Key matters considered	Outcome
Business Plan and financial performance	
Aligning the Strategic Business Plan and budget to the strategy	In the year, the Board discussed and approved the Strategic Business Plan, to promote alignment of financial performance and strategy. It further reviewed a five-year view of the Group which incorporated portfolio changes. In June 2021, the Board received the budget revision, reflecting the impact of portfolio changes and the changes to the operating model on the Group's targets.
Dividend	Since approval in January 2021, it was agreed that from FY21/22 the Company would seek to grow the dividend in line with CPIH, reflecting a move from RPI to CPIH in the UK regulated businesses. The Board considered the dividend policy at its November 2021 and May 2022 meetings and approved the proposed interim and final dividend payments.
RIIO-T2 financial structure	During the year, the Board reviewed the RIIO-T2 framework and how the Company will align its approach to operations given the change in regulatory incentives. Following the acquisition of WPD, the Board discussed and approved the RIIO-ED2 business plan for submission in December 2021 and received updates on the ongoing process.
Political and regulatory environment	
Impacts on the UK energy market	Throughout the year, the Board was updated on the disruption in the UK market as retail suppliers began to fail and how National Grid was responding. In early 2022, the Board was briefed on how the crisis in Ukraine could potentially affect the UK and the wider energy environment. As the conflict continued, the Board continued to be briefed on the significant impacts on the UK energy market, including the high and volatile prices, impact on consumers and direct impacts on the Company. The Board continued to have oversight of the impact on affordability and UK Security of Supply, cyber security and potential cost recovery.
UK RIIO-T2 price control	During the year, regular updates were provided on the RIIO-T2 price control appeal process and the holistic five-year strategy to deliver RIIO-T2 in ET. Early in the year, the Board challenged the Company's response to the provisional determinations and following the submission of a technical appeal to the Competition and Markets Authority (CMA) around the RIIO-T2 cost of equity and outperformance wedge; the CMA found in favour of our arguments on the outperformance wedge.
US	The Board reviewed the current US regulatory structure, including the current regulatory and financial frameworks in place and core components of the US regulatory framework and the performance profile of the US business. Twice in 2021, the Board met with the Monitor who was overseeing gas capacity planning for New York. The Board reviewed the Long Term Capacity Report; the Company is compliant with the terms of settlement. The Board discussed the stakeholder engagement plan and key challenges and risks going forward. The Board noted the rate case agreements that had been completed for KEDNY, KEDLI and NMPC, and noted the filing of a plan with the Massachusetts Department of Public Utilities.

Key matters considered	Outcome
People and culture	
Evolution of the Group culture of accountability, agility and performance	The Board is responsible for monitoring and assessing both the culture of the Group and its alignment with the Company's purpose, values and strategy. These elements are vital to our long-term success as a Company, as the availability of resources and operating procedures require Board engagement inside and outside of the boardroom. You can read more about how the Board monitors culture on page 95.
Risk	
Review and approval of Group Principal Risks and emerging risks	During the year, the Board completed a review of the Company's risk appetite, principal risks and emerging risks and how we manage them. It was agreed to retire the disruptive forces risk and de-escalate the data management risk. In May 2022, the Board reviewed and approved the effectiveness of the Group's risk management system, following updates in the year from the Audit & Risk Committee and the Safety & Sustainability Committee on focused risks within their remit. You can read more about our risks on pages 28 – 32.
Governance	
Refreshing our governance framework	With so much change within the business and the rapidly changing external landscape, the Board reviewed the entire governance framework to ensure it remained fit for purpose. Committee composition and remit were refreshed and refined. You can read more about this on page 90.

Looking forward:

The Board will continue its focus on the strategic priorities, including monitoring the actions, milestones and timelines to deliver the strategy. We will continue using enrichment sessions outside of the regularly scheduled Board meetings to deepen the Board's working knowledge on selected topics. All Board members will also continue to undertake site visits to see the work of National Grid for themselves.

How the Board monitors culture

The Board plays a significant role in monitoring and assessing both the culture of the Group and its alignment with the Company's purpose, values and strategy.

The People & Governance Committee also plays a key role in keeping momentum in relation to management development and succession. This year, focus has been on executive development in particular. Although not all Board members sit on the People & Governance Committee, they have access to all Committee papers and regularly attend the People & Governance Committee meetings. The Chair reports back to the full Board following each meeting, which also provides the opportunity for full Board input and to ensure it is monitoring culture effectively.

There has been a vast amount of change both within the organisation and externally over the last few years. The importance of creating the right culture throughout the Company, to ensure our colleagues are embracing positive and inclusive behaviours and values in everything we do, has never been more important.

The Board assesses the Company's culture and the progress being made from two key data sources:

- lagging indicators from the Grid:voice survey and the Spencer Stuart culture diagnostic; and
- leading indicators taken from the culture change activity underway across the organisation.

The full Board joined the People & Governance Committee to discuss with Spencer Stuart matters including the context, backgrounds and updates to the work that the Company had been undertaking to identify and cultivate senior talent. The full Board reviewed the assessments undertaken against the methodology used to assess the talent pipelines.

Grid:voice employee survey

Our Grid:voice survey this year provided a set of strong results, with improvements in a number of areas including the 'Safe to Say' scores, which are six points higher than the high performing norm. This has demonstrated that there is an open culture within the organisation where individuals feel that they are able to express their views, opinions and concerns. The Board also monitors areas that are not as strong performing as others and tracks progress. Consideration in the year was also given to WPD's results, the first year that these had been included. There is focus required in this area to work to align the results with the rest of the organisation and the Board will monitor to ensure progress is achieved.

The biggest impact on colleague engagement and culture is line managers and the tone that is set from the top of the organisation. Recognising this, the Company's 'leadership index' sets expectations for leadership behaviour, and provides actionable insight for leaders to focus development that has a positive impact on their immediate team. 2022 was the third full 'leadership index' that has been created and demonstrated positive progress with a reduction in the number of leaders scoring below our target levels. This has highlighted the positive and significant impact our individual leaders across the organisation can have on their own behaviour.

Culture diagnostic

The culture diagnostic work has shown a clear shift towards our desired culture and in particular indicated that the characteristic of 'Caution' had moved downwards and 'Purpose' had moved upwards, demonstrating a significant step forward over the last 12 months. The strongest culture traits for the Group are now 'Purpose', 'Caring' and 'Order'.

Leading indicators of change

In addition to the quantitative data, the Board also monitors leading indicators of change. Throughout the year this has been through the results of the organisation's 'Living our Values Everyday' campaign, 'Untapped AI' personal development coaching activity and through the 'Team Effectiveness' facilitation programme.

Looking forward

Our culture diagnostic work will continue to progress with the next goal in this area to move the characteristics of 'Results' further up and move 'Order' down. The challenge will be to maintain the changes made around 'Purpose' and 'Caution', whilst focusing organisation-wide and everyday action change on becoming more 'Customer' and 'Performance' orientated. The Board will continue to spend considerable time on culture and monitor the progress in this area.

One of the Board's goals for 2022/23 is to ensure laser-like focus is on management succession, including a focus on continuous culture improvement.

For further information on culture, please see page 65.

Members of the Board visited the IFA interconnector site at Sellindge in March 2022. Following a catastrophic fire at the site in September 2021, the Board and Committees have had oversight of the investigation into the root cause. The site visit consisted of a tour of the facility and an overview of the damage and reparations. It also provided the opportunity for Board members to hear directly from employees and contractors on site.

Board engagement

Engagement is key to the Group's long-term success and the Board directly and indirectly engages with key stakeholders, ensuring it understands their interests and takes them into account in Board decision making. You can read the Board's section 172(1) statement on page 56.

Workforce engagement

Throughout the year we continued with our 'Full Board Employee Voice' approach, utilising and enhancing existing colleague engagement methods and communication channels to ensure meaningful engagement across all locations. The programme, overseen by the People & Governance Committee, monitors the effectiveness of the programme and reviews the chosen mechanism under the Code at least annually. The variety of engagement is a great way of building and maintaining trust and communication whilst providing our people with an appropriate forum to influence change.

In the year we shared a selection of short videos of our new Non-executive Directors with our colleagues to help familiarise them with their Board.

Board engagement programme

Small sessions These sessions make up the majority of the Board engagement programme in the year. They consist of around 10 individuals in attendance and a different subset of Board members. Attendees are coordinated by HR and are diverse across our workforce. Some of the sessions are open discussion with no set agenda whilst others have recommended topics; for example, in May 2022, our employees discussed our Climate Transition Plan and the new Remuneration Policy ahead of these going to the AGM for shareholder vote.

Employee Resource Groups (ERG) and high-potential employees The Chair met with multiple ERG leads and participated in a 'learning from leaders' session with the 'Women in National Grid' (WING) ERG. Our high-potential employees also had the opportunity to meet with the Board and share their views. This was a great opportunity for the Board to meet our high-potential employees informally and reconfirmed the need to actively support their career development, a topic very much on the People & Governance Committee's agenda for the year ahead.

Virtual 'town hall' Our Chair and CEO hosted a virtual town hall in January 2022 with a cross-section of the US workforce. Discussions included community engagement, diversity and inclusion, the clean energy transition and gas supply. This was one of the first opportunities for some of our colleagues to meet our Chair since she had been in role.

Committee focused These included an Audit & Risk Committee virtual session in January 2022 with US finance colleagues and a Finance Committee discussion with colleagues from the Pension, Tax, Financial Planning and Treasury teams in July 2021.

Engineering dinner Earl Shipp and Tony Wood attended a dinner in March 2022 to recognise engineers involved in world-leading Energy Transition projects including T-Pylons, the UK's new nuclear power station and the Storm Eunice response. The event provided the opportunity for individuals to discuss a range of topics including SF_6, engineering capability and the strategic direction taken by the Board.

Site visits It was really positive for Directors to be able to get back out on site following the COVID-19 pandemic, and this year saw optional visits scheduled around Board meetings. These vital engagement forums provided the opportunity for smaller groups of the Board to hear views from and see the workforce in action and included the IFA interconnector at Sellindge, the London Power Tunnels and WPD's control centre.

Feedback and decision making

Following all engagement, the Board takes the time to discuss the views of the workforce and takes these into consideration throughout wider Board discussions, a topic on each Board agenda going forward. Following feedback in the external Board evaluation this year, a set of 'ground rules' were re-established by the Board to increase transparency around engagement and to ensure that following any non-scheduled engagement events, views heard are captured and reported back to the boardroom or the CEO/CFO, where appropriate.

Looking ahead

The People & Governance Committee reviewed the engagement mechanism at its March 2022 meeting and agreed that the current approach remained the most appropriate mechanism. The variety of sessions provides a valuable link between our colleagues and the Directors, and we look forward to hearing more from our employees this year. As the world and priorities continue to evolve, we will continue to keep the overall approach under review and updated and refined as required.

Shareholder engagement

The Board is committed to maintaining good communications with existing and potential shareholders. The Company has a comprehensive investor relations programme where a range of key investors are met with in person or virtually at small meetings and larger investor roadshow events. The Board Chair also engages with large shareholders and the Remuneration Committee Chair engages specifically on remuneration practices.

Management also hosts webcasts for both our half-year and full-year results and takes questions from investors and analysts to ensure an open dialogue with the market. Presentations given to analysts and investors covering the Group's results, along with all results and other regulatory announcements as well as further information for investors, are included on the investor relations section of our website at nationalgrid.com/investors.

Further information on our engagement with our retail shareholders is set out on page 97 under Annual and General Meetings of shareholders.

Capital Markets Day In November 2021 we hosted our first Capital Markets Day. This was a hybrid event giving investors the opportunity to engage online or in person with key members of the Group Executive Committee and National Grid leaders. As part of this, we held a number of 'teach in' sessions to support investors' knowledge of our business units and key strategy areas for the Group. The Capital Markets Day videos are on our website at nationalgrid.com/investors.

'Grid Guide to...' Throughout the year our investor series continued. The series consists of short, virtual sessions covering our ambitions and progress across a range of ESG themes. Some of the key sessions of the 2021/22 programme included:

- May 2021 – Grid Guide to... Our People;
- July 2021 – Grid Guide to... the Decarbonisation of Transport;
- October 2021 – Grid Guide to... the Future of Heat in downstate New York; and
- March 2022 – Grid Guide to... National Grid's Sustainable Supply Chain.

Annual and General Meetings of shareholders

In April 2021, we held a General Meeting to seek approval from our shareholders for the acquisition of WPD. We also announced our intention to sell a majority stake in UK Gas Transmission and the sale of NECO at this time. This meeting took place behind closed doors due to COVID-19 restrictions; however, shareholders were invited to submit questions in advance of the meeting and were answered in a shareholder webcast. In July 2021, our Annual General Meeting (AGM) took place in London. We also facilitated the ability for shareholders to view the meeting remotely, register and ask any questions both in person or virtually. Voting levels were largely consistent with previous years, despite the disruption caused by COVID-19 restrictions in place. All resolutions were passed at the meeting in line with the Board's recommendations.

The pandemic has clearly demonstrated the efficiency of virtual and hybrid meetings and allows for greater levels of engagement and participation by individuals. A resolution to amend our Articles of Association to allow for hybrid AGMs was approved in 2021. Our 2022 AGM in July will be conducted in the hybrid format.

The Notice convening the 2022 AGM will be made available to shareholders in advance of the meeting. This will provide shareholders with the appropriate time to consider matters. The results of the proxy votes on each resolution will be collated independently by the Company's registrar and will be published on the Company's website after the meeting.

Looking forward

We maintain a comprehensive investor relations programme throughout the year. Please visit our website to keep up to date as events are announced at nationalgrid.com/investors. Materials from recent seminars and access to our educational videos and podcasts can also be found online and on our social media channels.

Performance evaluation

2021/22 external Board evaluation

Our annual evaluation provides the Board and its Committees with an opportunity to consider and reflect on the quality and effectiveness of their decision making, and for each member to consider their own contribution and performance. In accordance with the Code, which outlines in the Provisions that the Company should undertake an externally facilitated evaluation every three years, the 2021/22 Board evaluation was conducted externally. In May 2021, National Grid engaged Independent Board Evaluation (IBE) to facilitate this year's Board evaluation.

Following initial briefings in October 2021, the evaluation began with Board and Committee observations in November 2021. This was supplemented with Director and management interviews. Results were fed back to the Chair in December 2021 and then presented to the Board in January 2022. The Board agreed the set of actions outlined below in March 2022.

National Grid confirms neither the principal consultant nor IBE has any connection with the Company, individual Directors nor the Company Secretary.

Findings of the Board evaluation

The Board has been through significant change over the past year, as noted in the evaluation. Findings of the evaluation take into account the appointment of a new Chair with effect from 31 May 2021 and a number of changes amongst the Non-executive Directors. The Board views these changes as positive. The review noted that National Grid is underpinned by robust governance and compliance. Succession planning, culture and strategy were identified as key areas of focus for the year ahead, with opportunity for Board materials to be further streamlined.

Board Committees' effectiveness

Each Board Committee was included as part of the evaluation and each Committee received a detailed report. IBE noted that the Committee structure had also been through a period of change, which has refocused the remit of each Committee. The Chair has engaged on feedback with each Committee Chair and, following the Board agreeing its action plan and goals in March 2022, each Committee will set an outline of key areas of focus for 2022/23.

Performance of the Chair

As part of IBE's evaluation, in line with the Code, each individual Director's effectiveness was evaluated, including our Chair's performance. Detailed feedback was shared directly with the Senior Independent Director, Thérèse Esperdy. An overview of the findings was shared during a private session between Thérèse and Paula. The Board recognised in its feedback that Paula had led the Board effectively during a period of significant change whilst outlining vital key strategic priorities for the business.

Focus area	Board actions for 2022/23
Strategy	• Finalise Board strategic topics for 2022/23 and ensure agendas align.
Capability	• Strengthen focus on talent and succession at all levels. Include regular reviews on People & Governance agendas and align with opportunities for the Board to meet high-potential employees.
Culture	• Incorporate the results of the culture scorecard in People & Governance Committee deliberations.
Employee engagement	• Review and refine the overall approach to employee engagement. • Ensure key insights from engagement opportunities are shared with the Board.
Engagement with management	• Ensure effective communication flows to provide the right insights, including early sight of emerging issues when required.
Process and meeting management	• Continue to improve discipline around Board papers and processes. • Routinely bring outside views into the boardroom.
ESG	• Ensure that ESG commitments are embedded in the Board's stewardship.

Directors' induction, development and training

The Chair has overall responsibility for ensuring that our Non-executive Directors receive a comprehensive induction and suitable ongoing development and training. This is key to enabling Board effectiveness individually and as a whole. New directors receive comprehensive induction programmes and induction packs, tailored to their experience, background, committee membership and requirements of their role. They are encouraged to engage with the business by visiting key sites in the UK and US. As our internal and external business environment continues to change, it is important to ensure that Directors' skills and knowledge are refreshed and updated regularly.

During the year, Non-executive Directors attended a detailed session on digital initiatives across the Group ahead of a digital discussion at the Board meeting. The Board also had the opportunity to attend a series of enrichment sessions; topics presented through the year included heat pumps, CCUS, hydrogen and ESG. Further enrichment sessions are scheduled for 2022/23 on topics such as energy market reform, customer disruption and offshore wind market operations and projects.

Ian Livingston

Significant focus was given to prepare Ian to step into the role of Chair of the Remuneration Committee from January 2022 alongside an introduction to the Group's Remuneration Policy. Ian also received an overview of the Group's strategy, key business operations and matters pertinent to the Audit & Risk Committee.

Martha Wyrsch

Martha joined as a member of the Safety & Sustainability Committee and Remuneration Committee. Focus was given to key safety, sustainability and remuneration-related matters. In September 2021, Martha visited National Grid's diversion site supporting HS2, gaining first-hand insight on the challenges the team faced during the project.

Anne Robinson

On appointment, Anne joined as a member of the Safety & Sustainability Committee. Focus was given to key safety and sustainability matters alongside an overview of the Group and current strategy. Anne will also join the Remuneration Committee in July 2022 and will be undertaking sessions on remuneration.

Tony Wood

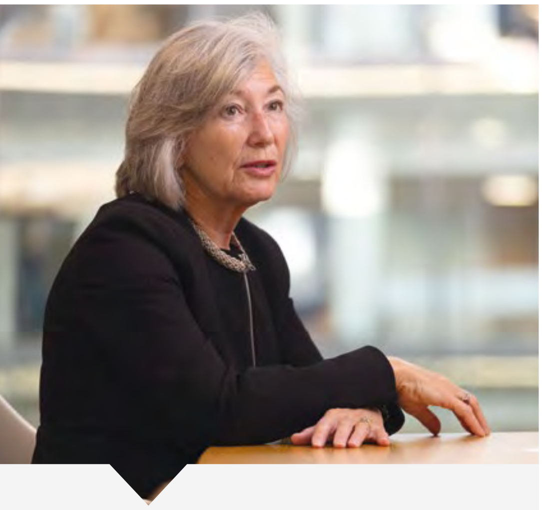
Tony joined as a member of the Safety & Sustainability and People & Governance Committees. Focus was given to key matters in relation to safety and sustainability alongside an overview of the Group. As part of his induction, Tony visited two key UK sites, Isle of Grain and London Power Tunnels, in August 2021.

"As such a large cohort of Directors has joined the Board during the year, it's been crucial that we get them up to speed quickly. Our induction, development and training programme has been vital in supporting this."

Paula Rosput Reynolds

Induction area	Provided by	Topics covered	Attended by
Governance and Director Duties	Chair of the Board Group General Counsel & Company Secretary Head of Company Secretariat External Legal Counsel	• Priority areas for the Board • Governance framework and corporate structure • Overall legal matters • Director duties for a listed company • Market Abuse Regulations	IL AR MW TW
Remuneration Committee	Chair of the Remuneration Committee Chief People & Culture Officer Group Head of Reward External remuneration consultant (PwC)	• Priority areas for the Remuneration Committee including Committee Chair succession • Remuneration Policy • Remuneration matters	IL MW
Audit & Risk Committee	Chair of the Audit & Risk Committee Chief Financial Officer Group Head of Audit Chief Risk Officer Group Financial Controller External auditor (Deloitte)	• Priority areas for the Audit & Risk Committee • Regulatory finance model • Financial reporting framework • Risk management framework and principal risks • External audit including lead partner succession	IL
Safety & Sustainability Committee	Group Head of Safety Group Chief Engineer	• Priority areas for the Safety & Sustainability Committee • National Grid's approach to safety and sustainability • Engineering assurance • Climate change and climate risk	AR MW TW
Strategy	Chief Strategy & External Affairs Officer Chief Sustainability Officer	• National Grid's strategy and transition to net zero • COP26	IL AR MW TW

People & Governance Committee report



Key decisions during the year

- Approved four Board appointments in the year
- Reviewed and approved Board and Committee composition and refreshment
- Reviewed and approved the Board Diversity Policy and progress against objectives
- Reviewed and approved the continuation of the Board 'workforce engagement' approach

Composition and Committee attendance:

The Committee is made up of four independent Non-executive Directors and the Chair of the Board.

Committee members	Attendance
Paula Rosput Reynolds[1] ◆	4/4
Thérèse Esperdy[1]	4/4
Jonathan Silver[1]	4/4
Earl Shipp[1]	4/4
Tony Wood[3]	3/3
Former Committee members	**Attendance**
Paul Golby[2]	1/1
Liz Hewitt[2]	1/1
Mark Williamson[2]	1/1
Amanda Mesler[2]	1/1
Jonathan Dawson[2]	1/1

◆ Committee Chair

1. Member of the Nominations Committee until 1 September 2021 and became a member of the refreshed People & Governance Committee from this date.
2. Member of the Nominations Committee until 1 September 2021.
3. Became a member of the Committee on appointment to the Company on 1 September 2021.

Year in review

On appointment, I requested Justine Campbell, Group General Counsel & Company Secretary to undertake a full review of the appropriateness of the Board Committee structure, terms of reference for the respective committees and overall effectiveness. The outcome of that review was to update the remits of the various committees. Notably, the Safety, Environment and Health Committee was repurposed as the Safety & Sustainability Committee, the Audit Committee as the Audit & Risk Committee and the Nominations Committee was repurposed as the People & Governance Committee. All were with effect from 1 September 2021. With respect to the latter Committee, the subject of this letter, let me simply restate the obvious: people make all the difference. So we formed a committee that looked not just at the process of governance but its content. To read further about the Committee refresh and governance framework, see page 90.

Board composition

Sir Peter Gershon, our prior chair, was kind enough to appoint me to chair of the Nominations Committee when I joined the Board in January 2021. Having the opportunity to chair both this Committee and the Board allows for me to ensure there is alignment across our governance practices and to ensure robust oversight of succession. Sir Peter recognised that the Board would have quite a bit of turnover in membership due to a substantial number of directors reaching the limits of their terms and that I should be the one leading the process of identifying new directors. In the year we recruited a number of new directors from diverse backgrounds and experiences, four of whom were seated earlier in the financial year and one who will join the Board ahead of this AGM. All Board members participated in the recruitment and it was encouraging how much agreement there was as to the talent we needed. There was also a unanimity of view that we were seeking seasoned senior professionals who were confident in their capabilities, independent in their thought processes, curious about our business, and invested in a commitment to a net zero future. Collectively, they bring vitality and energy to the boardroom, gracefully balancing support and challenge. Because such a large cohort of directors has come on board at one time, we will seek to stagger terms so that we don't encounter the same 'cliff' of retirements in the future as we experienced this year.

Management development and succession

In my first meeting as Board Chair, we began by exploring what were the most important things we needed to accomplish as a Board. From that discussion, we adopted goals for our work. One area that stood out was the need for a more robust process of reviewing management development and executive succession, a key responsibility of this Committee. We worked with our Chief Executive to review the succession pipeline for many of the key roles in the Company, to discuss development plans to our emerging leaders, and to identify where we need to introduce new skills and experience into the organisation. In its first year, the Committee has focused on executive development in particular. However, we have also reviewed the results of the culture survey, reviewed the demographics of our workforce and turnover, and used our engagement sessions to learn more about the temperament and issues of the wider workforce.

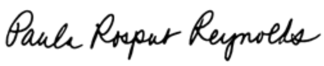
In line with our expanded remit, the Committee considered our workforce engagement mechanism and agreed to continue with our chosen method of enhancing existing Board engagement sessions. We discuss the learnings of these engagement sessions at every Board meeting, discussing whether we have the pulse of the organisation. We also have a schedule for the year to ensure we are meeting with organisations on both sides of the Atlantic, in offices, depots, and on the front line. At year end, the Committee considered whether these small and larger engagements remain appropriate and effective for us to stay in touch with all levels of the organisation and at this time we are agreed that they do; however, we will continue to challenge and review effectiveness in this area. See pages 96-97 for an overview of Board engagement activity through the year.

Diversity, equity and inclusion (DEI)

In 2021, the Company appointed its first senior executive with a remit specifically tied to diversity and inclusion. Natalie Edwards, our Global Chief Diversity Officer, has met with us to review the global DEI strategy, which includes a clear set of DEI commitments which will provide clarity and direction for the organisation. The work of the team in engaging with the workforce has been exemplary and we anticipate having Natalie meet with us frequently given the importance of this agenda. We also welcome the FCA's new listing rule requirements around diversity and inclusion reporting. These will apply for our next year's report; however I'm happy to report that we are already in compliance with these measures.

Culture and accountability

High-performing organisations are characterised by, among other things, clarity on goals and performance. To this end, the Board had an independent consultant review our board effectiveness and gather feedback on each of us as a contributor. Through this process, we are seeking to model the very culture that we seek to strengthen in the organisation. We are actively engaged with the Remuneration Committee and the Board as a whole in ensuring that there are clear objectives for the organisation and leaders so that we both monitor progress and measure outcomes. See page 95 to read more about how we as a Board monitor the culture of the Company.

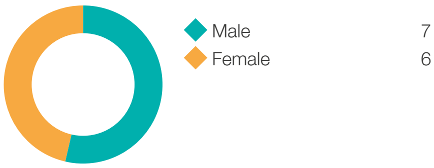


Paula Rosput Reynolds
Committee Chair

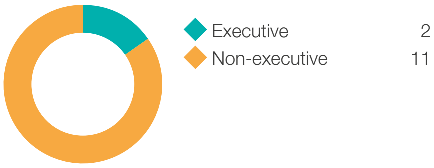
People & Governance Committee report continued

Our Board diversity
As at 31 March 2022

Board gender



Executive and Non-executive Directors



Board members by nationality

Tenure

Board skills and experience

Diversity policy objectives – progress update

The People & Governance Committee noted progress against the following Board Diversity Policy objectives at its March 2022 meeting:

Objectives	Progress
The Board aspires to meet and ultimately exceed the target of 33% of Board and the CEO's direct report positions to be held by women.	There are currently six female Directors on the Board, resulting in 46% women on the Board. We currently have 33% female direct reports to the CEO.
The Board aspires to meet and ultimately exceed the Parker Review target for FTSE 100 boards to have at least one Director from a non-white ethnic minority by 2021.	We currently have two Directors from a non-white ethnic minority.
The Board aspires to achieve 50% diversity* on the Board.	We currently have 54% diversity on the Board.

* Diversity of the Board is defined, in this context, as female and non-white ethnic minorities.

Our Policy determines that:

- all Board appointments and succession plans are made on merit and objective criteria, in the context of the skills and experience that are needed for the Board to be effective and to guard against 'group think';
- we will only engage executive search firms who have signed up to the UK Voluntary Code of Conduct on Gender Diversity; and
- we will continue to make key diversity data, both about the Board and our wider employee population, available in the Annual Report and Accounts.

In the year, the Committee will review the Policy and associated objectives to consider if these remain appropriate and update as necessary to ensure these remain relevant and stretching. Report on progress against our objectives (as set out above) will continue to be outlined in the Annual Report and Accounts.

Examples of the initiatives to support inclusion and diversity throughout our Company are set out on page 66.

Appointments, skills and the talent pipeline

The Board has a wide range of skills and experience and considers this when appointing new Directors. Skills such as ESG and climate change have been given greater focus in recent years to reflect the evolving strategy of the Company. The graph to the side provides an overview of the breadth of skills and experience currently on the Board. The Committee took account of these, as well as level of experience required and diversity, when considering appointments in the year. The appointments of Ian, Tony, Martha and Anne followed a transparent and thorough process, outlined below.

- Russell Reynold Associates and MWM Consulting were appointed jointly as the search firm for each appointment made throughout the year. There are no connections between the search firms, the Company and its individual directors. They reviewed our requirements and developed specific criteria for candidate selection alongside the requirement for broader Non-executive Director characteristic requirements, including deep engineering expertise, transformational experience and strong credentials in the future of energy and ESG considerations.
- Individual role profiles were created and a short list of candidates presented for consideration to the Chair of the People & Governance Committee.
- Preferred candidates met with members of the Board, who reported back to the People & Governance Committee.
- Leading candidates were identified and the People & Governance Committee recommended these for approval by the Board.

The Committee discussed the talent pipeline regularly, giving focus to ensuring development opportunities also reached further into the organisation and identified those less advanced in their careers but with long-term potential. A Future Leaders Programme was highlighted to the Committee and would be built into the regular talent updates. The programme focuses on less senior colleagues, enabling a wider group of potential future talent to enjoy a structured development programme, using digital tools as well as tailored support.

At senior management level, the Committee approved the appointment of Ben Wilson as Chief Strategy & External Affairs Officer, Stephen Woerner as President, New England, and Will Serle, who joined the Company as Chief People & Culture Officer. Phil Swift also joined with the integration of WPD as President, WPD. All four individuals joined the Group Executive Committee. Alison Kay, interim Chief Strategy & External Affairs Officer, Andy Doyle, Chief People & Culture Officer; and Badar Khan, President, US, stepped down in the year.

Audit & Risk Committee report

Key actions during the year

- Increased oversight of risk matters
- Review of WPD acquisition accounting and first annual goodwill impairment test
- Additional meetings to consider fraud and bribery allegations
- Hosted colleague engagement sessions specific to the Committee's remit

Composition and Committee attendance:

The Committee is made up of five independent Non-executive Directors.

Committee members	Attendance
Liz Hewitt ◆	8/8
Thérèse Esperdy	8/8
Ian Livingston[1]	3/3
Amanda Mesler	8/8
Jonathan Silver[1]	3/3
Former Committee members	**Attendance**
Paul Golby[2]	1/2

◆ Committee Chair
1. Ian Livingston and Jonathan Silver joined the Committee effective 1 September 2021.
2. Paul Golby was unable to attend the additional Committee meeting on 6 July 2021 due to a prior commitment and stepped down from the Board effective 26 July 2021.

Committee financial experience

The Board is satisfied that the Chair, as a chartered accountant with significant board-level financial and audit experience, is suitably qualified and has recent and relevant financial experience. The Committee as a whole is deemed to have competence relevant to the sector in which the Company operates.

Fair, balanced and understandable

The Committee was satisfied that the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the necessary information for shareholders to assess the Company's position and performance, business model and strategy. This was recommended to the Board at its meeting in May 2022.

Statement of Compliance with the Competition and Markets Authority (CMA) Order

The Company confirms that it has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 (Article 7.1), including with respect to the Audit & Risk Committee's responsibilities for agreeing the audit scope and fees and authorising non-audit services.

Role of the Committee

The work of the Audit & Risk Committee has never been more important: investors, regulators and other stakeholders require ever more informative and reliable reporting, not just of the results and financial position, but of resilience, risk management and the Company's environmental, social and governance (ESG) position and progress. The Committee also oversees and evaluates the Company's approach and controls relating to the prevention and detection of fraud and bribery, including overseeing the effectiveness of whistleblowing mechanisms.

In September 2021, the Committee's remit was expanded to have an increased delegation from the Board in relation to risk. We have spent significant time updating the reporting cadence of risk matters, working closely with the Chief Risk Officer to support effective oversight of the Company's principal, emerging and child risks and associated enterprise risk-management processes.

Review of the year

I'm delighted to be writing to you following my first full financial year as Audit & Risk Committee Chair.

During the year, we met four times as part of the standard schedule of Committee meetings. After the virtual world we endured in 2020/21, it was great to be able to meet in person again. Following the public announcement of the federal investigations into allegations of fraud and bribery by former National Grid employees in our US business, the Committee met four extra times in the year to provide oversight of the internal investigations. We also endorsed management broadening the scope of its investigations to receive assurance that the now substantiated allegations of fraud and bribery were isolated incidents and National Grid's controls are appropriate and continue to operate effectively to mitigate future instances.

The Committee also received updates on the successful go-live of the new enterprise resource planning (ERP) and general ledger system in the UK and we continued our oversight of ESG reporting and assurance matters. In particular, we have discussed the rapid market and regulatory developments in this space and management's strategies to respond to these changes.

It is vital that the Committee goes the extra mile by spending additional time on significant matters that present themselves each year. Nonetheless, we must ensure a laser-like focus on regulatory and compliance matters within our remit. We maintain an extensive and detailed agenda focusing on the audit, compliance and risk processes within the Company, working closely with management, the external auditor, Corporate Audit and the Finance and Legal teams. Key matters of business considered during the year are set out on page 103.

Engagement

In October 2021, we had a roundtable session giving Committee members the opportunity to engage with key management personnel in the UK and US, and this doubled as an induction session for Jonathan and Ian, whom I was glad to welcome to the Committee. We also held a virtual question and answer session with members of the US Finance, Risk and Global Internal Audit teams in January 2022. We are looking forward to returning to the US later in 2022 when I hope to host a similar in-person session. These were key parts of the wider stakeholder engagement focus for the Board which is detailed on pages 96–97.

Transactions

We have performed an active role monitoring the progress of the various transactions across the Group. We received regular updates relating to the integration of WPD's financial reporting and risk and controls framework into the Group and we had an informative session with the CEO and CFO of WPD in November 2021, who provided an overview of the business. We were regularly kept up to date on the Company's strategic portfolio transactions, including updates from management in relation to the accounting issues linked to the UK Gas Transmission (NGG) and NECO sales.

Thank you

I would like to thank Committee members, the management team and Deloitte for their commitment throughout an extremely busy year and for their contribution, support and integrity provided in support of the Committee's work. A sincere thank you must go to Doug King, who has completed his fifth and final statutory audit for National Grid. He has been a pleasure to work with and we are extremely grateful for his constructive challenge and professionalism over the past five years.

Liz Hewitt
Committee Chair

Significant issues/judgements relating to the financial statements

In considering the financial results announcements and the financial results contained in the Annual Report and Accounts, the Committee reviewed the significant issues and judgements made by management in determining those results.

The significant issues and judgements considered for the year ended 31 March 2022 are set out in the following table.

In addition, the Committee and the external auditor discussed the significant issues addressed by the Committee during the year. You can read more in the Independent Auditor's Report on pages 135 – 146.

Matter considered	Factors and reasons considered, including financial outcomes
WPD goodwill impairment test	• In March and May 2022, the Committee reviewed the output of the provisional and then final WPD goodwill and indefinite life intangible asset impairment test. The Committee challenged the reasonableness of the duration of the cash flow forecast used in the test and reviewed the key assumptions, including the cash flows, discount rate and terminal value. The Committee also received Deloitte's audit conclusions over both the impairment work and the execution of management's impairment SOX controls. The Committee concluded that the judgements taken and estimates made by management were supportable and should be disclosed as areas of judgement and key sources of estimation uncertainty.
Proposed disposal of a majority stake in the UK Gas Transmission business	• During the year, the Committee oversaw the judgements and accounting for the proposed sale of a majority stake in UK Gas Transmission. In particular, the Committee reviewed management's judgement on the date the business qualified as held for sale and a discontinued operation. Based upon management's analysis versus the criteria outlined in IFRS 5, the Committee was satisfied the judgement was appropriate.
Useful life of gas assets in the context of climate change	• Consistent with prior years, the Committee reviewed and concurred with management's judgement that, notwithstanding the regulatory and legislative commitments to net zero in the jurisdictions that we operate in, there will be a role for our gas networks beyond 2050 in a range of possible scenarios and that nothing suggests that our gas asset lives should be shortened at this point. The Committee also agreed with management that the additional disclosures and sensitivities previously added to the notes to the financial statements should be retained, along with the disclosures of the matter as a key judgement and key source of estimation uncertainty.
Application of the Group's Exceptional Items Framework	• In March 2022, the Committee approved revisions to the Group's Exceptional Items Framework (Framework) to include a disclosure section, reflecting the latest guidance and recommendations from the FRC following its October 2021 Thematic Review into Alternative Performance Measures. This update also reflected transactions that had occurred since the previous update to the Framework in September 2020. • Throughout the year, the Committee considered papers from management setting out how the Framework had been applied to certain events and transactions over the period, as set out in Note 5 to the financial statements. • For each item, the Committee considered the judgements made by management, including challenging when transactions were concluded as not qualifying for exceptional treatment. • Based on the reviews performed, the Committee was satisfied the Framework had been correctly applied throughout the year.

Financial reporting

Going concern and viability

The Committee reviewed the Group's going concern statement, viability statement (as set out on page 153 and pages 33–35 respectively) and the supporting assessment reports prepared by management. During 2021/22, there has been continued review of the Group's viability and going concern with support of the Finance Committee. The financial statements are prepared on a going concern basis such that the Company and the Group have adequate resources to continue in operation for at least 12 months from the date of signing the consolidated financial statements.

Statutory reporting framework policy

The Board has responsibility for effective management of risk for the Group including determining its risk appetite, identifying key strategic and emerging risks, and reviewing the risk management and internal control framework. The Committee, in supporting the Board to assess the effectiveness of risk management and internal control processes, relies on a number of Company-specific internal control mechanisms to support the preparation of the Annual Report and Accounts and the financial reporting process. This includes both the Board and Committees receiving regular management reports to include analysis of results, forecasts and comparisons with last year's results, and assurance from the external auditor.

With the regulatory environment evolving quickly, the Committee is kept fully informed of all new legislation, FRC advice and best practice and the requirements of the Code and Disclosure and Transparency Rules. During 2021/22, the Committee has been kept up to date with changes to legislation and regulatory reviews and has had oversight of the potential impacts.

The Committee and Board receive, in advance of the full-year results, a periodic SOX report on management's opinion on the effectiveness of internal control over financial reporting. This report concerns the Group-wide programme to comply with the requirements of SOX and is received directly from the Group SOX and Controls team.

In relation to the financial statements, the Company has specific internal mechanisms that govern the financial reporting process and the preparation of the Annual Report and Accounts. The Committee oversees that the Company provides accurate, timely financial results and implements accounting standards and judgements effectively, including in relation to going concern and viability. Our financial processes include a range of system, transactional and management oversight controls. Our businesses prepare detailed monthly management reports that include analysis of their results, along with comparisons to relevant budgets, forecasts and the previous year's results. Monthly business reviews, attended by the Chief Executive and Chief Financial Officer (CFO), supplement these reports. Each month, the CFO presents a consolidated financial report to the Board.

Key matters considered by the Committee

The key matters considered by the Committee during the course of the year ended 31 March 2022 are set out below:

Matter considered	Factors and reasons considered, including financial outcomes
Financial reporting	• In addition to the significant issues and judgements highlighted on page 102, the Committee also considered the accounting for the Company's disposal of its investment in the St William Homes LLP joint venture, the results of the purchase price acquisition exercise for the WPD acquisition, the ongoing impact of COVID-19 on our US retail customers' bad and doubtful debts provision, the accounting for the Company's interconnectors subject to cap and floor arrangements, and management's evaluation of the IFRS Interpretation Committee's agenda decisions on cloud computing arrangement costs. • Monitored and reviewed the integrity of the Group's financial information and other formal documents relating to its financial performance, including the appropriateness of accounting policies, use of the going concern assumption and viability assessment. • Recommended to the Board management's key accounting judgements and key sources of estimation uncertainty, including those related to pension valuations and environmental provisions for the 2021/22 half-year and full-year financial statements and the filing of other reports with the SEC containing financial information.
ESG reporting	• Reviewed management's proposed strategy for ESG reporting and assurance, and its proposal for implementing an ESG reporting system to ensure accurate, reliable and timely ESG reporting. • Received an update on the preparation of the Responsible Business Report and the Company's fifth TCFD disclosure. This included reviewing management's assessment of full compliance with TCFD's 11 recommendations. • Reviewed management's voluntary disclosures aligned with the EU Taxonomy, including the key judgements taken in preparing the disclosure. Also, management's disclosure maps on two leading ESG reporting frameworks: the Global Reporting Initiative and Sustainability Accounting Standards Board. • Recommended approval of the Responsible Business Report and related publications to the Board, following review of PwC's external assurance report.
WPD acquisition	• In addition to the WPD accounting matters noted on page 102, in September 2021, the Committee received an update on the implementation of management's Financial Position and Prospects Risk Mitigation Plan. • In November 2021, the WPD CEO and CFO attended the Committee to provide an overview of WPD.
Internal controls	• The Committee provided oversight over management's internal investigation following the federal investigations into allegations of fraud and bribery by former National Grid employees in our US business. The Committee endorsed management broadening the scope to confirm the Company's controls remain appropriate and continue to operate effectively. • Received regular updates on progress towards the Group's annual US regulatory attestation. • In September 2021 and March 2022, the Committee received updates on management's structured programme of work to strengthen the maturity of the Group's risk and controls framework. • In May 2022, the Group CFO presented a close out update on the implementation of the new ERP and general ledger system and completion of the roll-out.
Risk and viability statement	• Received regular updates on the actions being taken to manage the risk in line with the Group's risk appetite. • Received confirmation from each of the businesses and functions that risks are managed appropriately and continue to consider external influence and matters outside of the Group's control. • Monitored the internal control processes and reviewed and challenged the going concern and viability statements, including testing for reasonable worst-case scenarios. • Satisfied itself that the Board and management's risk management processes were functioning effectively and provided sufficient assurance.
External auditor	• Received an update report at each meeting, including updates on the status of, and results from, the annual audit process. • Considered the external auditor's report on the 2021/22 half- and full-year results. • Considered throughout the year the external audit plan, including monitoring the approach, scope and risk assessments contained within. • Assessed the effectiveness and independence of Deloitte, as well as continued review and oversight of non-audit services from Deloitte. • Continued to hold private meetings with Deloitte and maintained dialogue throughout the year. • Engaged with Deloitte regularly on the forward planning and succession planning for the lead Audit Partner; this included the confirmed successor attending a number of Committee meetings during the year. • Recommended the reappointment of Deloitte as the Company's external auditor to the Board.
Corporate audit	• Received regular updates on the 2021/22 audit plan and the significant findings and approved the audit plan for 2022/23. • Approved the Corporate Audit Charter which had been updated to reflect best practice and recent corporate governance developments. • Engaged with the Global Internal Audit team regularly as part of its role in the internal investigation into fraud and bribery controls.
Compliance, governance and disclosure matters	• Reviewed and approved the updated terms of reference for the Committee. • Received updates on ethics and business conduct, including whistleblowing to support the oversight, management and mitigation of business conduct issues as part of the controls framework. • Discussed the whistleblowing procedures in place and confirmed internal procedures remained effective, noting the communications during the year to employees, including additional communications in relation to fraud and bribery. • Received bi-annual updates in September 2021 and March 2022 of compliance with external legal requirements and regulations, including any non-compliance issues and steps being taken to improve compliance across the Group.

Audit & Risk Committee report continued

Risk management and internal control

Risk management

Risk management is the responsibility of the Board and is key to achieving our strategic priorities. The system of risk management is established by the Board, which sets risk appetite and maintains the system of internal controls to manage risk within the Group. The Audit & Risk Committee has delegated responsibility from the Board for the oversight of the Group's systems of internal control and risk management. This includes policies, compliance, legislation including compliance with SOX and the UK Bribery Act 2010, appropriateness of financial disclosures, procedures, business conduct and internal audit. As part of the framework across the Group, National Grid's values – 'do the right thing', 'find a better way' and 'make it happen' – continue to communicate and promote a culture of integrity across the Group. During the year, the Board reviewed the principal risks facing the Group (as set out on pages 28 – 32). The Committee provided oversight and reviewed the risk management process to ensure that processes are in place to manage risk appropriately.

Internal control and risk management effectiveness

We continually monitor the effectiveness of our internal control and risk management processes to make sure they continue to be effective, robust and remain fit for purpose. Controls are in place to reduce either the likelihood or impact of any risk once it has occurred. Following the review over the year the Committee recommended to the Board that the processes had the correct authority, expertise and independence and provided sufficient assurance to the Company.

This review includes financial, operational and compliance controls. The Committee also monitors and addresses any business conduct issues or compliance issues. The Certificate of Assurance (CoA) process operates via a cascade system and takes place annually in support of the Company's full-year results.

The Company has a Chief Risk Officer who leads on the Group's risk management processes. Corporate Audit also supports the Group's risk management and internal control processes. They maintain an independent and objective approach to evaluate and enhance process developments. The Global Head of Audit appointment is a matter reserved for the Committee and has responsibility for the internal audit function, attends all Committee meetings and has access to the Committee Chair as necessary.

At each of the Committee's meetings, progress of the internal audit process is reviewed including significant outstanding actions. The Committee also has regular private meetings with the Global Head of Audit. The Committee notes timelines and where actions are overdue, challenges these. Corporate Audit is responsible for developing the audit plan including engaging in major change programmes across the business.

The Committee Chair signed the updated Corporate Audit Charter in December 2021 following agreement from the Audit & Risk Committee and Safety & Sustainability Committee in November 2021 and December 2021 respectively. The Committee also received the results of the Internal Quality Assessment that took place in 2021/22.

External audit

The Committee is responsible for overseeing the relationship with the external auditor. The Committee Chair meets with the external auditor prior to each meeting and outside the meeting cycle on a regular basis.

- Deloitte is the external auditor to the Company.
- Appointed in 2017 following a formal tender process.
- Reappointed at the 2021 AGM for the year ended 31 March 2022.
- The Committee was authorised by shareholders to set Deloitte's remuneration at the 2021 AGM.
- Current lead Audit Partner is Doug King and 2021/22 was the fifth and final year of his term.

Chris Thomas has been selected as Doug King's successor and will oversee the statutory audit for 2022/23. The Committee has spent significant time with both Doug and Chris during 2021/22 to make sure the succession is seamless; this included Chris attending a number of Committee meetings in the year alongside Doug.

Following consideration of the auditor's independence and objectivity, the audit quality and the auditor's performance, the Committee was satisfied with the effectiveness, independence and objectivity of Deloitte and recommended to the Board its reappointment for the year ended 31 March 2023.

A resolution to reappoint Deloitte and give authority to the Committee to determine its remuneration will be submitted to shareholders at the 2022 AGM. In accordance with the CMA Order Article 4, the Committee believes that a competitive tender no later than 2026 is in the best interests of the Company given the independence, objectivity and performance of Deloitte to date and to ensure the appropriate time and planning required to execute a comprehensive tender process. This approach is in line with current regulation that requires a tender every 10 years.

Effectiveness, quality and performance

As part of the Committee's responsibilities, consideration is regularly given to the effectiveness of the external auditor to verify that the quality, challenge and output of the external audit process is sufficient. Throughout the year the Committee also looks at the quality of the auditor's reports and considers its response to accounting, financial control and audit issues as they arise. To maintain high levels of quality the Committee reviews and challenges, where appropriate, the external audit plan prior to approval.

Audit quality reports received by the Committee

External auditor Insights Report

On an annual basis, the Committee receives a report summarising the financial reporting and/or internal control areas that, based on the results of the most recent audit, Deloitte considers management should prioritise during the year ahead. This year, the report included management's responses to the recommendations, along with an update on prior year recommendations.

Management survey

Management undertook a survey in FY22 that sought views from over 100 key stakeholders involved in the external audit process across the Company. The questions comprised of the following areas:

- The external auditor's performance; key performance indicators included:
  - planning and scope;
  - robustness of the audit process;
  - independence and objectivity;
  - quality of delivery;
  - quality of people and service; and
  - understanding of the Company.
- National Grid's commitment to the audit.

Management, the external auditor, and the Committee discussed the results of the survey, which showed that the external auditor's score had remained consistent with the prior year. Deloitte agreed to put in place an action plan for areas of improvement.

In March 2022, the Committee received the FRC's Audit Quality Review Inspection Report of Deloitte for the audit of the Company's financial statements for 2020/21. The Committee noted there were no key findings from the review and three areas of good practice highlighted by the FRC.

The Committee also regularly engages and receives the views of senior management and members of the Finance team in forming conclusions on auditor effectiveness.

Meetings are held around each scheduled Committee meeting between Committee members and the external auditor, without management being present to encourage open and transparent feedback. This additional time outside of the formal meeting environment helps us to monitor the independence, quality and effectiveness of the external audit functions.

During the year, the Committee:

- reviewed the quality of audit planning, including approach, scope, progress and level of fees;
- reviewed the outcome of recommendations from the Deloitte Insights Report;

- held private meetings with Deloitte without management present;
- held meetings with the UK Partner and US Partner;
- confirmed that the Deloitte external audit process had been delivered effectively; and
- met with, and approved the appointment of, and transition plan for, Chris Thomas, the new lead Audit Partner who will take over for the 2022/23 audit year.

Auditor independence and objectivity
The independence of the external auditor is essential to the provision of an objective opinion on the true and fair view presented in the financial statements.

The Committee considered the safeguards in place, including the annual review by Corporate Audit, to assess the external auditor's independence. The external auditor reported to the Committee in May 2022 that it had considered its independence in relation to the audit and confirmed that it complies with UK regulatory and professional requirements, SEC regulations and Public Company Accounting Oversight Board (PCAOB) standards and that its objectivity is not compromised. The Committee took this into account when considering the external auditor's independence and concluded that Deloitte continued to be independent for the purposes of the external audit and confirmed that this recommendation was free from third-party influence and restrictive contractual clauses.

Non-audit services
In line with the FRC's Ethical Standard and to maintain the external auditor's objectivity and independence, we have a policy governing Deloitte's provision of non-audit services.

The cap on the total fees that may be paid to the external auditor for non-audit services in any given year is 70% of the average audit fees paid in the last three financial years.

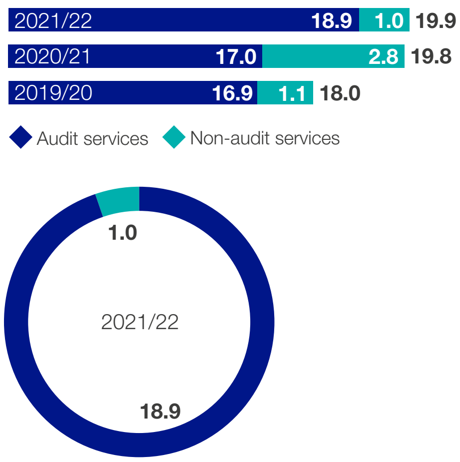
The provision of any non-audit service by the external auditor requires prior approval. A subset of services where, due to their nature, we believe there is no threat to the auditor's independence or objectivity qualify as pre-approved. These services must have a value under £250,000 (increased by Committee approval during the year from £50,000) and be reviewed in advance by the CFO. These services are limited to:

- audit, review or attest services. These are services that generally only the external auditor can provide, in connection with statutory and regulatory filings. They include comfort letters, statutory audits, attest services, consents and assistance with review of filing documents; and
- other areas, such as provision of access to technical publications.

Management presents a list of all non-audit work requests to the Committee to ensure the Committee is monitoring all non-audit services provided. Non-audit service approvals during 2021/22 principally related to comfort letters for debt issuances and refreshes of debt issuance programmes.

External auditor fees
The amounts payable to the external auditor, Deloitte, in the past two years were:

Statutory auditor's fees (£m)



Total billed non-audit services provided by Deloitte during the year ended 31 March 2022 were £1.0 million, representing 5% of total audit and non-audit fees. In 2020/21, non-audit services totalled £2.8 million (14% of total audit and non-audit fees).

Further information on the fees paid to Deloitte for audit, audit-related and other services is provided in Note 4 to the financial statements on page 162.

Total audit and audit-related fees include the statutory fee and fees paid to Deloitte for other services that the external auditor is required to perform, such as regulatory audits and SOX attestation. Non-audit fees represent all non-statutory services provided by Deloitte.

Safety & Sustainability Committee report

Key decisions during the year

- Approved the year-end sustainability disclosures
- Approved the Company's environmental sustainability strategy
- Approved the Committee's revised remit as the Safety & Sustainability Committee
- Approved the FY22 Audit Plan in respect of safety and sustainability matters

Composition and Committee attendance:

The Committee is made up of four independent Non-executive Directors.

Committee members	Attendance
Earl Shipp ◆	6/6
Anne Robinson[1]	2/2
Tony Wood[2]	4/4
Martha Wyrsch[2]	4/4
Former Committee members	Attendance
Mark Williamson[3]	2/2
Liz Hewitt[2]	2/2
Amanda Mesler[2]	2/2
Paul Golby[4]	1/1

◆ Committee Chair

1. Anne Robinson was appointed to the Committee effective 19 January 2022.
2. Tony Wood and Martha Wyrsch were appointed to the Committee and Amanda Mesler and Liz Hewitt stepped down from the Committee effective 1 September 2021.
3. Mark Williamson joined the Committee effective 1 September 2021 and stepped down from the Board effective 31 December 2021.
4. Paul Golby stepped down from the Board effective 26 July 2021.

Review of the year

I'm pleased to present to you my first report as Chair of the Safety & Sustainability Committee. After a review undertaken earlier in 2021, we refreshed our remit. In addition to health and safety, we agreed to increase monitoring of sustainability-related issues including external climate-related disclosure requirements. You'll note our new name, the Safety & Sustainability Committee, with effect from 1 September 2021.

To ensure we are well positioned to advise the Board on these wider strategic considerations, given the rapidly changing external environment and growing societal expectations, the Committee welcomed new members. We thus have a refreshed composition, providing significant experience across engineering, safety, and process-focused industries as well as in-depth knowledge of the energy transition, climate change and stewardship of environmental and sustainability matters.

Despite the widening of our remit, we have not lost sight of the health considerations we have customarily monitored. We saw continuing COVID-19 impacts being felt in both the UK and US through most of the year. Towards the end of the fiscal year, we monitored the gradual and safe return to the workplace for those who have been working from home. It is appropriate to recognise everyone's perseverance and forbearance throughout the last two years. In particular, the contributions of our front-line workers, who continued to work in the field through the pandemic, were exemplary. They have done a marvellous job designing, implementing and complying with numerous protocols to keep themselves healthy and thus protecting our customers as well. Our numbers of sickness within the workforce were low and productivity was maintained throughout. Nevertheless, the prolonged pandemic took an emotional toll on the entire organisation and the Committee has been briefed on the strengthening of the support the Company offers through various employee assistance programmes.

Safety, wellbeing and asset protection

Safety is always our number one priority. We monitored both process and personal safety at every meeting and requested 'deep dives' into selected events where we felt our independent oversight would be of value. Whilst we have continued strong progress on our leading safety indicators, our lagging (LTIFR) safety performance has been challenging to sustain through the pandemic. This is a key area of focus and one that we will continue to track as a Committee. The integration of WPD also progressed throughout the year and we familiarised ourselves with WPD's measurement programme and how it would be aligned with National Grid's. In January 2022, Phil Swift, President of WPD, provided us with an overview of the safety management of WPD, including lessons learnt that were being shared between National Grid and WPD. Overall, we are mindful of the amount of organisational change ongoing. Given this backdrop, we have reviewed safety performance and progress; we will continue to challenge the organisation to keep its strong safety focus. You can see some of our key safety results at page 27.

In September 2021, there was a fire at one of our interconnectors at Sellindge, where we own and operate HVDC facilities across the English Channel. We are grateful that no one was injured in this incident, in part due to the excellent training and quick thinking of our operators on duty at the time. The damage to the facility and the potential risk to human life were thoroughly reviewed by the Committee; we convened an additional meeting in December 2021 to receive a report from the Group Chief Engineer on the status of the investigation and a further update was provided in January 2022 following the completion of the investigation. Lessons learnt have already been communicated throughout the organisation and will influence our practices going forward.

Throughout the year, several significant storms in the UK and the US highlighted that we have to redouble our preparedness. The storms saw large swathes of customers disconnected from power for, in some cases, significant periods of time. Our people worked tirelessly to restore service to every last disconnection safely and securely. The emergence of extreme weather has potential impacts on our assets and our workforce. We will continue to provide oversight of the Company's efforts to adapt to extreme weather and to ensure our safety processes are robust and resilient to withstand whatever may come our way.

Sustainability

The second priority of this Committee is sustainability. In line with the Committee's expanded remit, we considered the Company's TCFD strategy through the year and are pleased to report that the Company has fully aligned its disclosures with the TCFD Recommended Disclosures. See pages 70 – 83 for further information. Whilst the Audit & Risk Committee focuses on the financial aspect of TCFD, we spent time considering the climate scenario analysis and the Company's wider climate strategy and commitments. We also received, for the first time this year, the Company's Climate Transition Plan for review. At the 2021 AGM, shareholders approved our first ever climate resolution, outlining our targets for net zero and our commitment to bring the Company's climate transition plan to a vote at the 2022 AGM. This plan will provide the opportunity to review our metrics and data in this area.

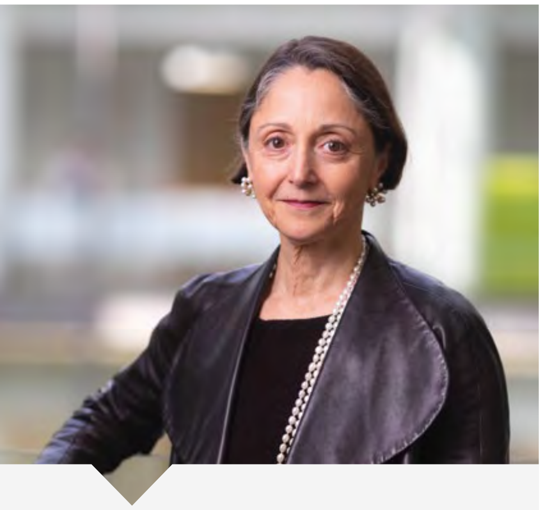
We also continued to review the Company's wider sustainability strategy and performance. National Grid's Responsible Business Report provides additional insights into our organisational aims and ambitions, and our performance against our net zero targets and wider sustainability strategy. We convened an ad-hoc Committee meeting in March 2022 to specifically consider our external reporting obligations in relation to sustainability and reviewed and commented on the initial drafts of these. We also brought the entire Board together for a separate session to undertake a thorough review of the aims, ambitions and measures to ensure that these commitments are embedded in the Board's stewardship.

Looking forward

As we navigate these changing and challenging times, we will continue to ensure we are having the right discussions and challenging the progress and pace at which we are moving. It is sure to be another busy year and I look forward to providing you with a further update on our progress.

Earl Shipp
Committee Chair

Finance Committee report



Key decisions during the year

- Approved the Group's financial risk appetite, aligning this with the Board's refreshed risk appetite framework
- Reviewed the pension arrangements linked to the Group's key transactions and approval of the Group pension strategy
- Considered the structure of the sale of the equity interest in the St William Homes LLP joint venture to The Berkeley Group plc
- Approved forecast expenditure for 2022/23 insurance renewals

Composition and Committee attendance:

The Committee is made up of three independent Non-executive Directors and two Executive Directors.

Committee members	Attendance
Thérèse Esperdy ◆	4/4
Jonathan Dawson	4/4
Liz Hewitt[2]	2/2
Andy Agg	4/4
John Pettigrew	4/4
Former Committee members	**Attendance**
Mark Williamson[1]	1/1
Jonathan Silver[2]	2/2

◆ Committee Chair

1. Mark Williamson stepped down from the Board effective 31 December 2021.
2. Liz Hewitt joined the Committee and Jonathan Silver stepped down from the Committee effective 1 September 2021.

Review of the year

This year we met on four scheduled occasions to undertake our responsibility as a Committee of monitoring the financial risk of the Group, focusing on the key areas within our remit: Treasury, Tax, Pensions and Insurance.

Despite continued challenges presented by the pandemic, we engaged directly with a number of the finance professionals in the Company. Jonathan Silver and I met with a cross-section of members in the Treasury, Tax, Pensions and Financial Planning teams in Massachusetts. As most organisations are now back in offices, we will continue to arrange separate engagement sessions.

Transactions

It has been vital to continue our focus on the Group's financing strategy, which is supporting the portfolio repositioning of the Group. We received regular updates during 2021/22 on the progress of the ongoing transactions. As a Committee we've been particularly interested to hear about the progress of WPD colleague integration into key departments such as Treasury, Tax, Pensions and Insurance; I'm pleased to report the integration continues to progress well.

We've monitored progress of the sale of a majority stake in UK Gas Transmission throughout the year, including a review of the engagement with credit rating agencies and of the UK Gas Transmission derivative book ahead of the launch of the sale process. We have also continued to monitor progress on the sale of NECO to PPL.

Financial risk appetite

During the year, the Committee reviewed the Group's financial risk appetite and took the opportunity to evaluate how financial risk was managed in line with the Board's refreshed risk appetite framework.

Treasury

It has been another busy year for the Company in terms of bond issuances. I'm delighted that National Grid continues to attract strong investor demand in the market at both holding and operating company levels. The issuances we've seen have typically had large orderbooks and tight spreads. We continue to contribute to the Group's Green Financing commitments and in August 2021 National Grid plc issued a dual tranche €1.5 billion bond across 7 years and 12 years; the 7-year tranche was issued in a green format.

In March 2022, we received a presentation from one of our core global banking partners that provided a macro market update and included key updates on the external view of National Grid's bond issuances and impacts of the conflict in Ukraine and retail energy crisis.

Throughout the year, we monitored the actions of the credit rating agencies. As noted above, we still have significant transactional activity ongoing and hence closely monitor our gearing, which will be reduced as asset proceeds are used to restore ratings headroom.

Insurance

The fire at one of our interconnectors at Sellindge pushed significant focus on insurance for the Committee and has had an impact on the Company's approach to renewals for 2022/23, whilst market conditions have continued to harden. The Head of Insurance has spent significant time with the Committee providing updates on the claims process whilst I've worked with my fellow Committee Chairs on implications of safety and accounting.

Tax

Following President Biden's election, we've stayed abreast of the US congressional tax proposals and potential impacts on the Group. In November 2021, we invited KPMG to update us on the key expected outcomes but indeed, at the time of writing, congressional action is still a moving target.

In the UK, with the increase in the minimum statutory rate, we have reviewed the changes that arise in the current year deferred taxes and the exceptional charge to remeasure the opening deferred tax liabilities going forward.

Pensions

In the UK, pension investments are managed by independent Trustees. However, it is the Committee's duty to ensure funding is adequate to meet obligations. As the funding positions of the various defined benefit schemes improve, it allows the Trustees to reduce investment risk to everyone's benefit. This year, we oversaw the transfer of WPD's pension arrangements to National Grid and Trustee appointments will be refreshed in 2022/23. During the year, we invited Mercer to provide external expertise to the Committee on the UK pension landscape. We also received detail on the Pension Schemes Act 2021 and the potential implications this had on the Group.

In the US, pension investments are overseen by an internal fiduciary committee comprising senior leaders with appropriate levels of financial experience. Over the course of the year, we have worked to ensure the transition of pension and other retiree benefits of our Rhode Island colleagues as they move across to PPL. There has also been further de-risking of our pension and retiree welfare investments in light of the improvement to funding positions in recent years.

Looking forward

Given the impact of geopolitical events on energy markets and inflation in the broad economy, we continue to monitor the Group's risk appetite. We regularly review stress tests and seek to bring our expertise from other sectors of the economy to foster a holistic view of financial markets.

Thérèse Esperdy

Thérèse Esperdy
Committee Chair

Directors' Remuneration report

Key activities during the year

- Development of 2022 Directors' Remuneration Policy
- Stakeholder consultation
- Incorporation of portfolio transactions into remuneration
- New members and transition of the Committee

The Committee is made up of four independent Non-executive Directors

Composition and Committee attendance:

Committee members	Attendance
Ian Livingston[1] ◆	4/4
Martha Wyrsch[2]	3/4
Jonathan Dawson	7/7
Amanda Mesler	4/4
Former Committee members	**Attendance**
Mark Williamson[3]	5/5
Earl Shipp[2]	2/3
Jonathan Silver[2]	3/3

◆ Committee Chair
1. Ian Livingston joined the Committee effective 1 August 2021 and became Committee Chair effective 1 January 2022.
2. Martha Wyrsch was appointed to the Committee and Earl Shipp and Jonathan Silver stepped down from the Committee effective 1 September 2021.
3. Mark Williamson stepped down from the Board effective 31 December 2021.

Dear shareholders,

This is my first letter since becoming Chair in January 2022. Firstly, I would like to thank my predecessor Jonathan Dawson for his strong stewardship of the Remuneration Committee over the last nine years and all his help in ensuring a smooth transition of the Chair.

This year has presented a full agenda for the Board and Remuneration Committee. An ambitious business plan to deliver against the backdrop of an increasingly dynamic and demanding external context presented several important considerations for remuneration, particularly in the context of the new Remuneration Policy.

With the COVID-19 crisis a persistent and dominant theme at the start of the year, the Company maintained its position of no employees furloughed, no compulsory redundancies, and no pay reductions.

In November 2021, the world turned its attention to COP26 and the necessity and urgency of a net zero future for all intensified – further underscoring the importance of the Company's Climate Transition Plan and net zero strategy, a key area we focused on in our Directors' Remuneration Policy review this year.

In the final months of the financial year, the effects of higher gas prices, exacerbated by the tragic world events in Ukraine, presented serious affordability challenges for both consumers and businesses. The recent announcement of the early return of £200 million of interconnector revenue to UK consumers over the next two years and a plan to deliver £400 million of sustainable cost efficiencies per annum by 2024, with £140 million delivered to-date, demonstrate the Company's commitment to doing its part to support and enable a more affordable energy future for consumers.

Despite these challenges, the Company delivered strong operational performance this year, reflecting substantial investment and a focus on delivering a clean, fair, and affordable energy future.

In March 2021, the Company announced the acquisition of WPD, the UK's largest electricity distribution business, and the sale of our US Rhode Island business. In March 2022, the Company announced the sale of a 60% equity stake in the UK Gas Transmission business. These transactions are a significant evolution of the Group's strategy and a major pivot towards electricity. The impact of the portfolio changes on financial results and performance outturns for the year are shown in greater detail in the implementation section of our remuneration report.

This year also presented the opportunity to review our Directors' Remuneration Policy (last approved in 2019) and examine how it might evolve. As we undertook this review, we sought to ensure that the best interests of all of our stakeholders today and over the next few years are properly addressed.

To do this, we set out to answer several key questions:

- What are the right performance measures that clearly link the Company's performance and long-term strategy to value creation?
- How can we better reflect the strategic importance of the Company's net zero strategy in remuneration?
- How can we create flexibility given the increasingly dynamic external context?

Over the last several months, the Committee and I have valued the engagement and collaboration of many of our major shareholders. The key elements of our new Remuneration Policy are summarised on page 113 and details are available on pages 124 – 128. Our Remuneration Policy proposal will be subject to a binding vote at the 2022 AGM.

Our Directors' Remuneration 2021/22 report is structured to cover three key areas:

1) Remuneration at a glance
2) 2021/22 implementation report
3) 2022 Directors' Remuneration Policy and implementation

Performance and remuneration outcomes during the year

Salary, pension and benefits

Our review of Executive Directors' salaries this year considered external market factors alongside wider workforce pay increases. The Committee has awarded salary increases of 3.75% to John Pettigrew and 6.5% to Andy Agg, both effective 1 July 2022. These changes are compared to an average increase of 4% across the UK wider workforce.

Our previous Directors' Remuneration Report (DRR) disclosed a three year plan to bring Andy Agg's base salary to a level broadly equal to the market median for his role. Andy's increase this year is the last installment to align his base pay.

As set out in our DRR last year, we acknowledged expectations from our shareholders to align Executive Directors' pension contribution rates with the majority of the UK wider workforce and have set out an approach to progressively do so. To that end, the pension allowances of John Pettigrew and Andy Agg were reduced to 12% of salary as of 1 April 2022, in line with pension contribution levels in the UK wider workforce, representing a material reduction in their fixed remuneration levels.

Annual Performance Plan (APP)

The APP for 2021/22 was based on financial performance measures (60%), operational measures (20%) and individual objectives (20%) that reflect key business and operational performance goals.

Financial performance (60%)
The Company has again had a successful year, delivering strong financial results while investing in the net zero energy transition. In parallel, we saw the solid execution of a complex set of portfolio transactions to integrate WPD, progress on the agreement to sell the US Rhode Island business, and the sale of a majority stake in the UK Gas Transmission business.

Formulaic outturns from the financial portion of the APP were 89.0% of the maximum based on achievement of 78.0% of maximum for Group Underlying EPS and 100% of maximum for Group RoE. APP outcomes are determined by financial results, with technical adjustments to targets including currency adjustments, unbudgeted pension costs and scrip dividend dilution, all in line with past practice.

Operational performance (20%)
The Committee allocated 10% of the operational portion of the 2021/22 APP to ensure strong execution of the portfolio transactions and a focus on value delivery for shareholders. Over the year, we announced the sale of a 60% equity stake in the UK Gas Transmission business, effectively managed regulatory and legal processes, and demonstrated solid progress on the initial integration of WPD into the Group. In this context, the Committee has set the performance outturn for the transactions at 10 out of 12 which is 83.33% of the maximum.

ESG measures make up the remaining 10% of the operational portion of the 2021/22 APP. These measures reflect quantifiable environmental emissions and diversity targets aligned to key commitments set out in our RBC. The outturn for the ESG portion of the APP was 6 out of 8 which equates to 75% of the maximum, reflecting solid delivery of SF_6, CO_2 and methane emission reductions, and progress on DEI goals.

Individual objectives (20%)
Performance against individual objectives resulted in outturns of 80% and 85% of the maximum for John Pettigrew and Andy Agg respectively.

Taking all the elements of performance together, the overall APP awards to the Executive Directors on the Board on 31 March 2022 were 85.2% of the maximum for John Pettigrew and 86.2% of the maximum for Andy Agg.

The details of the 2021/22 APP are further outlined on pages 114 – 116.

In reaching its overall decisions on the APP, the Committee considered the strong performance and delivery throughout the year across financial, operational, and individual objectives and determined no discretion was required to the APP formulaic outcome.

Long-Term Performance Plan (LTPP)
The measurement period of the 2019 LTPP ended on 31 March 2022 and consisted of two measures – Group Value Growth and Group RoE. As discussed in last year's report, the weighting of performance measures for the 2019 LTPP is one third Group RoE and two thirds Group Value Growth.

The formulaic vesting outcome of the 2019 LTPP was 74.22% of the maximum. The Committee reviewed whether there were any factors which might cause it to reduce the vesting levels and concluded after careful consideration that the vesting levels fairly reflected business performance and shareholder experience over the performance period.

As communicated in our DRR last year, we took the decision, given the timing and complexity of the portfolio transactions, to disclose the performance targets for the 2021 LTPP in this year's report. Note the 2021 LTPP award reverts to equal weighting of Group RoE and Group Value Growth performance measures. More details are set out on page 117.

Single figure and shareholding
The 2021/22 total remuneration single figures for John Pettigrew and Andy Agg are £6.5 million and £3.5 million respectively. These outcomes reflect strong, consistent short-term annual performance delivery in 2021/22 and longer-term value creation. The 2019 LTPP outcome makes up nearly £4 million of the overall single figure for John Pettigrew and nearly £2 million for Andy Agg. The value of the 2019 LTPP award is driven by the material share price growth of over 30% over the three-year performance period which in addition to dividends resulted in a total shareholder return (TSR) of 52%. These outcomes also reflect the heavy weighting on long-term share-based pay in our reward structure.

In last year's DRR, we set out an intent to review our post-employment shareholding requirement. As part of our Policy review, the Committee has concluded no changes are required. This decision considers an in-employment shareholding requirement (CEO: 500% of salary and other Executive Directors: 400% of salary) which is at the top end of market practice, and a post-employment shareholding requirement (200% of salary), which is in line with market practice. The Committee felt strongly it would be in the interest of shareholders to preserve the Executive Directors' shareholding requirements levels to ensure strong alignment with the shareholder experience.

Our 2022 Policy renewal
During the year, the Committee conducted a review of the Executive Directors' Remuneration Policy, considering:

1) alignment to our business strategy and wider stakeholders (incentive measures and target-setting);
2) alignment to our talent strategy (quantum and market practice); and
3) corporate governance requirements.

Having discussed these proposals with a number of our shareholders and governance bodies, the Committee proposes to make the following key changes to the Remuneration Policy, subject to their approval by shareholders at the 2022 AGM.

Financial and operational performance measures:
- Retain Group RoE in both the APP and LTPP to ensure the efficiency of annual operational delivery and the quality and sustainability of long-term shareholder value creation.
- Replace Group Value Growth in our LTPP with a three-year cumulative Underlying EPS measure. We believe a more recognised and commonly used measure will simplify remuneration and enhance transparency for both shareholders and employees, and create strong alignment to the Company's investor proposition.
- Retain an in-year earnings measure – i.e. Underlying EPS in our APP to ensure we continue to incentivise and reward strong operational delivery.

Whilst we recognise our short-term (APP) and long-term (LTPP) financial measures are similar, we believe these are the right measures to support delivery of the business strategy and the resultant creation of shareholder value.

The combination of annual and long-term earnings and returns measures act together to incentivise strong operational delivery in-year, together with long-term sustainable growth. As such, financial measures have been designed to incentivise different elements of performance in the short-term (APP) and the long-term (LTPP). See pages 129 – 130 for a further overview of our financial performance measures for 2022/23.

Environmental, Social and Governance
Our 2022 Policy expands the focus of ESG and incorporates further measures aligned to targets set out in our RBC.

- Broaden and simplify ESG measures in the APP to reflect key elements of our responsible business strategy – customers, colleagues and DEI.
- Introduce net zero transition measures aligned to:
  i) quantitative reductions in our Scope 1 emissions; and
  ii) the enablement of the net zero transition.

Finally, we recognise the value of some flexibility in the Policy to better adapt to business and market changes. As such, our new Policy provides greater flexibility to:

- enable the Committee to set appropriate financial, strategic, and ESG measures and weightings in respect of each APP/ LTPP award; and
- provide for the possibility of a one-year additional maximum incentive level of up to 50%, to be used only in exceptional circumstances (e.g. recruitment).

No material changes would be made to performance measures without prior consultation with major shareholders.

Other matters

When taking remuneration decisions in relation to Executive Directors, the Committee takes into consideration remuneration data across the industry (through market benchmarking) and our wider workforce (e.g. CEO pay ratio, gender and ethnic pay gap data, and colleagues' views on executive pay) to ensure decisions are fair, equitable, and aligned to performance in line with the Company's values.

Fair and equitable reward is at the heart of National Grid's values. Within the UK, National Grid continues to be an accredited real living wage employer by the Living Wage Foundation. Our UK mean gender base pay gap of -1.6% (median of 2.4%) has shown a strong trend since 2018 in closing the pay gap between genders working in comparable roles. Across the US, our mean gender base pay gap continues to improve from 13.5% in 2021 to 12.6% this year. Additional gender and ethnic pay gap data is reported in our Responsible Business Report (RBR).

Payment to past Directors

Nicola Shaw stood down from the Board on 26 July 2021 and stayed with the Company until after the conclusion of the RIIO-T2 CMA appeal process and continued as Chair of the Company's subsidiaries, National Grid Electricity Transmission plc and National Grid Gas plc. She was deemed to be a good leaver given her overall long-term strong performance and contribution to the business. She remained in active employment until 31 October 2021, after which she was not eligible for 2021/22 APP and received salary and benefits until her final employment date of 30 April 2022, as per the terms of her contract. Her APP was pro-rated for her period of active employment for 2021/22. Her 2019 LTPP will vest at the normal vesting date in July 2022, subject to performance conditions and is pro-rated for time served to the final employment date of 30 April 2022, in accordance with the plan rules.

Details of Nicola Shaw's remuneration in relation to the period 1 April 2021 to 26 July 2021 (qualifying service as an Executive Director) and 27 July 2021 to 31 March 2022, are presented in the Single Total Figure of Remuneration table on page 114. All payments are in accordance with her service agreement, the Directors' Remuneration Policy and in line with our June 2021 Corporate Governance disclosure.

Conclusion

On behalf of the Committee, I would like to thank shareholders for their input and engagement this year. We continue to aim to maintain an open dialogue on remuneration matters and welcome your further comments and feedback. We respectfully ask for your support at the forthcoming AGM.

Lord Ian Livingston
Committee Chair

Remuneration at a glance – 2021/22

Our 'At a glance' highlights the performance and remuneration outcomes for our Executive Directors for the year ended 31 March 2022. Further detail is provided in the Statement of implementation of Remuneration Policy in 2021/22.

	Policy summary (adopted 2019)	Outcomes for 2021/22
Salary	Target mid-market salary levels against: • FTSE 11 – 40 for UK-based Executive Directors • US general industry and US energy services companies with similar revenue for US-based Executive Directors	• John Pettigrew's salary increased by 2.3% to £1,053,000 as of 1 July 2021 in line with wider workforce increases • Andy Agg's salary increased by 6.5% to £675,000 as of 1 July 2021 reflecting a previously communicated progressive increase to continue to align his salary with the market rate for his role
Pension and benefits	Provide market competitive reward to assist in the attraction and retention of talent: • Eligible to participate in defined contribution plan (or defined benefit if already a member). • From April 2022, all UK Executive Directors' pension contributions are 12% of base salary in line with levels across the UK-based workforce.	• John Pettigrew's cash allowance was 23.4% of salary for 2021/22 (compared with 26.7% in 2020/21); reducing to 12% on 1 April 2022 • Andy Agg's cash allowance was 20% of salary for 2021/22; reducing to 12% on 1 April 2022 • Other benefits remain unchanged
Annual Performance Plan	Incentivise and reward achievement of annual financial, operational, and individual performance: • Maximum opportunity is 125% of salary • 50% paid in cash • 50% paid in shares which must be retained for at least two years or until the shareholding requirement is met, if later • Subject to both malus and clawback	See 2021/22 Annual Performance Plan below
Long-Term Performance Plan	Incentivise long-term business performance and align reward to our strategy: • Maximum award level is 350% of salary for CEO and 300% for other Executive Directors • Vesting is subject to long-term performance conditions • Shares which must be retained for at least two years following vesting or until the shareholding requirement is met, if later • Subject to both malus and clawback	See 2019 Long-Term Performance Plan below
Shareholding requirements	Create strong alignment with shareholder experience: • 500% of salary for CEO • 400% of salary for other Executive Directors • Post-employment shareholding requirement of 200% of salary for two years	See chart below

2021/22 Annual Performance Plan

Performance measures (% weighting)	
Financial (60%)	**89.00%**
Operational (20%)	**79.17%**
Individual – John Pettigrew (20%)	**80.00%**
Individual – Andy Agg (20%)	**85.00%**

APP outcome

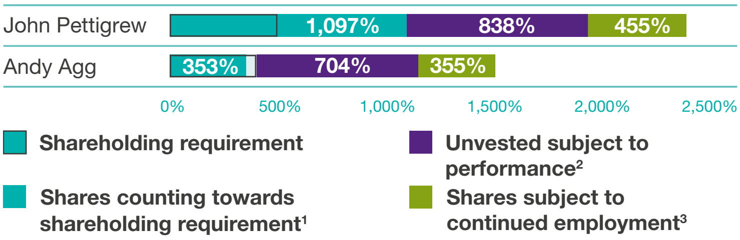
	% of Maximum	Actual (£'000s)	Maximum (£'000s)
John Pettigrew	85.2%	£1,116	£1,309
Andy Agg	86.2%	£717	£831

2019 Long-Term Performance Plan

Performance measures (% weighting)	
Group Value Growth (66.67%)	**100.00%**
Group RoE (33.33%)	**22.67%**

LTPP outcome

	% of Maximum	Actual (£'000s)	Maximum (£'000s)
John Pettigrew	**74.22%**	**£3,997**	**£5,386**
Andy Agg	**74.22%**	**£1,980**	**£2,668**



1. Represents beneficially owned shares as well as shares held in trust as part of the APP deferred share awards.
2. Represents the 2020 and 2021 LTPP awards subject to ongoing performance.
3. Represents LTPP shares subject to holding period plus shares held as part of the Sharesave scheme, if any.

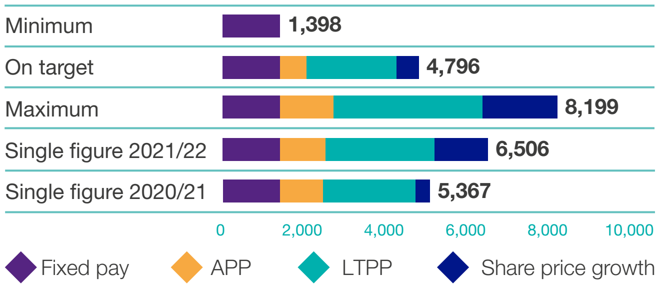
Andy Agg is expected to meet his shareholding requirement next year.

Note As noted in the Chair letter (payment to past Directors), Nicola Shaw stood down from her role as Executive Director on 26 July 2021. She remained in active employment until 31 October 2021, after which she was not eligible for 2021/22 APP and received salary and benefits until her final employment date of 30 April 2022 as per the terms of her contract. Details of Nicola's remuneration in relation to the period 1 April 2021 to 26 July 2021 (qualifying service as an Executive Director) and 27 July 2021 to 31 March 2022, are presented in the Single Total Figure of Remuneration table on page 114.

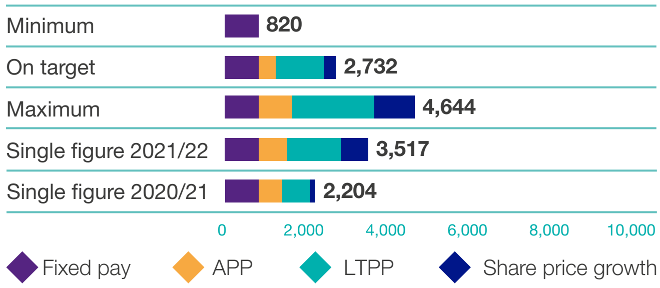
Single total figure of remuneration for 2021/22

A comparison of the 2021/22 single total figure of remuneration, with the maximum remuneration if variable pay had vested in full, is set out below.

John Pettigrew (in £'000s)



Andy Agg (in £'000s)



Notes: Maximum total figure of remuneration for 2020/21 for John Pettigrew was £6.557 million and £2.625 million for Andy Agg.

The 2021/22 single total figures of remuneration for John Pettigrew and Andy Agg are £6.506 million and £3.517 million respectively. These outcomes reflect strong annual performance delivery in 2021/22 and longer-term value creation as evidenced in the 2019 LTPP outcome. The single total figures of remuneration are in large driven by the heavy weighting on long-term share awards which make up to two-thirds of total remuneration, and nearly 80% of variable pay. The 2019 LTPP performance is driven in part by the impact of share price growth of 31.6%, yielding a Total Shareholder Return (TSR) of 52% over the three-year performance period in addition to long-term business performance delivery.

The 2021/22 total single figures represent an achievement of 79.4% for John Pettigrew and 75.7% for Andy Agg of the total maximum opportunity for 2021/22. This is line with last year's outcomes which were 81.8% for John Pettigrew and 83.9% for Andy Agg of the total maximum opportunity for 2020/21.

Alignment of remuneration with our business strategy

We align our performance linked elements of remuneration (APP and LTPP) through our strategic priorities, our RBC commitments, and our vision of a clean, fair and affordable energy future.

Our vision and values

Our vision is to be at the heart of a clean, fair and affordable energy future.

Every day we do the right thing, find a better way, and make it happen.

Our strategic priorities

- Enable the energy transition for all
- Grow our organisational capability
- Deliver for customers efficiently
- Empower colleagues for great performance

Our RBC commitments

- The environment
- Our people
- Our communities
- The economy
- Our governance

Key principles of our remuneration strategy

- Reward delivery of the Group's strategy in a matter that is simple, transparent, and aligned to shareholders' interests
- Attract, motivate, and retain senior executives with market-competitive reward
- Align performance measures to the way National Grid earns its returns for shareholders, with targets set to incentivise stretching financial and operational performance in line with shareholder expectations
- Reflect and underpin the Company's vision, values, and contribution to society

How we achieve this in practice

- Alignment of APP and LTPP performance measures to core financial and non-financial KPIs
- Heavy weighting towards share-based long-term pay to reflect the nature and duration of National Grid's businesses and asset lives
- A mandatory two-year holding period for APP share awards and vested LTPP awards
- A very high minimum shareholding requirement for senior executives (500% for the CEO – equivalent to nine times the after-tax salary)
- A post-employment shareholding required for all senior executives

Our 2022 Remuneration Policies are aligned to our business strategy

Enable the energy transition for all	Deliver for customers efficiently	Grow our organisational capability	Empower colleagues for great performance
Addition of net zero measures in LTPP aligned to commitment set our in our RBC	Financial measures strongly aligned to incentivise operational excellence and long-term value creation	Increased flexibility to better adapt measures to align to critical priorities that underpin short/longer-term performance	Emphasis on Company culture and DEI in APP

Remuneration Policy 2022 overview

Our proposed Remuneration Policy seeks to ensure strong alignment with National Grid's strategic priorities and to measure the success of management in achieving key short-and long-term financial, operational, and ESG objectives. The key elements of our Policy and the implementation for 2022/23 are set out below:

- ESG and, in particular, the energy transition, is at the heart of our strategic priorities. Our Policy expands the focus on ESG measures in the APP and incorporates further measures in the LTPP aligned to targets set out in our RBC.
- The replacement of Group Value Growth with a cumulative Underlying EPS measure in the LTPP creates a simpler and transparent measure of performance aligned to measure long-term value creation together with Group RoE.
- Flexibility in the Policy to adapt to the changing nature of the business and enable the attraction, retention, and incentivisation of talent in an increasingly competitive market.

	Proposed Policy changes (2022)	Implementation in 2022/23
Salary	• No change	• John Pettigrew's salary will increase by 3.75% to £1,092,500 – below the average increase of the wider workforce at 4% • Andy Agg's salary will increase by 6.5% to £719,000 – in line with previously communicated intention to align his salary with the market rate over a multi-year period subject to performance and progression in the role
Pension and benefits	• All new and existing UK-based Executive Directors will receive pension contributions of up to 12% of base salary for the defined contribution (DC) scheme or cash in lieu, in line with the level for new joiners across the UK wider workforce	• John Pettigrew's and Andy Agg's pension cash allowance will be 12% from 1 April 2022
Annual Performance Plan (APP)	• No change	• Proposed measures for 2022/23: – Group RoE (35%) – Underlying EPS (35%) – Operational measures – Customer, Colleagues, Diversity (15%) – Individual objectives (15%)
Long-Term Performance Plan	• No change to opportunity levels, vesting period and holding period • Financial measures to comprise at least 60% of the LTPP; introduction of an ESG measure expected to make up 20% of the LTPP • Flexibility to set a mix of financial, strategic and ESG measures and weightings every year • In the event of future proposals to make material changes to measures/weightings, the Committee will engage with shareholders as appropriate	• Proposed measures for 2022/23: – Cumulative three-year Underlying EPS (40%) – Group RoE (40%) – Net zero transition measures (20%)
Shareholding requirements	• No change	
Malus and Clawback	• Enhanced wording to reflect the corporate governance changes and market practice	
NED fees	• Simplified structure to have one standard base fee for US and UK based NEDs • Provides flexibility to reflect additional responsibilities where these are material to the roles	• Alignment of NED fees to market rates (see page 131)

In addition to the above, the proposed Policy also provides, in exceptional circumstance only (such as recruitment), flexibility to award up to 50% of salary in addition to the normal policy maximum across APP/LTPP for one year only.

Statement of implementation of Remuneration Policy in 2021/22

Content contained within a blue box indicates that all the information in the panel is audited.

2021/22 Remuneration Implementation

Single Total Figure of Remuneration – Executive Directors

The following table shows a single total figure in respect of qualifying service for 2021/22, together with comparative figures for 2020/21. All figures shown as £'000's:

	John Pettigrew		Andy Agg		Nicola Shaw[1]			
	2022	2021	2022	2021	qualifying service as Executive Director – 1 April '21 to 26 July '21	27July '21 to 31 March '22	2022 (Total)	2021
Salary	**1,047**	1,029	**665**	624	**181**	391	571	562
Benefits in kind	**101**	110	**22**	32	**4**	14	18	15
Pension	**245**	275	**133**	125	**42**	91	134	150
Total fixed pay	**1,393**	1,414	**820**	781	**227**	496	723	727
APP	**1,116**	1,035	**717**	618	**359**	*refer to APP note*	359	537
LTPP	**3,997**	2,918	**1,980**	805	**1,765**	*refer to LTPP note*	1,765	1,364
Total variable pay	**5,113**	3,953	**2,697**	1,423	**2,124**	–	**2,124**	1,901
Total remuneration	**6,506**	5,367	**3,517**	2,204	**2,351**	496	2,847	2,628

Notes:

1. Nicola Shaw stood down from the Board on 26 July 2021 and stayed with the Company until after the conclusion of the RIIO-T2 CMA appeal process and continued as Chair of the Company's subsidiaries, National Grid Electricity Transmission plc and National Grid Gas plc. She remained in active employment until 31 October 2021, after which she was not eligible for the 2021/22 APP and received salary and benefits until her final employment date of 30 April 2022 as per the terms of her contract. For reporting purposes, we have presented the complete APP and LTPP amount in the qualifying service column. Please refer to the APP note below for reference amounts for the respective period.

Salary: As of 1 July 2021, John Pettigrew and Nicola Shaw were each awarded a salary increase of 2.3% in line with the wider workforce increase. Andy Agg was awarded an increase of 6.5% as part of a multi-year plan to progressively align his salary with the market rate for his role since his appointment in January 2019.

Benefits in kind: Benefits in kind (BIK) include private medical insurance, life assurance, a fully expensed car or cash alternative and the use of a car and a driver when required. For John Pettigrew, the use of a car and driver amounted to approximately £85,500 for 2021/22 (and approximately £89,000 for 2020/21). There were no Sharesave options granted to any Executive Directors during 2021/22.

Pension: Pension contributions/cash in lieu for John Pettigrew and Nicola Shaw are 23.4% of salary for 2021/22 and 20% of salary for Andy Agg. Contributions will fall to 12% of salary for all Executive Directors from 1 April 2022.

APP: Nicola Shaw's APP is pro-rated for her period of active employment for 2021/22, i.e. 1 April 2021 to 31 October 2021. For reference, the pro-rated APP for the qualifying service as an Executive Director (1 April 2021 to 26 July 2021) is 55% of the total amount (i.e. circa £197,000 of the total amount of £359,000) and remaining 45% (i.e. circa £162,000 of the total amount of £359,000) for the period 27 July 2021 to 31 October 2021. Details on her financial, operational and individual objective assessment can be found on page 115 – 116.

LTPP: The 2019 LTPP is due to vest in July 2022. The average share price over the three months from 1 January 2022 to 31 March 2022 of 1,098.09 pence has been applied and estimated dividend equivalents are included. The 2020/21 LTPP figures have been restated to reflect the actual share price on vesting and all dividend equivalent shares. As the vesting share price of 930.43 pence was higher versus the estimate of 855.04 pence (and the additional dividend equivalent shares added for the dividend with a record date of 4 June 2021 with a dividend rate of 32.16 pence per share), the actual value at vesting was circa £296,000, £82,000 and £138,000 higher than for the estimate published last year for John Pettigrew, Andy Agg and Nicola Shaw, respectively. Nicola Shaw's 2019 LTPP will vest at the normal vesting dates 1 July 2022 subject to performance conditions and is pro-rated for time served to the date of 30 April 2022 in accordance with plan rules.

Impact of share price change: The 2019 LTPP awards were granted on 28 June 2019 with a share price of 834.11 pence. The impact of share price change for the 2019 LTPP, comparing share price at grant versus the average share price for the period 1 January 2022 to 31 March 2022 of 1,098.09 pence, is an increase of 263.98 pence (31.6%) per share compared with an increase of 2.1% for the 2018 LTPP performance period (excluding dividends).

Total pension benefits

Andy Agg, John Pettigrew and Nicola Shaw received a cash allowance in lieu of participation in a pension arrangement. There are no additional benefits on early retirement. The values of these benefits received during this year, are shown in the single total figure of remuneration table.

John Pettigrew has also accrued defined benefit (DB) entitlements; he opted out of the DB scheme on 31 March 2016 with a deferred pension and lump sum payable at his normal retirement date of 26 October 2031. At 31 March 2022, John Pettigrew's accrued DB pension was reduced to £85,409 per annum and his accrued lump sum was £256,225. These figures reflect a permanent change in John Pettigrew's pension entitlements going forward. No additional DB entitlements have been earned over the financial year, other than an increase for price inflation due under the pension scheme rules and legislation. Under the terms of the pension scheme, if John Pettigrew qualifies for ill-health requirements, or is made redundant, a pension may be payable earlier than his normal retirement date. A lump sum death in service benefit is also provided in respect of these DB entitlements.

2021/22 Annual Performance Plan

APP awards reward delivery against annual financial, operational and strategic performance targets and goals. For 2021/22, financial measures represent 60% of the award, operational measures 20%, and individual objectives the remaining 20% of the maximum. Payment of the APP award is made in shares (50% of the award) and cash (50% of the award). Shares (after any sales to pay associated tax) must be retained until the shareholding requirement is met, and in any event for a minimum of two years after receipt.

For financial measures, threshold, target and stretch performance levels are set by the Committee for the performance period and pay out at 0%, 50% and 100% of the maximum calculated on a straight-line basis. Operational measures have been assessed on a four-point scale (not met, partially achieved, achieved and over-achieved) based on quantitative targets set at the beginning of the year by the Committee. Target and stretch performance levels for the individual objectives are also predetermined by the Committee for the performance period, and an assessment of the performance relative to the target and stretch performance levels is made at the end of the performance year on each objective. Executive Directors have a maximum opportunity of 125% of base salary.

APP – Financial performance

The Group delivered strong financial performance in the year whilst also executing a complex set of portfolio transactions. Investment in critical infrastructure remained strong, with capital investment (continuing) of £6.7 billion driving asset growth of 8.7%. The businesses delivered solid earnings and returns, in particular in our UK Electricity and Gas Transmission and Metering businesses. The financial performance outcomes of the 2021/22 APP awards are summarised in the tables below:

Measure	Weighting (% of APP)	Threshold	Target	Stretch	Outcome (% of max)
Group Underlying EPS (pence per share) (A)	30%	72.0	75.0	78.0	78.0%
			76.7		
Group RoE (%) (A)	30%	9.8%	10.2%	10.6%	100.0%
			11.4%		
Total financial outturn					**89.0%**

(A) **Denotes an 'alternative performance measure' as described on pages 268 – 279**

Notes: Underlying EPS: Technical adjustments have been made to increase the performance range (each of the threshold, target and stretch) by 1.6 pence to reflect the net effect of currency adjustments, US pension assumptions, and scrip issuance. Financial targets were set to include the impacts of the portfolio transactions, specifically the addition of WPD to the Group. Group underlying EPS of 76.7 pence includes 11.4 pence from UK Gas Transmission discontinued operations, and excludes timing and major storm costs as outlined on page 271 in the Financial Results.
Nicola Shaw: The total financial outturn for Nicola was 96.3% of maximum based on performance against equally weighted measures (20% each) of UK RoE (outcome of 100% of max), UK underlying operating profit (outcome of 100% of max) and UK regulated controllable costs (outcome of 88.9% of max). Technical adjustments were applied to UK operating profit for the impact of CPI on revenues. The UK outturn is based on an equal weighting of the UK Electricity Transmission and UK Gas Transmission and Metering businesses.

APP – Operational performance

The operational measures (20%) of the 2021/22 APP were weighted equally between two key objectives – 1) effective completion of the Group portfolio transactions (10%); and 2) quantifiable ESG measures to reduce factors relating to Scope 1 direct carbon emissions and improve employee diversity.

Operational measures were assessed on a four-point scale (not met, partially achieved, achieved and over-achieved) based on quantifiable targets where possible and qualitative outcomes to reflect a balanced assessment of performance. All ESG measures were evaluated against quantifiable targets which are aligned to our RBC commitments.

Measure	Details	Assessment	Outcome
Transactions (10%)	Effective management to the satisfaction of the Board: • WPD transaction • Sale and separation of UK GT • Separation of RI	WPD: New operating model design, embedded culture and values, maintained business continuity and performance.	4 Over-achieved
		UK GT: Successfully secured sale of 60% stake of the business, alongside strong business performance delivery.	3 Achieved
		RI: Well-executed separation process, plans in place to mitigate or offset all stranded costs, transaction to complete in 2022/23	3 Achieved
Outcome – Transactions			**(10/12) 83.33%**
Group wide Scope 1 carbon emissions (5%)	Reduce Group-wide CO_2 impact from: • Vehicle fleet (68 Light Duty Vehicles (LDVs) converted) • Business air travel (<11,961,416 airmiles or 5 KT CO_2e) Reduce network carbon emissions from: • SF_6 emissions (21.8 KT CO_2e reduction) • Leak prone pipe (10.811 KT CO_2e avoided) • Emission leaks and compressor cab venting (4.4 KT CO_2e reduction)	Met and/or exceeded performance targets for four out of the five emissions measures most notably: • Business air travel (5,553,932 airmiles or 1.2 KT CO_2e) • SF_6 emissions (71 KT CO_2e reduction) • Leak prone pipe replacement (10.853 KT CO_2e avoided) • Compressor cab venting emissions reduction (18 KT CO_2e) • Fleet emission reductions just behind target measure with 62 LDVs converted	3 Achieved
Diversity (5%)	Deliver sustainable improvement in gender and ethnic diversity in line with key targets in our RBC • New hire rates • Promotion rates • Leaver rates • Strategic leadership group (SLG), (top ~110 leaders) • New talent diversity	Improved diversity in six of the eight Group-wide measures most notably: • Exceeded new hire targets (28% and 30%) for gender and ethnicity • Improved SLG diversity to 48% (target of 46%) • Increased new talent diversity to 57.7% (target of 50%) • Gender and ethnic leaver rates fell short of targets and remain a further focus area for 2022/23 Progress underpinned by robust delivery of a Group-wide DEI strategy.	3 Achieved
Outcome – ESG			**(6/8) 75.00%**
Combined operational outcome			**79.17%**

Notes: Diversity is defined as colleagues who have identified themselves of varying gender, sexual orientation, disability, under-represented racial and/or ethnic group.

APP – Individual objectives

In addition to the financial and operational goals previously discussed, the Board approves annual individual performance goals for the Executive Directors in line with key operational and strategic priorities. Performance is assessed at the end of the financial year by the Board and Remuneration Committee. The CEO completed a self-evaluation which was shared with members of the Board for their comments. The Chair compiled these comments, and based on these comments, proposed a scoring for each of the goals. The CEO undertook the same process for the other Executive Directors and presented his recommendations to the Committee in May 2022. The table below sets out the 2021/22 individual objectives together with associated performance commentaries and the Committee’s assessment of the performance outcome for each of the Executive Directors:

Individual objectives and performance summary – John Pettigrew	Outcome
Execute on the announced portfolio repositioning and deliver results on organisational streamlining • Successful execution of the strategic pivot to electricity; purchase of WPD • Effective management of divestitures and transition of WPD into the Group whilst ensuring solid business performance/continuity • Progression and development of the Company’s long-term strategic blueprint	80%
Demonstrate substantial progress in modernising how the Group works, enhancing a culture of accountability • Demonstrated progress in shifting the Group’s culture, with a strong focus on DEI and positive employee satisfaction results • Made progress to improve bench strength of senior leadership group and Group Executive team	
Raise the level of engagement with the public, communities and government • COP26 and Capital Markets Day – repositioned National Grid across key stakeholder groups as a critical part of the energy transition • Strengthened governmental, public and community relations, and key relationships in particular at the local level	

Individual objectives and performance summary – Andy Agg	Outcome
Successfully execute the portfolio repositioning • Effectively managed financing strategy and credit ratings approach for the acquisition of WPD • Strong execution of portfolio repositioning; divestment of 60% stake in UK Gas Transmission, 50% stake in St William Homes LLP • Successfully ensured the mitigation of all stranded costs resulting from the portfolio transactions	85%
Demonstrate progress in the Group-wide and Finance transformation programmes • Strong leadership across the Group driving in-year delivery and progression of £400 million of cost efficiencies per annum by the end of 2023/24 • Delivered solid progress against key transformation milestones, advanced key process and technology enabled efficiencies • Improved talent, succession potential, and capabilities within the CFO function	
Deliver enhanced investor engagement programme • Successfully engaged investors on the five-year investor framework and strategic pivot to electricity with positive feedback/sentiment • Increased transparency of our responsible business strategy yielding positive engagement and external ESG company ratings	

Individual objectives and performance summary – Nicola Shaw	Outcome
Successfully execute on UK businesses priorities • Effectively managed UK businesses to deliver on track mid-year financial performance for first year of RIIO-T2 • Successfully implemented operating model to stand up separate Electricity and Gas Transmission UK businesses	65%
Deliver a successful Competition & Markets Authority outcome • Led process to submit all RIIO-T1 reopeners with Ofgem • Managed and executed the CMA process effectively; with a positive result on the out-performance wedge	
Grow National Grid’s positioning on the UK’s net zero future • Established East Coast asset investment strategy to facilitate connection of 40+ GW of offshore renewables by 2030 • Fostered strong relationships with key stakeholders to lay the groundwork for the development of net zero investment roadmap	

2019 Long-Term Performance Plan award

The 2019 LTPP that will vest on 1 July 2022 was structured as outlined below in consideration of the transition to RIIO-T2 in the UK during the performance period. The financial measures and weightings of the 2019 LTPP below are the same for all Executive Directors.

- Group RoE over a two-year period (2019/20 – 2020/21) determines one third of the award
- Group Value Growth over the three-year period (2019/20 – 2021/22) determines two thirds of the award

The outturns of the 2019 LTPP reflect solid business performance over the three-year period, and are summarised below:

Performance measure	Weighting	Threshold 20% vesting	Maximum 100% vesting	Actual % of maximum
Group RoE A	33.33%	11.0%	12.5%	22.67%
		11.1%		
Group Value Growth A	66.67%	10.0%	12.0%	100.00%
		12.7%		
Overall vesting outcome				**74.22%**

A **Denotes an ‘alternative performance measure’ as described on pages 268 – 279**

As disclosed in last year’s DRR, the Group Value Growth measure in 2019 includes an upward adjustment versus the reported measure to reflect the value added from the sale of the residual interest in the UK Gas Distribution business and to adjust for the revised timing of UK cash tax payments. The Committee decided not to reflect upward adjustments to Group RoE or Group Value Growth for prior years (+0.3% in 2019/20 and +0.2% in 2020/21) resulting from the revisions described in note 1F to the consolidated financial statements in 2020/21 into the 2019 LTPP.

2019 LTPP Vesting

The 2019 LTTP vesting reflects both the final performance outturn and the impact share price and dividends from the time of issue to vesting date. For the 2019 award, the share price appreciation represents a material proportion of the total vesting value. The 2019 LTPP awards were granted on 28 June 2019 with a share price of 834.11 pence. Comparing the share price at grant versus the average share price for the period 1 January 2022 to 31 March 2022 of 1,098.09 pence, yields a share price gain for the 2019 LTPP of 263.9 pence (31.6%) per share in addition to estimated dividend yield of 148.7 pence per share.

The amounts due to vest under the 2019 LTPP for the performance period that ended on 31 March 2022 which are included in the 2021/22 single total figure table on page 114, are shown in the table below. The current share price valuation is an estimate based on the average share price over the three months from 1 January 2022 to 31 March 2022 of 1,098.09 pence and the proposed dividend with record date of 6 June 2022, subject to shareholder approval, is included. The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period.

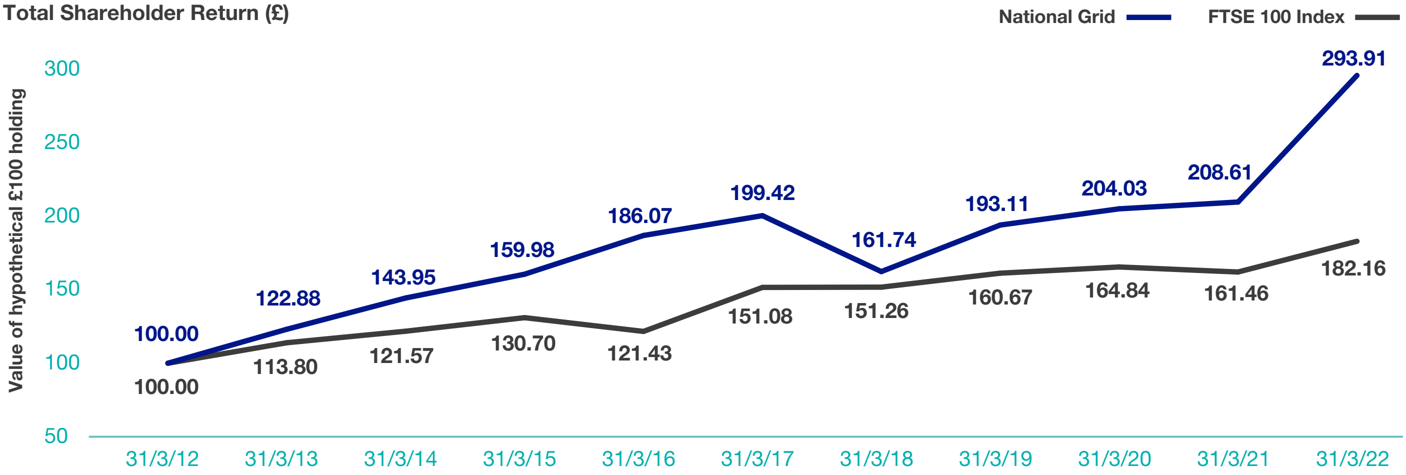
	Shares awarded	Performance outcome (% of maximum)	Vested shares based on performance	Face value of the award at grant (£'000s)	Share price appreciation (£'000s)	Dividend equivalent shares (£'000s)	Total value (£'000s)
John Pettigrew	431,969	74.22	320,607	2,674	846	477	3,997
Andy Agg	213,999	74.22	158,830	1,325	419	236	1,980
Nicola Shaw[1]	190,739	74.22	141,566	1,181	374	211	1,765

1. Nicola Shaw's 2019 LTPP will vest at the normal vesting date of July 2022 subject to performance conditions. The amount shown under 'Shares awarded' is pro-rated for time served to the termination date of 30 April 2022 in accordance with the plan rules.

Assessment of National Grid shareholder returns

The figure below outlines National Grid plc's 10-year annual TSR performance against the FTSE 100 Index since 31 March 2012 and illustrates the growth in value of a notional £100 holding invested in National Grid on 31 March 2012, compared with the same invested in the FTSE 100 Index. The FTSE 100 Index has been chosen because it is a widely recognised performance benchmark for large companies in the UK and it is a useful reference to assess relative value creation for National Grid shareholders. Over the last 10-year period, National Grid's relative TSR is 194% versus the FTSE 100 at 82% demonstrating sustainable long-term value for our shareholders. Over the more recent three-year performance period for the 2019 LTPP, National Grid's relative TSR was 52% versus the FTSE 100 relative TSR of 13%, which underscores the strong alignment of our Remuneration Policy with the value delivered for our shareholders.

Total Shareholder Return (£)



Data source: Datastream by Refinitiv

Notes: The TSR level shown at 31 March each year is the average of the closing daily TSR levels for the 30-day period up to and including that date. It assumes dividends are reinvested.

2021 Long-Term Performance Plan

2021 LTPP performance conditions

As disclosed in last year's DRR, we reverted to equal weighting for Group RoE and Group Value Growth, measured over the entire three-year performance period, for the 2021 LTPP. Below are the performance ranges for the two measures in the 2021 LTPP. As noted, setting of targets was delayed to enable proper consideration of the portfolio transactions for WPD, UK Gas Transmission, and the US Rhode Island businesses.

Performance measures	Weighting	Threshold 20% vesting	Maximum 100% vesting
Group RoE	50%	9.75%	11.00%
Group Value Growth	50%	9.25%	11.00%

Notes: Vesting between threshold and maximum will be on a straight-line basis. The calculation for the Group RoE measure will reflect the updated methodology from 2021/22 going forward as outlined on page 277 of the Annual Report.

2021 LTPP (conditional awards) made during the year

The face value of the awards are calculated using the volume weighted average share price at the date of grant. The share price at the date of grant on 28 June 2021 was 924.68 pence. The 2021 LTPP grant will vest on 1 July 2024. The total value of awards vesting and dividend equivalent shares are subject to a two-year holding period following vesting.

	Basis of award (% of base)	Number of shares	Face value (£'000)	Proportion vesting at threshold performance	Performance period end date
John Pettigrew	350%	398,568	£3,686	20%	31 March 2024
Andy Agg	300%	218,993	£2,025	20%	31 March 2024

Statement of Directors' shareholdings and share interests

The Executive Directors are required to build up and hold a shareholding from vested share plan awards. The following table shows the position of each of the Executive Directors in relation with the shareholding requirement and the number of shares owned by the Non-executive Directors, including connected persons. The shareholding is as of 31 March 2022 and the salary used to calculate the value of the shareholding is the gross annual salary as of 31 March 2022.

John Pettigrew continues to meet his shareholding requirement. Andy Agg, who was appointed the CFO in 2019, has not yet met his shareholding requirement and is expected to do so in 2023. The projections assume on-target performance/vesting outcomes. They will not be allowed to sell shares, except for covering associated tax liabilities, until their individual shareholding requirements are met. Non-executive Directors do not have a shareholding requirement.

Further shares have been purchased in each of April and May 2022 on behalf of each of John Pettigrew and Andy Agg via the Share Incentive Plan (an HMRC tax-advantaged all-employee share plan), thereby increasing the beneficial interests by 25 shares (12 in April and 13 in May) for John Pettigrew and 24 shares (12 each in April and May) for Andy Agg. There have been no other changes in Directors' shareholdings between 1 April 2022 and 19 May 2022.

The expected vesting dates for the conditional share awards subject to performance conditions are 1 July 2022, 3 July 2023 and 1 July 2024 for the 2019 LTPP, 2020 LTPP and 2021 LTPP respectively.

Directors	Share ownership requirements (multiple of salary)	Number of shares owned outright (including connected persons)	Value of shares held as a multiple of current salary	Number of options granted under the Sharesave Plan	Conditional share awards subject to performance conditions (LTPP 2019, 2020, and 2021)
Executive Directors					
John Pettigrew	500%	1,052,126	1,097%	4,219	1,235,754
Andy Agg	400%	216,807	353%	4,316	646,787
Non-executive Directors					
Liz Hewitt	–	2,500	–	–	–
Jonathan Dawson	–	45,632	–	–	–
Amanda Mesler	–	1,500	–	–	–
Earl Shipp (ADSs)	–	1,000	–	–	–
Anne Robinson (ADSs)	–	–	–	–	–
Tony Wood	–	–	–	–	–
Martha Wyrsch (ADSs)	–	5,000	–	–	–
Ian Livingston	–	1,838	–	–	–
Jonathan Silver (ADSs)	–	–	–	–	–
Paula Rosput Reynolds (ADSs)	–	2000	–	–	–
Thérèse Esperdy (ADSs)	–	1587	–	–	–

Notes: John Pettigrew: On 31 March 2022, John Pettigrew held 4,219 options granted in previous years under the Sharesave Plan with an exercise price of 711 pence per share and they can, subject to their terms, be exercised at 711 pence per share between 1 April 2025 and 30 September 2025. The number of conditional share awards subject to performance conditions is as follows: 2019 LTPP: 431,969; 2020 LTPP: 405,217; 2021 LTPP: 398,568.

Andy Agg: On 31 March 2022, Andy Agg held 4,316 options granted in previous years under the Sharesave Plan with an exercise price of 695 pence per share and they can, subject to their terms, be exercised at 695 pence per share between 1 April 2026 and 30 September 2026. The number of conditional share awards subject to performance conditions is as follows: 2019 LTPP: 213,999; 2020 LTPP: 213,795; 2021 LTPP: 218,993.

Earl Shipp, Jonathan Silver, Paula Rosput Reynolds, Martha Wyrsch, Anne Robinson and Thérèse Esperdy: Holdings are shown as American Depositary Shares (ADSs). Each ADS represents five ordinary shares.

Post-employment shareholding requirements

Past Executive Directors are required to continue to hold their shares/ADSs in line with our current and proposed Directors' Remuneration Policy.

To enforce this, the Executive Directors have agreed to give permission for the Company to periodically check with its third-party share scheme administrator whether the minimum shareholding requirement is being maintained. The Executive Directors have acknowledged that if they breach their post-employment shareholding requirement for any reason, the Company may enforce at its discretion one or more of the following processes: to request they repay to the Company an amount equivalent in value to the shareholding requirement that has not been met; the Company may withdraw/vary the vesting of any future shares granted under the LTPP; the Company may publish a public statement in a form, as the Company may decide that the Director has failed to comply with the post-employment shareholding requirement. Executive Directors are reminded annually, when employed, of the post-employment shareholding requirement. At termination, the minimum shareholding requirement is confirmed to the Director and checks are made by the Company at the 12-month and 24-month anniversary of leaving and at the financial year-end 31 March to ascertain if their post-employment shareholding requirement has been met.

Nicola Shaw stood down from the Board on 26 July 2021 and remained subject to an in-employment shareholding requirement until her final employment date of 30 April 2022, at which time she will be subject to a post-employment shareholding requirement of 200% of base salary for a period of two years. As of 31 March 2022, Nicola Shaw continues to meet her in-employment shareholding requirement.

Shareholder dilution

The Company has a number of multiple all-employee share plans that provide employees the opportunity to become shareholders. These plans include Sharesave and the Share Incentive Plan (SIP) in the UK and the 401(k) and Employee Stock Purchase Plan in the US.

Where shares may be issued or treasury shares reissued to satisfy incentives, the aggregate dilution resulting from executive share-based incentives will not exceed 5% in any 10-year period. Dilution resulting from all incentives, including all-employee incentives, will not exceed 10% in any 10-year period. The Committee reviews dilution levels against these limits annually and under these limits the Company, as at 31 March 2022, had a headroom of 3.9% and 7.8% respectively.

CEO pay ratio

We have disclosed our CEO pay ratios comparing the CEO single total figure of remuneration to the equivalent pay for the 25th quartile, median, and 75th quartile UK employees (calculated on a full-time equivalent basis), as well as the median Group-wide pay ratio.

CEO Pay Ratios 2021/22 to 2018/19

			UK		Group-wide
Year	**Method**	**25th percentile pay ratio**	**Median pay ratio**	**75th percentile pay ratio**	**Median pay ratio**
2021/22	Option A	135:1	105:1	81:1	76:1
2020/21	Option A	104:1	81:1	62:1	54:1
2019/20	Option A	111:1	86:1	66:1	53:1
2018/19 – voluntary	Option A	96:1	76:1	58:1	48:1

Notes: Following the completion of the WPD acquisition in June 2021, this year's CEO pay ratio includes circa 6,600 UK WPD employees in the data set. Salaries as at 31 March 2022 and estimated performance-based annual payments for 2021/22 have been annualised for part-time employees to reflect full-time equivalents. Performance payments have not been further adjusted to compensate where new employees have not completed a full performance year. The comparison with UK employees is specified by the Companies (Miscellaneous Reporting) Regulations 2018 (as amended). US employees represent approximately 56% of our total employees. Our median pay ratio on a Group-wide basis is 76:1, calculated on the same basis as the UK pay ratios and at an exchange rate of $1.348:£1.

The CEO pay ratio has increased to 105:1 at the UK median. The increase is explained by the increase in the CEO's single total figure of remuneration primarily due to the impact of the 2019 LTPP performance driven in part by the impact of share price growth of 31.6% over the three-year performance period and strong long-term business performance delivery. For reference, the impact of share price change for the 2019 LTPP, comparing share price at grant versus the average share price for the period 1 January 2022 to 31 March 2022 of 1,098.09 pence, for each Executive Director is an increase of 263.98 pence (31.6%) per share excluding the dividend (versus an increase of 2.1% for the 2018 LTPP). This year the 2019 LTPP vesting represents circa 61% (last year 54%) of the CEO's single total figure of remuneration. Excluding estimated 2019 LTPP vesting, our UK median pay ratio is 40:1 (last year 39:1). On a Group basis, the median pay ratio has increased to 76:1. The lower Group median pay ratio reflects the higher level of wages in the regions of the US where we operate as compared with the UK. Nearly 56% of our employees are US-based. Excluding estimated 2019 LTPP vesting, the Group-wide median pay ratio is 29:1.

These results highlight a key feature of our remuneration strategy to weight Executive and senior leadership compensation more heavily towards longer-term performance share based reward. Across the wider workforce, employee compensation is largely focused on in-year annual delivery.

The 2021/22 base pay and total pay including benefits for the CEO versus UK workforce is shown below.

2021/22 Base pay and benefits – CEO, UK wider workforce

			UK	
Pay and benefits data	**CEO remuneration**	**UK employee 25th percentile**	**UK employee 50th percentile**	**UK employee 75th percentile**
Base salary	£1,047,115	£36,598	£42,054	£55,726
Total pay and benefits	£6,505,511	£48,038	£61,834	£80,297

Flexibility is provided to adopt one of three methods for calculating the ratios. We have chosen Option A, which is a calculation based on the pay of all UK employees on a full-time equivalent basis, as this option is considered to be more statistically robust. The ratios are based on total pay and benefits inclusive of short-term and long-term incentives applicable for the respective financial year 1 April – 31 March. The reference employees at the 25th, 50th and 75th percentile have been determined by reference to pay and taxable benefits as at the last day of the respective financial year, 31 March, with estimates for the respective APP payouts and performance outcomes of the LTPP and dividend equivalents.

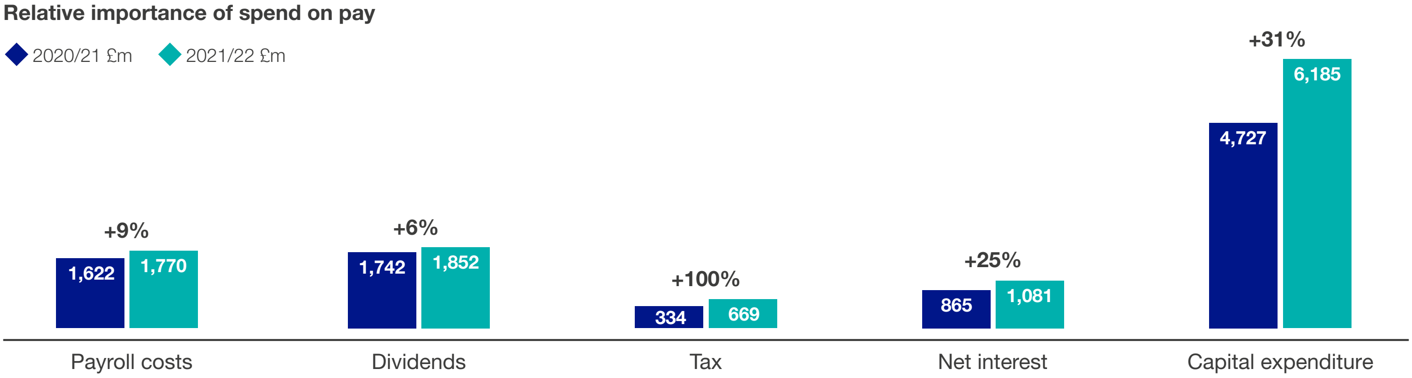
Most employees are eligible for a performance-based annual payment. Our principles for pay setting and progression in our wider workforce are the same as for our executives – mid-market approach to total reward sufficiently competitive to attract and retain high-calibre individuals without over-paying and providing the opportunity for individual development and career progression. The pay ratios reflect how remuneration arrangements differ, as accountability increases for more senior roles within the organisation, and in particular the ratios reflect the weighting towards long-term value creation and alignment with shareholder interests for the CEO.

We are satisfied that the median pay ratio reported this year is consistent with our wider pay, reward and progression policies for employees. The median reference employee falls within our collectively bargained employee population and has the opportunity for annual pay increases, annual performance payments and career progression and development opportunities. The CEO received a pay increase of 2.3% in 2021/22 in line with the increase budget awarded across the UK employee population (no increase was granted in 2020/21).

Relative importance of spend on pay

The chart below shows the relative importance of spend on pay compared with other costs and disbursements (dividends, tax, net interest and capital expenditure). Given the capital-intensive nature of our business and the scale of our operations, these costs were chosen as the most relevant measures for comparison purposes. All amounts exclude exceptional items and remeasurements.

Relative importance of spend on pay



Notes:
1. The dividend figure for 2020/21 has been restated at £1,742 million (from £1,738 million) to reflect the actual value of dividends paid.
2. 2020/21 payroll costs, tax, net interest and capital investment have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation.
3. Percentage increase/decrease of the costs between years is shown.

Chief Executive's pay in the last ten financial years

Steve Holliday was CEO throughout the five-year period from 2012/13 to 2015/16. John Pettigrew became CEO on 1 April 2016.

	Steve Holliday				John Pettigrew					
	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Single total figure of remuneration (£'000)	3,170	4,801	4,845	5,151	4,623	3,648	4,651	5,205	5,367	6,506
Single total figure of remuneration including only 2014 LTPP (£'000)					3,931					
APP proportion of maximum awarded	55.65%	77.94%	94.80%	94.60%	73.86%	82.90%	84.20%	70.58%	80.43%	85.20%
PSP/LTPP (proportion of maximum vesting)	25.15%	76.20%	55.81%	63.45%	90.41%	85.20%	84.20%	84.90%	68.00%	74.22%

Notes:
John Pettigrew: Single total figure for 2021/22 is explained in the single total figure of remuneration table for Executive Directors and single total figure for 2020/21 has been restated to reflect actual share price for 2018 LTPP vesting in 2021 and all dividend equivalent shares, consistent with comparative figures shown in this year's single total figure of remuneration table.

2014 LTPP: The 2016/17 single total figure of remuneration includes both the 2013 LTPP award and the 2014 LTPP award due to a change in the vesting period of four years (2013 LTPP) to three years (2014 LTPP).

PSP/LTPP plans: Prior to 2014, LTPP awards were made under a different LTI framework which incorporated a four-year performance period for the RoE element of the awards. The last award under this framework was made in 2013 and was fully vested in 2017. Awards made from 2014 are subject to a three-year performance period. The first of these awards vested in 2017.

Single total figure of remuneration – Non-executive Directors

The following table shows a single total figure in respect of qualifying service for 2021/22, together with comparative figures for 2020/21:

		Fees £'000		Other emoluments £'000		Total £'000	
		2021/22	2020/21	2021/22	2020/21	2021/22	2020/21
Paula Rosput Reynolds		599	21	18	0	616	21
Sir Peter Gershon	Resigned on 31.05.2021	90	540	12	82	102	622
Jonathan Dawson		108	112	3	1	111	113
Thérèse Esperdy		141	142	10	0	151	142
Paul Golby	Resigned on 26.07.2021	33	104	2	1	35	105
Liz Hewitt		113	99	9	0	122	99
Ian Livingston	Appointed on 01.08.2021	66	n/a	1	n/a	67	n/a
Amanda Mesler		93	91	2	0	94	91
Earl Shipp		113	104	7	0	120	104
Jonathan Silver		99	104	9	0	109	104
Mark Williamson	Resigned 31.12.2021	87	122	3	0	90	122
Tony Wood	Appointed on 01.09.2021	48	NA	2	n/a	50	NA
Martha Wyrsch	Appointed on 01.09.2021	56	NA	3	n/a	59	NA
Anne Robinson	Appointed on 19.01.2022	19	NA	0	n/a	19	NA
Total		**1,665**	**1,439**	**81**	**84**	**1,745**	**1,523**

Notes:
Receiving the US-based Board fee: Thérèse Esperdy, Earl Shipp, Jonathan Silver, Anne Robinson and Martha Wyrsch.
Receiving the UK-based Board fee: Jonathan Dawson, Paul Golby, Liz Hewitt, Amanda Mesler, Mark Williamson, Ian Livingston and Tony Wood.
Therese Esperdy: Fees include £25,000 for serving on the National Grid USA Board; she stepped down from the National Grid USA Board on 18 November 2021.
Paula Rosput Reynolds joined the Board on 1 January 2021 as a Non-executive Director and was appointed as Chair of the Board from 31 May 2021. She is not eligible for any benefits.
Other emoluments: In accordance with the Company's expenses policies, Non-executive Directors receive reimbursement for their reasonable expenses for attending Board meetings. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC and these costs are included in the table above. For 2020/21 due to COVID-19 travel restrictions, most of the NEDs did not incur travel-related expenses.
The total emoluments paid to Executive and Non-executive Directors in the year was £14.2 million (2020/21: £11.7 million).

Percentage change in Remuneration (Executive Directors, Non-executive Directors, employee average)

In line with the revised Shareholder Rights Directive (2019), we have included percentage change in salary/fee, bonus and benefits for each of the Directors compared to prior years. The regulations cover employees of the Parent Company only and not across the Group, and since we have very few people employed by our Parent Company (National Grid plc), we have voluntarily chosen a comparator group of all employees in the UK and the US to provide a representative comparison. In line with the regulations, we shall build this information to display a five-year history.

	2020/21			2021/22		
Executive Directors	**Salary**	**Benefits**	**Bonus**	**Salary**	**Benefits**	**Bonus**
John Pettigrew	1.3%	-4.7%	15.4%	1.7%	-8.8%	7.8%
Andy Agg	4.9%	40.6%	17.7%	6.5%	-31.6%	15.9%
Nicola Shaw	1.3%	1.1%	38.8%	1.7%	18.3%	-33.1%
Non Executive Directors						
Jonathan Dawson	0.5%	37.1%	n/a	-3.0%	417.6%	n/a
Therese Esperdy	0.4%	-100.0%	n/a	-0.8%	n/a	n/a
Sir Peter Gershon	0.5%	-5.5%	n/a	-83.3%	-85.0%	n/a
Paul Golby	0.5%	-87.5%	n/a	-68.5%	213.8%	n/a
Liz Hewitt	334.8%	-100.0%	n/a	14.5%	n/a	n/a
Amanda Mesler	0.5%	-100.0%	n/a	1.6%	n/a	n/a
Paula Rosput Reynolds	n/a	n/a	n/a	2816.8%	n/a	n/a
Earl Shipp	0.5%	-100.0%	n/a	8.6%	n/a	n/a
Jonathan Silver	14.3%	-100.0%	n/a	-4.2%	n/a	n/a
Mark Williamson	-8.6%	-100.0%	n/a	-29.2%	n/a	n/a
Ian Livingston	n/a	n/a	n/a	n/a	n/a	n/a
Tony Wood	n/a	n/a	n/a	n/a	n/a	n/a
Martha Wyrsch	n/a	n/a	n/a	n/a	n/a	n/a
Anne Robinson	n/a	n/a	n/a	n/a	n/a	n/a
Employee median	-8.49%	1.65%	-5.52%	2.8%	6.1%	40%

Note: For Nicola Shaw, the 2021/22 data reflects the salary, benefits and bonus paid for the complete year as presented in the single total figure of remuneration table.

For 2021/22, the percentage change data for salary/fees reflects that, other than for Andy Agg, the salary/fee increases for Directors were 2.3% in line with the wider workforce increases. For 2020/21, the percentage change data for salary/fees reflects that, other than for Andy Agg, there were no salary/fee increases for Directors. In contrast, the majority of managers and all those covered by trade union agreements were eligible to receive an annual salary increase during 2020/21. The average salary increase budget for the UK and the US employees, subject to performance review, was 2.3% and 2.5% respectively in 2020/21.

Budgets vary for employees covered by collective agreements depending on arrangements agreed with the respective trade unions. The Committee takes account of the general salary increase budgets available for managers/non-unionised employees when reviewing Directors' salaries/fees.

Further alignment between Executive Director pay and arrangements available to the wider workforce is evidenced by the approach that all employees have the opportunity to receive a bonus which is linked to either a combination of individual and Company/business performance measures, or Company/business performance measures only, thus enabling employees as well as the Executive Directors to benefit in the Company's success annually.

Payments for loss of office and payments to past Directors

Nicola Shaw stood down from the Board on 26 July 2021 and stayed with the Company until after the conclusion of the RIIO-T2 CMA appeal process and continued as Chair of the Company's subsidiaries, National Grid Electricity Transmission plc and National Grid Gas plc. She remained in active employment until 31 October 2021, after which she was not eligible for 2021/22 APP and received salary and benefits until her final employment date of 30 April 2022 as per the terms of her contract. Her APP is pro-rated for her period of active employment for 2021/22, i.e. 1 April 2021 to 31 October 2021. Her 2019 LTPP will vest at the normal vesting date of July 2022 subject to performance conditions and is pro-rated for time served to the termination date of 30 April 2022 in accordance with the plan rules.

Details of Nicola's remuneration in relation to the period 1 April 2021 to 26 July 2021 (qualifying service as an Executive Director) and 27 July 2021 to 31 March 2022 is disclosed in the Single Total Figure of Remuneration table on page 114. All payments are in accordance with her service agreement, the Directors' Remuneration Policy (and in line with our June 2021 Corporate Governance disclosure) and subject to applicable tax withholdings.

The Committee agreed to grant good leaver treatment for Nicola's in-flight LTPP awards given her overall long-term strong performance and contribution to the business. Nicola's awards under the 2020 LTPP will be pro-rated for completed months held since the award date until 30 April 2022. These awards will vest at the same time as other participants, subject to performance measured at the vesting date and any discretion the Committee may decide to exercise at the time of vesting, in line with our Directors' Remuneration Policy. These shares will be subject to the two-year post-vesting holding requirement and post-employment shareholding requirement.

There have been no payments made to past Directors during 2021/22.

External appointments and retention of fees

Experience as a board member of another company is considered to be valuable personal development, which in turn is of benefit to the Company. The table below details the Executive Director (at 31 March 2022) who served as non-executive director in other companies during the year ended 31 March 2022:

	Company	Retained fees
John Pettigrew	Rentokil Initial plc	£70,000

Role of Remuneration Committee

The Committee is responsible for recommending to the Board the Remuneration Policy for the Executive Directors, the other members of the Group Executive Committee and the Chair, and for implementing this Policy. The aim is to align the Remuneration Policy to the Company strategy and key business objectives, and ensure it reflects our shareholders', customers' and regulators' interests. The Committee receives input on Policy implementation within the wider workforce before reaching decisions on matters such as salary increases and annual incentive payouts and closely reviews the appropriateness of pay positioning by reference to external measures (benchmarking remuneration packages) and internal review of Company performance and pay gaps (CEO pay ratios, gender and ethnicity pay gaps) and from this year, the relativity year-on-year of salary, benefits and annual performance incentives compared with the same for the rest of the workforce.

- **Clarity:** we identify and communicate a range of performance measures in our incentives which clearly link to the successful execution of the Company's strategy.
- **Simplicity:** elements of our remuneration framework and their purpose are clearly articulated within our market-standard Remuneration Policy and we believe this is understood by all our stakeholders.
- **Risk:** risk is managed in a number of ways and evidenced through our Remuneration Policy, for example: setting maximum levels for incentive plans; implementing measures that are aligned to Company performance and shareholder interests; focusing on the long term and creating value through the LTPP; reviewing formulaic outcomes; malus and clawback provisions; and having a high shareholding requirement for senior executives.
- **Predictability:** full information on the potential values which could be earned are disclosed; our policy outlines threshold, target and maximum opportunity with varying actual incentive outcomes dependent on performance; and all the checks and balances set out above under Risk are disclosed as part of the Remuneration Policy.
- **Proportionality:** whilst incentive plans reward executives' performance in successfully delivering the business strategy, there is also a focus on sustaining this through holding periods that apply to vested shares and annual incentives paid out as shares; all executives are also subject to significant shareholding and post-employment shareholding requirements. The policy does not reward poor performance and the range of potential payouts under the Policy is appropriate.
- **Alignment to culture and strategy:** our culture recognises that how we do things is as vital as what we do and this is reflected in the type of performance conditions used in our incentive plans. Both the measures themselves and the targets set aim to reinforce this approach.

Our policy has operated as intended in terms of Company performance and quantum; a review of key considerations and decisions pertaining to its implementation is provided in the Committee Chair's statement.

The Committee's activities in 2021/22

Meeting/circulations	Main areas of discussion
April	Discussion on 2020/21 expected incentive plan outcomes (APP and outstanding LTPP) for the Group Executive Committee 2020/21 APP individual objective scoring for the Group Executive Committee Discussion on the 2021/22 APP financial and operational measures and LTPP 2021 award for the Group Executive Committee Discussion on the 2021/22 APP strategic objectives for the Group Executive Committee Market data review and base salary increase proposals for the Group Executive Committee
May	Approval of 2020/21 APP and 2018 LTPP outcomes for the Group Executive Committee Approval of pay decisions for the Group Executive Committee Review and approval of Chair fees Approval of the 2021/22 APP strategic objectives for the Group Executive Committee Approval of LTPP plan rules Items related to Executive Director leaver arrangements and WPD senior management team remuneration arrangements
July	Approval of 2021/22 APP targets (financial and operational) and 2018 LTPP vesting Debrief of AGM season, remuneration trends and initial discussion for 2022 Remuneration Policy
August*	Items related to new Group Executive Committee appointment
October	Approval of 2021 LTPP targets
November	Approval of the revision to 2021/22 APP targets to incorporate transactions impact Performance update on incentive plans (APP and outstanding LTPP) Items related to various Group Executive Committee members' (i) leaving arrangements, and (ii) remuneration arrangements Approval of 2021/22 Sharesave plan Review of gender and ethnicity pay gaps
January	Provisional approval 2022 Remuneration Policy; approval of the consultation plan Items related to various Group Executive Committee members' (i) leaving arrangements (ii) remuneration arrangements (iii) incentive plan outcomes, and (iv) forward looking objectives
February*	Review of shareholder letter on proposed Remuneration Policy
March	AGM season debrief and discussion on feedback from shareholder consultation on 2022 Remuneration Policy Discussion on 2021/22 expected incentive plan outcomes (APP and outstanding LTPP) for the Group Executive Committee 2021/22 APP individual objective scoring for the Group Executive Committee Discussion on the 2022/23 APP financial and operational measures and LTPP 2022 award for the Group Executive Committee Discussion on the 2022/23 APP strategic objectives for the Group Executive Committee Market data review and base salary increase proposals for the Group Executive Committee Approval of proposed amends to Employee Share Schemes Sub-Committee Terms of Reference

* By circulation.

Advisors to the Remuneration Committee

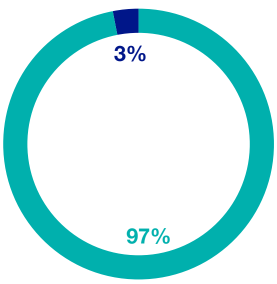
PricewaterhouseCoopers LLP (PwC) was selected by the Committee to become its independent advisor from 3 August 2020 and provided advice and counsel to the Committee throughout the 2021/22 financial year. PwC is member of the Remuneration Consultants Group (RCG) and have signed up to RCG's code of conduct. The Committee is satisfied that any potential conflicts were appropriately managed. Work undertaken by PwC in its role as independent advisor to the Committee, has incurred fees of £243,500 on the basis of time charged to perform services and deliverables.

The Committee reviews the objectivity and independence of the advice it receives from its advisors each year. It is satisfied that PwC provided credible and professional advice. PwC has provided general and technical remuneration services in relation to employees below Board and Group Executive Committee level that include broad-based employee reward support and data assurance services. In addition, Willis Towers Watson (WTW) provided benchmarking support to the Committee in the year and incurred fees of £15,600.

The Committee considers the views of the Chair on the performance and remuneration of the CEO, and of the CEO on the performance and remuneration of the other members of the Group Executive Committee. The Committee is also supported by the Group General Counsel & Company Secretary, who acts as Secretary to the Committee; the Chief People & Culture Officer; the Group Head of Reward; and, as required, the CFO, the Group Head of Pensions and Group Financial Controller.

Voting on Directors' Remuneration Policy and the Directors' Remuneration Report

Directors' Remuneration Policy adopted at the 2019 AGM



Directors' Remuneration Report 2020/21

Note:
The Directors' Remuneration Policy voting figures shown refer to votes cast at the 2019 AGM and represent 64.66% of the voting share capital.
The Directors' Remuneration Report voting figures shown refer to votes cast at the 2021 AGM (in respect of the 2019 remuneration policy adopted at the 2019 AGM) and represent 66.73% of the voting share capital.

2022 Directors' Remuneration Policy

Our Remuneration strategy sets out to ensure strong alignment with our strategic priorities and creation of value for shareholders whilst providing market competitive remuneration to enable the attraction and retention of top leadership talent. Our existing Policy (adopted in 2019) continues to function well, providing remuneration outcomes well aligned to Company performance and our shareholders' experience. As such, the 2022 Policy, effective July 2022 subject to shareholder approval, incorporates modest refinements to reflect the importance of the Company's responsible business strategy and ESG goals in both the short and long-term and the increasingly dynamic external context which advantages greater agility and flexibility. We have engaged widely with shareholders and proxy advisory service organisations and are grateful for the engagement, feedback, and positive support on our Policy proposals. The Committee is committed to maintaining an open dialogue and members remain available to answer questions throughout the AGM process and forthcoming year ahead on our 2022 Directors' Remuneration Policy as outlined below.

Policy tables – Executive Directors

Element	Operation	Maximum levels	Performance assessment
Salary Purpose and link to business strategy: to attract, motivate and retain high-calibre individuals.	Salaries are generally reviewed annually and are targeted broadly at the mid-market of our peer group. However, a number of other factors are also taken into account: • business performance and individual contribution; • the individual's skills and experience; • scope of the role, including any changes in responsibility; • market data, including base pay and total remuneration; and • opportunity in the relevant comparator group.	No prescribed maximum annual increase although increases are generally aligned to or below salary increases received by other Company employees and to market movements. Increases in excess of this may be made at the Committee's discretion in circumstances such as a significant change in responsibility, progression if more recently appointed in the role and alignment to mid-market levels.	Not applicable.
Benefits Purpose and link to business strategy: to provide competitive and cost effective benefits to attract and retain high-calibre individuals.	Benefits currently provided include: • company car or a cash alternative (UK only); • use of a car and driver when required; • private medical insurance; • life assurance; • personal accident insurance (UK only); • opportunity to purchase additional benefits (including personal accident insurance for US) under flexible benefits schemes available to all employees; and • opportunity to participate in HMRC (UK) or Internal Revenue Service (US) tax-advantaged all-employee share plans. UK Sharesave: Monthly contributions from net salary for a period of three or five years. The savings can be used to purchase shares at a discounted price set at the launch of each plan period. Share Incentive Plan: UK employees may use gross salary to purchase shares. These shares are placed in trust. Employee Stock Purchase Plan (ESPP) (423(b) plan): eligible US employees may purchase ADSs on a monthly basis at a discounted price. Other benefits may be offered at the discretion of the Committee. In circumstances where an Executive Director is located outside of the UK, benefits will be set such that they are competitive in the local market.	The cost of providing benefits will vary from year to year in line with market. Participation in tax-advantaged all-employee share plans is subject to limits set by relevant tax authorities.	Not applicable.
Pension Purpose and link to business strategy: to reward sustained contribution and assist in attraction and retention.	Externally hired Executive Directors may participate in a DC arrangement or alternatively choose to receive cash in lieu. In cases of internal promotion to the Board, the Company will recognise legacy DB pension arrangements of existing employees in both the UK and US where these have been provided under an existing arrangement. In line with market practice, pensionable pay for UK-based Executive Directors includes base salary only and for US-based Executive Directors it includes base salary and APP awards.	**UK Directors**: DC: annual contributions for new appointments and existing Executive Directors of up to 12% of base salary. Executive Directors may take a full or partial cash supplement in lieu. Life assurance of four times base salary and a dependant's pension of one third of basic salary is provided. Executives with HMRC pension protection may be offered lump sum life assurance only, equal to four times base salary. **US Directors:** DC contributions of up to 9% of basic salary plus APP award with additional 401(k) plan match up to 4%. DB: no additional DB entitlements will be earned over the financial years from the date of appointment, other than an increase for price inflation due under the pension scheme rules and legislation. Under the terms of the pension scheme, if the Executive Director satisfies the ill-health requirements, or is made redundant, a pension may be payable earlier than the normal retirement date. A lump sum death in service benefit is also provided in respect of these DB entitlements.	Not applicable. None of the current Executive Directors are active members of a defined benefit plan.

Element	Operation	Maximum levels	Performance assessment
Annual Performance Plan Purpose and link to business strategy: to incentivise and reward the achievement of annual financial measures and strategic non-financial measures including the delivery of annual individual objectives and demonstration of our Company leadership qualities and values.	The APP comprises reward for achievement against financial and non-financial measures and achievement against individual objectives. Financial and non-financial performance measures and targets are normally agreed at the start of each financial year and are aligned with strategic business priorities. Targets are set with reference to the business plan and strategy. Individual objectives and associated targets are normally agreed also at the start of the year. APP awards are paid in June. At least 50% of the APP award is paid in shares, which (after any sales to pay associated income tax) must be retained until the shareholding requirement is met, and in any event for two years after receipt. Awards are subject to malus and clawback provisions.	The maximum award is 125% of base salary in respect of a financial year. The payout levels at threshold, target and stretch performance levels are 0%, 50% and 100%, respectively. In exceptional circumstances, (such as the recruitment of an Executive Director), the Committee has the flexibility to award up to an additional 50% of base salary as incentives and this can be applied across the APP and or LTPP in any given year but for one year only. Therefore, in exceptional circumstances, the annual maximum award opportunity under the annual bonus can be up to 175% of base salary assuming all 50% of the exceptional max is used and allocated to APP.	At least 50% of the APP is based on performance against financial measures. The Committee may use its discretion to set financial and non-financial measures that it considers appropriate in each year. Notwithstanding the level of award achieved, the Committee has the discretion to modify the formulaic amount payable, to reflect wider financial and business performance, demonstration of leadership qualities and our values, or to take account of a significant event.
Long-Term Performance Plan Purpose and link to business strategy: to drive long-term business performance, aligning Executive Director incentives to key strategic objectives and shareholder interests over the longer term.	Awards of shares may be granted each year, with vesting subject to long-term performance conditions. The performance measures which are chosen are those that the Committee believes reflect the creation of long-term value within the business. Targets are set for each award with reference to the business plan and strategy. Participants may receive ordinary dividend equivalent shares on vested shares, from the time the award was made, at the discretion of the Committee. Participants must retain vested shares (after any sales to pay associated income tax) until the shareholding requirement is met, and in any event for a further two years after vesting. Awards are subject to malus and clawback provisions.	The normal annual maximum award limits that may be granted are 350% of salary for the CEO and 300% of salary for other Executive Directors. For each performance measure, threshold performance will trigger up to 20% of the award to vest; 100% will vest if maximum performance is attained. In exceptional circumstances (such as the recruitment of an Executive Director), the Committee has the flexibility to award up to an additional 50% of base salary as incentives and this can be applied across the APP or the LTPP in any given year but for one year only. Therefore, in exceptional circumstances, the annual maximum award opportunity can be up to 400% of base salary for a CEO role and 350% of salary for other Executive Directors assuming all 50% of the exceptional max is used and allocated to LTPP.	The Committee will review performance measures for each award cycle prior to grant to ensure continued alignment with the Company's strategy. As such, different performance measures, targets and/or weightings may be set to reflect the business strategy and the regulatory framework operating at that time. Awards have a three-year performance period followed by a two-year holding period post-vesting. Notwithstanding the level of award achieved, the Committee has the discretion to modify the formulaic amount vesting, to reflect wider financial and business performance, demonstration of leadership qualities and our values, or to take account of a significant event.

Malus and clawback
The Committee has discretion to determine whether exceptional circumstances exist which justify whether any or all of an award should be forfeited, even if already paid. Examples of exceptional circumstances include, but are not limited to:

- discovery of a material misstatement resulting in an adjustment in the audited accounts of the Company or any Group company;
- the assessment of any performance condition, or condition in respect of a payment or award under the APP or LTPP, that was based on error, inaccurate or misleading information;
- the discovery that any information used to determine the APP or LTPP award was based on error, inaccurate or misleading information;
- action or conduct of a participant which amounts to fraud or gross misconduct;
- event or behaviour of a participant leading to the censure of the Company by a regulatory authority or has had a significant detrimental impact on the reputation of any Group company, provided that the Board is satisfied that the relevant participant was responsible for the censure or reputational damage and that the censure or reputational damage is attributable to the participant; and
- a material failure or risk management and/or corporate failure.

Where the Committee in its absolute discretion determines that exceptional circumstances exist that justify doing so:

- in respect of all or part of an award that has yet to be paid or vested ('malus'), as applicable, the Committee may determine the award, or part of it, will be forfeited; and
- in respect of all or part of an award that has been paid or has vested ('clawback'), as applicable, the Committee may determine the award, or part of it, will be forfeited and may reclaim an amount considered appropriate through means deemed appropriate to those specific circumstances.

APP – cash	Malus applies in the year the bonus is earned and clawback for two years thereafter
APP – deferred shares	Malus applies until the end of two years following the financial year in which the bonus is earned and clawback for two years thereafter
LTPP	Malus applies up to vesting and clawback during the two-year holding period

Shareholding requirement – in employment

The requirement of Executive Directors to build up and hold a significant value of National Grid shares ensures they share a significant level of risk with shareholders and aims to align their interests. Executive Directors are required to build up and retain shares in the Company. The level of holding required is 500% of salary for the CEO and 400% of salary for the other Executive Directors. Unless the shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Committee.

Shareholding requirement – post employment

The requirement of Executive Directors to continue to hold National Grid shares after leaving ensures they continue to share a risk with shareholders and maintain alignment with shareholders' interests. Executive Directors will be required to hold 200% of base salary calculated at their leaving date, or maintain their actual holding percentage if lower, expressed as a number of shares and held for a period of two years. This calculation excludes the value of any awards not yet vested for 'good leavers' that will vest according to the normal schedule and which in any event must be held for a two-year period. The calculation will include recently vested LTPP awards or APP awards paid as shares which are subject to respective two-year holding periods, even after employment.

Until the post-employment shareholding requirement is met, Executive Directors will not be permitted to sell shares, other than to pay income tax liabilities on shares just vested or in exceptional circumstances approved by the Committee.

Our peer group

The Committee reviews its Remuneration Policy against appropriate peer groups annually to make sure we remain competitive in the relevant markets. The primary focus for reward market comparisons is currently the FTSE 11 – 40 for UK-based Executive Directors and US general industry and US energy services companies with similar levels of revenue for US-based Executive Directors. These peer groups are considered appropriate for a large, complex, international and predominantly regulated business. The Committee may amend the peer group and reference other peer groups as deemed appropriate.

Policy tables – Non-executive Directors (NEDs)

Element	Operation	Maximum levels	Performance metrics, weighting and time period applicable
Fees for NEDs Purpose and link to business strategy: to attract NEDs who have a broad range of experience and skills to oversee the implementation of our strategy	NED fees (excluding those of the Chair) are set by the Group Executive Committee in conjunction with the Chair. The Chair fees are set by the Committee. Fee structure: • Chair fee (all inclusive); • basic fee; • Committee chair fee; • Committee membership fee; • Senior Independent Director fee; and • additional Board responsibilities. Fees are reviewed every year taking into account those in companies of similar scale and complexity. The Chair is eligible to receive benefits as deemed appropriate and necessary in respect of the role, which may include, for example, private medical and personal accident cover, the use of a company car and driver, and financial advice. NEDs do not participate in incentives, pension or any other benefits. However, they are eligible for reimbursement for all Company-related travel expenses. In instances where these costs are treated by HMRC as taxable benefits, the Company also meets the associated tax cost to the Non-executive Directors through a PAYE settlement agreement with HMRC. NEDs who also sit on National Grid subsidiary boards may receive additional fees related to service on those boards.	There are no prescribed maximum fee levels although fee increases are generally aligned to salary increases received by other Company employees and market movement for NEDs of companies of similar scale and complexity. The cost of benefits provided to the Chair is not subject to a predetermined maximum since the purchase cost will vary from year to year.	Not applicable.

Legacy arrangements

For the avoidance of doubt, the Committee may approve payments to satisfy commitments agreed prior to the approval of this Remuneration Policy, for example, those outstanding and unvested incentive awards which have been disclosed to shareholders in previous Remuneration Reports and any commitment made to a person before that person became an Executive Director.

Operation of the policy

The Committee reviews annually the overall appropriateness and relevance of the Remuneration Policy and whether any changes should be put to shareholders. Decisions on the measures and targets for performance-related pay (APP and LTPP) and payouts are made taking account of overall financial and business performance. A member of the Audit & Risk Committee is required to be a member of the Committee and this ensures the Committee receives knowledgeable input on setting financial measures and assessing outturns including any adjustments and judgements considered by the Audit & Risk Committee. The Committee also works closely with the People & Governance Committee in respect of pay and conditions of newly appointed Directors to ensure their remuneration is within Policy. The Committee will also link in with the Employee Share Schemes Sub-Committee as required. Consistent with the UK Corporate Governance Code, members of the Remuneration Committee are independent Non-executive Directors who do not receive any variable remuneration and do not participate in decisions about their own remuneration.

Other features of the Remuneration Policy

Policy on recruitment remuneration

Salaries for new Executive Directors appointed to the Board will be set in accordance with the terms of the approved Remuneration Policy in force at the time of appointment, and in particular will take account the appointee's skills, experience and the scope and assessment of the market rate for the role.

Where appropriate, salaries may be set below market level initially, with the Committee retaining discretion to award increases in salary in excess of the wider workforce and inflation to progressively bring the salary up to the market level over time, where this is justified by individual and Company performance. Any such increases will be disclosed accordingly, along with a supporting rationale where appropriate.

Benefits consistent with those offered to other Executive Directors under the approved Remuneration Policy in force at the time of appointment will be offered, taking account of local market practice. The Committee may also agree that the Company will meet certain recruitment costs, for example legal fees, certain relocation expenses or provide tax equalisation as appropriate.

Pension contributions for new Executive Directors appointed to the Board will be set in accordance with the terms of the approved Remuneration Policy in force at the time of appointment.

Ongoing incentive pay (APP and LTPP) for new Executive Directors will be in accordance with the approved Remuneration Policy in force at the time of appointment. This means the normal maximum APP award in any year would be 125% of salary and the normal maximum LTPP award would be 350% of salary for the CEO and 300% of salary for other Executive Directors. In exceptional recruitment circumstances, the Committee has the flexibility to award up to an additional 50% of basic salary as incentive pay and this can be applied across the APP/LTPP in any given year but for one year only. The total maximum variable pay in any year will be 525%, excluding any buyout awards.

For an externally appointed Executive Director, the Company may offer additional cash or share-based payments that it considers necessary to buy out current entitlements from the former employer that will be lost on recruitment to National Grid. Any such arrangements would, so far as practicable, reflect the delivery mechanisms, time horizons and levels of conditionality of the remuneration lost. In order to facilitate buy-out arrangements, existing incentive arrangements will be used to the extent possible, although awards may also be granted outside of these shareholder-approved schemes if necessary and as permitted under the Listing Rules.

For an internally appointed Executive Director, any outstanding APP awards will be determined according to the original terms but paid at the end of the year. Any outstanding LTPP awards will be paid according to the original terms.

Fees for a new Chair or Non-executive Director will be set in line with the approved Policy in force at the time of appointment.

Service contracts/letters of appointment

In line with our Policy, all Executive Directors have service contracts which are terminable by either party with 12 months' notice commencing immediately after announcement. Non-executive Directors are subject to letters of appointment. The Board Chair's appointment is subject to six months' notice by either party; for other Non-executive Directors, notice is one month. Both Executive Directors and Non-executive Directors are required to be re-elected at each AGM.

Examples of circumstances which could trigger 'good leaver' treatment include: redundancy, retirement, illness, injury, disability and death. In these circumstances, awards will be released to the departing Executive Director or, in the case of death, to their estate. Long-term share plan awards held by 'good leavers' will normally vest, subject to performance measured at the normal vesting date and be reduced pro-rata for completed time of service starting on the date of grant, as per the plan rules. Such awards would vest at the same time as for other participants, apart from circumstances in which the award recipient has died, in which case the awards may vest as soon as practicable (based on a forecast of performance).

At the Committee's discretion, the Company may also agree other payments such as an agreed amount for legal fees associated with the departure of the Executive Director and outplacement support.

No compensation would be paid for loss of office of Directors on a change of control of the Company.

No compensation is payable to the Chair or Non-executive Directors if they are required to stand down or are not re-elected at the AGM.

Copies of Directors' service contracts and letters of appointment are available for inspection at the Company's registered office.

Policy on payment for loss of office

The contracts contain provisions for payment in lieu of notice, at the sole and absolute discretion of the Company. Such contractual payments are limited to payment of salary only for the remainder of the notice period. In the UK, such payments would usually be phased on a monthly basis, over a period not greater than 12 months, and the Executive Director would be expected to mitigate any losses where employment is taken up during the notice period. In the US, for tax compliance purposes, the policy is to make any payment in lieu of notice as soon as reasonably practicable, and in any event within two and a half months of the later of 31 December and 31 March immediately following the notice date.

In the event of a UK Director's role becoming redundant, statutory compensation would apply and the relevant pension plan rules may result in the early payment of an unreduced pension. On termination of employment, no APP award would generally be payable. However, the Committee has the discretion to deem an individual to be a 'good leaver', in which case a pro-rata discretionary payment could be paid, based on performance (as measured at the end of the financial year) and the achievement of individual objectives during the financial year up to termination.

In the UK, any discretionary payment would generally be paid at the normal time. In the US the payment may be made earlier if required for tax compliance purposes, in which case the Committee would apply discretion to determine an appropriate level of financial performance. Examples of circumstances which could trigger 'good leaver' treatment include redundancy, retirement, illness, injury, disability and death. The Committee may apply discretion to determine if any pro-rata discretionary payment should be made sooner than it would normally be paid, for example, in the case of death.

On termination of employment, outstanding awards under the share plans will be treated in accordance with the relevant plan rules approved by shareholders. Unvested share awards would normally lapse. 'Good leaver' provisions apply at the Committee's discretion and in specified circumstances.

External appointments

Executive Directors may, with the approval of the Board, accept one external appointment as a Non-executive Director of another company and retain any fees received for the appointment. Experience as a board member of another company is considered to be valuable personal development, which in turn is of benefit to the Company.

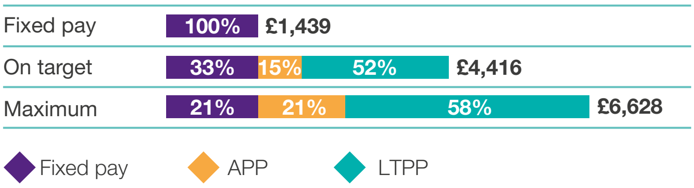
Corporate and share capital events

The Group's employee share plans (including the LTPP) contain standard provisions that allow awards (and where relevant their exercise prices) to be adjusted, or in some cases vest or be exchanged, on the occurrence of a corporate or share capital event such as a capitalisation or rights issue, sub-division, consolidation or reduction of share capital, demerger, special dividend or distribution, listing or change of control, normally at the discretion of the Committee.

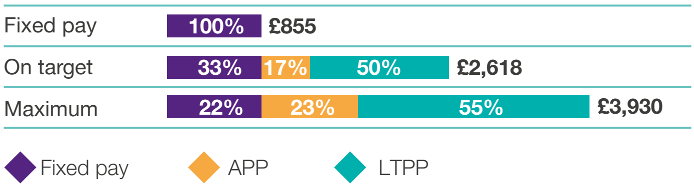
Total remuneration opportunity

The total remuneration for each of the Executive Directors that could result from the 2022 Remuneration Policy under three different performance levels (below threshold, when only fixed pay is receivable, on target and maximum) is shown below. The maximum receivable assuming 50% share price growth (or a reduction) in LTPP awards over a three-year performance period, and the basis for this calculation, is set out in the notes below.

John Pettigrew



Andy Agg



Notes:

1. Fixed pay consists of salary, pension and benefits in kind as provided under the Remuneration Policy. Salary is that to be paid in 2022/23, taking account of the increases that will be effective from 1 July 2022 as shown on page 129. Benefits in kind and pension are as shown in the Single Total Figure of Remuneration table for 2021/22 on page 114.
2. APP calculations are based on 125% of salary for the period 1 April 2022 to 31 March 2023. APP payout is 0% for threshold performance, 50% for on-target performance and the maximum of 100% is for achieving stretch.
3. LTPP calculations are based on awards with a face value of 350% of 1 July 2022 salary for John Pettigrew and 300% of 1 July 2022 salary for Andy Agg. LTPP payout is 20% for threshold performance and the maximum of 100% is for achieving stretch and straight line vesting between. Excludes changes in share price and dividend equivalents.
4. For LTPP calculations, assuming either a 50% share price growth (or reduction) over the three-year performance period, the increase (or decrease) in LTPP value and maximum total compensation for each of the Executive Directors would be (all amounts expressed as £'000):
   - John Pettigrew: LTI value would increase (or decrease) from £3,824 to £5,736 (or £1,912) and maximum total compensation would rise (or reduce) from £6,628 to £8,540 (or £4,716) respectively
   - Andy Agg: LTI value would increase (or decrease) from £2,157 to £3,236 (or £1,079) and maximum total compensation would rise (or reduce) from £3,930 to £5,008 (or £2,809) respectively.

Consideration of remuneration policy elsewhere in the Company

The design and implementation of executive remuneration takes into consideration the wider workforce context and remuneration strategy to ensure they are mutually reinforcing. Our executive Remuneration Policy is well aligned to policies for our non-unionised workforce, and the Committee actively considers employee feedback and views on executive pay. The Company issues an employee engagement survey each year, which includes remuneration as a topic, and regularly engages with employees on a variety of topics including remuneration to ensure employees have an opportunity to share their feedback and views.

All employees are entitled to base salary, benefits, and pension contributions. The approach to assessing salaries, benefits, pensions and other elements of remuneration is consistent across the Group with an objective to ensure they remain competitive at relevant mid-market levels for all job bands/roles, including roles that are subject to union negotiation. We are pleased to report that National Grid continues to be accredited by the Living Wage Foundation as a real Living Wage employer for our UK businesses (excluding the recent acquisition of WPD). Further plans and efforts are underway to achieve equivalent accreditations for WPD and the rest of our global businesses in the US.

Middle to senior leaders are eligible to participate in our long-term incentive plans either through performance share awards or restricted share awards (under the LTPP) to incentivise and reward their individual contributions toward the Company's longer-term strategic priorities. Performance measures for the LTPP are consistent with measures set for Executive Directors to ensure strong alignment and focus on the Company's strategic goals.

Across the wider workforce, a greater emphasis and focus is placed on delivery of the Company's annual operational and financial business plans. As such, the majority of employees are eligible to participate in the APP. Performance measures for annual incentives are cascaded through the organisation and designed to ensure they incentive elements of business performance within an individual's control and are aligned to employee's annual goals. All Company employees are encouraged to become shareholders through a number of all-employee share plans and a significant proportion of our employees participate annually. These plans include Sharesave and the SIP in the UK and the 401(k) and 423(b) plans in the US which are summarised on page 124.

Implementation of the Remuneration Policy for 2022/23

The Remuneration Policy to be adopted at the 2022 AGM, subject to shareholder approval, will be implemented during 2022/23 as outlined below:

Salary and pensions

Salary increases will normally be in line with the increase awarded to other employees in the UK and the US, subject to performance. Higher salary increases may also be awarded for a change in responsibility. Additionally, in line with the Policy on recruitment remuneration, salaries for new directors may be set below market level initially and aligned to market level over time (provided the increase is merited by the individual's contribution and performance).

As explained in the Chair's statement, for 2022 a salary increase of 3.75% for John Pettigrew and 6.5% for Andy Agg will be awarded, effective from 1 July 2022.

	From 1 July 2022	From 1 July 2021	% increase
John Pettigrew	£1,092,500	£1,053,000	3.75%
Andy Agg	£719,000	£675,000	6.5%

The pension contribution for new and existing Executive Directors has been set to 12% effective 1 April 2022, in line with pension contribution rates for the UK wider workforce.

2022/23 Annual Performance Plan

The 2022/23 APP measures will be split across financial measures, operational measures and individual objectives, weighted 70%, 15% and 15% respectively. The increase in the financial element of the APP this year reflects a balancing of operational measures which total 15% (versus 20% in 2021/22) and individual objectives which total 15% (versus 20% in 2021/22). The maximum APP award for both the Executive Directors for 2022/23 is 125% of basic salary, in line with the Policy, subject to shareholder approval.

	Measure	Weighting
Financial measures	Underlying EPS	35%
	Group RoE	35%
Operational measures	Customers: Group Customer Satisfaction Index	5%
	Colleagues: Group Having a Voice Index	5%
	Diversity, Equity, and Inclusion: % Diversity of Strategic Leadership Group (top ~110 leaders)	5%
Individual objectives		15%

Financial measures

Underlying EPS and Group RoE have been retained as financial measures in the 2022/23 APP. In both measures for remuneration purposes, the part year contributions of UK Gas Transmission are included in the performance targets. Group RoE remains a relevant and key measure of performance as a primarily regulated asset-based company. In the short-term (APP), Group RoE targets are set to ensure strong in year returns and operational results. An 'annual profit' measure in the APP also remains key, given in particular the importance of regulated earnings to the business strategy. Underlying EPS is a well-understood and established measure internally and externally, and as such remains the most appropriate APP earnings measure for the business. Similar to Group RoE, annual target setting considers specific challenges and opportunities in the year ahead and is flexed accordingly whilst remaining consistent with our longer-term performance goals. Financial APP targets are considered commercially sensitive and consequently will be disclosed in the 2022/23 Directors' Remuneration Report.

Operational measures

The 2022/23 APP operational measures are designed to incentivise key annual priorities aligned to the Company's strategy as a responsible business and broader ESG goals and are weighted equally across three key measures focused on customers, colleagues and DEI. Operational measures will continue to be assessed on a four-point scale (not met, partially achieved, achieved and over-achieved) based on quantifiable targets and qualitative outcomes to reflect a balanced assessment of performance.

The Group Customer Satisfaction Index is an equally weighted index of quantifiable and predominantly externally measured customer satisfaction scores/ measures across each of the Company's business units. The inclusion of a customer measure in the APP reflects the strategic importance and focus on delivering excellent service and business outcomes for customers. The colleague 'Having a Voice' measure is a quantitative Group wide index from our annual Company-wide employee survey of more than 30,000 colleagues. The index measures the level of transparency and cultural openness in the organisation – a key area of focus for us. Specifically, the year ahead will maintain a strong focus on embedding the Company's purpose, values, and culture as part of the deeper integration of WPD as well as continue to evolve the culture and ways of working across the Group. The diversity measure is a quantifiable target for the level of diversity in the strategic leadership group (SLG ~ top 110) in line with a key strategic priority to build a strong, diverse, and inclusive strategic leadership team and pipeline of talent to support the delivery of the Company's strategy.

Individual objectives

The Committee has approved individual objectives for the Executive Directors in line with key strategic and operational priorities for the year ahead. John Pettigrew's individual objectives for 2022/23 are focused on: 1) delivery of the enterprise-wide transformation; 2) execution of the Company and Board's strategic blueprint; and 3) development and progression of a diverse, inclusive, strategic leadership group talent and capabilities. Andy Agg's annual performance objectives are focused on: 1) management of the portfolio repositioning, credit strategy, and investor sentiment; 2) achievement of key regulatory outcomes (ED2) and performance; and 3) progression of the Finance function's transformation and talent agenda.

How our Remuneration Policy will be implemented in 2022/23

2022 Long Term Performance Plan

The 2022 LTPP performance measures and weightings for all Executive Directors comprise two equally weighted financial measures totalling 80% and two equally weighted net zero transition measures with a combined weighting of 20% as outlined in the table below. The maximum 2022 LTPP award is 350% and 300% of base salary for John Pettigrew and Andy Agg respectively, in line with the proposed Policy, subject to shareholder approval.

LTPP targets and performance are measured over the entire three-year performance period, which for the 2022 LTPP is 1 April 2022 – 31 March 2025. Subject to approval by the shareholders at the 2022 AGM, the 2022 Remuneration Policy and the LTPP plan rules (approved at the July 2021 AGM that reflect updates to align to market practice and good governance, in particular for malus and clawback provisions) would apply to the 2022 LTPP awards.

	Measure	Weighting
Financial measures	Cumulative three-year Underlying EPS A	40%
	Group RoE A	40%
Net zero transition measures	National Grid Scope 1 emissions	10%
	Enablement of net zero transition: Strategic initiatives (Scope 2 and 3)	10%

A **Denotes an 'alternative performance measure' as described on pages 268 – 279**

Financial measures

LTPP financial measures are selected to reflect key drivers of the Company's longer-term strategy and value creation for shareholders. Given the primarily regulated and long-term nature of our businesses, earnings growth and sustainable investment returns are important measures of long-term shareholder value creation. Whilst we recognise our short-term (APP) and long-term (LTPP) financial measures are similar, we believe these are the right measures to support delivery of the business strategy and the resultant creation of shareholder value. The combination of annual and long-term earnings and returns measures act together to incentivise strong operational delivery in a year, and long-term efficient asset growth and a sustainable dividend. As such, the 2022 LTPP financial measures are designed to incentivise different elements of performance over the long term as compared to the short term. Specifically in LTPP, Group RoE is averaged across the three-year performance period with targets set to ensure the company delivers sustainable performance for shareholders. Similarly, the Underlying EPS measure is a cumulative measure that sums Underlying EPS for the three years in the LTPP performance period and sets out to incentivise sustainable long-term earnings growth and value creation for shareholders. As such, LTPP Underlying EPS targets have been set in line with the Company's five-year investor frame with target performance aligned to the top end of the range. The LTPP Underlying EPS measure will not be subject to the technical adjustments made in annual Group EPS measure.

Below are the performance ranges for the financial measures in the 2022 LTPP. The targets have been set in consideration of the forthcoming RIIO-ED2 final determination, the portfolio transactions and the Company's forward Strategic Business Plan.

Financial performance measures	Weighting	Threshold 20% vesting	Maximum 100% vesting
Cumulative 3 year Underlying Group EPS A	40%	199 p	217 p
Group RoE A	40%	9.50%	10.75%

Notes: Vesting between threshold and maximum will be on a straight-line basis. The calculation for the Group RoE measure will reflect the updated methodology from 2021/22 going forward as outlined on page 277 of the Annual Report. Targets assume UK Gas Transmission minority stake is treated as a discontinued operation from start of 2023/24. Underlying EPS growth reflects the cumulative summation of the Underlying EPS results for each of the three years in the performance period; 2022/23, 2023/24 and 2024/25.

Net zero transition measures

The net zero transition measures set out targets and outcomes to achieve 1) reductions in the Company's direct Scope 1 emissions and 2) enable the broader net zero energy transition to achieve reductions in Scope 2 and Scope 3 emissions through greater reliance on low carbon/renewable energy sources in line with goals set out in our RBC.

The reduction of Scope 1 emissions target is a cumulative measure aligned to meet the Company's 2030 goals and the SBTi (Science Based Target initiative) well below 2°C pathway. The Scope 1 reduction target excludes Long Island Power Authority (LIPA) generation asset emissions as management do not have direct control over decisions to run the assets. In recent years, LIPA operation has been well above predicted levels driven by regional factors including availability of local supply. Broader considerations and actions regarding the longer term for LIPA have been incorporated into the second measure as part of enabling the net zero transition.

Net zero transition measures	Weighting	Threshold 20% vesting	Maximum 100% vesting
Reduction of Scope 1 emissions	10%	-50 $ktCO_2e$	-117 $ktCO_2e$

Note: Target represents cumulative savings as measured against the 2022 Scope 1 emissions baseline. These targets include best current estimates of the addition of WPD and removal of the UK Gas Transmission and US Rhode Island businesses.

How our Remuneration Policy will be implemented in 2022/23

The second measure reflects National Grid's role in enabling the net zero transition to a carbon neutral future by 2050. This measure will assess delivery against key net zero strategic priorities and quantified outcomes that underpin the Company's strategy to enable a net zero future by 2050. There are four key areas of focus; 1) US energy-efficiency programmes and generation; 2) UK net zero transmission strategy including interconnectors and transmission investment to connect offshore wind; 3) US future of gas strategy including the transition to renewable natural gas (RNG), hydrogen, and hybrid/electrification of heat; and 4) low-carbon electricity distribution investment in line with government and regulatory plans. Assessment of this measure will be based on a four-point scale (not met, partially achieved, achieved and over-achieved) based on delivery of quantifiable and qualitative outcomes to reflect a balanced assessment of performance.

Fees for NEDs

Non-executive Director fees were reviewed mid-year in light of the Board Committee and membership changes to ensure alignment to the market and simplify the fee structure. The fee increases will be effective from 1 January 2022 and paid retrospectively as of 1 July 2022.

Role	From 1 January 2022 (£'000)	From 1 July 2021 (£'000)	% increase vs 2021
Chair	700.0	700.0	0.0%
Senior Independent Director	30.0	23.6	27.1%
Board fee	80.0	71.1 (UK based)	12.5%
		84.4 (US based)	-5.2%
Chair Audit & Risk Committee	31.9	31.9	0.0%
Chair Remuneration Committee	30.0	31.9	-6.0%
Chair other Committees (Finance, Safety & Sustainability)	25.0	24.4	2.5%
Audit & Risk Committee member	23.0	11.0	109.1%
Remuneration Committee member	18.0	11.0	63.6%
Other Committee member (Finance, Safety & Sustainability, People & Governance)	15.0	11.0	36.4%

Note: For the People & Governance Committee, no fees are paid for the Committee Chair, the Senior Independent Director or the Board Chair.

The Directors' Remuneration Report has been approved by the Board and signed on its behalf by:

Ian Livingston
Committee Chair
18 May 2022

Doing Right Now

Fairness and affordability

We are committed to delivering energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring no one is left behind in the short term due to increased energy prices, or in the longer-term transition to clean energy.

Financial Statements

Statement of Directors’ responsibilities

The Directors are responsible for preparing the Annual Report and Accounts, including the Group financial statements and the Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law, the Directors are required to prepare the Group financial statements in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards (IFRS) as adopted by the UK. The financial statements also comply with IFRS as issued by the IASB. In addition, the Directors have elected to prepare the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 ‘Reduced Disclosure Framework’. Under company law, the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group and Parent Company for that period.

In preparing the Group financial statements, International Accounting Standard 1 requires that Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity’s financial position and financial performance; and
- make an assessment of the Group’s ability to continue as a going concern.

In preparing the Parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Parent Company’s transactions and disclose with reasonable accuracy at any time the financial position of the Group and Parent Company on a consolidated and individual basis, and to enable them to ensure that the Group financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Parent Company and its subsidiaries and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the Company’s website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Having made the requisite enquiries, so far as the Directors in office at the date of the approval of this Report are aware, there is no relevant audit information of which the auditors are unaware and each Director has taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

Each of the Directors, whose names and functions are listed on pages 88 – 89, confirms that:

- to the best of their knowledge, the Group financial statements and the Parent Company financial statements, which have been prepared in accordance with IFRS as issued by the IASB and IFRS as adopted by the UK and UK GAAP FRS 101 respectively, give a true and fair view of the assets, liabilities, financial position and profit of the Company on a consolidated and individual basis;
- to the best of their knowledge, the Strategic Report contained in the Annual Report and Accounts includes a fair review of the development and performance of the business and the position of the Company on a consolidated and individual basis, together with a description of the principal risks and uncertainties that it faces; and
- they consider that the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provides the information necessary for shareholders to assess the Company’s position and performance, business model and strategy.

This Responsibilities Statement was approved by the Board and signed on its behalf.

Directors’ Report

The Directors’ Report, prepared in accordance with the requirements of the Companies Act 2006 and the UK Listing Authority’s Listing Rules, and Disclosure Rules and Transparency Rules, comprising pages 1 – 131 and 242 – 288, was approved by the Board and signed on its behalf.

Strategic Report

The Strategic Report, comprising pages 1 – 83, was approved by the Board and signed on its behalf.

By order of the Board

Justine Campbell
Group General Counsel & Company Secretary

18 May 2022

Company number: 04031152

Independent Auditor's Report to the members of National Grid plc

Report on the audit of the financial statements

1. Opinion

In our opinion:

- the financial statements of National Grid plc (the 'Parent Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 March 2022 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB);
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 *'Reduced Disclosure Framework'*; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

Group:

- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated statement of changes in equity;
- the consolidated statement of financial position;
- the consolidated cash flow statement; and
- the related notes 1 to 38 to the consolidated financial statements.

Parent Company:

- the Company accounting policies;
- the Company balance sheet;
- the Company statement of changes in equity; and
- the related notes 1 to 10 to the Company financial statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law, United Kingdom adopted international accounting standards and IFRS as issued by the IASB. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 'Reduced Disclosure Framework' (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group and Parent Company for the year are disclosed in note 4e to the consolidated financial statements and note 10 to the Company financial statements. We confirm that we have not provided any non-audit services that are prohibited by the FRC's Ethical Standard to the Group or the Parent Company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Materiality	The materiality that we used for the Group financial statements was £135 million which represents 4.9% of adjusted profit before tax (profit before tax from continuing operations, excluding the impact of reported exceptional items and remeasurements) and 4.1% of statutory profit before tax.
Scoping	Our scope covered eight components of the Group in addition to procedures performed at the Group level. Of these, five were subjected to a full-scope audit whilst the remaining three were subject to specific procedures on certain account balances. Our scoping covered 97% of the Group's revenue; 93% of the Group's profit before tax; and 98% of the Group's net assets.
Key audit matters	The key audit matters that we identified in the current year were: • Acquisition of Western Power Distribution (WPD) and impairment testing of the related WPD goodwill; and • Impact of climate change on property, plant and equipment. The following items were identified as key audit matters in the prior year but not in the current year: • 'Impact of COVID-19 including the recoverability of US trade and other receivables' has not been deemed to be a key audit matter this year as the impact is now well understood and there is a reduction in uncertainty. This reduces the impact on accounting judgements and on the way that we perform our audit; and • 'Treasury derivative transactions' has not been deemed a key audit matter this year. Although we continue to undertake a substantial amount of work to audit the Group's large Treasury function, there have been no significant matters identified in either the current or prior year, meaning we believe this can now be considered a more routine area of the audit. Following the acquisition of WPD during the year, we identified the acquisition accounting of WPD and the subsequent impairment testing of the goodwill recognised on acquisition as a key audit matter, given the size of the acquisition and the judgements applied by management in both the purchase price allocation (PPA) and the goodwill impairment testing.

4. Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Our evaluation of the Directors' assessment of the Group's and Parent Company's ability to continue to adopt the going concern basis of accounting included:

- assessing the financing facilities including the nature of facilities, repayment terms and covenants;
- enquiring of management regarding the assumptions used in the going concern model;
- testing the clerical accuracy and appropriateness of the model used to prepare the forecasts;
- assessing the assumptions used in the forecasts;
- assessing management's identified potential mitigating actions and the appropriateness of the inclusion of these in the going concern assessment;
- assessing the historical accuracy of forecasts prepared by management;
- reading analyst reports, industry data and other external information to determine if it provided corroborative or contradictory evidence in relation to assumptions used;
- reperforming management's sensitivity analysis; and
- evaluating the disclosures made within the financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill

Key audit matter description

Account balance: Property, plant and equipment (PPE), Other intangible assets, Borrowings and Goodwill. Refer to notes 1F, 11, 35 and 37 to the financial statements and the Audit & Risk Committee's discussion on pages 101 – 105.

Acquisition of WPD (referred to as 'UK Electricity Distribution')

The acquisition of WPD completed on 14 June 2021. The Competition and Markets Authority (CMA) issued an Initial Enforcement Order (IEO) which required the WPD group to continue to be run independently from National Grid until it had completed its reviews. The CMA reviews were completed on 1 September 2021, at which point the restrictions put in place by the IEO were removed. The IEO restrictions meant there was judgement regarding the point at which National Grid assumed control of WPD. Management concluded that, based on the evaluated evidence, they assumed control from 14 June 2021 and consolidated WPD from that date.

Management, with support from third-party experts, performed an exercise to fair value the assets and liabilities acquired at the date of acquisition. The key balance sheet items fair valued included:

- PPE valued at £10,051 million, which implied a step-down of £4,026 million relative to the book value acquired. This represents a combination of an accounting adjustment to remove deferred customer contributions and a fair value step-down;
- licence intangible assets of £1,714 million; attributed to the licences to operate for each of the distribution network operators (DNOs) acquired; and
- non-current borrowings of £7,556 million; an increase of £1,589 million on pre-acquisition book value.

The difference between the consideration paid (£7,881 million) and the net fair values of the identified assets and liabilities acquired (£3,160 million) is recorded as goodwill of £4,721 million. Management concluded this represents the future expected growth of the WPD business, expected synergies from combining the business with National Grid and the expertise of the management team acquired.

The most significant judgements related to the allocation of value between PPE, the acquired licence intangibles and the residual goodwill recorded.

The fair value of the PPE assets was determined based on cash flows related to the existing asset base, including estimates regarding future expected outperformance, maintenance and replacement expenditure and regulatory returns. Given there is no future cash inflow related to assets which were funded by customer contributions, this resulted in an accounting adjustment of £2,754 million.

The fair value of the licence intangible assets was determined based on discounting the incremental cash flows relating to the licence. These cash flows were calculated by subtracting the cash flows attributable to PPE and goodwill from the cash flows for the business as a whole. The licence cash flows are dependent on multiple key assumptions including future expected outperformance, synergies, capital expenditure and regulatory returns which are subject to a high degree of uncertainty.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill continued

Key audit matter description continued

In determining these fair values, management is required to make significant estimates and judgements including those relating to the forecasts of future cash flows, terminal value and selection of the discount rate. Performing audit procedures to evaluate the appropriateness of management's determination of the acquisition date and the reasonableness of these estimates and assumptions required a high degree of auditor judgement and an increased extent of effort, including the need to involve our fair value specialists.

WPD goodwill impairment

Following the finalisation of the PPA, the WPD goodwill balance of £4,721 million was tested for impairment in line with the requirement in IAS 36 to perform an impairment review annually, starting in the year of acquisition. Due to volatility caused by macroeconomic events in the last three months of this financial year, management tested goodwill as at 31 March 2022 but will revert to 31 December in future periods.

As set out in note 11 to the financial statements, management prepared a discounted cash flow model to estimate the value-in-use and compared this to the carrying value; this indicated there was headroom and accordingly no impairment was recognised. The value-in-use was measured at the group of cash-generating units (CGU) level and the calculation was derived from multiple inputs to the model.

We performed risk assessment procedures and identified three key assumptions:

- **Totex forecasts** – The model used for the impairment test leverages the cash flow forecasts from the fair value allocation exercise and extends to 2050. Management forecast negative cash flows for a number of years due to the level of investment required to reinforce the networks to meet expected electricity demand in order to achieve the Company's and the UK's target to become net zero by 2050. The future forecast expenditure is therefore dependent on the increased demand for low-carbon technologies ('LCTs') including electric vehicles (EVs) and heat pumps which will require more connections on the distribution network. Given there are a number of potential pathways for the energy transition to 2050, including the extent of electrification, there is uncertainty in the level of future totex required.
- **Discount rate** – Management utilised a pre-tax discount rate of 5.2%. The discount rate should reflect the return required by the market and the risks inherent in the cash flows being discounted and accordingly should be independent of the actual capital structure of the business being assessed and the way in which the acquisition of the business was financed. There is a risk that management did not apply a reasonable discount rate, leading to a material misstatement of goodwill.
- **Terminal value** – In order to calculate the value of the business at the end of the forecast period in 2050, management have assumed an 'exit multiple' of Regulatory Asset Value (RAV) at that date. This is the equivalent of a nominal growth rate in perpetuity of 2.5%.

Changes in these assumptions could have a significant impact on the fair value and the amount of any impairment charge.

The impairment test of WPD goodwill involved significant assumptions including those used in the selection of the discount rate and the terminal value. Auditing these assumptions required a high degree of auditor judgement and increased extent of effort, including the need to involve more senior members of the team and our fair value specialists.

How the scope of our audit responded to the key audit matter

Acquisition of WPD

We have tested the controls over the accounting for the acquisition of WPD. This has included testing the review controls over the valuations and management's challenge of the estimates made.

We challenged the reasonableness of management's judgement regarding the date from when they assumed control, including reading correspondence with the regulators and the terms of the IEO, as well as searching for any contradictory evidence.

In respect of the overall acquired balance sheet, we:

- evaluated the appropriateness of the methodology applied in valuing the acquired assets and liabilities;
- determined the reasonableness of the values attributed to acquired assets and liabilities, with input from our valuations, tax, treasury and pension specialists;
- read the share purchase agreement; and
- vouched the consideration paid to bank statements.

In challenging management's judgements and estimates relating to the fair value allocations to PPE, intangible assets and goodwill, we:

- evaluated the fair value methodology used by management's experts, with input from our valuation specialists;
- assessed the competence and objectivity of management's experts;
- tested the integrity of the model used in determining the fair values; and
- compared significant assumptions to externally sourced information including from the regulator and other government bodies.

We also evaluated the appropriateness of the disclosures in the financial statements.

WPD goodwill impairment

We tested the controls over management's impairment review performed for the WPD business. In addition, we conducted the following substantive procedures.

Totex forecasts

- We understood the key totex assumptions in the model and challenged the basis of these by benchmarking the assumptions against third-party and relevant industry publications to inform our assessment of the nature, timing and extent of expected electrification in the UK.
- We evaluated the competence and objectivity of the third-party experts used by management to develop the totex forecasts.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill continued

How the scope of our audit responded to the key audit matter continued

Discount rate

- We engaged our valuation specialists to develop an independent range for a reasonable discount rate using relevant third-party market and peer data for the WPD business. We compared management's calculated rate to our reasonable range.

Terminal value

- We independently developed a reasonable range of RAV-based exit multiples using external data obtained for historical market transaction values.
- We independently recalculated the equivalent long-term nominal growth rate to assess the reasonableness of the rate compared to long-term growth forecasts for the UK economy.

Other

- We assessed whether the impairment methodology applied by management was acceptable under IFRS and tested the integrity and mechanical accuracy of the impairment model.
- We evaluated all key inputs, assumptions and datasets used in the model by benchmarking information to different industry and third-party publications.
- We assessed the accuracy of management's short-term forecasts by comparing to the latest historical financial information for WPD.
- We assessed whether management's impairment forecasts are consistent with other forecasts used by management, including the RIIO-ED2 business plan submitted to Ofgem.
- We evaluated all changes to key assumptions between the model used for the PPA exercise and the goodwill impairment test.
- We challenged management's disclosures in notes 1F, 11, 35 and 37 including in relation to the sensitivity of discount rate and terminal value disclosures.

Key observations

Acquisition of WPD

Our testing confirmed that relevant controls over management's significant judgements and estimates operated effectively.

We are satisfied:

- that it is appropriate for management to consolidate WPD from 14 June 2021;
- that management's methodology in valuing the acquired assets and liabilities is reasonable;
- that the fair values allocated to PPE, licence intangible assets, and goodwill, whilst judgemental, are reasonable; and
- that the disclosures relating to the acquisition in notes 1F and 37 are appropriate.

Goodwill impairment

Our testing confirmed that relevant controls over management's impairment test of WPD operated effectively.

Management's forecasts assume that for the next regulatory price control, which is yet to be approved by the regulator but will be applicable from 1 April 2024, the methodology will be consistent with recent regulatory publications. This is a reasonable assumption; however, should there be a significant change in the stability of the regulatory model that governs the performance of electricity distribution operators this could result in an impairment, as set out in note 11 to the financial statements.

Totex forecasts

For the purpose of the impairment test management has used forecasts for totex which represent a reasonable view of the extent of expected electrification in targeting net zero when compared with a range of scenarios in the public domain.

Discount rate

Management's pre-tax discount rate of 5.2% is towards the low end of the reasonable range determined by our specialists. The rate is a highly sensitive assumption and an increase in the pre-tax discount rate by 50 basis points would result in an impairment of £1,033 million, as set out in note 35 to the financial statements.

Terminal value

The RAV-based exit multiple used to determine the terminal value (equivalent to a 2.5% nominal growth rate in perpetuity) is within the reasonable range of multiples we have determined based on our assessment of historical market transactions. The value-in-use calculation is very sensitive to the terminal value as it represents 98% of the value-in-use on a post-tax basis. Reducing the terminal value to a level consistent with a 2% in perpetuity nominal growth rate would eliminate the headroom.

5.2 Impact of climate change on property, plant and equipment

Key audit matter description	Account balance: PPE. Refer to notes 1F and 13 to the financial statements and the Audit & Risk Committee's discussion on pages 101 – 105. The UK government and certain US states in which the Group operates have enacted legislation and established targets in respect of net zero carbon emissions by 2050. Accordingly climate change represents a strategic challenge for the Group, which has also set targets for reducing greenhouse gas emissions by the same date. Natural gas, when burned, emits carbon dioxide and is considered a greenhouse gas. Therefore, the strategic challenge relates to the potential future use of the Group's gas assets, which are used to facilitate gas transmission services in the UK and gas distribution services in the US in the period approaching 2050 and beyond. However, the Group announced the sale of the UK gas transmission business in March 2022 and since August 2021, it has been held for sale with the transaction expected to be completed in the third quarter of 2022/23. Accordingly, the useful lives of the UK gas transmission assets are no longer a risk for the Group and do not materially impact the results for the year. Therefore, our focus has been on the useful economic life of the Group's gas assets in the US, which is up to 80 years, extending well beyond the 2050 net zero commitment date. As the continued use of natural gas as a primary energy source beyond 2050 appears to be in conflict with net zero targets and the impact of shortening the useful lives of the gas assets to 2050 has a material impact on annual depreciation, there is an audit risk that management judgements taken to determine useful lives of US gas assets in the context of the net zero commitments are not reasonable. As described in note 13 to the financial statements, the impact of changing the useful economic lives of the gas assets in the US, such that they would be fully depreciated by 2050, would be an increase in the annual depreciation expense of £180 million. The Group announced in April 2022 that it is planning to eliminate fossil fuels from its gas and electric systems in New York state and Massachusetts by 2050, by decarbonising the gas network through the use of renewable natural gas (RNG) and green hydrogen. This commitment to eliminate entirely, fossil fuels from the gas network by 2050, includes clear and measurable internal milestones in the period up to 2050. Both New York and Massachusetts, the largest states in which the Group operates, announced climate action plans proposing that nearly all households change their heating systems to electricity by 2050. Management's vision, which will require legislative and regulatory support to implement, proposes a hybrid approach that they believe will enable customers to have more affordable energy solutions and allow customers to retain choice in how to achieve net zero. Although there are challenges and uncertainties around the sufficiency of RNG supply, as well as around the cost effectiveness and production of green hydrogen, as they are early stage technologies, management is of the view that a hybrid electric–gas heating system approach will be a practical and achievable pathway to meet the state and regional decarbonisation goals as well as the most affordable, reliable and practical solution to reduce emissions. This hybrid approach would mean there would be a need for the majority of the Group's US gas assets in the long term and hence there will be no need to shorten their useful economic lives. Management operated a control to assess the accounting impacts associated with climate change, including on the useful lives of the Group's US gas assets, to ensure these are considered and reflected appropriately in the financial statements. Management determined that disclosure of a key judgement in relation to the potential future use of the US gas assets post 2050 and disclosure of the gas asset lives as a key estimate (note 1F to the financial statements), with sensitivity analysis (note 13 to the financial statements), was appropriate.

5.2 Impact of climate change on property, plant and equipment continued

How the scope of our audit responded to the key audit matter

We tested management's internal control over the accounting for and disclosure of the potential impacts associated with the energy transition and climate change.

With the assistance of our sustainability specialists, we challenged management's judgement that it is probable the useful lives of the US gas assets will extend beyond 2050 in light of the different goals, commitments and legislation relating to net zero in the US states in which the Group operates by:

- understanding potential strategic pathways to achieve net zero targets;
- obtaining and reading government plans in the US for achieving net zero which we compared to the potential strategic pathways;
- challenging the technical feasibility of management's plans by considering the readiness for hydrogen blending with other gases across both transmission and distribution networks;
- evaluating information from the Group's regulators, including rate cases in the US, to consider whether they presented any contradictory evidence;
- performing an assessment of the likelihood of occurrence of alternative scenarios for achieving net zero targets;
- considering the potential for repurposing the Group's gas networks for alternative uses, and in particular management's plans to decarbonise the natural gas system with renewable natural gas and hydrogen; and
- reading a number of external reports, the key ones being:
  - The Sixth Carbon Budget, produced by the Climate Change Committee;
  - National Grid's 'Clean Energy Vision' report;
  - The 'DPU 20-80 Notice of Filing and Public Hearing';
  - 'Ramping Up Heat Pump Adoption in New York State';
  - 'E3's Technical Analysis of Decarbonization Pathways report' for Massachusetts;
  - The 'Pathways to Carbon-Neutral NYC: Modernize, Reimagine, Reach', produced by the New York City Mayor's Office of Sustainability;

  and searching for contradictory evidence in respect of management's judgements.

We also held discussions with Deloitte specialists in other countries regarding the suitability of existing gas infrastructure for transporting hydrogen across both transmission and distribution gas assets as well as the potential cost effectiveness of green hydrogen.

We assessed the disclosures set out in note 1 to the financial statements and the sensitivity analysis set out in note 13 to the financial statements regarding the useful economic lives of the Group's gas assets.

Key observations

Our testing confirmed that the relevant controls over management's assessment of the impact of the energy transition and climate change operated effectively.

In the UK we have noted that the announcement of the 60% sale of its UK gas business, 'NGG', in March 2022 has resulted in a reduced risk and that the depreciation impact on the current year financial statements is not material as depreciation of the gas assets ceased from the date the business was held for sale in August 2021.

We observe that whilst some indicators do exist suggesting that the useful economic lives of the Group's US gas assets may be limited to 2050, these are mitigated by other statements by governments and advisory bodies which suggest electrification alone is not a reliable solution and therefore gas distribution assets in the US, will continue to have a role beyond 2050.

Management's best estimate of the useful economic lives of US gas assets, across all states in which it operates, is based on the depreciable lives identified through depreciation studies for each asset which are approved by the respective state regulator. Accordingly, in the US, the IFRS asset depreciable lives are identical to those agreed by the Group's regulators for regulatory purposes.

We note that whilst state energy policy in the US states in which the Group operates is codified by the legislature, it is the regulators who are charged with implementing state energy policies. We concluded it was reasonable to assume that there will be a valuable use for the Group's US gas assets beyond 2050 and in the absence of any determination by the Group's regulators, it continues to be reasonable to use the regulatory asset lives for the calculation of depreciation in accordance with IFRS.

We consider the disclosures in note 1 to the financial statements and the sensitivity analysis in note 13 to the financial statements to be appropriate.

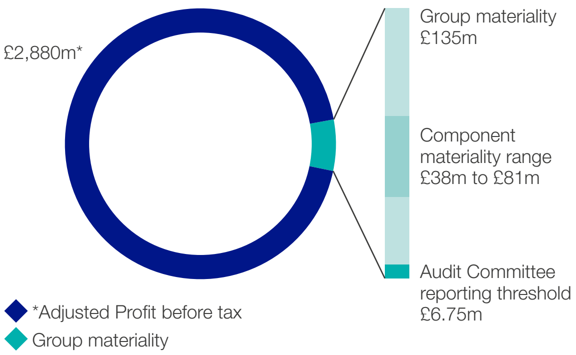
We are satisfied that management's other disclosures in the Annual Report and Accounts relating to the uncertainty surrounding the future use of the Group's gas assets are consistent with the financial statements and our understanding of the business.

6. Our application of materiality

6.1 Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent Company financial statements
Materiality	£135 million (2021: £120 million)	£135 million (2021: £100 million)
Basis for determining materiality	Our determined materiality represents 4.7% (2021: 5.9%) of adjusted profit before tax from continuing operations and 3.9% (2021: 5.8%) of statutory profit before tax from continuing operations. Adjusted profit before tax is profit before tax, exceptional items and remeasurements as disclosed in the consolidated income statement. Prior year materiality was determined on a similar basis.	We determined materiality for our audit of the Parent Company financial statements using 0.83% of net assets (2021: 0.68%). The increase in materiality is in part a result of net assets increasing in the current year. In addition, we decided to align the Parent Company materiality with Group materiality.
Rationale for the benchmark applied	We consider adjusted profit before tax to be an important benchmark of the performance of the Group. We consider it appropriate to adjust for exceptional items and remeasurements as these items are volatile and not reflective of the underlying performance of the Group. We conducted an assessment of which line items we understand to be the most important to investors and analysts by reviewing analyst reports and National Grid's communications to shareholders and lenders, as well as the communications of peer companies. This assessment resulted in us considering the financial statement line items above. Profit before tax is the benchmark ordinarily considered by us when auditing listed entities. It provides comparability against other companies across all sectors, but has limitations when auditing companies whose earnings are impacted by items which can be volatile from one period to the next, and therefore may not be representative of the volume of transactions and the overall size of the business in a given year, or where the impact of volatility may result in the recognition of material income or charges in a particular year. Whilst not an IFRS measure, adjusted profit is one of the key metrics communicated by management in National Grid's results announcements. It excludes some of the volatility arising from changes in fair values of financial assets and liabilities as well as exceptional items. It was also the key measure applied in the prior year. 	As the Company is non-trading, operates primarily as a holding company for the Group's trading entities, and is not profit orientated, we believe the net asset position is the most appropriate benchmark to use.

6.2 Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole.

	Group financial statements	Parent Company financial statements
Performance materiality	70% (2021: 80%) of Group materiality. Given the acquisitions, disposals and changes in operating model and key financial systems, we have set this at 70% of materiality compared with 80% in the prior year.	70% (2021: 80%) of Parent Company materiality. Although the factors leading to the reduction in performance materiality % for the Group do not impact the Parent Company in the same way, we also decided to align performance materiality with the Group.
Basis and rationale for determining performance materiality	In determining performance materiality, we considered the following factors: • Our cumulative experience from prior year audits; • The level of corrected and uncorrected misstatements identified; • Our risk assessment, including our understanding of the entity and its environment; • Our assessment of the Group's overall control environment. We also considered the level of change in the business from the prior year.	

6.3 Error reporting threshold

We agreed with the Audit & Risk Committee that we would report to the Committee all audit differences in excess of £6.75 million (2021: £6 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit & Risk Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

7.1 Identification and scoping of components

Our audit was scoped by obtaining an understanding of the Group and its environment and assessing the risks of material misstatements at the Group level. We used data analytics tools and specialists to help inform our understanding of the business, identify key risk areas and evaluate the level of audit coverage required.

The UK Electricity Transmission, UK Gas Transmission, UK Electricity System Operator, UK Electricity Distribution and US regulated (comprising the New York and New England business units) components were subject to a full-scope audit for Group reporting purposes, completed to the individual component materiality levels set out below.

In addition to the above components subject to full scope audit procedures by the component teams, we have identified three other business units which form part of National Grid Ventures and Other, where we consider there to be a reasonable possibility of material misstatement in specific items within the financial statements: National Grid Ventures UK, Genco and UK Property. Accordingly, we have directed component auditors to perform specific audit procedures in relation to material account balances and analytical procedures on the respective income statements and statements of financial position for these components.

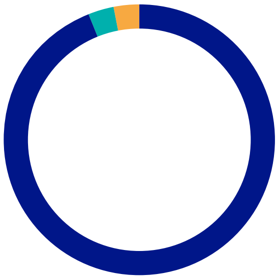
Business unit	Audit scope	Component materiality
UK Electricity Transmission	Full-scope audit	£48 million
UK Gas Transmission	Full-scope audit	£43 million
UK Electricity System Operator	Full-scope audit	£48 million
UK Electricity Distribution	Full-scope audit	£48 million
US regulated (comprising New York and New England)	Full-scope audit	£81 million
National Grid Ventures UK	Audit of specified account balances	£26 million
Genco (comprising US generating assets)	Audit of specified account balances	£26 million
UK Property	Audit of specified account balances	£26 million

In addition to the work performed at a component level, the Group audit team performed audit procedures on the Parent Company financial statements, including but not limited to corporate activities such as treasury as well as on the consolidated financial statements themselves, including entity-level controls, litigation provisions, the consolidation, financial statement disclosures and risk assessment work on components not included elsewhere in the scope of our audit. The Group audit team also performed analytical reviews on out-of-scope components, led the work in connection with the impact of climate change on the useful lives of the Group's gas assets and co-ordinated certain procedures performed on key areas, such as the WPD purchase price allocation and goodwill impairment and environmental provisions, where audit work is performed by both the Group and component audit teams.

The scope and risk assessment of our audit is broadly consistent with the prior year and our audit coverage of 'Revenue', 'Profit before tax' and 'Net assets' is materially the same as in the prior year.

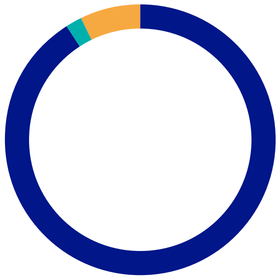
7.1 Identification and scoping of components continued

Revenue



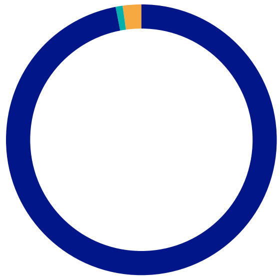
Full audit scope	94%
Specified audit procedures	3%
Review at Group level	3%

Profit before tax



Full audit scope	91%
Specified audit procedures	2%
Review at Group level	7%

Net assets



Full audit scope	97%
Specified audit procedures	1%
Review at Group level	2%

7.2. Our consideration of the control environment

Our audit approach was generally to place reliance on management's relevant controls over all business cycles affecting in-scope financial statement line items. We tested controls through a combination of tests of inquiry, observation, inspection and re-performance.

In limited circumstances where controls were deficient and there were not sufficient mitigating or alternative controls we could rely on, we adopted a non-controls reliance approach. All control deficiencies which we considered to be significant were communicated to the Audit & Risk Committee. All other deficiencies were communicated to management. For all deficiencies identified, we considered the impact and updated our audit plan accordingly.

The Group's financial systems environment relies on a high number of UK and US applications. In the current year, we scoped 44 IT systems as relevant to the audit. These systems are all directly or indirectly relevant to the entity's financial reporting process.

We planned to rely on the General IT Controls (GITCs) associated with these systems, where the GITCs were appropriately designed and implemented, and these were operating effectively. To assess the operating effectiveness of GITCs, our IT audit specialists performed testing on access security, change management, data centre operations and network operations.

7.3. Our consideration of climate-related risks

Climate change impacts National Grid's business in a number of ways as set out in the Strategic Report on page 30 of the Annual Report and note 1 to the financial statements on page 154. It represents a key strategic consideration of management.

We reviewed management's climate change risk assessment and evaluated the completeness of identified risks and the impact on the financial statements. We also considered the impact of climate change in our own risk assessment procedures. Management's assessment included an overview of the legislative changes in the US, key developments post COP26 and an evaluation of the possible future use of National Grid's US gas assets in a net zero carbon energy system. Both management's and our risk assessment identified the useful economic lives of the gas assets in the US, as the key risk as described in note 13 to the financial statements and in the Audit & Risk Committee Report (page 102). Our response to this risk is documented in our Key Audit Matter on pages 139 – 140.

In addition to the procedures in respect of the Key Audit Matter mentioned above, with the involvement of our climate change specialists we:

- read the climate-related statements made by management (as disclosed in 'The Environment' section of the 'Our commitment to being a responsible business' in the Strategic Report) and considered whether these were in line with our understanding of management's approach to climate change and the narrative reporting was in line with financial statements and the knowledge obtained throughout the audit; and
- read the Task Force on Climate-related Financial Disclosures (TCFD) and considered if any of the information disclosed was inconsistent with the information we obtained through our audit.

7.4. Working with other auditors

The Group audit team is responsible for the scope and direction of the audit process and provide direct oversight, review and coordination of our component audit teams.

As each of the financially significant components maintains separate financial records, we have engaged component auditors from the Deloitte member firms in the US or the UK to perform procedures at these components on our behalf. This approach allows us to engage local auditors who have appropriate knowledge of local regulations to perform this audit work. We issued detailed instructions to the component auditors and directed and supervised their work.

We interacted regularly with the component Deloitte teams during each stage of the audit and reviewed key working papers. We maintained continuous and open dialogue with our component teams in addition to holding formal meetings to ensure that we were fully aware of their progress and the results of their procedures.

Our oversight of component auditors focused on the planning of their audit work and key judgements made. In particular, our supervision and direction focused on the work performed in relation to key estimates and judgements made by management. As part of our monitoring of component auditors, we participated in key local audit meetings.

The senior statutory auditor and other Group audit partners conducted visits to meet in person with the component teams responsible for the full-scope locations, which was supplemented by procedures performed remotely throughout the year. Their involvement included attending planning meetings, discussing the audit approach and any issues arising from the component team's work, meetings with local management, and reviewing key audit working papers on higher and significant risk areas to drive a consistent and high quality audit. The level of involvement of the lead audit partner and the Group audit team in the component audits has been extensive and we are satisfied that it has enabled us to conclude that sufficient appropriate audit evidence has been obtained in support of our opinion on the Group financial statements as a whole.

Independent Auditor's Report to the members of National Grid plc continued

8. Other information

The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information contained within the Annual Report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

9. Responsibilities of Directors

As explained more fully in the Statement of Directors' responsibilities, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud or non-compliance with laws and regulations

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

11.1 Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud or non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- the Group's own assessment of the risks that irregularities may occur either as a result of fraud or error that was approved by the Audit & Risk Committee on 22 March 2022;
- results of our enquiries of management, internal audit, and the Audit & Risk Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
  - responding to the allegations of fraud and bribery against former National Grid employees in the US business (as set out in the Audit & Risk Committee report on page 101); and
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations; and
- the matters discussed among the engagement team and our specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. The engagement team includes partners and staff who have extensive experience of working with companies in the same sectors as National Grid operates, and this experience was relevant to the discussion about where fraud risks may arise. Fraud specialists also advised the engagement team of fraud schemes that had arisen in similar sectors and industries, and they participated in the initial fraud risk assessment discussions.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override of controls.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act 2006, Listing Rules, pensions legislation, tax legislation, the UK Corporate Governance Code, IFRS as issued by the IASB, United Kingdom adopted international accounting standards, FRS 101, as well as the US Securities Exchange Act 1934 and relevant SEC regulations, and laws and regulations prevailing in each country which we identified a full-scope component.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Group's operating licences and environmental regulations.

11.2. Audit response to risks identified

As a result of performing the above, we did not identify any key audit matters related to the potential risk of fraud or non-compliance with laws and regulations.

Our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- inquiring of management, the Audit & Risk Committee and in-house legal counsel concerning actual and potential litigation and claims;
- obtaining confirmations from external legal counsel concerning open litigation and claims;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with relevant regulatory authorities; and
- reviewing the outcome of the alleged fraud and bribery investigations as well as testing the design of the entity-level controls, particularly in respect of the whistleblowing process.

In addressing the risk of fraud through management override of controls our procedures included:

- making enquiries of individuals involved in the financial reporting process about inappropriate or unusual activity relating to the processing of journal entries and other adjustments;
- using our data analytics tools, we selected and tested journal entries and other adjustments which were either made at the end of a reporting period or which identified activity that exhibited certain characteristics of audit interest;
- assessing whether the judgements made in making accounting estimates are indicative of a potential bias;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- considering whether there were any significant transactions that are outside the normal course of business, or that otherwise appear to be unusual due to their nature, timing or size.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams. We remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the Parent Company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report or the Directors' Report.

13. Corporate Governance Statement

The Listing Rules require us to review the Directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- the Directors' statement with regard to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 153;
- the Directors' explanation as to its assessment of the Group's prospects, the period this assessment covers and why the period is appropriate set out on pages 33 – 35;
- the Directors' statement on fair, balanced and understandable set out on pages 101 and 134;
- the Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on pages 28 – 32 and 94;
- the section of the Annual Report that describes the review of effectiveness of risk management and internal control systems set out on pages 28 – 32; and
- the section describing the work of the Audit & Risk Committee set out on pages 101 – 105.

14. Matters on which we are required to report by exception

14.1 Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14.2 Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of Directors' remuneration have not been made or the part of the Directors' Remuneration Report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. Other matters which we are required to address

15.1 Auditor tenure

We became independent and commenced our audit transition on 1 January 2017. Following the recommendation of the Audit & Risk Committee, we were appointed by the shareholders at the Annual General Meeting on 31 July 2017 to audit the financial statements for the year ending 31 March 2018 and subsequent financial periods.

The period of total uninterrupted engagement including previous renewals and reappointments of the firm is five years, covering the years ending 31 March 2018 to 31 March 2022.

15.2 Consistency of the audit report with the additional report to the Audit & Risk Committee

Our audit opinion is consistent with the additional report to the Audit & Risk Committee we are required to provide in accordance with ISAs (UK).

16. Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

As required by the Financial Conduct Authority (FCA) Disclosure Guidance and Transparency Rule (DTR) 4.1.14R, these financial statements form part of the European Single Electronic Format (ESEF) prepared Annual Financial Report filed on the National Storage Mechanism of the UK FCA in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditor's report provides no assurance over whether the annual financial report has been prepared using the single electronic format specified in the ESEF RTS.

Douglas King FCA (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
London, United Kingdom
18 May 2022

Consolidated income statement
for the years ended 31 March

2022	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3,5	**18,260**	**189**	**18,449**
Provision for bad and doubtful debts	4	**(167)**	**—**	**(167)**
Other operating income/(costs)	4,5	**(14,280)**	**369**	**(13,911)**
Operating profit	2(b)	**3,813**	**558**	**4,371**
Finance income	5,6	**65**	**(15)**	**50**
Finance costs	5,6	**(1,146)**	**74**	**(1,072)**
Share of post-tax results of joint ventures and associates	5,16	**148**	**(56)**	**92**
Profit before tax	2(b),5	**2,880**	**561**	**3,441**
Tax	5,7	**(669)**	**(589)**	**(1,258)**
Profit after tax from continuing operations		**2,211**	**(28)**	**2,183**
Profit after tax from discontinued operations	10	**344**	**(173)**	**171**
Total profit for the year (continuing and discontinued)		**2,555**	**(201)**	**2,354**
Attributable to:				
Equity shareholders of the parent		**2,554**	**(201)**	**2,353**
Non-controlling interests from continuing operations		**1**	**—**	**1**
Earnings per share (pence)				
Basic earnings per share (continuing)	8			**60.6**
Diluted earnings per share (continuing)	8			**60.3**
Basic earnings per share (continuing and discontinued)	8			**65.4**
Diluted earnings per share (continuing and discontinued)	8			**65.0**

2021[1]	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	13,665	—	13,665
Provision for bad and doubtful debts	4	(325)	—	(325)
Other operating income/(costs)	4,5	(10,913)	(26)	(10,939)
Operating profit	2(b)	2,427	(26)	2,401
Finance income	5,6	35	23	58
Finance costs	5,6	(900)	47	(853)
Share of post-tax results of joint ventures and associates	5,16	66	(8)	58
Profit before tax	2(b),5	1,628	36	1,664
Tax	5,7	(334)	(26)	(360)
Profit after tax from continuing operations		1,294	10	1,304
Profit after tax from discontinued operations	10	340	(3)	337
Total profit for the year (continuing and discontinued)		1,634	7	1,641
Attributable to:				
Equity shareholders of the parent		1,633	7	1,640
Non-controlling interests from continuing operations		1	—	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			37.0
Diluted earnings per share (continuing)	8			36.8
Basic earnings per share (continuing and discontinued)	8			46.6
Diluted earnings per share (continuing and discontinued)	8			46.3

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Consolidated income statement
for the years ended 31 March continued

2020[1]	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	13,360	—	13,360
Provision for bad and doubtful debts	4	(234)	—	(234)
Other operating income/(costs)	4,5	(10,322)	(525)	(10,847)
Operating profit	2(b)	2,804	(525)	2,279
Finance income	5,6	70	(16)	54
Finance costs	5,6	(999)	(21)	(1,020)
Share of post-tax results of joint ventures and associates	5,16	88	(1)	87
Profit before tax	2(b),5	1,963	(563)	1,400
Tax	5,7	(362)	(8)	(370)
Profit after tax from continuing operations		1,601	(571)	1,030
Profit after tax from discontinued operations	10	317	(82)	235
Total profit for the year (continuing and discontinued)		1,918	(653)	1,265
Attributable to:				
Equity shareholders of the parent		1,917	(653)	1,264
Non-controlling interests from continuing operations		1	—	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			29.7
Diluted earnings per share (continuing)	8			29.6
Basic earnings per share (continuing and discontinued)	8			36.5
Diluted earnings per share (continuing and discontinued)	8			36.3

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Consolidated statement of comprehensive income

for the years ended 31 March

	Notes	2022 £m	2021[1] £m	2020[1] £m
Profit after tax from continuing operations		**2,183**	1,304	1,030
Profit after tax from discontinued operations		**171**	337	235
Other comprehensive income from continuing operations				
Items from continuing operations that will never be reclassified to profit or loss:				
Remeasurement gains/(losses) on pension assets and post-retirement benefit obligations	25	**2,172**	1,658	(782)
Net gains/(losses) on equity instruments designated at fair value through other comprehensive income		**12**	46	(9)
Net losses in respect of cash flow hedging of capital expenditure		**(1)**	(12)	(17)
Tax on items that will never be reclassified to profit or loss	7	**(496)**	(472)	232
Total items from continuing operations that will never be reclassified to profit or loss		**1,687**	1,220	(576)
Items from continuing operations that may be reclassified subsequently to profit or loss:				
Retranslation of net assets offset by net investment hedge		**630**	(1,347)	561
Net (losses)/gains in respect of cash flow hedges		**(57)**	67	(121)
Net gains/(losses) in respect of cost of hedging		**1**	20	(80)
Net (losses)/gains on investment in debt instruments measured at fair value through other comprehensive income		**(11)**	80	(15)
Share of other comprehensive income/(losses) of associates, net of tax		**1**	1	(5)
Tax on items that may be reclassified subsequently to profit or loss	7	**15**	(8)	33
Total items from continuing operations that may be reclassified subsequently to profit or loss		**579**	(1,187)	373
Other comprehensive income/(loss) for the year, net of tax from continuing operations		**2,266**	33	(203)
Other comprehensive income/(loss) for the year, net of tax from discontinued operations	10	**211**	(216)	38
Other comprehensive income/(loss) for the year, net of tax		**2,477**	(183)	(165)
Total comprehensive income for the year from continuing operations		**4,449**	1,337	827
Total comprehensive income for the year from discontinued operations	10	**382**	121	273
Total comprehensive income for the year		**4,831**	1,458	1,100
Attributable to:				
Equity shareholders of the parent				
From continuing operations		**4,447**	1,338	825
From discontinued operations		**382**	121	273
		4,829	1,459	1,098
Non-controlling interests				
From continuing operations		**2**	(1)	2

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Financial Statements

Consolidated statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Retained earnings £m	Other equity reserves[1] £m	Total shareholders' equity £m	Non-controlling interests £m	Total equity £m
At 31 March 2019	458	1,314	21,999	(4,223)	19,548	20	19,568
Profit for the year	—	—	1,264	—	1,264	1	1,265
Other comprehensive (loss)/income for the year	—	—	(509)	343	(166)	1	(165)
Total comprehensive income for the year	—	—	755	343	1,098	2	1,100
Equity dividends	—	—	(892)	—	(892)	—	(892)
Scrip dividend-related share issue[2]	12	(13)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(6)	—	(6)	—	(6)
Share-based payments	—	—	19	—	19	—	19
Tax on share-based payments	—	—	3	—	3	—	3
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(15)	(15)	—	(15)
At 1 April 2020	470	1,301	21,895	(3,895)	19,771	22	19,793
Profit for the year	—	—	1,640	—	1,640	1	1,641
Other comprehensive income/(loss) for the year	—	—	1,001	(1,182)	(181)	(2)	(183)
Total comprehensive income/(loss) for the year	—	—	2,641	(1,182)	1,459	(1)	1,458
Equity dividends	—	—	(1,413)	—	(1,413)	—	(1,413)
Scrip dividend-related share issue[2]	4	(5)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(2)	—	(2)	—	(2)
Share-based payments	—	—	27	—	27	—	27
Tax on share-based payments	—	—	(2)	—	(2)	—	(2)
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(17)	(17)	—	(17)
At 1 April 2021	474	1,296	23,163	(5,094)	19,839	21	19,860
Profit for the year	—	—	2,353	—	2,353	1	2,354
Other comprehensive income for the year	—	—	1,871	605	2,476	1	2,477
Total comprehensive income for the year	—	—	4,224	605	4,829	2	4,831
Equity dividends	—	—	(922)	—	(922)	—	(922)
Scrip dividend-related share issue[2]	11	(12)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Transactions in own shares	—	16	(3)	—	13	—	13
Share-based payments	—	—	43	—	43	—	43
Tax on share-based payments	—	—	7	—	7	—	7
Transfer of accumulated gains and losses on sale of equity investments[3]	—	—	82	(82)	—	—	—
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	8	8	—	8
At 31 March 2022	**485**	**1,300**	**26,611**	**(4,563)**	**23,833**	**23**	**23,856**

1. For further details of other equity reserves, see note 28.
2. Included within the share premium account are costs associated with scrip dividends.
3. In the year ended 31 March 2022, the Group disposed of its equity instruments related to shares held as part of a portfolio of financial instruments which back some long-term employee liabilities. The equity instruments were previously measured at FVOCI and prior to the disposal the Group recognised a gain of £12 million in the year. The accumulated gain and losses of £82 million recognised in other comprehensive income were transferred to retained earnings on disposal (see note 15).

Consolidated statement of financial position

as at 31 March

	Notes	2022 £m	2021 £m
Non-current assets			
Goodwill	11	**9,532**	4,588
Other intangible assets	12	**3,272**	1,443
Property, plant and equipment	13	**57,532**	47,043
Other non-current assets	14	**303**	293
Pension assets	25	**3,885**	1,747
Financial and other investments	15	**830**	755
Investments in joint ventures and associates	16	**1,238**	867
Derivative financial assets	17	**305**	542
Total non-current assets		**76,897**	57,278
Current assets			
Inventories and current intangible assets	18	**511**	439
Trade and other receivables	19	**3,715**	2,919
Current tax assets		**106**	67
Financial and other investments	15	**3,145**	2,342
Derivative financial assets	17	**282**	457
Cash and cash equivalents	20	**204**	157
Assets held for sale	10	**10,000**	3,557
Total current assets		**17,963**	9,938
Total assets		**94,860**	67,216
Current liabilities			
Borrowings	21	**(12,121)**	(3,737)
Derivative financial liabilities	17	**(144)**	(145)
Trade and other payables	22	**(4,915)**	(3,517)
Contract liabilities	23	**(130)**	(66)
Current tax liabilities		**(32)**	(75)
Provisions	26	**(240)**	(260)
Liabilities held for sale	10	**(7,188)**	(1,568)
Total current liabilities		**(24,770)**	(9,368)
Non-current liabilities			
Borrowings	21	**(33,344)**	(27,483)
Derivative financial liabilities	17	**(869)**	(754)
Other non-current liabilities	24	**(805)**	(843)
Contract liabilities	23	**(1,342)**	(1,094)
Deferred tax liabilities	7	**(6,765)**	(4,815)
Pensions and other post-retirement benefit obligations	25	**(810)**	(1,032)
Provisions	26	**(2,299)**	(1,967)
Total non-current liabilities		**(46,234)**	(37,988)
Total liabilities		**(71,004)**	(47,356)
Net assets		**23,856**	19,860
Equity			
Share capital	27	**485**	474
Share premium account		**1,300**	1,296
Retained earnings		**26,611**	23,163
Other equity reserves	28	**(4,563)**	(5,094)
Total shareholders' equity		**23,833**	19,839
Non-controlling interests		**23**	21
Total equity		**23,856**	19,860

The consolidated financial statements set out on pages 147 – 234 were approved by the Board of Directors on 18 May 2022 and were signed on its behalf by:

Paula Rosput Reynolds Chair
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Consolidated cash flow statement

for the years ended 31 March

	Notes	2022 £m	2021[1] £m	2020[1] £m
Cash flows from operating activities				
Total operating profit from continuing operations	2(b)	**4,371**	2,401	2,279
Adjustments for:				
Exceptional items and remeasurements	5	**(558)**	26	525
Other fair value movements		**(65)**	(22)	—
Depreciation, amortisation and impairment		**1,830**	1,485	1,435
Share-based payments		**38**	23	16
Changes in working capital		**361**	279	217
Changes in provisions		**140**	(167)	(138)
Changes in pensions and other post-retirement benefit obligations		**(76)**	(16)	(58)
Cash flows relating to exceptional items		**(253)**	(42)	(36)
Cash generated from operations – continuing operations		**5,788**	3,967	4,240
Tax paid		**(298)**	(91)	(92)
Net cash inflow from operating activities – continuing operations		**5,490**	3,876	4,148
Net cash inflow from operating activities – discontinued operations		**782**	585	470
Cash flows from investing activities				
Acquisition of financial investments		**(197)**	(99)	(108)
Acquisition of, and contributions to National Grid Renewables and Emerald Energy Venture LLC		**(16)**	(26)	(139)
Acquisition of WPD[2]	37	**(7,837)**	—	—
Investments in joint ventures and associates		**(265)**	(81)	(82)
Disposal of financial investments		**215**	66	63
Disposal of interests in Quadgas HoldCo Limited	10	**—**	—	1,965
Disposal of interest in St William Homes LLP	16	**413**	—	—
Purchases of intangible assets		**(446)**	(399)	(295)
Purchases of property, plant and equipment		**(5,098)**	(4,209)	(4,291)
Disposals of property, plant and equipment		**26**	7	66
Dividends received from joint ventures, associates and other investments		**166**	80	75
Interest received		**40**	16	73
Net movements in short-term financial investments		**(781)**	(438)	12
Cash inflows on derivatives		**17**	225	58
Cash outflows on derivatives		**(122)**	(81)	(281)
Net cash flow used in investing activities – continuing operations		**(13,885)**	(4,939)	(2,884)
Net cash flow used in investing activities – discontinued operations		**(125)**	(177)	(311)
Cash flows from financing activities				
Proceeds from issue of treasury shares		**33**	16	16
Purchase of own shares		**(3)**	(2)	(6)
Proceeds received from loans	29(c)	**12,347**	5,150	3,921
Repayment of loans	29(c)	**(1,261)**	(1,654)	(3,037)
Payments of lease liabilities	29(c)	**(117)**	(107)	(115)
Net movements in short-term borrowings	29(c)	**(11)**	(619)	(562)
Cash inflows on derivatives	29(c)	**20**	17	46
Cash outflows on derivatives	29(c)	**(114)**	(183)	(245)
Interest paid	29(c)	**(1,053)**	(753)	(867)
Dividends paid to shareholders	9	**(922)**	(1,413)	(892)
Net cash flow from/(used in) financing activities – continuing operations		**8,919**	452	(1,741)
Net cash flow (used in)/from financing activities – discontinued operations		**(1,150)**	298	135
Net increase/(decrease) in cash and cash equivalents	29(b)	**31**	95	(183)
Reclassification to held for sale	10,29(b)	**(11)**	(4)	—
Exchange movements	29(b)	**5**	(7)	4
Cash and cash equivalents at start of year		**157**	73	252
Cash and cash equivalents at end of year[3]	20	**182**	157	73

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Balance consists of cash consideration paid and cash acquired from WPD.
3. Cash and cash equivalents at end of year are shown net of the Group's bank overdraft as at 31 March 2022 of £22 million (2021: £nil; 2020: £nil).

Notes to the consolidated financial statements

1. Basis of preparation and recent accounting developments

Accounting policies describe our approach to recognising and measuring transactions and balances in the year. The accounting policies applicable across the financial statements are shown below, whereas accounting policies that are specific to a component of the financial statements have been incorporated into the relevant note.

This section also shows areas of judgement and key sources of estimation uncertainty in these financial statements. In addition, we have summarised new International Accounting Standards Board (IASB) and UK endorsed accounting standards, amendments and interpretations and whether these are effective for this year end or in later years, explaining how significant changes are expected to affect our reported results.

National Grid's principal activities involve the transmission and distribution of electricity in Great Britain and electricity and gas in northeastern US. The Company is a public limited liability company incorporated and domiciled in England and Wales, with its registered office at 1–3 Strand, London WC2N 5EH.

The Company, National Grid plc, which is the ultimate parent of the Group, has its primary listing on the London Stock Exchange and is also quoted on the New York Stock Exchange.

These consolidated financial statements were approved for issue by the Board on 18 May 2022.

These consolidated financial statements have been prepared in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) and related interpretations as issued by the IASB and IFRS as adopted by the UK. They are prepared on the basis of all IFRS accounting standards and interpretations that are mandatory for the period ended 31 March 2022 and in accordance with the Companies Act 2006. The comparative financial information has also been prepared on this basis.

The consolidated financial statements have been prepared on a historical cost basis, except for the recording of pension assets and liabilities, the revaluation of derivative financial instruments and certain commodity contracts and certain financial assets and liabilities measured at fair value.

These consolidated financial statements are presented in pounds sterling, which is also the functional currency of the Company.

The notes to the financial statements have been prepared on a continuing basis unless otherwise stated.

Our income statement and segmental analysis separately identify financial results before and after exceptional items and remeasurements. We continue to use a columnar presentation as we consider it improves the clarity of the presentation, is consistent with the way that financial performance is measured by management and reported to the Board and the Executive Committee, and assists users of the financial statements to understand the results. The inclusion of total profit for the period from continuing operations before exceptional items and remeasurements is used to derive part of the incentive target set annually for remunerating certain Executive Directors and accordingly we believe it is important for users of the financial statements to understand how this compares with our results on a statutory basis and period on period.

A. Going concern

As part of the Directors' consideration of the appropriateness of adopting the going concern basis of accounting in preparing these financial statements, the Directors have considered the impact of the planned disposals of The Narragansett Electric Company (NECO) and the UK Gas Transmission business (see note 10) and the financing for the acquisition of PPL Western Power Distribution (WPD) (see note 33). The Directors have assessed the principal risks discussed on pages 28 – 32, including by modelling both a base case and a reasonable worst-case scenario.

The main cash flow impacts identified in the reasonable worst-case scenario are:

- additional potential working capital requirements in response to energy price increases driven by the wider energy market stability challenges and the conflict between Russia and Ukraine;
- adverse impacts of inflation on our capex programme;
- adverse impact from timing across the Group, i.e. a net under-recovery of allowed revenues or reductions in over-collections;
- a significant reduction in cash collections driven by lower customer demand and increased bad debt in our US businesses and potential supplier defaults in our UK business;
- higher cash outflow than expected following the Sellindge Interconnector fire;
- higher operating costs than expected; or non-delivery of planned efficiencies across the Group; and
- the potential impact of further significant storm costs in the US.

As part of their analysis, the Board also considered the following potential levers at their discretion to improve the position identified by the analysis if the debt capital markets are not accessible:

- the payment of dividends to shareholders;
- significant changes in the phasing of the Group's capital programme, with elements of non-essential works and programmes delayed; and
- a number of further reductions in operating expenditure across the Group primarily related to workforce cost reductions in both the UK and the US.

Having considered the reasonable worst-case scenario, the impact and timing of the planned strategic transactions, and the further levers at the Board's discretion, the Group continues to have headroom against the Group's committed facilities identified in note 33 to the financial statements.

In addition to the above, the ability to raise new and extend existing financing was separately included in the analysis, and the Directors noted the c.£4.2 billion of new long-term senior debt issued in the period from 1 April to 31 March 2022 as evidence of the Group's ability to continue to have access to the debt capital markets if needed.

Based on the above, the Directors have concluded the Group is well placed to manage its financing and other business risks satisfactorily and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least 12 months from the signing date of these consolidated financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Notes to the consolidated financial statements continued

1. Basis of preparation and recent accounting developments continued

B. Basis of consolidation
The consolidated financial statements incorporate the results, assets and liabilities of the Company and its subsidiaries, together with a share of the results, assets and liabilities of joint operations.

A subsidiary is defined as an entity controlled by the Group. Control is achieved where the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The Group accounts for joint ventures and associates using the equity method of accounting, where the investment is carried at cost plus post-acquisition changes in the share of net assets of the joint venture or associate, less any provision for impairment. Losses in excess of the consolidated interest in joint ventures and associates are not recognised, except where the Company or its subsidiaries have made a commitment to make good those losses.

Where necessary, adjustments are made to bring the accounting policies used in the individual financial statements of the Company, subsidiaries, joint operations, joint ventures and associates into line with those used by the Group in its consolidated financial statements under IFRS. Intercompany transactions are eliminated.

The results of subsidiaries, joint operations, joint ventures and associates acquired or disposed of during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Acquisitions are accounted for using the acquisition method, where the purchase price is allocated to the identifiable assets acquired and liabilities assumed on a fair value basis and the remainder recognised as goodwill.

C. Foreign currencies
Transactions in currencies other than the functional currency of the Company or subsidiary concerned are recorded at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Non-monetary assets are not retranslated unless they are carried at fair value.

Gains and losses arising on the retranslation of monetary assets and liabilities are included in the income statement, except where the application of hedge accounting requires inclusion in other comprehensive income (see note 32(e)).

On consolidation, the assets and liabilities of operations that have a functional currency different from the Company's functional currency of pounds sterling, principally our US operations that have a functional currency of US dollars, are translated at exchange rates prevailing at the reporting date. Income and expense items are translated at the average exchange rates for the period where these do not differ materially from rates at the date of the transaction. Exchange differences arising are recognised in other comprehensive income and transferred to the consolidated translation reserve within other equity reserves (see note 28).

D. Disposal of The Narragansett Electric Company
As described further in note 10, on 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, NECO. Whilst all of the regulatory approvals are in place, the disposal of NECO was not finalised as at 31 March 2022 due to the appeal of one of these approvals by the Rhode Island Attorney General.

The associated assets and liabilities have been presented as held for sale in the consolidated statement of financial position. As NECO does not represent either a major line of business or a geographical area of operations, it has not met the criteria for classification as a discontinued operation and therefore its results for the period are not separately disclosed on the face of the income statement.

E. Disposal of UK Gas Transmission
As described further in note 10, on 27 March 2022, the Group agreed to sell 100% of the UK Gas Transmission business to a new entity (the 'Acquiring Entity') in exchange for £4.2 billion cash consideration (subject to customary completion adjustments) and a 40% interest in the Acquiring Entity. The sale is expected to complete in the third quarter of the financial year ending 31 March 2023 subject to the receipt of all regulatory approvals. The Group's 40% interest in the Acquiring Entity is expected to be classified as an associate on the basis that the Group will retain significant influence over the business through its retained stake. The Group has the ability to appoint two out of the seven Directors to the Board of the Acquiring Entity. On 27 March 2022, the Group also entered into a Further Acquisition Agreement (FAA) for the potential sale of the remaining 40% stake. The FAA is a put option that can be exercised by the purchaser either in the period between 1 January and 31 March 2023 or in the period between 1 April and 30 June 2023. The deferral of the option window is at our discretion (subject to change depending on the timing of the closing of the sale agreement).

The Group classified the business as held for sale at the end of August 2021, when it became highly probable that the value of the business to the Group would be recovered through sale rather than continued ownership. As UK Gas Transmission represents a major separate line of business, the business has been classified separately as a discontinued operation for all periods presented in the consolidated income statement and statement of comprehensive income. Earnings per share (EPS) has also been shown split between continuing and discontinued operations.

F. Areas of judgement and key sources of estimation uncertainty
The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates. Information about such judgements and estimations is in the notes to the financial statements, and the key areas are summarised below.

Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are as follows:
- categorisation of certain items as exceptional items or remeasurements and the definition of adjusted earnings (see notes 5 and 8). In applying the Group's exceptional items framework, we have considered a number of key matters, as detailed in note 5;
- in relation to the planned disposal of the UK Gas Transmission business, the key judgement that has been applied is the date from which the business qualified for classification as held for sale and a discontinued operation, as explained further in note 10;
- in performing the WPD goodwill and indefinite-lived licence intangible assets impairment assessment, judgement has been applied over the forecast cash flow duration (see note 11); and
- the judgement that, notwithstanding legislation enacted and targets committing the UK, New York State and Massachusetts to achieving net zero greenhouse gas emissions by 2050, these do not trigger a reassessment of the remaining useful economic lives of our gas network assets (see key sources of estimation uncertainty below and note 13).

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are as follows:
- in performing the goodwill impairment assessment of the WPD group of cash-generating units, the key source of estimation uncertainty relates to the discount rate and terminal value assumptions used in the value-in-use calculations (see note 11);
- the valuation of liabilities for pensions and other post-retirement benefits (see note 25); and
- the cash flows applied in determining the environmental provisions, in particular relating to three US Superfund sites (see note 26).

1. Basis of preparation and recent accounting developments continued

In addition, we also highlight the estimates made regarding the useful economic lives of our gas network assets due to the length over which they are being depreciated, the potential for new and evolving technologies over that period, and the range of potential pathways for meeting net zero targets (see note 13 for details and sensitivity analysis).

In order to illustrate the impact that changes in assumptions for the valuation of pension assets and liabilities and cash flows for environmental provisions could have on our results and financial position, we have included sensitivity analyses in note 35. In performing our impairment assessment of goodwill and indefinite-lived licence intangible assets, we have sensitised our forecasts to factor in adjustments to key inputs to each model (see note 11). Information on what we believe to be a reasonably possible range of outcomes on the recoverability of customer receivables is included in note 19.

G. Accounting policy choices

IFRS provides certain options available within accounting standards. Choices we have made, and continue to make, include the following:

- Presentational formats: we use the nature of expense method for our income statement and aggregate our statement of financial position to net assets and total equity. In the income statement, we present subtotals of total operating profit, profit before tax and profit after tax from continuing operations, together with additional subtotals excluding exceptional items and remeasurements as a result of the three columnar presentation described earlier. Exceptional items and remeasurements are presented in a separate column on the face of the income statement.
- Financial instruments: we normally opt to apply hedge accounting in most circumstances where this is permitted (see note 32(e)).

H. New IFRS accounting standards and interpretations effective for the year ended 31 March 2022

With effect from the period commencing 1 April 2021, the consolidated financial statements are prepared in accordance with IAS and IFRS and related interpretations as adopted by the UK, instead of those adopted by the EU. As both sets of accounting standards are currently aligned, there will be no transitional adjustments required and comparative amounts were not required to be restated.

The Group early adopted the following amendments to standards which have had no material impact on the Group's results or financial statement disclosures:

- amendments to IFRS 16 'Leases – COVID-19-Related Rent Concessions';
- amendments to IFRS 3 'Definition of a Business'; and
- amendments to IAS 1 and IAS 8 'Definition of Material'.

In April 2021, the IFRS IC (Interpretation Committee) also issued an agenda decision in relation to the accounting treatment for configuration and customisation costs in a cloud computing arrangement. This guidance clarified that in order for an intangible asset to be capitalised in relation to customisation and configuration costs in a cloud computing arrangement, it is necessary for there to be control of the underlying software asset or for there to be a separate intangible asset which meets the definition in IAS 38 Intangible Assets. As at 31 March 2022, the Group has recognised a cumulative adjustment against software intangible assets of £34 million for previously capitalised customisation and configuration relating to its continuing operations. The Group has also considered the application of the new accounting guidance for its comparative periods and concluded that it does not have a material impact. Accordingly, no comparative periods have been restated.

I. New IFRS accounting standards and interpretations not yet adopted

The following new accounting standards and amendments to existing standards have been issued but are not yet effective or have not yet been endorsed by the UK:

- IFRS 17 'Insurance Contracts';
- amendments to IFRS 3 'Business Combinations';
- amendments to IAS 12 'Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction';
- amendments to IAS 16 'Property, Plant and Equipment';
- amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets';
- amendments to IAS 1 'Presentation of Financial Statements';
- amendments to IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors';
- annual improvements to IFRS standards 2018-2020; and
- amendments to IFRS Practice Statement 2 – making materiality judgements.

Effective dates will be subject to the UK endorsement process.

The Group is currently assessing the impact of the above standards, but they are not expected to have a material impact.

The Group has not adopted any other standard, amendment or interpretation that has been issued but is not yet effective.

2. Segmental analysis

This note sets out the financial performance for the year split into the different parts of the business (operating segments). The performance of these operating segments is monitored and managed on a day-to-day basis. Revenue and the results of the business are analysed by operating segment, based on the information the Board of Directors uses internally for the purposes of evaluating the performance of each operating segment and determining resource allocation between them. The Board is National Grid's chief operating decision maker (as defined by IFRS 8 'Operating Segments') and assesses the profitability of operations principally on the basis of operating profit before exceptional items and remeasurements (see note 5). As a matter of course, the Board also considers profitability by segment, excluding the effect of timing. However, the measure of profit disclosed in this note is operating profit before exceptional items and remeasurements as this is the measure that is most consistent with the IFRS results reported within these financial statements.

As a result of the new operating model, the operating segments that were reported up to the Board have changed during the period to align with the six business units that will continue to operate, and the UK Gas Transmission business that is expected to be disposed of, which is now considered a discontinued operation (see note 10). Five of these continuing businesses meet the size criteria set out in the accounting standards to be treated as reportable operating segments. The other operating segment, remaining businesses that are not operating segments and the corporate centre activities are reported to the Board of Directors on an aggregated basis.

The following table describes the main activities for each reportable operating segment within continuing operations:

UK Electricity Transmission	The high-voltage electricity transmission networks in England and Wales.
UK Electricity Distribution	The electricity distribution networks of WPD in the East Midlands, West Midlands and South West of England and South Wales.
UK Electricity System Operator	The Great Britain system operator.
New England	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New England.
New York	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New York.

The UK Gas Transmission business, which owns the high-pressure gas transmission networks in Great Britain and gas system operator in Great Britain and includes the regulated gas metering operations (which was previously reported within NGV and Other), is now a discontinued operation and classified as held for sale (see note 10). Therefore, while it is still a reportable operating segment, it is no longer presented within continuing operations.

The National Grid Ventures (NGV) operating segment is outside our regulated core business and operates in competitive markets across the UK and the US. The business comprises all commercial operations in LNG at the Isle of Grain in the UK, our electricity generation business in the US, our electricity interconnectors and our investment in National Grid Renewables Development LLC, with a focus on investment and future activities in emerging growth areas. NGV does not meet the thresholds set out in IFRS 8 to be identified as a separate reportable segment and therefore its results are not required to be separately presented.

Other activities that do not form part of any of the segments in the above table or NGV primarily relate to our UK property business together with insurance and corporate activities in the UK and US and the Group's investments in technology and innovation companies through National Grid Partners.

(a) Revenue

Revenue primarily represents the sales value derived from the generation, transmission and distribution of energy, together with the sales value derived from the provision of other services to customers. Refer to note 3 for further details.

Sales between operating segments are priced considering the regulatory and legal requirements to which the businesses are subject. The analysis of revenue by geographical area is on the basis of destination. There are no material sales between the UK and US geographical areas.

	2022			2021[1]			2020[1]		
	Total sales £m	**Sales between segments £m**	**Sales to third parties £m**	Total sales £m	Sales between segments £m	Sales to third parties £m	Total sales £m	Sales between segments £m	Sales to third parties £m
Operating segments – continuing operations:									
UK Electricity Transmission	**2,035**	**(7)**	**2,028**	1,974	(10)	1,964	1,986	(8)	1,978
UK Electricity Distribution	**1,482**	**(14)**	**1,468**	—	—	—	—	—	—
UK Electricity System Operator	**3,455**	**(18)**	**3,437**	2,018	—	2,018	1,716	—	1,716
New England	**4,550**	**—**	**4,550**	4,214	—	4,214	4,235	—	4,235
New York	**5,561**	**—**	**5,561**	4,605	—	4,605	4,601	—	4,601
NGV and Other	**1,216**	**—**	**1,216**	864	—	864	834	(4)	830
Total revenue before exceptional items and remeasurements	**18,299**	**(39)**	**18,260**	13,675	(10)	13,665	13,372	(12)	13,360
Exceptional items and remeasurements[2]	**189**	**—**	**189**	—	—	—	—	—	—
Total revenue from continuing operations	**18,488**	**(39)**	**18,449**	13,675	(10)	13,665	13,372	(12)	13,360
Split by geographical areas – continuing operations:									
UK			**7,803**			4,368			4,102
US			**10,646**			9,297			9,258
Total revenue from continuing operations			**18,449**			13,665			13,360

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. In connection with the disposal of St William Homes LLP in the year the Group released deferred income within NGV and Other of £189 million related to deferred profits from previous property sales (see note 5).

2. Segmental analysis continued

(b) Operating profit

A reconciliation of the operating segments' measure of profit to profit before tax from continuing operations is provided below. Further details of the exceptional items and remeasurements are provided in note 5.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			After exceptional items and remeasurements		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Operating segments – continuing operations:									
UK Electricity Transmission	**1,067**	1,094	1,109	**(12)**	(14)	(5)	**1,055**	1,080	1,104
UK Electricity Distribution	**909**	—	—	**—**	—	—	**909**	—	—
UK Electricity System Operator	**7**	(60)	211	**(2)**	7	1	**5**	(53)	212
New England	**743**	611	523	**21**	3	(53)	**764**	614	470
New York	**780**	665	835	**315**	30	(465)	**1,095**	695	370
NGV and Other	**307**	117	126	**236**	(52)	(3)	**543**	65	123
Total operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279
Split by geographical area – continuing operations:									
UK	**2,234**	1,113	1,422	**224**	(57)	(8)	**2,458**	1,056	1,414
US	**1,579**	1,314	1,382	**334**	31	(517)	**1,913**	1,345	865
Total operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			After exceptional items and remeasurements		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Reconciliation to profit before tax:									
Operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279
Share of post-tax results of joint ventures and associates	**148**	66	88	**(56)**	(8)	(1)	**92**	58	87
Finance income	**65**	35	70	**(15)**	23	(16)	**50**	58	54
Finance costs	**(1,146)**	(900)	(999)	**74**	47	(21)	**(1,072)**	(853)	(1,020)
Profit before tax from continuing operations	**2,880**	1,628	1,963	**561**	36	(563)	**3,441**	1,664	1,400

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation.

(c) Capital expenditure

Capital expenditure represents additions to property, plant and equipment and non-current intangibles but excludes additional investments in and loans to joint ventures and associates.

	Net book value of property, plant and equipment and other intangible assets			Capital expenditure			Depreciation, amortisation and impairment		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Operating segments:									
UK Electricity Transmission	**14,678**	14,000	13,463	**1,195**	984	951	**(508)**	(460)	(431)
UK Electricity Distribution	**12,522**	—	—	**899**	—	—	**(158)**	—	—
UK Electricity System Operator	**404**	379	336	**108**	88	92	**(83)**	(47)	(38)
New England	**11,485**	10,165	13,127	**1,561**	1,437	1,365	**(364)**	(389)	(373)
New York	**18,676**	16,467	16,920	**1,960**	1,738	1,822	**(537)**	(453)	(436)
NGV and Other	**3,039**	2,750	2,490	**462**	480	562	**(180)**	(136)	(157)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)
Split by geographical area – continuing operations:									
UK	**30,131**	16,627	15,706	**2,546**	1,504	1,560	**(879)**	(596)	(579)
US	**30,673**	27,134	30,630	**3,639**	3,223	3,232	**(951)**	(889)	(856)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)
Asset type:									
Property, plant and equipment	**57,532**	42,424	45,160	**5,714**	4,335	4,465	**(1,544)**	(1,317)	(1,286)
Non-current intangible assets	**3,272**	1,337	1,176	**471**	392	327	**(286)**	(168)	(149)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

3. Revenue

Revenue arises in the course of ordinary activities and principally comprises:
- transmission services;
- distribution services; and
- generation services.

Transmission services, distribution services and certain other services (excluding rental income but including metering) fall within the scope of IFRS 15 'Revenue from Contracts with Customers', whereas generation services (which solely relate to the contract with the Long Island Power Authority (LIPA) in the US) are accounted for under IFRS 16 'Leases' as rental income, also presented within revenue. Revenue is recognised to reflect the transfer of goods or services to customers at an amount that reflects the consideration to which the Group expects to be entitled to in exchange for those goods or services and excludes amounts collected on behalf of third parties and value added tax. The Group recognises revenue when it transfers control over a product or service to a customer.

Revenue in respect of regulated activities is determined by regulatory agreements that set the price to be charged for services in a given period based on pre-determined allowed revenues. Variances in service usage can result in actual revenue collected exceeding (over-recoveries) or falling short (under-recoveries) of allowed revenues. Where regulatory agreements allow the recovery of under-recoveries or require the return of over-recoveries, the allowed revenue for future periods is typically adjusted. In these instances, no assets or liabilities are recognised for under- or over-recoveries respectively, because the adjustment relates to future services that have not yet been delivered.

Below, we include a description of principal activities, by reportable segment, from which the Group generates its revenue. For more detailed information about our segments, see note 2.

(a) UK Electricity Transmission
The UK Electricity Transmission segment principally generates revenue by providing electricity transmission services in England and Wales. Our business operates as a monopoly regulated by Ofgem, which has established price control mechanisms that set the amount of annual allowed returns our business can earn (along with the Scottish and Offshore transmission operators amongst others).

The transmission of electricity encompasses the following principal services:
- the supply of high-voltage electricity – revenue is recognised based on usage. Our performance obligation is satisfied over time as our customers make use of our network. We bill monthly in arrears and our payment terms are up to 60 days. Price is determined prior to our financial year end with reference to the regulated allowed returns and estimated annual volumes; and
- construction work (principally for connections) – revenue is recognised over time, as we provide access to our network. Customers can either pay over the useful life of the connection or upfront. Where the customer pays upfront, revenues are deferred as a contract liability and released over the life of the asset.

For other construction where there is no consideration for any future services, for example diversions, revenues are recognised as the construction work is completed.

(b) UK Electricity Distribution
The UK Electricity Distribution segment principally generates revenue by providing electricity distribution services in the Midlands and South West of England and South Wales. Similar to UK Electricity Transmission, UK Electricity Distribution operates as a monopoly in the jurisdictions that it operates in and is regulated by Ofgem.

The distribution of electricity encompasses the following principal services:
- electricity distribution – revenue is recognised based on usage by customers (over time), based upon volumes and price. The price control mechanism in place that determines our annual allowances is similar to UK Electricity Transmission. Revenues are billed monthly and payment terms are typically within 14 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability and released over the life of the asset.

For other construction where there is no consideration for any future services, revenues are recognised as the construction is completed.

(c) UK Electricity System Operator
The UK System Operator earns revenue for balancing supply and demand of electricity on Great Britain's electricity transmission system, where it acts as principal. Balancing services are regulated by Ofgem and revenue is recognised as the service is provided.

The System Operator also collects revenues on behalf of transmission operators, principally National Grid Electricity Transmission plc and the Scottish and Offshore transmission operators, from users (electricity suppliers) who connect to or use the transmission system. As the System Operator acts as an agent in this capacity, it therefore records transmission network revenues net of payments to transmission operators.

(d) New England
The New England segment principally generates revenue by providing electricity and gas distribution services and high voltage electricity transmission services in New England. Distribution services are regulated by the Massachusetts Department of Public Utilities (MADPU) and the Rhode Island Public Utilities Commission (RIPUC) and transmission services are regulated by the Federal Energy Regulatory Commission (FERC), both of whom regulate the rates that can be charged to customers.

The distribution of electricity and gas and the provision of electricity transmission facilities encompasses the following principal services:
- electricity and gas distribution and electricity transmission – revenue is recognised based on usage by customers (over time). Revenues are billed monthly and payment terms are 30 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability or customer contributions (where they relate to government entities) and released over the life of the connection.

3. Revenue continued

(e) New York

The New York segment principally generates revenue by providing electricity and gas distribution services and high-voltage electricity transmission services in New York. Distribution services are regulated by the New York Public Service Commission (NYPSC) and transmission services are regulated by the FERC, both of whom regulate the rates that can be charged to customers.

The distribution of electricity and gas and the provision of electricity transmission facilities encompasses the following principal services:

- electricity and gas distribution and electricity transmission – revenue is recognised based on usage by customers (over time). Revenues are billed monthly and payment terms are 30 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability or customer contributions (where they relate to government entities) and released over the life of the connection.

(f) NGV and Other

NGV and Other generates revenue from electricity interconnectors, LNG at the Isle of Grain, National Grid Renewables, our UK commercial property business, rental income and insurance.

The Group recognises revenue from transmission services through interconnectors and LNG importation at the Isle of Grain by means of customers' use of capacity and volumes. Revenue is recognised over time and is billed monthly. Payment terms are up to 30 days. Revenues in respect of certain wholly owned interconnector subsidiaries are subject to a cap and floor regime constructed by Ofgem. Where an interconnector expects to breach its total five-year cap, a provision and reduction in revenue is recognised in the current reporting period (see note 26). Where an interconnector does not expect to reach its five-year floor, either an asset will be recognised where a future inflow of economic benefits is considered virtually certain, or a contingent asset will be disclosed where the future inflow is concluded to be probable.

Electricity generation revenue is earned from the provision of energy services and supply capacity to produce energy for the use of customers of LIPA through a power supply agreement where LIPA receives all of the energy and capacity from the asset until at least 2025. The arrangement is treated as an operating lease within the scope of the leasing standard where we act as lessor; with rental income being recorded as other income, which forms part of total revenue. Lease payments (capacity payments) are recognised on a straight-line basis and variable lease payments are recognised as the energy is generated.

Other revenue in the scope of IFRS 15 principally includes sales of renewables projects from National Grid Renewables to Emerald Energy Venture LLC (Emerald), which is jointly controlled by National Grid and Washington State Investment Board (WSIB) (see note 16). National Grid Renewables develops wind and solar generation assets in the US, whilst Emerald has a right of first refusal to buy, build and operate those assets. Revenue is recognised as it is earned.

Other revenue, recognised in accordance with standards other than IFRS 15, includes property sales by our UK commercial property business (including sales to our 50% share in the St William joint venture which was sold on 15 March 2022) and rental income. Property sales are recorded at a point in time (when the sale is legally completed) and rental income is recorded over time.

(g) Disaggregation of revenue

In the following tables, revenue is disaggregated by primary geographical market and major service lines. The table below reconciles disaggregated revenue with the Group's reportable segments (see note 2).

Revenue for the year ended 31 March 2022	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total £m
Revenue under IFRS 15							
Transmission	1,983	–	–	52	405	627	3,067
Distribution	–	1,375	–	4,434	5,110	–	10,919
System Operator	–	–	3,418	–	–	–	3,418
Other[1]	35	89	19	10	10	147	310
Total IFRS 15 revenue	2,018	1,464	3,437	4,496	5,525	774	17,714
Other revenue							
Generation	–	–	–	–	–	373	373
Other[2]	10	4	–	54	36	69	173
Total other revenue	10	4	–	54	36	442	546
Total revenue before exceptional items and remeasurements	2,028	1,468	3,437	4,550	5,561	1,216	18,260
Exceptional items and remeasurements	–	–	–	–	–	189	189
Total revenue from continuing operations	2,028	1,468	3,437	4,550	5,561	1,405	18,449

1. The UK Electricity Transmission and UK Electricity Distribution other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
2. Other revenue, recognised in accordance with accounting standards other than IFRS 15, includes property sales by our UK commercial property business and rental income.

Notes to the consolidated financial statements continued

3. Revenue continued

(g) Disaggregation of revenue continued

Geographical split for the year ended 31 March 2022	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total £m
Revenue under IFRS 15							
UK	2,018	1,464	3,437	—	—	646	7,565
US	—	—	—	4,496	5,525	128	10,149
Total IFRS 15 revenue	2,018	1,464	3,437	4,496	5,525	774	17,714
Other revenue							
UK	10	4	—	—	—	35	49
US	—	—	—	54	36	407	497
Total other revenue	10	4	—	54	36	442	546
Total revenue before exceptional items and remeasurements	2,028	1,468	3,437	4,550	5,561	1,216	18,260
Exceptional items and remeasurements	—	—	—	—	—	189	189
Total revenue from continuing operations	2,028	1,468	3,437	4,550	5,561	1,405	18,449

Revenue for the year ended 31 March 2021	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
Transmission	1,875	—	—	74	329	316	2,594
Distribution	—	—	—	4,091	4,226	—	8,317
System Operator	—	—	2,076	—	—	—	2,076
Other[2]	67	—	(61)	8	7	76	97
Total IFRS 15 revenue	1,942	—	2,015	4,173	4,562	392	13,084
Other revenue							
Generation	—	—	—	—	—	376	376
Other[3]	22	—	3	41	43	96	205
Total other revenue	22	—	3	41	43	472	581
Total revenue from continuing operations	1,964	—	2,018	4,214	4,605	864	13,665

Geographical split for the year ended 31 March 2021	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
UK	1,942	—	2,015	—	—	327	4,284
US	—	—	—	4,173	4,562	65	8,800
Total IFRS 15 revenue	1,942	—	2,015	4,173	4,562	392	13,084
Other revenue							
UK	22	—	3	—	—	59	84
US	—	—	—	41	43	413	497
Total other revenue	22	—	3	41	43	472	581
Total revenue from continuing operations	1,964	—	2,018	4,214	4,605	864	13,665

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.
2. The UK Electricity Transmission other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
3. Other revenue, recognised in accordance with accounting standards other than IFRS 15, principally includes property sales by our UK commercial property business and rental income reported in NGV and Other.

3. Revenue continued

(g) Disaggregation of revenue continued

Revenue for the year ended 31 March 2020	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
Transmission	1,898	—	—	77	348	309	2,632
Distribution	—	—	—	4,114	4,205	—	8,319
System Operator	—	—	1,610	—	—	—	1,610
Other[2]	69	—	94	6	6	51	226
Total IFRS 15 revenue	1,967	—	1,704	4,197	4,559	360	12,787
Other revenue							
Generation	—	—	—	—	—	369	369
Other[3]	11	—	12	38	42	101	204
Total other revenue	11	—	12	38	42	470	573
Total revenue from continuing operations	1,978	—	1,716	4,235	4,601	830	13,360

Geographical split for the year ended 31 March 2020	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
UK	1,967	—	1,704	—	—	322	3,993
US	—	—	—	4,197	4,559	38	8,794
Total IFRS 15 revenue	1,967	—	1,704	4,197	4,559	360	12,787
Other revenue							
UK	11	—	12	—	—	86	109
US	—	—	—	38	42	384	464
Total other revenue	11	—	12	38	42	470	573
Total revenue from continuing operations	1,978	—	1,716	4,235	4,601	830	13,360

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.
2. The UK Electricity Transmission other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
3. Other revenue, recognised in accordance with accounting standards other than IFRS 15, principally includes property sales by our UK commercial property business and rental income reported in NGV and Other.

Contract liabilities (see note 23) represent revenue to be recognised in future periods relating to contributions in aid of construction of £1,472 million (2021: £1,160 million; 2020: £1,158 million). Contract liabilities in the years ended 31 March 2021 and 2020 included amounts in respect of the UK Gas Transmission business of £136 million and £136 million respectively. Revenue is recognised over the life of the asset. The asset lives for connections in UK Electricity Transmission, UK Electricity Distribution, New England and New York are 40 years, 69 years, 51 years and up to 48 years respectively. The weighted average amortisation period is 31 years.

Future revenues in relation to unfulfilled performance obligations not yet received in cash amount to £5.2 billion (2021: £4.8 billion; 2020: £3.1 billion). £1.7 billion (2021: £1.6 billion; 2020: £1.5 billion) relates to connection contracts in UK Electricity Transmission which will be recognised as revenue over 25 years and £3.0 billion (2021: £3.0 billion; 2020: £1.5 billion) relates to revenues to be earned under Grain LNG contracts until 2045. The remaining amount will be recognised as revenue over 3 years.

The amount of revenue recognised for the year ended 31 March 2022 from performance obligations satisfied (or partially satisfied) in previous periods, mainly due to changes in the estimate of the stage of completion, is £nil (2021: £nil; 2020: £nil).

4. Other operating income and costs

Below we have presented separately certain items included in our operating costs from continuing operations. These include a breakdown of payroll costs (including disclosure of amounts paid to key management personnel) and fees paid to our auditors. Other operating income includes gains arising on disposal of interests in other entities.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
(Gain) on disposal of St William Homes LLP (note 5)	**–**	–	–	**(228)**	–	–	**(228)**	–	–
Depreciation, amortisation and impairment	**1,830**	1,485	1,435	**–**	–	–	**1,830**	1,485	1,435
Payroll costs	**1,770**	1,622	1,558	**24**	16	–	**1,794**	1,638	1,558
Purchases of electricity	**1,487**	1,181	1,318	**(207)**	(51)	85	**1,280**	1,130	1,403
Purchases of gas	**1,851**	1,233	1,276	**(185)**	17	40	**1,666**	1,250	1,316
Property and other taxes	**1,202**	1,105	1,100	**–**	–	–	**1,202**	1,105	1,100
UK Electricity Balancing costs	**3,152**	1,875	1,317	**–**	–	–	**3,152**	1,875	1,317
Other	**2,988**	2,412	2,318	**227**	44	400	**3,215**	2,456	2,718
Other operating (income)/costs	**14,280**	10,913	10,322	**(369)**	26	525	**13,911**	10,939	10,847
Provision for bad and doubtful debts	**167**	325	234	**–**	–	–	**167**	325	234
Total operating costs from continuing operations	**14,447**	11,238	10,556	**(369)**	26	525	**14,078**	11,264	11,081
Operating costs from continuing operations include:									
Inventory consumed							**436**	312	315
Research and development expenditure							**11**	12	9

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(a) Payroll costs

	2022 £m	2021[1] £m	2020[1] £m
Wages and salaries[2]	**2,563**	2,170	2,081
Social security costs	**201**	156	152
Defined contribution scheme costs	**81**	67	62
Defined benefit pension costs	**185**	126	125
Share-based payments	**38**	23	16
Severance costs (excluding pension costs)	**5**	9	1
	3,073	2,551	2,437
Less: payroll costs capitalised	**(1,279)**	(913)	(879)
Total payroll costs from continuing operations	**1,794**	1,638	1,558

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Included within wages and salaries are US other post-retirement benefit costs of £39 million (2021: £43 million; 2020: £45 million). For further information refer to note 25.

(b) Number of employees

	31 March 2022	**Monthly average 2022**	31 March 2021[1]	Monthly average 2021[1]	31 March 2020[1]	Monthly average 2020[1]
UK	**11,960**	**11,393**	4,468	4,333	4,185	4,095
US	**17,332**	**17,314**	17,026	16,821	16,748	16,679
Total number of employees (continuing operations)	**29,292**	**28,707**	21,494	21,154	20,933	20,774

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

4. Other operating income and costs continued

(c) Key management compensation

	2022 £m	2021 £m	2020 £m
Short-term employee benefits	**7**	7	7
Compensation for loss of office	**—**	—	1
Post-employment benefits	**1**	1	1
Share-based payments	**5**	4	3
Total key management compensation	**13**	12	12

Key management compensation relates to the Board, including the Executive Directors and Non-executive Directors for the years presented.

(d) Directors' emoluments

Details of Executive Directors' emoluments are contained in the Remuneration Report on page 114 and those of Non-executive Directors on page 121.

(e) Auditors' remuneration

Auditors' remuneration is presented below in accordance with the requirements of the Companies Act 2006 and the principal accountant fees and services disclosure requirements of Item 16C of Form 20-F:

	2022 £m	2021 £m	2020 £m
Audit fees payable to the Parent Company's auditors and their associates in respect of:			
Audit of the Parent Company's individual and consolidated financial statements[1]	**2.7**	2.5	1.9
The auditing of accounts of any associate of the Company	**8.9**	8.1	8.7
Other services supplied[2]	**7.3**	6.4	6.3
	18.9	17.0	16.9
Total other services[3]			
All other fees:			
Other assurance services[4]	**0.9**	0.8	0.6
Other non-audit services not covered above[5]	**0.1**	2.0	0.5
	1.0	2.8	1.1
Total auditors' remuneration	**19.9**	19.8	18.0

1. Audit fees in each year represent fees for the audit of the Company's financial statements and regulatory reporting for the years ended 31 March 2022, 2021 and 2020.
2. Other services supplied represent fees payable for services in relation to other statutory filings or engagements that are required to be carried out by the auditors. In particular, this includes fees for reports under section 404 of the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley), audit reports on regulatory returns and the review of interim financial statements for the six-month periods ended 30 September 2021, 2020 and 2019 respectively.
3. There were no tax compliance or tax advisory fees and no audit-related fees as described in Item 16C(b) of Form 20-F.
4. In all years, principally relates to assurance services provided in relation to comfort letters for debt issuances and, in 2021, also includes amounts related to capacity market auction monitoring services.
5. For 2021, includes the class 1 Circular in respect of the acquisition of WPD announced on 18 March 2021. In 2020, other assurance services include auction monitor work on Contracts for Difference, a review of controls over our data on New York customers and IT project assurance.

The Audit & Risk Committee considers and makes recommendations to the Board, to be put to shareholders for approval at each AGM, in relation to the appointment, re-appointment, removal and oversight of the Company's independent auditors. The Committee also considers and approves the audit fees on behalf of the Board in accordance with the Competition and Market Authority Audit Order 2014. The auditors' remuneration is then put to shareholders at each AGM. Details of our policies and procedures in relation to non-audit services to be provided by the independent auditors are set out on page 105 of the Corporate Governance Report.

Certain services are prohibited from being performed by the external auditors under the Sarbanes-Oxley Act. Of the above services, none were prohibited.

Notes to the consolidated financial statements continued

5. Exceptional items and remeasurements

To monitor our financial performance, we use a profit measure that excludes certain income and expenses. We call that measure 'adjusted profit'. Adjusted profit (which excludes exceptional items and remeasurements as defined below) is used by management to monitor financial performance as it is considered that it aids the comparability of our reported financial performance from year to year. We exclude items from adjusted profit because, if included, these items could distort understanding of our performance for the year and the comparability between periods. This note analyses these items, which are included in our results for the year but are excluded from adjusted profit.

Exceptional items and remeasurements from continuing operations

	2022 £m	2021[1] £m	2020[1] £m
Included within operating profit			
Exceptional items:			
Release of St William Homes LLP deferred income	**189**	–	–
Net gain on disposal of St William Homes LLP	**228**	–	–
New operating model implementation costs and cost efficiency programme	**(66)**	(50)	–
Transaction and separation costs	**(223)**	(24)	–
Environmental insurance recovery	**38**	–	–
Changes in environmental provisions	**–**	14	(400)
	166	(60)	(400)
Remeasurements – commodity contract derivatives	**392**	34	(125)
	558	(26)	(525)
Included within finance income and costs			
Remeasurements:			
Net gains/(losses) on financing derivatives	**74**	47	(21)
Net (losses)/gains on financial assets at fair value through profit and loss	**(15)**	23	(16)
	59	70	(37)
Included within share of post-tax results of joint ventures and associates			
Remeasurements:			
Remeasurements – net losses on financial instruments	**(56)**	(8)	(1)
Total included within profit/(loss) before tax	**561**	36	(563)
Included within tax			
Exceptional items – movements arising on items not included in profit before tax:			
Deferred tax charge arising as a result of UK tax rate change	**(458)**	–	(148)
Tax on exceptional items	**(28)**	8	103
Tax on remeasurements	**(103)**	(34)	37
	(589)	(26)	(8)
Total exceptional items and remeasurements after tax	**(28)**	10	(571)
Analysis of total exceptional items and remeasurements after tax			
Exceptional items after tax	**(320)**	(52)	(445)
Remeasurements after tax	**292**	62	(126)
Total exceptional items and remeasurements after tax	**(28)**	10	(571)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

5. Exceptional items and remeasurements continued

Exceptional items

Management uses an exceptional items framework that has been discussed and approved by the Audit & Risk Committee. This follows a three-step process which considers the nature of the event, the financial materiality involved and any particular facts and circumstances. In considering the nature of the event, management focuses on whether the event is within the Group's control and how frequently such an event typically occurs. With respect to restructuring costs, these represent additional expenses incurred that are not related to the normal business and day-to-day activities. In determining the facts and circumstances, management considers factors such as ensuring consistent treatment between favourable and unfavourable transactions, the precedent for similar items, the number of periods over which costs will be spread or gains earned, and the commercial context for the particular transaction. The exceptional items framework was last updated in March 2022 and reflects the latest disclosure requirements arising in respect of FRC guidance issued in the year.

Items of income or expense that are considered by management for designation as exceptional items include significant restructurings, write-downs or impairments of non-current assets, significant changes in environmental or decommissioning provisions, integration of acquired businesses, gains or losses on disposals of businesses or investments and significant debt redemption costs as a consequence of transactions such as significant disposals or issues of equity, and the related tax, as well as deferred tax arising on changes to corporation tax rates.

Costs arising from restructuring programmes include redundancy costs. Redundancy costs are charged to the consolidated income statement in the year in which a commitment is made to incur the costs and the main features of the restructuring plan have been announced to affected employees.

Set out below are details of the transactions against which we have considered the application of our exceptional items framework in each of the years for which results are presented. No COVID-19-related costs incurred have been recognised as exceptional in any of the years presented.

2022

Net gain on disposal of St William Homes LLP and release of deferred income

During the year, the Group recognised a gain of £228 million on the disposal of its entire 50% equity interest in the St William Homes LLP joint venture to The Berkeley Group plc for cash consideration of £413 million (see note 16). In connection with the disposal, the Group also released deferred income of £189 million which related to deferred profits from previous property sales to St William Homes LLP. We have concluded that the release of the deferred income should be classified as exceptional given the crystallisation event for the release is the sale of the Group's equity interest in St William Homes LLP.

New operating model implementation costs and cost efficiency programme

The Group incurred a further £66 million of costs in relation to the design and implementation of our new operating model and the major cost efficiency programme announced in November 2021. The costs recognised primarily relate to professional fees incurred and redundancy provisions. Whilst the costs incurred this year do not meet the quantitative threshold to be classified as exceptional on a standalone basis, when taken in aggregate with the costs expected to be incurred over the duration of the programme, we have concluded that the costs should be classified as exceptional in line with our exceptional items policy. Estimated costs expected to be incurred in future years are disclosed in the Financial review on page 38. The total cash outflow for the period was £48 million.

Transaction and separation costs

£223 million of transaction and separation costs were incurred in the period in relation to the acquisition of WPD (see note 37), the planned disposal of NECO (see note 10) and the planned disposal of our UK Gas Transmission business (see note 10). The costs relate to legal fees, bankers' fees and other professional fees. The costs have been classified as exceptional, consistent with similar costs for the year ended 31 March 2021. The total cash outflow for the year was £196 million.

Environmental insurance recovery

In the US, the most significant component of our £1.9 billion environmental provision relates to several Superfund sites, and arose from former manufacturing gas plant facilities, previously owned or operated by the Group or its predecessor companies. Under Federal and State Superfund laws, potential liability for the historical contamination may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred. In the year, we have recognised an exceptional gain of £38 million relating to an insurance receivable for site remediation costs that are included in our Superfund sites environmental provision. The insurance receipts have been recorded as an exceptional item in line with the treatment of the related costs.

2021

New operating model implementation costs

The Group incurred £50 million of costs in relation to the design and implementation of our new operating model that is built on a foundation of six business units. The costs recognised in the year ended 31 March 2021 primarily related to professional fees incurred and redundancy provisions. In evaluating the costs incurred against the quantitative thresholds in our exceptional items framework we considered the total costs to be incurred over the duration of the programme. Whilst the costs incurred did not meet the quantitative threshold to be classified as exceptional on a standalone basis, we concluded that the costs should be classified as exceptional in line with our exceptional items policy, in order to ensure that the costs are treated in a consistent manner with similar costs incurred previously. The total cash outflow for the year was £33 million.

Transaction and separation costs

£24 million of transaction and separation costs were incurred in relation to the acquisition of WPD (see note 37) and the planned sale of NECO (see note 10). The costs related to legal fees, bankers' fees and professional fees. Whilst the costs incurred in isolation were not sufficiently material to warrant classification as an exceptional item, we expected further costs to be incurred in the next year, for example, in regard to success fees on completion of the acquisition. When taken in aggregate, the costs incurred over both years will be sufficiently material to be classified as exceptional in line with our policy. The total cash outflow for the year was £14 million.

Changes in environmental provision

We recognised an exceptional gain of £14 million relating to the release of environmental provisions relating to one of our US Superfund sites, for which the original provision was treated as an exceptional item. The reduction in the provision arose as a result of the re-evaluation of the Group's share of estimated costs following the finalisation of discussions on the scope of certain remediation work with government authorities. The release was recorded as an exceptional item in line with the treatment of the original provision.

5. Exceptional items and remeasurements continued

2020

Changes in environmental provisions

As a result of notices issued by governmental authorities and newly developed cost estimates prepared by third-party engineers in relation to our US Superfund sites, we re-evaluated our estimates of total costs and cost sharing allocations borne by the Company, and accordingly increased our provision by £326 million. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers, but under IFRS no asset can be recognised for this recovery.

Also included in the total environmental charge was the £74 million (re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation) impact of the change in the real discount rate applied to the environmental provisions across the Group, of which £66 million related to the US and £8 million to the UK. Given the substantial and sustained change in gilts and corporate bond yields, we concluded it was appropriate to reduce the real discount rate from 1% to 0.5%. The weighted average remaining duration of our cash flows is now around 10 years.

Remeasurements

Remeasurements comprise unrealised gains or losses recorded in the consolidated income statement arising from changes in the fair value of certain of our financial assets and liabilities accounted for at fair value through profit and loss (FVTPL). Once the fair value movements are realised (for example, when the derivative matures), the previously recognised fair value movements are then reversed through remeasurements and recognised within earnings before exceptional items and remeasurements. These assets and liabilities include commodity contract derivatives and financing derivatives to the extent that hedge accounting is not available or is not fully effective.

The unrealised gains or losses reported in profit and loss on certain additional assets and liabilities treated at FVTPL are also classified within remeasurements. These relate to financial assets (which fail the 'solely payments of principal and interest test' under IFRS 9), the money market fund investments used by Group Treasury for cash management purposes and the net foreign exchange gains and losses on borrowing activities. These are offset by foreign exchange gains and losses on financing derivatives measured at fair value. In all cases, these fair values increase or decrease because of changes in foreign exchange, commodity or other financial indices over which we have no control.

We report unrealised gains or losses relating to certain discrete classes of financial assets accounted for at FVTPL within adjusted profit. These comprise our portfolio of investments made by National Grid Partners, our investment in Sunrun Neptune 2016 LLC and the contingent consideration arising on the acquisition of National Grid Renewables (all within NGV and Other). The performance of these assets (including changes in fair value) is included in our assessment of adjusted profit for the relevant business units.

Remeasurements excluded from adjusted profit are made up of the following categories:

i. Net gains/(losses) on commodity contract derivatives represent mark-to-market movements on certain physical and financial commodity contract obligations in the US. These contracts primarily relate to the forward purchase of energy for supply to customers, or to the economic hedging thereof, that are required to be measured at fair value and that do not qualify for hedge accounting. Under the existing rate plans in the US, commodity costs are recoverable from customers although the timing of recovery may differ from the pattern of costs incurred;
ii. Net gains/(losses) on financing derivatives comprise gains and losses arising on derivative financial instruments used for the risk management of interest rate and foreign exchange exposures. These exclude gains and losses for which hedge accounting has been effective, and have been recognised directly in the consolidated statement of other comprehensive income or are offset by adjustments to the carrying value of debt (see notes 17 and 32). Net foreign exchange gains and losses on financing derivatives used for the risk management of foreign exchange exposures are offset by foreign exchange losses and gains on borrowing activities;
iii. Net gains/(losses) on financial assets measured at FVTPL comprise gains and losses on the investment funds held by our insurance captives which are categorised as FVTPL (see note 15);
iv. Net gains/(losses) on financial liabilities measured at FVTPL comprise the change in the fair value (excluding changes due to own credit risk) of a financial liability that was designated at FVTPL on transition to IFRS 9 to reduce a measurement mismatch (see note 21); and
v. Unrealised net gains/(losses) on derivatives and other financial instruments within our joint ventures and associates.

Items included within tax

2022

Change in UK corporation tax rate

In the Spring Budget 2021, the UK government announced that from 1 April 2023 the UK corporation tax rate will increase to 25%, and this was substantively enacted on 24 May 2021. Deferred tax balances at 31 March 2022 were remeasured at the enacted rate, with £458 million recognised as exceptional, in line with previous periods.

2020

The Finance Act 2016, which was enacted on 15 September 2016, reduced the main UK corporation tax rate to 17% with effect from 1 April 2020. Deferred tax balances were calculated at this rate for the years ended 31 March 2017 to 2019. On 17 March 2020, the UK government utilised the Provisional Collection of Taxes Act 1968 to substantively enact a reversal of the reduction in the main UK corporation tax rate to 17% with effect from 1 April 2020, resulting in the rate remaining at 19%. Deferred taxes at 31 March 2020 were measured using enacted tax rates and reflected in these financial statements, resulting in a £148 million deferred tax charge (re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation), principally due to the remeasurement of deferred tax liabilities. The treatment of this charge as exceptional was consistent with the treatment for the year ended 31 March 2017 when the original reduction in the tax rate was substantively enacted, resulting in the recognition of an exceptional tax credit of £94 million.

6. Finance income and costs

This note details the interest income generated by our financial assets and interest expense incurred on our financial liabilities, primarily our financing portfolio (including our financing derivatives). It also includes the net interest on our pensions and other post-retirement assets. In reporting adjusted profit, we adjust net financing costs to exclude any net gains or losses on financial instruments included in remeasurements (see note 5).

Finance income and costs remeasurements include unrealised gains and losses on certain assets and liabilities now treated at FVTPL. The interest income, dividends and interest expense on these items are included in finance income and finance costs before remeasurements respectively.

	Notes	2022 £m	2021[1] £m	2020[1] £m
Finance income				
Interest income on financial instruments:				
Bank deposits and other financial assets		**32**	33	48
Dividends received on equities held at fair value through other comprehensive income (FVOCI)		**3**	2	2
Other income		**30**	—	20
		65	35	70
Finance costs				
Net interest on pensions and other post-retirement benefit obligations	25	**—**	(51)	(34)
Interest expense on financial liabilities held at amortised cost:				
Bank loans and overdrafts		**(216)**	(53)	(46)
Other borrowings[2]		**(961)**	(741)	(846)
Interest on derivatives		**(59)**	(47)	(92)
Unwinding of discount on provisions	26	**(73)**	(77)	(75)
Other interest		**11**	(51)	(8)
Less: interest capitalised[3]		**152**	120	102
		(1,146)	(900)	(999)
Remeasurements – Finance income				
Net gains/(losses) on FVTPL financial assets		**(15)**	23	(16)
		(15)	23	(16)
Remeasurements – Finance costs				
Net gains/(losses) on financing derivatives[4]:				
Derivatives designated as hedges for hedge accounting		**45**	30	(14)
Derivatives not designated as hedges for hedge accounting		**29**	17	(7)
		74	47	(21)
Total remeasurements – Finance income and costs		**59**	70	(37)
Finance income		**50**	58	54
Finance costs[5]		**(1,072)**	(853)	(1,020)
Net finance costs from continuing operations		**(1,022)**	(795)	(966)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Includes interest expense on lease liabilities (see note 13 for details).
3. Interest on funding attributable to assets in the course of construction in the current year was capitalised at a rate of 3.2% (2021: 3.1%; 2020: 3.6%). In the UK, capitalised interest qualifies for a current year tax deduction with tax relief claimed of £16 million (2021: £11 million; 2020: £15 million). In the US, capitalised interest is added to the cost of property, plant and equipment and qualifies for tax depreciation allowances.
4. Includes a net foreign exchange gain on borrowing activities of £110 million (2021: £73 million gain; 2020: £114 million gain) offset by foreign exchange losses and gains on financing derivatives measured at fair value.
5. Finance costs include principal accretion on inflation linked liabilities of £241 million (2021: £46 million; 2020: £85 million).

7. Tax

Tax is payable in the territories where we operate, mainly the UK and the US. This note gives further details of the total tax charge and tax liabilities, including current and deferred tax. The current tax charge is the tax payable on this year's taxable profits. Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future due to differences in the accounting and tax bases.

The tax charge for the period is recognised in the income statement, the statement of comprehensive income or directly in the statement of changes in equity, according to the accounting treatment of the related transaction. The tax charge comprises both current and deferred tax.

Current tax assets and liabilities are measured at the amounts expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amounts are those that have been enacted or substantively enacted by the reporting date.

The Group operates internationally in territories with different and complex tax codes. Management exercises judgement in relation to the level of provision required for uncertain tax outcomes. There are a number of tax positions not yet agreed with the tax authorities where different interpretations of legislation could lead to a range of outcomes. Judgements are made for each position having regard to particular circumstances and advice obtained.

Deferred tax is provided for using the balance sheet liability method, and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases.

Deferred tax liabilities are generally recognised on all taxable temporary differences, and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences arise from the initial recognition of goodwill or from the initial recognition of other assets and liabilities in a transaction (other than a business combination) that affects neither the accounting nor the taxable profit or loss.

Deferred tax liabilities are recognised on taxable temporary differences arising on investments in subsidiaries and joint arrangements except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same tax authority, and the Company and its subsidiaries intend to settle their current tax assets and liabilities on a net basis.

Tax charged/(credited) to the consolidated income statement – continuing operations

	2022 £m	2021[1] £m	2020[1] £m
Tax before exceptional items and remeasurements	**669**	334	362
Exceptional tax on items not included in profit before tax (note 5)	**458**	–	148
Tax on other exceptional items and remeasurements	**131**	26	(140)
Total tax reported within exceptional items and remeasurements	**589**	26	8
Total tax charge from continuing operations	**1,258**	360	370

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Tax as a percentage of profit before tax

	2022 %	2021[1] %	2020[1] %
Before exceptional items and remeasurements – continuing operations	**23.2**	20.5	18.4
After exceptional items and remeasurements – continuing operations	**36.6**	21.6	26.4

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

7. Tax continued

The tax charge for the year can be analysed as follows:

	2022 £m	2021[1] £m	2020[1] £m
Current tax:			
UK corporation tax at 19% (2021: 19%; 2020: 19%)	**255**	157	132
UK corporation tax adjustment in respect of prior years	**(9)**	15	5
	246	172	137
Overseas corporation tax	**6**	3	(2)
Overseas corporation tax adjustment in respect of prior years	**(26)**	(15)	(41)
	(20)	(12)	(43)
Total current tax from continuing operations	**226**	160	94
Deferred tax:			
UK deferred tax	**605**	39	207
UK deferred tax adjustment in respect of prior years	**(5)**	(20)	(4)
	600	19	203
Overseas deferred tax	**425**	174	64
Overseas deferred tax adjustment in respect of prior years	**7**	7	9
	432	181	73
Total deferred tax from continuing operations	**1,032**	200	276
Total tax charge from continuing operations	**1,258**	360	370

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Tax charged/(credited) to the consolidated statement of comprehensive income and equity

	2022 £m	2021[1] £m	2020[1] £m
Current tax:			
Cash flow hedges, cost of hedging and own credit reserve	**–**	–	–
Deferred tax:			
Investments at fair value through other comprehensive income	**–**	12	(1)
Cash flow hedges, cost of hedging and own credit reserve	**(12)**	6	(38)
Remeasurements of pension assets and post-retirement benefit obligations	**493**	462	(226)
Share-based payments	**(4)**	1	(2)
	477	481	(267)
Total tax recognised in the statements of comprehensive income from continuing operations	**481**	480	(265)
Total tax relating to share-based payments recognised directly in equity from continuing operations	**(4)**	1	(2)
	477	481	(267)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

7. Tax continued

The tax charge for the year after exceptional items and remeasurements, for the continuing business, is higher (2021: higher tax charge; 2020: lower tax charge) than the standard rate of corporation tax in the UK of 19% (2021: 19%; 2020: 19%):

	Before exceptional items and remeasurements 2022 £m	**After exceptional items and remeasurements 2022 £m**	Before exceptional items and remeasurements 2021[1] £m	After exceptional items and remeasurements 2021[1] £m	Before exceptional items and remeasurements 2020[1] £m	After exceptional items and remeasurements 2020[1] £m
Profit before tax from continuing operations						
Before exceptional items and remeasurements	**2,880**	**2,880**	1,628	1,628	1,963	1,963
Exceptional items and remeasurements	**—**	**561**	—	36	—	(563)
Profit before tax from continuing operations	**2,880**	**3,441**	1,628	1,664	1,963	1,400
Profit before tax from continuing operations multiplied by UK corporation tax rate of 19% (2021: 19%; 2020: 19%)	**547**	**654**	309	316	373	266
Effect of:						
Adjustments in respect of prior years[2]	**(28)**	**(33)**	(10)	(12)	(31)	(31)
Expenses not deductible for tax purposes	**13**	**47**	18	29	24	24
Non-taxable income[3]	**(19)**	**(49)**	(7)	(7)	(18)	(18)
Adjustment in respect of foreign tax rates[4]	**143**	**170**	42	42	53	18
Deferred tax impact of change in UK tax rate	**43**	**501**	—	—	—	148
Adjustment in respect of post-tax profits of joint ventures and associates included within profit before tax	**(28)**	**(17)**	(15)	(12)	(17)	(17)
Other[5]	**(2)**	**(15)**	(3)	4	(22)	(20)
Total tax charge from continuing operations	**669**	**1,258**	334	360	362	370
	%	**%**	%	%	%	%
Effective tax rate – continuing operations	**23.2**	**36.6**	20.5	21.6	18.4	26.4

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. The prior year adjustments are primarily due to agreement of prior period tax returns.
3. Includes tax on chargeable disposals after the offset of capital losses and tax on the profits deferred to the following accounting period.
4. Includes remeasurement of US closing State deferred tax balances as a result of expected increase in the blended State tax rate following the disposal of NECO.
5. Other primarily comprises the movement in the deferred tax asset on previously unrecognised capital losses, claims for land remediation relief and impact of fair value movements on capitalised hedging.

Factors that may affect future tax charges

In the Spring Budget 2021, the UK government announced an increase in the main corporation tax rate from 19% to 25% with effect from 1 April 2023. This was substantively enacted on 24 May 2021. Deferred tax balances as at 31 March 2022, that are expected to reverse after 1 April 2023, have been calculated at 25%.

The US government continues to consider changes to federal tax legislation, but as no changes have been substantively enacted at the balance sheet date, deferred tax balances as at 31 March 2022 have been calculated at the prevailing tax rates based on the current tax laws.

We will continue to monitor the developments driven by Brexit, the OECD's Base Erosion and Profit Shifting (BEPS) project and European Commission initiatives including fiscal aid investigations. At this time, we do not expect this to have any material impact on our future tax charges. Governments across the world including the UK and the US have introduced various stimulus/reliefs for businesses to cope with the impact of the COVID-19 pandemic, from which we do not currently expect there to be a material impact on our future tax charges.

7. Tax continued

Tax included within the statement of financial position

The following are the major deferred tax assets and liabilities recognised, and the movements thereon, during the current and prior reporting periods:

	Regulatory licences £m	Accelerated tax depreciation £m	Share-based payments £m	Pensions and other post-retirement benefits £m	Financial instruments £m	Other net temporary differences[1] £m	Total £m
Deferred tax liabilities/(assets)							
At 1 April 2020	—	6,562	(48)	(360)	(55)	(1,653)	4,446
Exchange adjustments and other[2]	—	(501)	4	51	4	174	(268)
Charged/(credited) to income statement	—	373	—	(12)	1	(147)	215
Charged to other comprehensive income and equity	—	—	2	414	6	—	422
At 1 April 2021	—	6,434	(42)	93	(44)	(1,626)	4,815
Exchange adjustments and other[2]	—	247	(1)	1	1	(85)	163
Charged/(credited) to income statement	—	1,050	26	118	153	(117)	1,230
Charged/(credited) to other comprehensive income and equity	—	—	(6)	587	(10)	—	571
Reclassification to held for sale (note 10)	—	(643)	5	(166)	2	(1)	(803)
Acquisition of WPD (note 37)	429	622	—	142	(403)	(1)	789
At 31 March 2022	**429**	**7,710**	**(18)**	**775**	**(301)**	**(1,830)**	**6,765**

1. The deferred tax asset of £1,830 million as at 31 March 2022 (2021: £1,626 million) in respect of other net temporary differences primarily relates to net operating losses of £428 million (2021: £455 million), US environmental provisions of £511 million (2021: £453 million) and US bad debt provision of £201 million (2021: £184 million).
2. Exchange adjustments and other primarily comprises foreign exchange arising on translation of the US dollar deferred tax balances.

Deferred tax assets and liabilities are only offset where there is a legally enforceable right of offset and there is an intention to settle the balances net. The deferred tax balances (after offset) for statement of financial position purposes consist solely of deferred tax liabilities of £6,765 million (2021: £4,815 million). This balance is after offset of a deferred tax asset of £428 million (2021: £455 million) which has been recognised in respect of net operating losses (£418 million) and capital losses (£10 million).

Deferred tax assets in respect of some capital losses as well as trading losses and non-trade deficits have not been recognised as their future recovery is uncertain or not currently anticipated. The total deferred tax assets not recognised are as follows:

	2022 £m	2021 £m
Capital losses	**2,363**	1,620
Non-trade deficits	**1**	1
Trading losses	**7**	7

The capital losses arose in the UK on disposal of certain businesses or assets. They are available to carry forward indefinitely but can only be offset against future capital gains. The UK non-trade deficits arose prior to 1 April 2017 and therefore can only be offset against future non-trade profits.

At 31 March 2022 and 31 March 2021, there were no recognised deferred tax liabilities for taxes that would be payable on the unremitted earnings of the Group's subsidiaries or its associates as there are no significant corporation tax consequences of the Group's UK, US or overseas subsidiaries or associates paying dividends to their parent companies. There are also no significant income tax consequences for the Group from the payment of dividends by the Group to its shareholders.

Notes to the consolidated financial statements continued

8. Earnings per share (EPS)

EPS is the amount of profit after tax attributable to each ordinary share. Basic EPS is calculated on profit after tax for the year attributable to equity shareholders divided by the weighted average number of shares in issue during the year. Diluted EPS shows what the impact would be if all outstanding share options were exercised and treated as ordinary shares at year end. The weighted average number of shares is increased by additional shares issued as scrip dividends and reduced by shares repurchased by the Company during the year. The earnings per share calculations are based on profit after tax attributable to equity shareholders of the Company which excludes non-controlling interests.

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the adjusted profit sub-totals used by the Company. We have included reconciliations from this additional EPS measure to earnings for both basic and diluted EPS to provide additional detail for these items. For further details of exceptional items and remeasurements, see note 5.

(a) Basic EPS

	Earnings 2022 £m	**EPS 2022 pence**	Earnings 2021[1] £m	EPS 2021[1] pence	Earnings 2020[1] £m	EPS 2020[1] pence
Adjusted earnings from continuing operations	**2,210**	**61.4**	1,293	36.7	1,600	46.2
Exceptional items and remeasurements after tax from continuing operations (see note 5)	**(28)**	**(0.8)**	10	0.3	(571)	(16.5)
Earnings from continuing operations	**2,182**	**60.6**	1,303	37.0	1,029	29.7
Adjusted earnings from discontinued operations (see note 10)	**344**	**9.6**	340	9.7	317	9.2
Exceptional items and remeasurements after tax from discontinued operations	**(173)**	**(4.8)**	(3)	(0.1)	(82)	(2.4)
Earnings from discontinued operations	**171**	**4.8**	337	9.6	235	6.8
Total adjusted earnings	**2,554**	**71.0**	1,633	46.4	1,917	55.4
Total exceptional items and remeasurements after tax (including discontinued operations)	**(201)**	**(5.6)**	7	0.2	(653)	(18.9)
Total earnings	**2,353**	**65.4**	1,640	46.6	1,264	36.5

	2022 millions	2021 millions	2020 millions
Weighted average number of ordinary shares – basic	**3,599**	3,523	3,461

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(b) Diluted EPS

	Earnings 2022 £m	**EPS 2022 pence**	Earnings 2021[1] £m	EPS 2021[1] pence	Earnings 2020[1] £m	EPS 2020[1] pence
Adjusted earnings from continuing operations	**2,210**	**61.1**	1,293	36.5	1,600	46.0
Exceptional items and remeasurements after tax from continuing operations (see note 5)	**(28)**	**(0.8)**	10	0.3	(571)	(16.4)
Earnings from continuing operations	**2,182**	**60.3**	1,303	36.8	1,029	29.6
Adjusted earnings from discontinued operations	**344**	**9.5**	340	9.6	317	9.1
Exceptional items and remeasurements after tax from discontinued operations (see note 10)	**(173)**	**(4.8)**	(3)	(0.1)	(82)	(2.4)
Earnings from discontinued operations	**171**	**4.7**	337	9.5	235	6.7
Total adjusted earnings	**2,554**	**70.6**	1,633	46.1	1,917	55.1
Total exceptional items and remeasurements after tax (including discontinued operations)	**(201)**	**(5.6)**	7	0.2	(653)	(18.8)
Total earnings	**2,353**	**65.0**	1,640	46.3	1,264	36.3

	2022 millions	2021 millions	2020 millions
Weighted average number of ordinary shares – diluted	**3,616**	3,540	3,478

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(c) Reconciliation of basic to diluted average number of shares

	2022 millions	2021 millions	2020 millions
Weighted average number of ordinary shares – basic	**3,599**	3,523	3,461
Effect of dilutive potential ordinary shares – employee share plans	**17**	17	17
Weighted average number of ordinary shares – diluted	**3,616**	3,540	3,478

9. Dividends

Interim dividends are recognised when they become payable to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

	2022			2021			2020		
	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m
Interim dividend in respect of the current year	**17.21**	**339**	**282**	17.00	348	249	16.57	335	241
Final dividend in respect of the prior year	**32.16**	**583**	**562**	32.00	1,065	54	31.26	557	517
	49.37	**922**	**844**	49.00	1,413	303	47.83	892	758

The Directors are proposing a final dividend for the year ended 31 March 2022 of 33.76p per share that will absorb approximately £1,231 million of shareholders' equity (assuming all amounts are settled in cash). It will be paid on 18 August 2022 to shareholders who are on the register of members at 4 June 2022 (subject to shareholders' approval at the AGM). A scrip dividend will be offered as an alternative.

10. Assets held for sale and discontinued operations

The results and cash flows of significant assets or businesses sold during the year are shown separately from our continuing operations, and presented within discontinued operations in the income statement and cash flow statement. Assets and businesses are classified as held for sale when their carrying amounts are recovered through sale rather than through continuing use. They only meet the held for sale condition when the assets are ready for immediate sale in their present condition, management is committed to the sale and it is highly probable that the sale will complete within one year. Depreciation ceases on assets and businesses when they are classified as held for sale and the assets and businesses are impaired if the proceeds less sale costs fall short of the carrying value.

(a) Assets held for sale

The following assets and liabilities were classified as held for sale as at 31 March 2022:

	Total assets held for sale £m	Total liabilities held for sale £m	Net assets held for sale £m
The Narragansett Electric Company	**4,129**	**(1,658)**	**2,471**
UK Gas Transmission	**5,871**	**(5,530)**	**341**
Net assets held for sale	**10,000**	**(7,188)**	**2,812**

The Narragansett Electric Company

On 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, NECO. NECO is part of our New England segment and is a retail distribution company providing electricity and gas to customers in Rhode Island. The associated assets and liabilities were consequently presented as held for sale in the consolidated financial statements for the year ended 31 March 2021.

As NECO does not represent a separate major line of business or geographical operations, the criteria for classification as a discontinued operation are not met and accordingly its results have not been separately disclosed on the face of the income statement.

Whilst all of the regulatory approvals are in place, the disposal of NECO was not finalised as at 31 March 2022 due to the appeal of one of these approvals by the Rhode Island Attorney General. The following assets and liabilities of NECO were classified as held for sale at 31 March 2022:

	£m
Goodwill	**590**
Intangible assets	**4**
Property, plant and equipment	**3,173**
Trade and other receivables	**251**
Cash and cash equivalents	**6**
Other assets	**105**
Total assets held for sale	**4,129**
Borrowings	**(1,177)**
Pension liabilities	**(12)**
Other liabilities	**(469)**
Total liabilities held for sale	**(1,658)**
Net assets held for sale	**2,471**

No impairment losses were recognised upon remeasurement of the assets and liabilities prior to classification as held for sale. NECO generated profit after tax of £237 million for the year ended 31 March 2022 (2021: £104 million; 2020: £31 million). Current and deferred tax balances relating to NECO have not been included as held for sale on the basis that those balances will be retained by National Grid rather than transferred with the other assets and liabilities of NECO. Furthermore, the tax balances of NECO have been classified within current and non-current assets and liabilities with the corresponding offsets from the other Group members in accordance with the jurisdictional netting principles.

Notes to the consolidated financial statements continued

10. Assets held for sale and discontinued operations continued

(a) Assets held for sale continued

UK Gas Transmission

The Group announced its intention to sell the UK Gas Transmission business on 18 March 2021. On 27 March 2022, the Group agreed to sell 100% of the UK Gas Transmission business to a new entity (the 'Acquiring Entity') in exchange for £4.2 billion cash consideration (subject to customary completion adjustments) and a 40% interest in the Acquiring Entity. The other 60% in the Acquiring Entity will be owned by Macquarie Infrastructure and Real Assets (MIRA) and British Columbia Investment Management Corporation (BCI) (together, the 'Consortium'). £2.0 billion of the cash consideration comes from additional debt financing raised by the Acquiring Entity at completion. The sale is expected to complete in the third quarter of the financial year ending 31 March 2023 subject to the receipt of all regulatory approvals.

On 27 March 2022, the Group also entered into a Further Acquisition Agreement (FAA) with the Consortium. This allows the Consortium to purchase the Group's 40% interest in the Acquiring Entity for £1.4 billion plus an annualised escalation factor. The FAA can be exercised either in the period between 1 January and 31 March 2023 or in the period between 1 April and 30 June 2023. The deferral of the option window is at our discretion (subject to change, depending on the timing of the closing of the sale agreement).

The Group classified the associated assets and liabilities of the business as held for sale in the consolidated statement of financial position as at 31 August 2021, when the sale was considered to be highly probable following management approval of the sale timetable and communication thereof to potential buyers. As at 31 March 2022, the following assets and liabilities of the UK Gas Transmission business were classified as held for sale:

	£m
Intangible assets	159
Property, plant and equipment	4,719
Trade and other receivables	215
Pension assets	664
Cash and cash equivalents	9
Financing derivatives	93
Other assets	12
Total assets held for sale	5,871
Borrowings	(4,165)
Deferred tax liabilities	(803)
Other liabilities	(562)
Total liabilities held for sale	(5,530)
Net assets held for sale	**341**

No impairment losses were recognised upon remeasurement of the assets and liabilities prior to classification as held for sale.

(b) Discontinued operations

Planned disposal of UK Gas Transmission

As UK Gas Transmission represents a major separate line of business, the business has also met the criteria for classification as a discontinued operation, and therefore the results of the business have been shown separately from the continuing business for all periods presented on the face of the income statement as a discontinued operation.

Disposal of Quadgas HoldCo Limited

In June 2019, the Group sold its remaining 39% interest in Cadent (held through its holding in Quadgas HoldCo Limited (Quadgas)). The aggregate carrying value of our investment in Quadgas at the disposal date was £1,956 million and the total sales proceeds were £1,965 million, resulting in a gain on disposal of £9 million.

We considered the disposal of our 39% investment in Quadgas as the final stage of the plan to dispose of our interest in the UK Gas Distribution business first announced in 2015, and accordingly treated the results and cash flows arising from Quadgas as a discontinued operation on the basis that the sale formed the final part of a 'single coordinated plan' to dispose of UK Gas Distribution.

10. Assets held for sale and discontinued operations continued

(b) Discontinued operations continued

The summary income statements for UK Gas Transmission and Quadgas, together representing the discontinued operations of the Group, for the years ended 31 March 2022, 2021 and 2020 are as follows:

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2022 £m	2021 £m	2020 £m	**2022 £m**	2021 £m	2020 £m	**2022 £m**	2021 £m	2020 £m
Discontinued operations									
Revenue	**1,362**	1,114	1,180	**–**	–	–	**1,362**	1,114	1,180
Other operating costs	**(708)**	(615)	(677)	**(17)**	(5)	(25)	**(725)**	(620)	(702)
Operating profit	**654**	499	503	**(17)**	(5)	(25)	**637**	494	478
Finance income	**–**	–	6	**–**	–	–	**–**	–	6
Finance costs[1]	**(218)**	(77)	(120)	**(12)**	2	(27)	**(230)**	(75)	(147)
Profit before tax	**436**	422	389	**(29)**	(3)	(52)	**407**	419	337
Tax[2]	**(92)**	(82)	(72)	**(144)**	–	(39)	**(236)**	(82)	(111)
Profit after tax from discontinued operations	**344**	340	317	**(173)**	(3)	(91)	**171**	337	226
Gain on disposal	**–**	–	–	**–**	–	9	**–**	–	9
Total profit after tax from discontinued operations	**344**	340	317	**(173)**	(3)	(82)	**171**	337	235

1. Finance costs from discontinued operations include principal accretion of inflation linked liabilities in the UK Gas Transmission business of £158 million (2021: £38 million; 2020: £76 million).
2. Of the £144 million exceptional tax charge in the year ended 31 March 2022, £145 million relates to deferred tax due to the change in the UK corporation tax rate.

The summary statement of comprehensive income for discontinued operations for the years ended 31 March 2022, 2021 and 2020 are as follows:

	2022 £m	2021 £m	2020 £m
Profit after tax from discontinued operations	**171**	337	235
Other comprehensive income/(loss) from discontinued operations			
Items from discontinued operations that will never be reclassified to profit or loss:			
Remeasurement gains/(losses) on pension assets and post-retirement benefit obligations	**309**	(250)	58
Net losses on financial liability designated at fair value through profit and loss attributable to changes in own credit risk	**(1)**	(11)	(3)
Net losses in respect of cash flow hedging of capital expenditure	**–**	(2)	–
Tax on items that will never be reclassified to profit or loss	**(94)**	50	(20)
Total gains/(losses) from discontinued operations that will never be reclassified to profit or loss	**214**	(213)	35
Items from discontinued operations that may be reclassified subsequently to profit or loss:			
Net gains/(losses) in respect of cash flow hedges	**1**	3	(1)
Net (losses)/gains in respect of cost of hedging	**(4)**	(6)	2
Tax on items that may be reclassified subsequently to profit or loss	**–**	–	2
Total losses from discontinued operations that may be reclassified subsequently to profit or loss	**(3)**	(3)	3
Other comprehensive income/(loss) for the year, net of tax from discontinued operations	**211**	(216)	38
Total comprehensive income for the year from discontinued operations	**382**	121	273

Details of the cash flows relating to discontinued operations are set within the consolidated cash flow statement.

11. Goodwill

Goodwill represents the excess of what we paid to acquire businesses over the fair value of their net assets at the acquisition date. We assess whether goodwill is recoverable by performing an impairment review annually or more frequently if events or changes in circumstances indicate a potential impairment.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rate. Goodwill is allocated to cash-generating units (CGUs) and this allocation is made to those CGUs that are expected to benefit from the acquisition in which the goodwill arose.

Impairment is recognised where there is a difference between the carrying value of the CGU and the estimated recoverable amount of the CGU to which that goodwill has been allocated. Any impairment is recognised immediately in the income statement and is not subsequently reversed. Any impairment loss is first allocated to the carrying value of the goodwill and then to the other assets within the CGU. Recoverable amount is defined as the higher of fair value less costs to sell and estimated value-in-use at the date the impairment review is undertaken. Value-in-use represents the present value of expected future cash flows, discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

	Total £m
Net book value at 1 April 2020	5,712
Exchange adjustments	(562)
Reclassification to held for sale (note 10)	(562)
Net book value at 1 April 2021	4,588
Exchange adjustments	223
Acquisition of WPD (note 37)	4,721
Net book value at 31 March 2022	**9,532**

There was no significant accumulated impairment charge as at 31 March 2022 or 31 March 2021.

Following the announcement of the planned sale of NECO (see note 10), goodwill balances relating to our Rhode Island CGU and a portion of the goodwill relating to our previously reported Federal CGU were reclassified as held for sale in the prior period. Following the implementation of our new operating model during the year ended 31 March 2022, we have reassessed our CGUs. The Federal CGU (£544 million) is now allocated across the New York, New England and National Grid Ventures Renewables CGUs. The Massachusetts CGU (£963 million) is now allocated to the New England CGU. These changes reflect the updated level at which goodwill is now monitored for internal management purposes.

Impairment review of goodwill and indefinite-lived intangibles

Goodwill and indefinite-lived intangibles (see note 12) are reviewed annually for impairment and the recoverability is assessed by comparing the carrying amount of our operations with the expected recoverable amount on a value-in-use basis which uses pre-financing and pre-tax cash flow projections based on the Group's financial plans, approved by the Directors, as a starting point. See below for a summary of which operations our goodwill and indefinite-lived intangibles are allocated to:

CGU or group of CGUs	2022 £m
Goodwill:	
National Grid Ventures Renewables	**150**
New England	**1,510**
New York	**3,151**
WPD[1]	**4,721**
Total goodwill	**9,532**
Indefinite-lived intangibles (regulatory licences related to WPD):	
West Midlands	**518**
East Midlands	**519**
South Wales	**257**
South West	**420**
Total indefinite-lived intangibles	**1,714**

1. This is a combination of the West Midlands, East Midlands, South Wales and South West CGUs, reflecting the level at which the goodwill is monitored.

In each assessment, the value-in-use has been calculated assuming a stable regulatory framework and is based on projections that incorporate our best estimates of future cash flows, including costs, changes in commodity prices, future rates and growth. Such projections reflect our current regulatory agreements, taking into account regulatory arrangements to allow for future agreements and recovery of investment, including those related to achieving the net zero plans of the jurisdictions that we operate in. Our plans have proved to be reliable guides in the past and the Directors believe the estimates are appropriate.

11. Goodwill continued

(a) Cash flow periods, terminal value and discount rate assumptions

We select cash flow durations longer than five years, when our forecasts are considered reliable. The cash flow durations selected reflect our knowledge and understanding of the regulatory environments in which we operate, and most significantly, where markets have legislated decarbonisation commitments by 2050, we utilise longer cash flow forecasts that reflect the investment required to deliver those commitments before applying a terminal value at the point those commitments are due to be fulfilled and market growth is expected to stabilise. For our regulated WPD operations, we consider cash flow durations that run until 2050, reflecting the expected investment required in the network, in excess of economy-wide long-term growth rates in order to deliver the energy transition. For our regulated US operations (New York and New England CGUs), we use a five-year cash flow forecast.

For our WPD business, a nominal terminal growth rate of 2.5% is assumed upon the terminal year cash flows, reflecting management's best view, based on market and operational experience, of the expected long-term growth in the relevant market. For our US regulated operations, due to differences in the regulatory framework and the combination of gas and electricity networks, we apply a growth rate of 2.25%. This has been determined with regard to data on industry growth projections, specifically related to the energy transition, and projected growth in real gross domestic product (GDP) for the territory within which the CGU is based.

Pre-tax cash flows are discounted by applying a pre-tax discount rate reflecting the time value of money and the risks specific to the group of assets. In practice, the post-tax discount rate for the group of assets in question is taken as a starting point, before considering industry peer discount rates to apply adjustments, as required, ensuring the rate applied is independent of the entity's capital structure and to reflect a market participants' view of a risk adjusted discount rate specific to the CGU or group of CGUs. The post-tax discount rate is then grossed up to a pre-tax discount rate that is applied to pre-tax cash flows. The pre-tax discount rates used for the year ended 31 March 2022 were as follows: WPD Group 5.2%; WPD DNOs 4.9%; New York 5.5%; and New England 5.6%.

The discount rate and terminal growth rate applied in the year ended 31 March 2021 to the CGUs assessed at that date were 5.3% and 2.1% respectively.

(b) Key inputs and sensitivity analysis

In assessing the carrying value of goodwill and licences, we have sensitised our forecasts to factor in adjustments to key inputs to each model. Whilst regulatory licences are tested for impairment before we test goodwill, we consider the sensitivity for all balances separately for WPD and our regulated US operations below.

WPD goodwill

We identified the discount rate and the terminal growth rate as key assumptions for which the value-in-use calculation is the most sensitive in our impairment review. A reduction in the terminal growth rate to 2% resulted in WPD's carrying amount equalling its recoverable amount. Considering the sensitivity to the discount rate applied, we found that increasing the pre-tax discount rate by 0.2% (to 5.4%) will result in WPD's carrying amount equalling its recoverable amount (see notes 1 and 35).

WPD indefinite-lived regulatory licences

No reasonable changes to inputs to the impairment test performed over the South West, East Midlands, West Midlands and South Wales Distribution Network Operator CGUs were identified as resulting in an impairment.

Regulated US operations: New York and New England goodwill

While it is possible that a key assumption in the calculation could change, the Directors believe that no reasonably foreseeable change would result in an impairment of goodwill, in view of the long-term nature of the key assumptions and the margin by which the estimated value-in-use exceeds the carrying amount. This remains the case even after taking into account the short-term effects of COVID-19 and inflationary pressures, the most significant of which is an increase in bad debt charges in the short term, but not a risk of impairment to goodwill.

12. Other intangible assets

Other intangible assets include software which is written down (amortised) over the period we expect to receive a benefit from the asset. An amortisation expense is charged to the income statement to reflect the reduced value of the asset over time. Amortisation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

Indefinite-lived intangibles comprise regulatory licences for which there is no foreseeable limit to the period over which they are expected to generate net cash inflows. These assets are considered to have an indefinite life and are not amortised but subject to a review for impairment annually, or more frequently if events or circumstances indicate a potential impairment. Any impairment is charged to the income statement as it arises.

Identifiable intangible assets are recorded at cost less accumulated amortisation and any provision for impairment, with the exception of regulatory licences that are assessed to have indefinite lives and are therefore tested annually for impairment (see note 11 for details of impairment tests performed over indefinite-lived intangible assets). Other intangible assets are tested for impairment only if there is an indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the CGU to which that asset belongs is estimated. Impairments are recognised in the consolidated income statement within Other operating income and costs. Any assets which suffered impairment in a previous period are reviewed for possible reversal of the impairment at each reporting date.

The Group's regulatory licences relate to electricity distribution licences acquired in connection with the Group's acquisition of WPD on 14 June 2021 (see note 37). The licences provide the right to operate and invest in the relevant network that operates as a monopoly in the licensed geographic area. Once granted by Ofgem, the licence is issued to a licensee on the basis that it remains active into perpetuity. On that basis, the value attributed to the electricity distribution network licence assets is considered to have an indefinite useful life.

Internally generated intangible assets, such as software, are recognised only if: i) an asset is created that can be identified; ii) it is probable that the asset created will generate future economic benefits; and iii) the development cost of the asset can be measured reliably. Where no internally generated intangible asset can be recognised, development expenditure is recorded as an expense in the period in which it is incurred.

Cloud computing arrangements are reviewed to determine if the Group has control of the software intangible asset. Control is considered to exist where the Group has the right to take possession of the software and run it on its own or a third party's computer infrastructure or if the Group has exclusive rights to use the software such that the supplier is unable to make the software available to other customers.

Costs relating to configuring or customising the software in a cloud computing arrangement are assessed to determine if there is a separate intangible asset over which the Group has control. If an asset is identified, it is capitalised and amortised over the useful economic life of the asset. To the extent that no separate intangible asset is identified, then the costs are either expensed when incurred or recognised as a prepayment and spread over the term of the arrangement if the costs are concluded to not be distinct.

The accounting for costs incurred in cloud computing arrangements represents the application of new accounting guidance for the Group for the year ended 31 March 2022. Certain costs which were previously capitalised in respect of the Group's cloud computing arrangements have been expensed in the period.

12. Other intangible assets continued

Other than regulatory licences, intangible assets are amortised on a straight-line basis over their estimated useful economic lives. Amortisation periods for other intangible assets are:

	Years
Software	3 to 10
Regulatory licences	Indefinite

	Regulatory licences[1] £m	Software £m	Assets in the course of construction £m	Total £m
Cost at 1 April 2020	—	2,026	557	2,583
Exchange adjustments	—	(102)	(43)	(145)
Additions	—	7	414	421
Disposals	—	(47)	(2)	(49)
Reclassifications[2]	—	255	(240)	15
Reclassification to held for sale (note 10)	—	(19)	—	(19)
Cost at 1 April 2021	—	2,120	686	2,806
Exchange adjustments	—	69	11	80
Additions	—	15	513	528
Acquisition of WPD (note 37)	1,714	49	—	1,763
Disposals	—	(7)	—	(7)
Reclassifications[2]	—	260	(302)	(42)
Reclassification to held for sale (note 10)	—	(431)	(38)	(469)
Cost at 31 March 2022	1,714	2,075	870	4,659
Accumulated amortisation at 1 April 2020	—	(1,288)	—	(1,288)
Exchange adjustments	—	61	—	61
Amortisation charge for the year	—	(196)	—	(196)
Accumulated amortisation of disposals	—	44	—	44
Reclassification to held for sale (note 10)	—	16	—	16
Accumulated amortisation at 1 April 2021	—	(1,363)	—	(1,363)
Exchange adjustments	—	(33)	—	(33)
Amortisation charge for the year	—	(297)	—	(297)
Impairment[3]	—	—	(10)	(10)
Accumulated amortisation of disposals	—	7	—	7
Reclassification to held for sale (note 10)	—	309	—	309
Accumulated amortisation at 31 March 2022	—	(1,377)	(10)	(1,387)
Net book value at 31 March 2022[4]	**1,714**	**698**	**860**	**3,272**
Net book value at 31 March 2021	—	757	686	1,443

1. Relates to the licence intangibles acquired as part of the acquisition of WPD (see note 37). The Group assesses its indefinite-life intangible assets for impairment annually (see note 11).
2. Reclassifications includes amounts transferred to property, plant and equipment (see note 13).
3. Depreciation of assets in the course of construction relates to impairment provision adjustments recognised in the year.
4. The Group has capitalised £366 million (2021: £298 million) in relation to the Gas Business Enablement system in the US, of which £152 million (2021: £82 million) is in service and is being amortised over 10 years, with the remainder included within assets in the course of construction. A further £103 million (2021: £nil) in relation to our new UK general ledger system was reclassified from assets in the course of construction to software assets in the period to 31 March 2022, and is now amortised over 10 years.

13. Property, plant and equipment

Property, plant and equipment are the physical assets controlled by us. The cost of these assets primarily represents the amount initially paid for them or the fair value on the date of acquisition of a business. Cost includes both their purchase price and the construction and other costs associated with getting them ready for operation. A depreciation expense is charged to the income statement to reflect annual wear and tear and the reduced value of the asset over time. Depreciation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

We operate an energy networks business and therefore have a significant physical asset base. We continue to invest in our networks to maintain reliability, create new customer connections and ensure our networks are flexible and resilient. Our business plan envisages these additional investments will be funded through a mixture of cash generated from operations and the issue of new debt.

Property, plant and equipment is recorded at cost, less accumulated depreciation and any impairment losses. Cost includes the purchase price of the asset; any payroll and finance costs incurred which are directly attributable to the construction of property, plant and equipment together with an appropriate portion of overheads which are directly linked to the capital work performed; and the cost of any associated asset retirement obligations.

Property, plant and equipment includes assets in which the Group's interest comprises legally protected statutory or contractual rights of use. Additions represent the purchase or construction of new assets, including capital expenditure for safety and environmental assets, and extensions to, enhancements to, or replacement of, existing assets. All costs associated with projects or activities which have not been fully commissioned at the period end are classified within assets in the course of construction.

Items within property, plant and equipment are tested for impairment only if there is some indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the income statement and if immaterial are included within the depreciation charge for the year.

(a) Analysis of property, plant and equipment

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Cost at 1 April 2020	3,897	59,609	4,771	1,036	69,313
Exchange adjustments	(213)	(3,308)	(130)	(73)	(3,724)
Additions	89	328	4,023	70	4,510
Disposals	(6)	(344)	(26)	(48)	(424)
Reclassifications[1]	96	3,007	(3,243)	77	(63)
Reclassification to held for sale (note 10)	(111)	(3,231)	(174)	(44)	(3,560)
Cost at 1 April 2021	3,752	56,061	5,221	1,018	66,052
Exchange adjustments	97	1,627	111	37	1,872
Additions	22	926	4,843	129	5,920
Acquisition of WPD (note 37)	200	9,512	185	154	10,051
Disposals	(165)	(367)	—	(88)	(620)
Reclassifications[1]	62	4,063	(4,133)	89	81
Reclassification to held for sale (note 10)	(309)	(8,800)	(640)	(267)	(10,016)
Cost at 31 March 2022	3,659	63,022	5,587	1,072	73,340
Accumulated depreciation at 1 April 2020	(847)	(18,042)	—	(662)	(19,551)
Exchange adjustments	37	698	—	46	781
Depreciation charge for the year	(90)	(1,270)	—	(116)	(1,476)
Disposals	—	339	—	48	387
Reclassifications[1]	2	(5)	—	6	3
Reclassification to held for sale (note 10)	22	798	—	27	847
Accumulated depreciation at 1 April 2021	(876)	(17,482)	—	(651)	(19,009)
Exchange adjustments	(20)	(351)	—	(23)	(394)
Depreciation charge for the year[2]	(114)	(1,300)	(48)	(167)	(1,629)
Disposals	29	311	—	88	428
Reclassifications[1]	15	(40)	(18)	2	(41)
Reclassification to held for sale (note 10)	193	4,421	6	217	4,837
Accumulated depreciation at 31 March 2022	(773)	(14,441)	(60)	(534)	(15,808)
Net book value at 31 March 2022	**2,886**	**48,581**	**5,527**	**538**	**57,532**
Net book value at 31 March 2021	2,876	38,579	5,221	367	47,043

1. Represents amounts transferred between categories, (to)/from other intangible assets (see note 12), from inventories and reclassifications between cost and accumulated depreciation.
2. Depreciation of assets in the course of construction relates to impairment provision adjustments recognised in the year.

13. Property, plant and equipment continued

(a) Analysis of property, plant and equipment continued

	2022 £m	2021 £m
Information in relation to property, plant and equipment		
Capitalised interest included within cost	**2,114**	2,233
Contributions to cost of property, plant and equipment included within:		
Trade and other payables	**137**	138
Non-current liabilities	**421**	400
Contract liabilities – current	**130**	66
Contract liabilities – non-current	**1,342**	1,094

(b) Asset useful economic lives

No depreciation is provided on freehold land or assets in the course of construction. Other items of property, plant and equipment are depreciated, on a straight-line basis, at rates estimated to write off their book values over their estimated useful economic lives. In assessing estimated useful economic lives, consideration is given to any contractual arrangements and operational requirements relating to particular assets. The assessments of estimated useful economic lives and residual values of assets are performed annually.

Unless otherwise determined by operational requirements, the depreciation periods for the principal categories of property, plant and equipment are, in general, as shown in the table below split between the UK and US, along with the weighted average remaining UEL for each class of property, plant and equipment (which is calculated by applying the annual depreciation charge per class of asset to the net book value of that class of asset).

	Years		
	UK	US	Weighted average remaining UEL[1]
Freehold and leasehold buildings	up to 60	up to 100	41
Plant and machinery:			
Electricity transmission plant and wires	up to 100	45 to 80	31
Electricity distribution plant	3 to 99	35 to 85	45
Electricity generation plant	n/a	20 to 93	12
Interconnector plant and other	5 to 60	5 to 50	32
Gas plant – mains, services and regulating equipment	n/a	47 to 80	55
Gas plant – storage	5 to 40	12 to 65	12
Gas plant – meters	7 to 30	14 to 40	24
Motor vehicles and office equipment	up to 30	up to 26	5

1. Excluded from the above table are depreciation periods in respect of items of property, plant and equipment which are classified as held for sale as at 31 March 2022.

(c) Gas asset lives

The role that gas networks play in the pathway to achieving the greenhouse gas emissions reductions targets set in the jurisdictions in which we operate is currently uncertain. However, we believe the gas assets which we own and operate today will continue to have a crucial role in maintaining security, reliability and affordability of energy beyond 2050, although the scale and purpose for which the networks will be used is dependent on technological developments and policy choices of governments and regulators.

With respect to our US gas distribution assets, asset lives are assessed as part of detailed depreciation studies completed as part of each separate rate proceeding. Depreciation studies consider the physical condition of assets and the expected operational life of an asset. We believe these assessments are our best estimate of the UEL of our gas network assets in the US.

The weighted average remaining UEL for our US gas distribution fixed asset base is circa 58 years, however a sizeable proportion of our assets are assumed to have UELs which extend beyond 2080. We continue to believe the lives identified by rate proceedings are the best estimate of the assets' UELs, although we continue to keep this assumption under review as we learn more about possible future pathways towards net zero. Whilst the targets, goals and ambitions have now been formalised in legislation in the states in which we operate, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways. We continue to actively engage and support our regulators to enable the clean energy transition in a safe, reliable and affordable way.

Asset depreciation lives feed directly into our US regulatory recovery mechanisms, such that any shortening of asset lives and regulatory recovery periods as agreed with regulators should be recoverable through future rates, subject to agreement, over future periods, as part of wider considerations around ensuring the continuing affordability of gas in our service territories.

Given the uncertainty described relating to the UELs of our gas assets, below we provide a sensitivity on the depreciation charge for our New York and New England segments were a shorter UEL presumed:

	Increase in depreciation expense for the year ended 31 March 2022		Increase in depreciation expense for the year ended 31 March 2021[1]	
	New York £m	New England £m	New York £m	New England £m
UELs limited to 2050	**140**	**40**	125	35
UELs limited to 2060	**67**	**15**	57	13
UELs limited to 2070	**31**	**1**	26	2

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.

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13. Property, plant and equipment continued

(c) Gas asset lives continued

Note that this sensitivity calculation excludes any assumptions regarding the residual value for our asset base and the effect that shortening asset depreciation lives would be expected to have on our regulatory recovery mechanisms. In the event that any of the US gas distribution assets are stranded, the Group would expect to recover the associated costs. While recovery is not guaranteed and is determined by regulators in the US, there are precedents for stranded asset cost recovery for US utility companies.

(d) Right-of-use assets

The Group leases various properties, land, equipment and cars. New lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term. The lease payments include fixed payments, any variable lease payments dependent on an index or a rate, and any break fees or renewal option costs that we are reasonably certain to incur. The discount rate applied is the rate implicit in the lease or, if that is not available, then the incremental rate of borrowing for a similar term and similar security (which is determined based on observable data for borrowing rates for the specific group entity that has entered into the lease, with specific adjustments for the term of the lease and any lease-specific risk premium). The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

The table below shows the movements in the net book value of right-of-use assets included within property, plant and equipment at 31 March 2022 and 31 March 2021, split by category. The associated lease liabilities are disclosed in note 21.

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Net book value at 1 April 2020	364	95	–	225	684
Exchange adjustments	(30)	(4)	–	(22)	(56)
Additions	60	6	–	64	130
Reclassifications	–	–	–	(15)	(15)
Depreciation charge for the year	(29)	(16)	–	(68)	(113)
Net book value at 31 March 2021	365	81	–	184	630
Exchange adjustments	10	1	–	10	21
Additions	14	2	–	88	104
Acquisition of WPD (note 37)	7	2	–	–	9
Reclassification to held for sale (note 10)	(7)	–	–	(4)	(11)
Modifications of leases[1]	(122)	–	–	–	(122)
Disposals	(2)	–	–	(1)	(3)
Depreciation charge for the year	(40)	(16)	–	(67)	(123)
Net book value at 31 March 2022	**225**	**70**	**–**	**210**	**505**

1. The Group entered into an agreement to reduce the lease term of its New England corporate office, Reservoir Woods, with effect from October 2021. The existing lease liability and right-of-use asset have been remeasured based on the terms of the modified lease.

The following balances have been included in the income statement for the years ended 31 March 2022 and 31 March 2021 in respect of right-of-use assets:

	2022 £m	2021 £m
Included within net finance income and costs:		
Interest expense on lease liabilities	**(18)**	(21)
Included within revenue:		
Lease income[1]	**385**	390
Included within operating expenses:		
Expense relating to short-term and low-value leases	**(14)**	(13)

1. Included within lease income is £374 million (2021: £376 million) of variable lease payments, the majority of which relates to the power supply arrangement entered into with LIPA (see note 3).

The total of future minimum sublease payments expected to be received under non-cancellable subleases is £108 million (2021: £104 million).

14. Other non-current assets

Other non-current assets include assets that do not fall into any other non-current asset category (such as goodwill or property, plant and equipment) where the benefit to be received from the asset is not due to be received until after 31 March 2023.

	2022 £m	2021 £m
Other receivables	**110**	45
Non-current tax assets	**6**	6
Prepayments	**–**	5
Accrued income[1]	**187**	237
	303	293

1. Includes accrued income in relation to property sales to St William Homes LLP and other companies within The Berkeley Group. Following completion of the sale of St William Homes LLP on 15 March 2022, the outstanding accrued income due from St William Homes LLP became due from other companies within The Berkeley Group (see note 16).

15. Financial and other investments

The Group holds a range of financial and other investments. These investments include short-term money market funds, quoted investments in equities or bonds of other companies, investments in our venture capital portfolio (National Grid Partners), bank deposits with a maturity of greater than three months, and investments that can not be readily used in operations, principally collateral deposited in relation to derivatives.

The classification of each investment held by the Group is determined based on two main factors:
- its contractual cash flows – whether the assets cash flows are solely payments of the principal and interest on the financial asset on pre-determined dates or whether the cash flows are determined by other factors such as the performance of a company; and
- the business model for holding the investments – whether the intention is to hold onto the investment for the longer term (collect the contractual cash flows), or to sell the asset with the intention of managing any gain or loss on sale or to manage any liquidity requirements.

The four categories of financial and other investments are as follows:
- Financial assets at amortised cost – debt instruments that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is to collect contractual cash flows, are held at amortised cost. This category includes our receivables in relation to deposits and collateral;
- FVOCI debt and other investments – debt investments, such as bonds, that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is both to collect the contractual cash flows and to sell the debt instruments, are measured at fair value through other comprehensive income (FVOCI), with gains or losses recognised in the consolidated statement of comprehensive income instead of through the income statement. On disposal, any gains or losses are recognised within finance income in the income statement (see note 6). Other investments include insurance contracts, measured at fair value, and held to back the present value of unfunded pension liabilities in note 25;
- FVOCI equity instruments – the Group previously held equity instruments which it elected to measure at FVOCI on the basis that they were not held for trading and so the recognition of any gains and losses on these investments in the income statement would not have been representative of performance. The shares were held as part of a portfolio of financial instruments which back some long-term employee liabilities. In the year ended 31 March 2022, the Group sold all of the remaining equities as part of a plan to de-risk that investment portfolio. The fair value of the equities on the date of sale was £111 million and upon disposal realised gains and losses of £82 million were transferred to retained earnings (see note 28); and
- FVTPL investments – other financial investments are subsequently measured at fair value with any gains or losses recognised in the income statement (FVTPL). This primarily comprises our money market funds, insurance company fund investments and corporate venture capital investments held by National Grid Partners.

Financial and other investments are initially recognised on trade date. Subsequent to initial recognition, the fair values of financial assets that are quoted in active markets are based on bid prices. When independent prices are not available, fair values are determined using valuation techniques used by the relevant markets using observable market data where possible (see note 32(g) for further details).

15. Financial and other investments continued

	2022 £m	2021 £m
Non-current		
FVOCI debt and other investments	**413**	416
FVOCI equity investments[1]	**–**	99
FVTPL investments	**417**	240
	830	755
Current		
FVTPL investments	**2,292**	1,768
Financial assets at amortised cost	**853**	574
	3,145	2,342
	3,975	3,097
Financial and other investments include the following:		
Investments in short-term money market funds	**1,936**	1,412
Investments held by National Grid Partners	**309**	136
Investments in Sunrun	**109**	103
Balances that are restricted or not readily used in operations:		
Collateral[2]	**806**	540
Insurance company and non-qualified plan investments	**534**	589
Cash surrender value of life insurance policies	**234**	283
Other investments	**47**	34
	3,975	3,097

1. In the year ended 31 March 2022, the Group sold its equity investments which were previously held in relation to non-qualified pension plans in the US.
2. The collateral balance includes £802 million (2021: £480 million) of collateral placed with counterparties with whom we have entered into a credit support annex to the International Swaps and Derivatives Association (ISDA) Master Agreement and £4 million (2021: £18 million) of restricted amounts allocated for specific projects within the National Grid Electricity System Operator. In the year ended 31 March 2021, £42 million of the balance included collateral paid by operating companies as security deposits. In the current year this collateral has been replaced with letters of credit as permitted under the Connection and Use of System Code.

FVTPL and FVOCI investments are recorded at fair value. The carrying value of current financial assets at amortised cost approximates their fair values, primarily due to short-dated maturities. The exposure to credit risk at the reporting date is the fair value of the financial investments. For further information on our credit risk, refer to note 32(a).

For the purposes of impairment assessment, the investments in bonds are considered to be low risk as they are investment grade securities; life insurance policies are held with regulated insurance companies; and deposits, collateral receivable and other financial assets at amortised cost are investment grade. All financial assets held at FVOCI or amortised cost are therefore considered to have low credit risk and have an immaterial impairment loss allowance equal to 12-month expected credit losses.

In determining the expected credit losses for these assets, some or all of the following information has been considered: credit ratings, the financial position of counterparties, the future prospects of the relevant industries and general economic forecasts.

No FVOCI or amortised cost financial assets have had modified cash flows during the period. There has been no change in the estimation techniques or significant assumptions made during the year in assessing the loss allowance for these financial assets. There were no significant movements in the gross carrying value of financial assets during the year that contribute to changes in the loss allowance. No collateral is held in respect of any of the financial investments in the above table. No balances are more than 30 days past due, and no balances were written off during the year.

16. Investments in joint ventures and associates

Investments in joint ventures and associates represent businesses we do not control but over which we exercise joint control or significant influence. They are accounted for using the equity method. A joint venture is an arrangement established to engage in economic activity, which the Group jointly controls with other parties and has rights to a share of the net assets of the arrangement. An associate is an entity which is neither a subsidiary nor a joint venture, but over which the Group has significant influence.

	2022			2021		
	Associates £m	Joint ventures £m	Total £m	Associates £m	Joint ventures £m	Total £m
Share of net assets at 1 April	229	638	867	341	654	995
Exchange adjustments	6	19	25	(22)	(36)	(58)
Additions	17	469	486	6	75	81
Share of post-tax results for the year	43	49	92	30	28	58
Share of other comprehensive income of associates, net of tax	1	—	1	1	—	1
Dividends received	(35)	(123)	(158)	(31)	(49)	(80)
Disposals	—	(50)	(50)	—	—	—
Other movements[1]	16	(41)	(25)	(96)	(34)	(130)
Share of net assets at 31 March	**277**	**961**	**1,238**	229	638	867

1. Other movements relate to tax liabilities for US and certain UK associates and joint ventures which are borne by the Group and the elimination of profits arising from sales to the Group's share of joint ventures. Within associates, the other movements in the year ended 31 March 2021 primarily relates to the reclassification of the Group's investment in Sunrun from an investment in an associate to financial investments.

A list of joint ventures and associates including the name and proportion of ownership is provided in note 34. Transactions with and outstanding balances with joint ventures and associates are shown in note 31. The joint ventures and associates have no significant contingent liabilities to which the Group is exposed, and the Group has no significant contingent liabilities in relation to its interests in the joint ventures and associates. The Group has capital commitments of £714 million (2021: £141 million) in relation to joint ventures and associates.

On 15 March 2022, the Group disposed of its entire 50% interest in St William Homes LLP to The Berkeley Group for cash consideration of £413 million. The receipt of cash has been recognised within net cash used in investing activities within the cash flow statement. The Group recognised a gain on disposal of £228 million within Other operating income and costs and released to revenue deferred income of £189 million which related to deferred profits related to previous property sales to St William Homes LLP. The gain on disposal and the release of deferred income are both classified as exceptional in the year (see note 5).

The following table describes the Group's material joint ventures and associates at 31 March 2022:

Joint venture	% stake	
BritNed Development Limited[1]	50%	BritNed is a joint venture with the Dutch transmission system operator, TenneT, and operates the subsea electricity link between Great Britain and the Netherlands, commissioned in 2011.
Nemo Link Limited[1]	50%	Nemo is a joint venture with the Belgian transmission operator, Elia, and is a subsea electricity interconnector between Great Britain and Belgium, which became operational on 31 January 2019.
Emerald Energy Venture LLC	51%	Emerald is a joint venture with Washington State Investment Board and builds and operates wind and solar assets. Emerald was acquired on 11 July 2019.
Bight Wind Holdings LLC	27.3%	Bight Wind is a joint venture with RWE Renewables. Following the successful win at auction of six seabed leases in northeastern US on 25 February 2022, Bight Wind will commence the development of an offshore wind project which will play a key role in supplying clean energy to customers in New York. At 31 March 2022, the Group has an amount payable to Bight Wind of £223 million in respect of a capital call to the Group which is payable in April 2022. The assets, liabilities and results of Bight Wind will become material to the Group upon recognition of the seabed lease in the year ending 31 March 2023.

Material associate	% stake	
Millennium Pipeline Company LLC	26.25%	Millennium Pipeline Company LLC is an associate that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.

1. BritNed and Nemo have reporting periods ending on 31 December with monthly management reporting information provided to National Grid.

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16. Investments in joint ventures and associates continued

Summarised financial information as at 31 March, together with the carrying amount of material investments, is as follows:

	BritNed Development Limited		Nemo Link Limited		Emerald Energy Venture LLC		Millennium Pipeline Company LLC	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
Statement of financial position								
Non-current assets	**390**	409	**515**	536	**1,070**	559	**800**	795
Cash and cash equivalents	**77**	47	**7**	31	**134**	112	**33**	27
All other current assets	**10**	24	**7**	8	**8**	12	**29**	24
Non-current liabilities	**(52)**	(50)	**(34)**	(30)	**(182)**	(182)	**(237)**	(256)
Non-current financial liabilities	**(29)**	(31)	**—**	—	**(310)**	(104)	**—**	—
Current liabilities	**(15)**	(22)	**(33)**	(19)	**(66)**	(25)	**(45)**	(38)
Current financial liabilities	**—**	—	**—**	—	**(23)**	(2)	**—**	—
Net assets	**381**	377	**462**	526	**631**	370	**580**	552
Group's ownership interest in joint venture/associate	**191**	189	**231**	263	**322**	189	**152**	145
Group adjustment: elimination of profits on sales to joint venture	**—**	—	**—**	—	**(49)**	(23)	**—**	—
Carrying amount of the Group's investment	**191**	189	**231**	263	**273**	166	**152**	145

	BritNed Development Limited		Nemo Link Limited		Emerald Energy Venture LLC		Millennium Pipeline Company LLC	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
Income statement								
Revenue	**131**	72	**148**	66	**25**	28	**200**	199
Depreciation and amortisation	**(15)**	(15)	**(23)**	(24)	**(17)**	(14)	**(43)**	(43)
Other costs	**(9)**	(15)	**(6)**	(6)	**(145)**	(22)	**(20)**	(21)
Operating profit/(loss)	**107**	42	**119**	36	**(137)**	(8)	**137**	135
Net interest expense	**(2)**	(1)	**(1)**	—	**(5)**	—	**(21)**	(18)
Profit/(loss) before tax	**105**	41	**118**	36	**(142)**	(8)	**116**	117
Income tax expense	**(20)**	(11)	**(22)**	(14)	**—**	—	**—**	—
Profit/(loss) for the year	**85**	30	**96**	22	**(142)**	(8)	**116**	117
Group's share of profit/(loss)	**43**	15	**48**	11	**(72)**	(4)	**30**	31
Group adjustment: tax credit/(charge)	**—**	—	**—**	—	**19**	1	**(8)**	(9)
Group's share of post-tax results for the year	**43**	15	**48**	11	**(53)**	(3)	**22**	22

17. Derivative financial instruments

Derivatives are financial instruments that derive their value from the price of an underlying item such as interest rates, foreign exchange rates, credit spreads, commodities, equities or other indices. In accordance with policies approved by the Board, derivatives are transacted generally to manage exposures to fluctuations in interest rates, foreign exchange rates and commodity prices. Our derivatives balances comprise two broad categories:

- financing derivatives: These are used to manage our exposure to interest rates and foreign exchange rates. Specifically, we use these derivatives to manage our financing portfolio, holdings in foreign operations and contractual operational cash flows; and
- commodity contract derivatives: These are used to manage our US customers' exposure to price and supply risks. Some forward contracts for the purchase of commodities meet the definition of derivatives. We also enter into derivative financial instruments linked to commodity prices, including index futures, options and swaps, which are used to manage market price volatility.

Derivatives are initially recognised at fair value and subsequently remeasured to fair value at each reporting date. Changes in fair values are recorded in the period they arise, in either the consolidated income statement or other comprehensive income. Where the gains or losses recorded in the income statement arise from changes in the fair value of derivatives to the extent that hedge accounting is not applied or is not fully effective, these are recorded as remeasurements, detailed in notes 5 and 6. Where the fair value of a derivative is positive it is carried as a derivative asset, and where negative as a derivative liability.

The fair value of derivative financial instruments is calculated by taking the present value of future cash flows, primarily incorporating market observable inputs. The various inputs include foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate and inflation curves, the forward rate curves of underlying commodities, and for those positions that are not fully cash collateralised, the credit quality of the counterparties.

Certain clauses embedded in non-derivative financial instruments or other contracts are presented as derivatives because they impact the risk profile of their host contracts and they are deemed to have risks or rewards not closely related to those host contracts.

Further information on how derivatives are valued and used for risk management purposes is presented in note 32. Information on commodity contracts and other commitments not meeting the definition of derivatives is presented in note 30.

The fair values of derivatives by category are as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current	**282**	**(144)**	**138**	457	(145)	312
Non-current	**305**	**(869)**	**(564)**	542	(754)	(212)
	587	**(1,013)**	**(426)**	999	(899)	100
Financing derivatives	**298**	**(991)**	**(693)**	942	(767)	175
Commodity contract derivatives	**289**	**(22)**	**267**	57	(132)	(75)
	587	**(1,013)**	**(426)**	999	(899)	100

(a) Financing derivatives

The fair values of financing derivatives by type are as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Interest rate swaps	**89**	**(97)**	**(8)**	325	(159)	166
Cross-currency interest rate swaps	**174**	**(642)**	**(468)**	601	(351)	250
Foreign exchange forward contracts[1]	**35**	**(65)**	**(30)**	16	(74)	(58)
Inflation-linked swaps	**—**	**(187)**	**(187)**	—	(183)	(183)
	298	**(991)**	**(693)**	942	(767)	175

1. Included within the foreign exchange forward contracts balance are £21 million (2021: £32 million) of derivative liabilities in relation to the hedging of capital expenditure and a deal-contingent foreign exchange forward contract liability of £nil (2021: £9 million) in relation to the disposal of NECO (see note 10).

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17. Derivative financial instruments continued

(a) Financing derivatives continued

The maturity profile of financing derivatives is as follows:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Current						
Less than 1 year	**34**	**(136)**	**(102)**	428	(70)	358
	34	**(136)**	**(102)**	428	(70)	358
Non-current						
In 1 to 2 years	**6**	**(29)**	**(23)**	10	(14)	(4)
In 2 to 3 years	**28**	**(39)**	**(11)**	24	(12)	12
In 3 to 4 years	**—**	**(26)**	**(26)**	62	(80)	(18)
In 4 to 5 years	**12**	**(16)**	**(4)**	4	(42)	(38)
More than 5 years	**218**	**(745)**	**(527)**	414	(549)	(135)
	264	**(855)**	**(591)**	514	(697)	(183)
	298	**(991)**	**(693)**	942	(767)	175

The notional contract amounts of financing derivatives by type are as follows:

	2022 £m	2021 £m
Interest rate swaps	**(1,607)**	(2,259)
Cross-currency interest rate swaps	**(10,397)**	(8,389)
Foreign exchange forward contracts	**(6,371)**	(4,651)
Inflation-linked swaps	**(500)**	(500)
	(18,875)	(15,799)

London Inter-bank Offered Rate (LIBOR) is being replaced as an interest rate benchmark by alternative reference rates and therefore we are transitioning LIBOR cash flows on our affected contracts in line with the relevant jurisdictions. During the year we transitioned derivatives which pay or receive cash flows that reference GBP LIBOR (maturing between 2023 and 2040) to alternative reference rates (not transitioned in 2021: £2,041 million, maturing between 2023 and 2026). Derivatives with a notional value of £806 million that reference USD LIBOR (maturing between 2023 and 2026) are yet to be amended (2021: £769 million, maturing between 2023 and 2026).

(b) Commodity contract derivatives

The fair values of commodity contract derivatives by type are as follows:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Commodity purchase contracts accounted for as derivative contracts						
Forward purchases of gas	**11**	**(6)**	**5**	44	(94)	(50)
Derivative financial instruments linked to commodity prices						
Electricity capacity	**1**	**—**	**1**	2	—	2
Electricity swaps	**208**	**(10)**	**198**	10	(33)	(23)
Electricity options	**5**	**—**	**5**	—	(1)	(1)
Gas swaps	**29**	**(6)**	**23**	1	(3)	(2)
Gas options	**35**	**—**	**35**	—	(1)	(1)
	289	**(22)**	**267**	57	(132)	(75)

17. Derivative financial instruments continued

(b) Commodity contract derivatives continued

The maturity profile of commodity contract derivatives is as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current						
Less than one year	**248**	**(8)**	**240**	29	(75)	(46)
	248	**(8)**	**240**	29	(75)	(46)
Non-current						
In 1 to 2 years	**34**	**(6)**	**28**	7	(24)	(17)
In 2 to 3 years	**5**	**(5)**	**—**	7	(16)	(9)
In 3 to 4 years	**2**	**(2)**	**—**	7	(7)	—
In 4 to 5 years	**—**	**(1)**	**(1)**	6	(5)	1
More than 5 years	**—**	**—**	**—**	1	(5)	(4)
	41	**(14)**	**27**	28	(57)	(29)
	289	**(22)**	**267**	57	(132)	(75)

The notional quantities of commodity contract derivatives by type are as follows:

	2022	2021
Forward purchases of gas[1]	**28m Dth**	36m Dth
Electricity swaps	**13,458 GWh**	12,321 GWh
Gas swaps	**39m Dth**	47m Dth
Gas options	**59m Dth**	40m Dth

1. Forward gas purchases have terms up to one year (2021: five years). The contractual obligations under these contracts are £86 million (2021: £104 million).

18. Inventories and current intangible assets

Inventories represent assets that we intend to use in order to generate revenue in the short term, either by selling the asset itself (for example, fuel stocks) or by using it to fulfil a service to a customer or to maintain our network (consumables).

Inventories are stated at the lower of weighted average cost and net realisable value. Where applicable, cost comprises direct materials and direct labour costs as well as those overheads that have been incurred in bringing the inventories to their present location and condition.

Emission allowances, principally relating to the emissions of carbon dioxide in the UK and sulphur and nitrous oxides in the US, are recorded as intangible assets within current assets. They are initially recorded at cost and subsequently at the lower of cost and net realisable value. A liability is recorded in respect of the obligation to deliver emission allowances, and emission charges are recognised in the income statement in the period in which emissions are made.

	2022 £m	2021 £m
Fuel stocks	**96**	94
Raw materials and consumables	**297**	253
Current intangible assets – emission allowances	**118**	92
	511	439

There is a provision for obsolescence of £7 million against inventories as at 31 March 2022 (2021: £10 million).

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19. Trade and other receivables

Trade and other receivables include amounts which are due from our customers for services we have provided, accrued income which has not yet been billed, prepayments, contract assets where certain milestones are required to be fulfilled and other receivables that are expected to be settled within 12 months.

Trade and other receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate allowances for estimated irrecoverable amounts.

	2022 £m	2021 £m
Trade receivables	**2,661**	2,152
Accrued income	**1,110**	886
Provision for impairment of receivables and accrued income	**(741)**	(672)
Trade receivables and accrued income, net	**3,030**	2,366
Prepayments	**429**	387
Contract assets	**33**	13
Other receivables	**223**	153
	3,715	2,919

Trade receivables are non-interest-bearing and generally have an up to 60 days term. Due to their short maturities, the fair value of trade and other receivables approximates their carrying value. The maximum exposure of trade and other receivables to credit risk is the carrying amount reported on the balance sheet.

Provision for impairment of receivables
A provision for credit losses is recognised at an amount equal to the expected credit losses that will arise over the lifetime of the trade receivables and accrued income.

	2022 £m	2021 £m
At 1 April	**672**	512
Exchange adjustments	**31**	(57)
Charge for the year, net of recoveries	**167**	326
Uncollectible amounts written off	**(124)**	(59)
Reclassification to held for sale (note 10)	**(5)**	(50)
At 31 March	**741**	672

The trade receivables balance, accrued income balance and provisions balance split by geography are as follows:

	As at 31 March 2022			As at 31 March 2021		
	UK £m	US £m	Total £m	UK £m	US £m	Total £m
Trade receivables	**352**	**2,309**	**2,661**	227	1,925	2,152
Accrued income	**715**	**395**	**1,110**	547	339	886
Provision for impairment of receivables and accrued income	**(43)**	**(698)**	**(741)**	(23)	(649)	(672)
	1,024	**2,006**	**3,030**	751	1,615	2,366

There are no retail customers in the UK businesses. A provision matrix is not used in the UK as an assessment of expected losses on individual debtors is performed, and the provision is not material.

In the US, £2,243 million (2021: £1,852 million) of the trade receivables and accrued income balance is attributable to retail customers. For non-retail US customer receivables, a provision matrix is not used and expected losses are determined on individual debtors.

The provision for retail customer receivables in the US is calculated based on a series of provision matrices which are prepared by regulated entity and by customer type. The expected loss rates in each provision matrix are based on historical loss rates adjusted for current and forecasted economic conditions at the balance sheet date. The inclusion of forward-looking information in the provision matrix setting process under IFRS 9 results in loss rates that reflect expected future economic conditions and the recognition of an expected loss on all debtors even where no loss event has occurred.

In March 2020, the Group's US distribution businesses ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimise risk to the Group's employees as a result of COVID-19. At that time, the Group also ceased customer termination activities as requested by relevant local authorities. Collection and customer termination activities resumed in New England during the year ended 31 March 2022, where permitted. Whilst certain collection activities also resumed in New York in the year, we expect to resume full collection activities over the course of the next year. Collection activities have also been supported by certain government COVID funding programmes in both New England and New York.

In calculating our provision for impairment of receivables at 31 March 2022, we were able to incorporate the actual cash collection levels experienced for the two years since the start of the pandemic to determine the expected loss rates per category of outstanding receivable by operating company, which is summarised in the provision matrix shown below. Factored into our analysis are expected cash collections based on the resumed collection activities in New England and New York during the year.

19. Trade and other receivables continued

Based on our review, we recognised a charge of £139 million which represents our best estimate based on the information available. For the year ended 31 March 2021, we recognised a charge of £325 million due to the ongoing reduction of customer terminations and collections which were ceased in the preceding year and not fully recovered as at 31 March 2022. We based our review of certain macroeconomic factors at the time, including unemployment levels and our experience regarding debtor recoverability during and in the aftermath of the 2008/09 financial crisis.

The average expected loss rates and gross balances for the retail customer receivables in our US operations are set out below:

	2022		2021	
	%	**£m**	%	£m
Accrued income	**5**	**382**	7	322
0 – 30 days past due	**5**	**731**	7	580
30 – 60 days past due	**20**	**213**	24	155
60 – 90 days past due	**32**	**123**	36	108
3 – 6 months past due	**41**	**161**	52	140
6 – 12 months past due	**56**	**177**	66	180
Over 12 months past due	**71**	**456**	71	367
		2,243		1,852

US retail customer receivables are not collateralised. Trade receivables are written off when regulatory requirements are met. Write-off policies vary between jurisdictions as they are aligned with the local regulatory requirements, which differ between regulators. There were no significant amounts written off during the period that were still subject to enforcement action. Our internal definition of default is aligned with that of the individual regulators in each jurisdiction.

For further information on our wholesale and retail credit risk, refer to note 32(a).

20. Cash and cash equivalents

Cash and cash equivalents include cash balances, together with short-term investments with an original maturity of less than three months that are readily convertible to cash.

Net cash and cash equivalents reflected in the cash flow statement are net of bank overdrafts, which are reported in borrowings. The carrying amounts of cash and cash equivalents and bank overdrafts approximate their fair values.

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for periods varying between one day and three months, depending on the immediate cash requirements, and earn interest at the respective short-term deposit rates.

Cash and cash equivalents held in currencies other than sterling have been converted into sterling at year-end exchange rates. For further information on currency exposures, refer to note 32(c).

Cash and cash equivalents at 31 March 2022 include £14 million (2021: £12 million) that is restricted. The restricted cash balances include amounts required to be maintained for insurance purposes and cash balances that can only be used for low-carbon network fund projects.

	2022 £m	2021 £m
Cash at bank	**204**	117
Short-term deposits	**–**	40
Cash and cash equivalents	**204**	157

21. Borrowings

We borrow money primarily in the form of bonds and bank loans. These are for a fixed term and may have fixed or floating interest rates or are linked to inflation indices. We use derivatives to manage risks associated with interest rates, inflation rates and foreign exchange. Lease liabilities are also included within borrowings.

Our price controls and rate plans lead us to fund our networks within a certain ratio of debt to equity or regulatory asset value and, as a result, we have issued a significant amount of debt. As we continue to invest in our networks, the value of debt is expected to increase over time. To maintain a strong balance sheet and to allow us to access capital markets at commercially acceptable interest rates, we balance the amount of debt we issue with the value of our assets, and we take account of certain other metrics used by credit rating agencies.

All borrowings are measured at amortised cost, with the exception of one current liability which was measured at fair value through profit and loss in order to eliminate a measurement mismatch. This current liability has now matured.

Borrowings, which include interest-bearing, zero-coupon and inflation-linked debt, overdrafts and collateral payable, are initially recorded at fair value. This normally reflects the proceeds received (net of direct issue costs for liabilities measured at amortised cost). Subsequently, borrowings are stated either: i) at amortised cost; or ii) at fair value though profit and loss. Where a borrowing is held at amortised cost, any difference between the proceeds after direct issue costs and the redemption value is recognised over the term of the borrowing in the income statement using the effective interest method. For the liability held at fair value through profit and loss, interest is calculated using the effective interest method.

Where a borrowing or liability is held at fair value, changes in the fair value of the borrowing due to changes in the issuer's credit risk are recorded in the own credit reserve within equity (see note 28). All other changes in the fair value of the liability are recognised in the income statement within remeasurements (see notes 5 and 6).

	2022 £m	2021 £m
Current		
Bank loans[1]	**8,976**	1,022
Bonds[2]	**1,735**	1,987
Commercial paper	**1,303**	628
Lease liabilities	**107**	99
Other loans	**–**	1
	12,121	3,737
Non-current		
Bank loans	**2,211**	2,532
Bonds	**30,682**	24,209
Lease liabilities	**451**	586
Other loans	**–**	156
	33,344	27,483
Total borrowings	**45,465**	31,220

1. Current bank loans include £8,179 million of borrowings under the bridge facility relating to the acquisition of WPD (31 March 2021: undrawn). The bridge facility allows for the extension of the maturity date up to September 2023 but includes a requirement that the proceeds of the planned sales of NECO and the UK Gas Transmission business are applied to repay the facility. As these are expected to completed within one year the position has been classified as current.
2. Includes a liability held at fair value through profit and loss of £nil (2021: £682 million).

21. Borrowings continued

Total borrowings are repayable as follows:

	2022 £m	2021 £m
Less than 1 year	**12,121**	3,737
In 1 to 2 years	**1,410**	1,745
In 2 to 3 years	**2,544**	889
In 3 to 4 years	**2,580**	2,206
In 4 to 5 years	**2,493**	1,833
More than 5 years:		
By instalments	**869**	927
Other than by instalments	**23,448**	19,883
	45,465	31,220

The fair value of borrowings at 31 March 2022 was £45,624 million (2021: £34,676 million). Where market values were available, the fair value of borrowings (Level 1) was £24,454 million (2021: £20,333 million). Where market values were not available, the fair value of borrowings (Level 2) was £21,170 million (2021: £14,343 million), and calculated by discounting cash flows at prevailing interest rates. The notional amount outstanding of the debt portfolio at 31 March 2022 was £44,055 million (2021: £31,010 million). There have been no new issuances since the year end.

Collateral is placed with or received from any derivative counterparty where we have entered into a credit support annex to the ISDA Master Agreement once the current mark-to-market valuation of the trades between the parties exceeds an agreed threshold. Included in current bank loans is £60 million (2021: £582 million) in respect of cash received under collateral agreements. For further details of our borrowing facilities, refer to note 33. For further details of our bonds in issue, please refer to the debt investor section of our website. Unless included herein, the information on our website is unaudited.

Certain borrowings, primarily some of our USD denominated bank loans and company car lease contracts, have payments that are linked to LIBOR. LIBOR is being replaced as an interest rate benchmark by alternative reference rates and therefore we are transitioning LIBOR cash flows on our affected contracts in line with the relevant jurisdictions. The migration project is underway, with all affected contracts where we previously paid or received GBP LIBOR amended in the year to 31 March 2022. £314 million (2021: £328 million) of bank loans affected by GBP LIBOR have been transitioned to alternative reference rates. £181 million (2021: £173 million) of lease liabilities affected by USD LIBOR have been transitioned to alternative rates and £110 million (2021: £59 million) of bank loans affected by USD LIBOR have yet to be amended.

Financial liability at fair value through profit and loss

The financial liability was designated at fair value through profit and loss. Up until the date of maturity in November 2021, the liability was analysed as follows:

i. the fair value of the liability at maturity in November 2021 was £699 million (2021: £682 million), which included cumulative changes in fair value attributable to changes in credit risk recognised in other comprehensive income, post tax of £nil (2021: £1 million);
ii. the amount repayable at maturity in November 2021 was £699 million (2021: £684 million); and
iii. the difference between carrying amount and contractual amount at maturity was £nil (2021: £2 million).

This liability was reclassified in order to eliminate a measurement mismatch with derivatives which provide an economic hedge. The associated derivatives were collateralised and did not contain significant exposure to our own credit risk. The presentation of credit risk in other comprehensive income did not, therefore, create or enlarge an accounting mismatch in profit or loss.

The change in the fair value attributable to a change in credit risk was calculated as the difference between the total change in the fair value of the liability and the change in the value of the liability due to changes in market risk factors alone. The change in the fair value due to market risk factors was calculated using benchmark yield curves as at the end of the reporting period holding the credit risk margin constant. The fair value of the liability was calculated using observed market prices.

21. Borrowings continued

Lease liabilities

Lease liabilities are initially measured at the present value of the lease payments expected over the lease term. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security. The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method.

	2022 £m	2021 £m
Gross lease liabilities are repayable as follows:		
Less than 1 year	**132**	114
1 to 5 years	**282**	321
More than 5 years	**259**	464
	673	899
Less: finance charges allocated to future periods	**(115)**	(214)
	558	685
The present value of lease liabilities are as follows:		
Less than 1 year	**107**	99
1 to 5 years	**247**	267
More than 5 years	**204**	319
	558	685

22. Trade and other payables

Trade and other payables include amounts owed to suppliers, tax authorities and other parties which are due to be settled within 12 months. The total also includes deferred amounts, some of which represent monies received from customers but for which we have not yet delivered the associated service. These amounts are recognised as revenue when the service is provided.

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2022 £m	2021 £m
Trade payables	**3,113**	2,165
Deferred payables	**487**	154
Customer contributions[1]	**137**	138
Social security and other taxes	**278**	140
Contingent consideration	**34**	39
Other payables	**866**	881
	4,915	3,517

1. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

Due to their short maturities, the fair value of trade payables approximates their carrying value.

23. Contract liabilities

Contract liabilities primarily relate to the advance consideration received from customers for construction contracts, mainly in relation to connections, for which revenue is recognised over the life of the asset.

	2022 £m	2021 £m
Current	**130**	66
Non-current	**1,342**	1,094
	1,472	1,160

Significant changes in the contract liabilities balances during the period are as follows:

	2022 £m	2021 £m
As at 1 April	**1,160**	1,158
Exchange adjustments	**29**	(65)
Revenue recognised that was included in the contract liability balance at the beginning of the period	**(53)**	(96)
Increases due to cash received, excluding amounts recognised as revenue during the period	**510**	262
Reclassification to held for sale (note 10)	**(174)**	(99)
At 31 March	**1,472**	1,160

24. Other non-current liabilities

Other non-current liabilities include deferred income and customer contributions which will not be recognised as income until after 31 March 2023. It also includes contingent consideration and other payables that are not due until after that date.

Other non-current liabilities are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2022 £m	2021 £m
Deferred income[1]	**41**	78
Customer contributions[2]	**421**	400
Contingent consideration	**7**	18
Other payables	**336**	347
	805	843

1. In the year ended 31 March 2021, principally the deferral of profits relating to the sale of property to St William Homes LLP, which were expected to be recognised in future years. In the year ended 31 March 2022, the Group disposed of its interests in St William Homes LLP, resulting in a release of previously deferred profits (see note 16).
2. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

There is no material difference between the fair value and the carrying value of other payables.

25. Pensions and other post-retirement benefits

All of our employees are eligible to participate in a pension plan. We have defined contribution (DC) and defined benefit (DB) pension plans in the UK and the US. In the US we also provide healthcare and life insurance benefits to eligible employees, post-retirement. The fair value of associated plan assets and present value of DB obligations are updated annually in accordance with IAS 19 'Employee Benefits'. We separately present our UK and US pension plans to show the geographical split. Below we provide a more detailed analysis of the amounts recorded in the primary financial statements and the actuarial assumptions used to value the DB obligations.

UK pension plans

Defined contribution plan

Employees of National Grid's legacy UK businesses are eligible to join the National Grid UK Retirement Plan (NGUKRP), a section of a Master Trust arrangement managed by Legal & General. National Grid pays contributions into the NGUKRP to provide DC benefits on behalf of its employees, generally providing a double match of member contributions up to a maximum Company contribution of 12% of salary. Additionally, WPD operates a DC pension plan (WPPS) which includes three separate DC sections. Two of the DC sections are closed with no active members at 31 March 2022. There is also an open section, available to all new WPD employees.

These plans are defined contribution in nature and are designed to provide members with a pension pot for their retirement. As such, investment risks are borne by the member and there is no legal or constructive obligation on National Grid to pay additional contributions in the instance that investment performance is poor. Payments to these DC plans are charged as an expense as they fall due.

Defined benefit plans

National Grid operates various DB pension plans in the UK. These include two legally separate sections of the National Grid UK Pension Scheme (Section A and Section B of NGUKPS), three sections of the industry-wide Electricity Supply Pension Scheme (ESPS) and a legacy scheme (WPUPS). During the year, following National Grid's announcement of its intention to sell its Gas Transmission and Metering businesses, Section B of NGUKPS was reallocated as held for sale. Each of these plans holds its assets in separate Trustee administered funds. The arrangements are managed by Trustee companies with boards consisting of company- and member-appointed directors. These plans are all closed to new members except for the ESPS schemes in very rare circumstances.

The arrangements are subject to independent actuarial funding valuations every three years, and following consultation and agreement with the Company, the qualified actuary certifies the employers' contributions, which, together with the specified contributions payable by the employees and proceeds from the plans' assets, are expected to be sufficient to fund the benefits payable. The latest full actuarial valuations for each of the DB plans were carried out at 31 March 2019, with the Company agreeing to fund the assessed funding shortfalls for the UK DB plans that were in deficit via recovery plan payments scheduled to finish in November 2024 or earlier, with payments of approximately £130 million across all plans still due to be paid. Separately, National Grid continues to fund the cost of future benefit accrual (over and above member contributions) for each of the DB schemes. In the year to March 2022, the aggregate level of ongoing contributions (excluding recovery plan payments) was £83 million (2021: £50 million; 2020: £70 million). National Grid also pays contributions in respect of the costs of plan administration and the Pension Protection Fund (PPF) levies for most of its DB plans.

In addition, for some plans the Company has also agreed to establish security arrangements with charges in favour of the Trustee. The value of security provided across National Grid's DB plans was £286 million at 31 March 2022, all of which is currently provided in the form of surety bonds but may also be provided as letters of credit or cash. The assets held as security will be paid to the respective section or plan in the event that the relevant supporting employer is subject to an insolvency event or fails to make the required contributions; and applicable to NGEG of ESPS only, if NGET loses its licence to operate under relevant legislation. Counter indemnities have also been taken out to ensure the obligations will be fulfilled. In addition, further cash payments of up to a maximum of £675 million could also become due if certain trigger events occur which have been individually agreed between the plans and their relevant supporting employers.

A guarantee has also been provided to Section A of NGUKPS, with the payment contingent on insolvency or on failure to pay pension obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited.

US pension plans

The US pension plans are governed by a fiduciary committee called the Retirement Plan Committee (RPC). The RPC is structured in accordance with US laws governing retirement plans under the Employee Retirement Income Security Act and comprises appointed employees of the Company.

Defined contribution plans

National Grid has a DC pension plan which allows employee as well as Company contributions. Non-union employees hired after 1 January 2011, as well as most new hire represented union employees, receive a core contribution into the DC plan ranging from 3% to 9% of salary, irrespective of the employee's contribution into the plan. Most employees also receive a matching contribution that varies between 25% and 50% of employee contributions up to a maximum of 8% to 10%. The assets of the plans are held in trusts and administered by the RPC.

Defined benefit plans

National Grid sponsors four non-contributory qualified DB pension plans, which provide vested union employees, and vested non-union employees hired before 1 January 2011, with retirement benefits within prescribed limits as defined by the US Internal Revenue Service. National Grid also provides non-qualified DB pension arrangements for a section of current and former employees, which are closed to new entrants. Benefits under the DB plans generally reflect age, years of service and compensation, and are paid in the form of an annuity or lump sum. An independent actuary performs valuations annually. The Company funds the DB plans by contributing no less than the minimum amount required, but no more than the maximum tax-deductible amount allowed under US Internal Revenue Service regulations. The range of contributions determined under these regulations can vary significantly depending upon the funded status of the plans. At present, there is some flexibility in the amount that is contributed on an annual basis. In general, the Company's policy for funding the US pension plans is to contribute the amounts collected in rates and capitalised in the rate base during the year, to the extent that the funding is no less than the minimum amount required. For the current financial year, these contributions amounted to approximately £116 million (2021: £110 million).

25. Pensions and other post-retirement benefits continued

US other post-retirement benefits

National Grid provides healthcare and life insurance benefits to eligible employees, post-retirement. Eligibility is based on certain age and length of service requirements and, in most cases, retirees contribute to the cost of their healthcare coverage. In the US, there is no governmental requirement to pre-fund post-retirement healthcare and life insurance plans. However, in general, the Company's policy for funding the US retiree healthcare and life insurance plans is to contribute amounts collected in rates and capitalised in the rate base during the year. For the current financial year, these contributions amounted to £17 million (2021: £26 million).

For the last few years it has been the Company's policy to primarily direct contributions to the DB pension plans due to concerns over tax deductible limitations relating to the retiree and healthcare and life insurance plans.

Actuarial assumptions

On retirement, members of DB plans receive benefits whose value is dependent on factors such as salary and length of pensionable service. National Grid's obligation in respect of DB pension plans is calculated separately for each DB plan by projecting the estimated amount of future benefit payments that employees have earned for their pensionable service in the current and prior periods. These future benefit payments are discounted to determine the present value of the liabilities. Current service cost and any unrecognised past service cost are recognised immediately.

Advice is taken from independent actuaries relating to the appropriateness of the key assumptions applied, including life expectancy, expected salary and pension increases, and inflation. Comparatively small changes in the assumptions used may have a significant effect on the amounts recognised in the consolidated income statement, the consolidated statement of other comprehensive income and the net liability recognised in the consolidated statement of financial position. Remeasurements of pension assets and post-retirement benefit obligations are recognised in full in the period in which they occur in the consolidated statement of other comprehensive income.

The Company has applied the following financial assumptions in assessing DB liabilities:

	UK pensions			US pensions			US other post-retirement benefits		
	2022 %	2021 %	2020 %	2022 %	2021 %	2020 %	2022 %	2021 %	2020 %
Discount rate – past service	**2.78**	2.00	2.35	**3.65**	3.25	3.30	**3.65**	3.25	3.30
Discount rate – future service	**2.85**	2.15	2.35	**3.65**	3.25	3.30	**3.65**	3.25	3.30
Rate of increase in RPI – past service	**3.60**	3.15	2.65	**n/a**	n/a	n/a	**n/a**	n/a	n/a
Rate of increase in RPI – future service	**3.33**	3.00	2.45	**n/a**	n/a	n/a	**n/a**	n/a	n/a
Salary increases	**3.47**	3.40	2.90	**4.60**	4.30	3.50	**4.60**	4.30	3.50
Initial healthcare cost trend rate	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**6.80**	7.10	7.00
Ultimate healthcare cost trend rate	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**4.50**	4.50	4.50

For UK pensions, single equivalent financial assumptions are shown above for presentational purposes, although full yield curves have been used in our calculations. The discount rate is determined by reference to high-quality UK corporate bonds at the reporting date. The rate of increase in salaries has been set using a promotional scale where appropriate. The rates of increases stated are not indicative of historical increases awarded or a guarantee of future increase, but merely an appropriate assumption used in assessing DB liabilities. Retail Price Index (RPI) is the key assumption that determines assumed increases in pensions in payment and deferment in the UK only.

Discount rates for US pension liabilities have been determined by reference to appropriate yields on high-quality US corporate bonds at the reporting date based on the duration of plan liabilities. The healthcare cost trend rate is expected to reach the ultimate trend rate by 2031 (2021: 2030).

The table below sets out the projected life expectancies adopted for the UK and US pension arrangements:

	UK pensions			US pensions		
	2022 years	2021 years	2020 years	2022 years	2021 years	2020 years
Assumed life expectations for a retiree age 65						
Males	**22.0**	21.8	22.1	**21.4**	21.6	20.9
Females	**23.8**	23.7	23.8	**23.6**	24.0	23.4
In 20 years:						
Males	**23.2**	23.1	23.3	**23.1**	23.2	22.5
Females	**25.2**	25.2	25.3	**25.3**	25.5	25.1

The weighted average duration of the DB obligation for each category of plan is 14 years for UK pension plans; 13 years for US pension plans and 15 years for US other post-retirement benefit plans. The table below summarises the split of DB obligations by status for each category of plan, with comparative figures for 2021.

	UK pensions		US pensions		US other post-retirement benefits	
	2022 %	2021 %	2022 %	2021 %	2022 %	2021 %
Active members	**16**	8	**36**	35	**34**	34
Deferred members	**10**	14	**9**	9	**–**	–
Pensioner members	**74**	78	**55**	56	**66**	66

For sensitivity analysis see note 35.

25. Pensions and other post-retirement benefits continued

Amounts recognised in the consolidated statement of financial position

	2022 £m	2021 £m
Present value of funded obligations	**(23,541)**	(23,283)
Fair value of plan assets	**27,013**	24,388
	3,472	1,105
Present value of unfunded obligations	**(326)**	(324)
Other post-employment liabilities	**(71)**	(66)
Net defined benefit asset/(liability)	**3,075**	715
Represented by:		
Liabilities	**(810)**	(1,032)
Assets	**3,885**	1,747
	3,075	715

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Present value of funded obligations	**(14,197)**	(13,571)	**(6,531)**	(6,681)	**(2,813)**	(3,031)	**(23,541)**	(23,283)
Fair value of plan assets	**16,865**	14,680	**7,263**	6,909	**2,885**	2,799	**27,013**	24,388
	2,668	1,109	**732**	228	**72**	(232)	**3,472**	1,105
Present value of unfunded obligations	**(78)**	(74)	**(248)**	(250)	**—**	—	**(326)**	(324)
Other post-employment liabilities	**—**	—	**—**	—	**(71)**	(66)	**(71)**	(66)
Net defined benefit asset/(liability)	**2,590**	1,035	**484**	(22)	**1**	(298)	**3,075**	715
Represented by:								
Liabilities	**(78)**	(74)	**(248)**	(393)	**(484)**	(565)	**(810)**	(1,032)
Assets	**2,668**	1,109	**732**	371	**485**	267	**3,885**	1,747
	2,590	1,035	**484**	(22)	**1**	(298)	**3,075**	715

The recognition of the pension assets in the UK and in the US reflects legal and actuarial advice that we have taken regarding recognition of surpluses under IFRIC 14. In the UK, the Group has an unconditional right to a refund in the event of a winding up. In the US, surplus assets of a Plan may be used to pay for future benefits expected to be earned under that Plan.

25. Pensions and other post-retirement benefits continued

Amounts recognised in the income statement and statement of other comprehensive income

The expense or income arising from all Group retirement benefit arrangements recognised in the Group income statements is shown below:

	2022 £m	2021 £m	2020 £m
Included within operating costs			
Administration costs	**20**	18	16
Included within payroll costs			
Defined benefit plan costs:			
Current service cost	**223**	175	178
Past service cost – augmentations	**1**	—	—
Past service cost/(credit) – redundancies	**1**	(1)	—
Special termination benefit cost – redundancies	**9**	5	2
	234	179	180
Included within finance income and costs			
Net interest (income)/cost	**(2)**	38	23
Total included in income statement[1]	**252**	235	219
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[2]	**2,481**	1,408	(724)
Exchange adjustments	**7**	186	(97)
Total included in the statement of other comprehensive income[3]	**2,488**	1,594	(821)

1. Amounts shown in the table above include operating costs of £4 million (2021: £3 million; 2020: £4 million); payroll costs of £10 million (2021: £10 million; 2020: £10 million); and net interest income of £2 million (2021: £13 million; 2020: £11 million) presented within profit from discontinued operations. These amounts all relate to UK pensions.
2. For the year ended 31 March 2021, this included actuarial losses from the purchase of buy-in policies of £0.1 billion.
3. Amounts shown in the table above include remeasurements of pension assets and post-retirement benefit obligations resulting in a gain of £309 million (2021: £250 million loss; 2020: £58 million gain) presented within discontinued operations. These amounts all relate to UK pensions.

The geographical split of pensions and other post-retirement benefits is shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2022 £m	2021 £m	2020 £m	2022 £m	2021 £m	2020 £m	2022 £m	2021 £m	2020 £m
Included within operating costs									
Administration costs	**11**	9	9	**7**	7	6	**2**	2	1
Included within payroll costs									
Defined benefit plan costs:									
Current service cost	**83**	28	33	**101**	104	100	**39**	43	45
Past service cost – augmentations	**1**	—	—	**—**	—	—	**—**	—	—
Past service cost/(credit) – redundancies	**1**	(1)	—	**—**	—	—	**—**	—	—
Special termination benefit cost – redundancies	**9**	5	2	**—**	—	—	**—**	—	—
	94	32	35	**101**	104	100	**39**	43	45
Included within finance income and costs									
Net interest (income)/cost	**(7)**	(38)	(31)	**—**	35	21	**5**	41	33
Total included in income statement	**98**	3	13	**108**	146	127	**46**	86	79
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[1]	**1,577**	(622)	143	**532**	1,017	(588)	**372**	1,013	(279)
Exchange adjustments	**—**	—	—	**11**	83	(42)	**(4)**	103	(55)
Total included in the statement of other comprehensive income	**1,577**	(622)	143	**543**	1,100	(630)	**368**	1,116	(334)

1. For the year ended 31 March 2021, UK pensions is stated after actuarial losses from the purchase of buy-in policies of £0.1 billion.

25. Pensions and other post-retirement benefits continued

Reconciliation of the net defined benefit asset/(liability)

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening net defined benefit asset/(liability)	**1,035**	1,520	**(22)**	(1,113)	**(298)**	(1,360)	**715**	(953)
Cost recognised in the income statement (including discontinued operations)	**(98)**	(3)	**(108)**	(146)	**(46)**	(86)	**(252)**	(235)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**1,577**	(622)	**543**	1,100	**368**	1,116	**2,488**	1,594
Employer contributions	**167**	138	**116**	110	**17**	26	**300**	274
Other movements	**7**	2	**—**	—	**(29)**	(16)	**(22)**	(14)
Acquisition of WPD (note 37)	**566**	—	**—**	—	**—**	—	**566**	—
Reclassification to held for sale (note 10)	**(664)**	—	**(45)**	27	**(11)**	22	**(720)**	49
Closing net defined benefit asset/(liability)	**2,590**	1,035	**484**	(22)	**1**	(298)	**3,075**	715

Changes in the present value of defined benefit obligations (including unfunded obligations)

The table below shows the movement in defined benefit obligations across our DB plans over the year.

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening defined benefit obligations	**(13,645)**	(12,844)	**(6,931)**	(8,085)	**(3,031)**	(3,697)	**(23,607)**	(24,626)
Current service cost	**(83)**	(28)	**(101)**	(104)	**(39)**	(43)	**(223)**	(175)
Interest cost	**(88)**	(296)	**(240)**	(243)	**(100)**	(112)	**(428)**	(651)
Actuarial (losses)/gains – experience	**(627)**	(21)	**(24)**	(72)	**107**	216	**(544)**	123
Actuarial gains/(losses) – demographic assumptions	**133**	(1)	**100**	—	**71**	—	**304**	(1)
Actuarial gains/(losses) – financial assumptions	**1,387**	(1,181)	**329**	(62)	**192**	(25)	**1,908**	(1,268)
Past service (cost)/credit – redundancies	**(1)**	1	**—**	—	**—**	—	**(1)**	1
Special termination benefit cost – redundancies	**(9)**	(5)	**—**	—	**—**	—	**(9)**	(5)
Past service cost – augmentations	**(1)**	—	**—**	—	**—**	—	**(1)**	—
Medicare subsidy received	**—**	—	**—**	—	**(24)**	(25)	**(24)**	(25)
Employee contributions	**(8)**	(1)	**—**	—	**—**	—	**(8)**	(1)
Benefits paid	**919**	731	**403**	371	**159**	144	**1,481**	1,246
Exchange adjustments	**—**	—	**(327)**	804	**(140)**	362	**(467)**	1,166
Acquisition of WPD	**(7,096)**	—	**—**	—	**—**	—	**(7,096)**	—
Reclassification to held for sale	**4,844**	—	**12**	460	**(8)**	149	**4,848**	609
Closing defined benefit obligations	**(14,275)**	(13,645)	**(6,779)**	(6,931)	**(2,813)**	(3,031)	**(23,867)**	(23,607)

25. Pensions and other post-retirement benefits continued

Changes in the value of plan assets

The table below shows the movement in pension assets across our DB plans over the year.

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening fair value of plan assets	14,680	14,364	6,909	6,972	2,799	2,412	24,388	23,748
Interest income	95	334	240	208	95	71	430	613
Return on plan assets in excess of interest[1]	684	581	127	1,151	2	822	813	2,554
Administration costs	(11)	(9)	(7)	(7)	(2)	(2)	(20)	(18)
Employer contributions	167	138	116	110	17	26	300	274
Employee contributions	8	1	—	—	—	—	8	1
Benefits paid	(912)	(729)	(403)	(371)	(159)	(144)	(1,474)	(1,244)
Exchange adjustments	—	—	338	(721)	136	(259)	474	(980)
Acquisition of WPD	7,662	—	—	—	—	—	7,662	—
Reclassification to held for sale	(5,508)	—	(57)	(433)	(3)	(127)	(5,568)	(560)
Closing fair value of plan assets	16,865	14,680	7,263	6,909	2,885	2,799	27,013	24,388
Actual return on plan assets	779	915	367	1,359	97	893	1,243	3,167
Expected contributions to plans in the following year	146	93	74	113	14	6	234	212

1. For the year ended 31 March 2021, this included actuarial losses from the purchase of buy-in policies of £0.1 billion.

Asset allocations

The allocation of assets by asset class is set out below. Within these asset allocations there is significant diversification across regions, asset managers, currencies and bond categories.

UK pensions

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	1,458	474	1,932	555	801	1,356	732	732	1,464
Corporate bonds	2,741	—	2,741	3,730	37	3,767	3,837	—	3,837
Government securities	786	—	786	1,836	—	1,836	2,051	—	2,051
Property	122	1,002	1,124	104	565	669	103	585	688
Diversified alternatives	1,334	432	1,766	—	712	712	—	893	893
Liability-matching assets	2,023[1]	6,090[2]	8,113[3]	1,731[1]	4,133[2]	5,864[3]	1,704[1]	3,278[2]	4,982[3]
Longevity swap	—	(80)	(80)	—	(64)	(64)	—	(51)	(51)
Cash and cash equivalents	477	—	477	34	250	284	29	222	251
Other (including net current assets and liabilities)	16	(10)	6	—	256	256	—	249	249
	8,957	7,908	16,865[4]	7,990	6,690	14,680	8,456	5,908	14,364

1. Consists of pooled funds which invest mainly in fixed interest securities.
2. Includes buy-in policies held by NGUKPS with a total value of £2.7 billion (2021: £4.1 billion; 2020: £3.3 billion).
3. Included within liability-matching assets above is £6.6 billion (2021: £2.5 billion; 2020: £2.8 billion) of repurchase agreements. These are used to increase the market exposure of the liability-matching portfolios.
4. The fair value of plan assets for NGUKPS Section A includes £32 million (2021: £nil; 2020: £nil) of direct holdings in WPD debt instruments.

25. Pensions and other post-retirement benefits continued

US pensions

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	272	1,904	2,176	560	2,359	2,919	467	2,043	2,510
Corporate bonds	2,311	697	3,008	1,547	507	2,054	1,640	518	2,158
Government securities	335	715	1,050	354	527	881	535	732	1,267
Property	—	295	295	—	264	264	—	307	307
Diversified alternatives	142	364	506	167	458	625	162	464	626
Infrastructure	—	182	182	—	130	130	—	121	121
Cash and cash equivalents	31	—	31	24	—	24	24	—	24
Other (including net current assets and liabilities)	12	3	15	12	—	12	(44)	3	(41)
	3,103	4,160	7,263	2,664	4,245	6,909	2,784	4,188	6,972

US other post-retirement benefits

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	185	1,013	1,198	419	1,303	1,722	353	1,037	1,390
Corporate bonds	723	2	725	13	—	13	15	—	15
Government securities	511	2	513	533	3	536	551	1	552
Diversified alternatives	144	120	264	185	172	357	162	161	323
Other[1]	—	185	185	—	171	171	—	132	132
	1,563	1,322	2,885	1,150	1,649	2,799	1,081	1,331	2,412

1. Other primarily comprises insurance contracts.

Main defined benefit risks

National Grid underwrites the financial and demographic risks associated with our DB plans. Although the governing bodies have sole responsibility for setting investment strategies and managing risks, National Grid closely works with and supports the governing bodies of each plan, to assist them in mitigating the risks associated with their plans and to ensure that the plans are funded to meet their obligations.

The most significant risks associated with the DB plans are:

Main risks	Description and mitigation
Investment risk	The plans invest in a variety of asset classes, with actual returns likely to differ from the underlying discount rate adopted, impacting on the funding position of the plan through the net balance sheet asset or liability. Each plan seeks to balance the level of investment return required with the risk that it can afford to take, to design the most appropriate investment portfolio.
Changes in bond yields	Liabilities are calculated using discount rates set with reference to the yields in high-quality bonds prevailing in the UK and US debt markets and will fluctuate as yields change. Volatility of the net balance sheet asset or liability is controlled through liability-matching strategies. The investment strategies allow for the use of synthetic as well as physical assets to be used to hedge interest rate risk.
Inflation risk	Changes in inflation will affect the current and future pensions but are partially mitigated through investing in inflation-matching assets and hedging instruments as well as bulk annuity buy-in policies. The investment strategies allow for the use of synthetic as well as physical assets to be used to hedge inflation risk.
Member longevity	Longevity is a key driver of liabilities and changes in life expectancy have a direct impact on liabilities. Improvements in life expectancy will lead to pension payments being paid for longer than expected and benefits ultimately being more expensive. This risk has been partly mitigated by recent scheme investment transactions including a longevity insurance contract (longevity swap) for NGEG of ESPS and two buy-in policies for Section A of NGUKPS.
Counterparty risk	This is managed by having a diverse range of counterparties and through having a strong collateralisation process (including for the longevity swap held by NGEG of ESPS). Measurement and management of counterparty risk is delegated to the relevant investment managers. For our bulk annuity policies, various termination provisions were introduced in the contracts, managing our exposure to counterparty risk. The insurers' operational performance and financial strength are monitored on a regular basis.
Default risk	Investments are predominantly made in regulated markets in assets considered to be of investment grade. Where investments are made either in non-investment grade assets or outside of regulated markets, investment levels are kept to prudent levels and subject to agreed control ranges, to control the risk.
Liquidity risk	The pension plans hold sufficient cash to meet benefit requirements, with other investments being held in liquid or realisable assets to meet unexpected cash flow requirements. The plans do not borrow money, or act as guarantor, to provide liquidity to other parties (unless it is temporary).
Currency risk	Fluctuations in the value of foreign denominated assets due to exposure to currency exchange rates is managed through a combination of segregated currency hedging overlay and currency hedging carried out by some of the investment managers.

25. Pensions and other post-retirement benefits continued

DB plan investment strategies

The Trustees and RPC, after taking advice from professional investment advisors and in consultation with National Grid, set their key principles, including expected returns, risk and liquidity requirements. They formulate an investment strategy to manage risk through diversification, taking into account expected contributions, maturity of the pension liabilities, and in the UK, the strength of the covenant. These strategies allocate investments between return-seeking assets such as equities and property, and liability-matching assets such as buy-in policies, government securities and corporate bonds which are intended to protect the funding position.

The approximate investment allocations for our plans at 31 March 2022 are as follows:

	UK pensions %	US pensions %	US other post-retirement benefits %
Return-seeking assets	28	41	51
Liability-matching assets	72	59	49

The governing bodies can generally delegate responsibility for the selection of specific bonds, securities and other investments to appointed investment managers. Investment managers are selected based on the required skills, expertise in those markets, process and financial security to manage the investments. Their performance is regularly reviewed against measurable objectives, consistent with each pension plan's long-term objectives and accepted risk levels.

In the UK, each of our pension plans has Responsible Investment (RI) Policies, which take into account Environmental, Social and Governance (ESG) factors and generally incorporate the six UN-backed Principles for Responsible Investment (UNPRI). Each of the Trustee boards believes that ESG factors can be material to financial outcomes and should therefore be considered alongside other factors. They recognise that their primary responsibility remains a fiduciary one, i.e., their first duty is to ensure the best possible return on investments with the appropriate level of risk. However, they also recognise the increasing materiality of ESG factors and that they have a fiduciary and regulatory duty to consider RI, including ESG factors and their potential impact on the quality and sustainability of long-term investment returns. The principle defined contribution arrangement in the UK, the NGUKRP, is operated by Legal & General, which embeds ESG factors in the investment options offered to members. As well as offering a range of self-select ethical funds, it directly incorporates its Climate Impact Pledge into the default investment option, which acts to align the fund to a carbon net zero future.

Whilst in the US there is no regulatory requirement to have ESG-specific principles embedded in investment policies, our investment managers often utilise ESG principles to inform their decision-making process.

26. Provisions

Provisions are recognised when an obligation exists resulting from a past event, and it is probable that cash will be paid to settle it, but the exact amount of cash required can only be estimated. The majority of our provisions relate to environmental remediation, specifically in relation to certain Superfund sites in the US, being sites we own or have owned in the past where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York. We also recognise provisions for decommissioning costs for various assets we would be required to remove at the end of their lives; the costs associated with restructuring plans; the costs in respect of insured past events; for certain Ofgem arrangements in respect of specific interconnectors which require the return of excess revenues above a cap; and for lease contracts we have entered into that are now loss-making.

In determining the quantum of the provision we recognise, we make estimates in relation to management's best judgement of the evaluation of the likelihood and the probability of exposure to potential loss, and the costs that would be incurred. Should circumstances change following unforeseeable developments, the likelihood or quantum could alter.

Provisions are recognised where a legal or constructive obligation exists at the reporting date, as a result of a past event, where the amount of the obligation can be reliably estimated and where the outflow of economic benefit is probable.

The quantum of the provision recognised for decommissioning, environmental, restructuring and other costs is based on estimated future expenditure, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment. Provisions to decommission significant portions of our regulated transmission and distribution assets are not recognised where no legal obligations exist, and a realistic alternative exists to incurring costs to decommission assets at the end of their life. In any case, even if a legal or constructive obligation did exist, it is not currently determinable when remediation work would take place and therefore no provision would be recorded at this point.

Changes in the provision arising from revised estimates, discount rates or changes in the expected timing of expenditure that relates to property, plant and equipment are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated useful economic lives; otherwise such changes are recognised in the income statement.

The unwinding of the discount is included within the income statement within finance costs.

	Environmental £m	Decommissioning £m	Restructuring £m	Other £m	Total provisions £m
At 1 April 2020	2,071	254	35	294	2,654
Exchange adjustments	(185)	(9)	(1)	(21)	(216)
Additions	26	42	11	67	146
Unused amounts reversed	(38)	(27)	–	(16)	(81)
Unwinding of discount	66	7	–	5	78
Utilised	(161)	(16)	(19)	(62)	(258)
Reclassification to held for sale (note 10)	(79)	(7)	–	(10)	(96)
At 31 March 2021	1,700	244	26	257	2,227
Exchange adjustments	82	4	1	10	97
Additions	158	37	16	212	423
Acquisition of WPD (note 37)	–	37	–	29	66
Unused amounts reversed	(25)	(4)	(1)	(31)	(61)
Unwinding of discount	64	6	–	3	73
Utilised	(99)	(26)	(22)	(47)	(194)
Reclassification to held for sale (note 10)	(3)	(40)	(3)	(46)	(92)
At 31 March 2022	**1,877**	**258**	**17**	**387**	**2,539**

	2022 £m	2021 £m
Current	**240**	260
Non-current	**2,299**	1,967
	2,539	2,227

26. Provisions continued

Environmental provisions

The environmental provision represents the estimated restoration and remediation costs relating to a number of sites owned and managed by subsidiary undertakings, together with certain US sites that National Grid no longer owns. The environmental provision is as follows:

	2022			2021		
	Discounted £m	Real undiscounted £m	Real discount rate	Discounted £m	Real undiscounted £m	Real discount rate
UK sites	152	160	0.5%	167	171	0.5%
US sites	1,725	1,789	0.5%	1,533	1,583	0.5%
	1,877	1,949		1,700	1,754	

The remediation expenditure in the UK relates to old gas manufacturing sites and also to electricity transmission sites. Cash flows are expected to be incurred until 2069. A number of estimation uncertainties affect the calculation of the provision, including the impact of regulation, the accuracy of site surveys, unexpected contaminants, transportation costs, the impact of alternative technologies, the expected timing and duration of cash flows, and changes in the real discount rate. This provision incorporates our best estimate of the financial effect of these uncertainties, but future changes in any of the assumptions could materially impact the calculation of the provision. The undiscounted amount is the undiscounted best estimate of the liability having regard to these uncertainties.

The remediation expenditure in the US is expected to be incurred until 2069, of which the majority relates to three Superfund sites (being sites where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York). The weighted average duration of the cash flows is 11 years. The uncertainties regarding the calculation of this provision are similar to those considered in respect of UK sites. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers.

Decommissioning provisions

The decommissioning provisions include £258 million (2021: £244 million) of expenditure relating to asset retirement obligations estimated to be incurred until 2104.

Restructuring provisions

In 2022, we continued to undertake design and implementation activities in respect of our new operating model and cost efficiency programme, which resulted in the recognition of an increased provision of £16 million in the year (2021: £11 million). The income statement expense relating to the provision has been treated as an exceptional item, and details are provided in note 5.

Other provisions

Included within other provisions at 31 March 2022 are the following amounts:

- £163 million (2021: £166 million) of estimated liabilities in respect of past events insured by insurance subsidiary undertakings, including employer liability claims. In accordance with insurance industry practice, these estimates are based on experience from previous years, but we currently expect that cash flows will be incurred until 2037;
- £121 million (2021: £nil) of estimated liabilities in respect of interconnector excess revenues which will be repayable in future reporting periods in accordance with the cap and floor regime constructed by Ofgem (see notes 3 and 38). These estimates are based on the respective interconnectors' performance against their cumulative caps and cash outflows will be required to settle these liabilities by the financial year ending 31 March 2028;
- £28 million (2021: £27 million) in respect of onerous lease commitments and rates payable on surplus properties with expenditure expected to be incurred until 2039; and
- £26 million (2021: £13 million) in respect of emissions provisions with expenditure expected to be incurred until 2023.

27. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of treasury shares the Company holds, which are shares that the Company has bought itself, predominantly to actively manage scrip issuances and settle employee share option and reward plan liabilities.

Share capital is accounted for as an equity instrument. An equity instrument is any contract that includes a residual interest in the consolidated assets of the Company after deducting all its liabilities and is recorded at the proceeds received, net of direct issue costs, with an amount equal to the nominal amount of the shares issued included in the share capital account and the balance recorded in the share premium account.

	Allotted, called-up and fully paid	
	million	£m
At 1 April 2020	3,780	470
Issued during the year in lieu of dividends[1]	35	4
At 31 March 2021	3,815	474
Issued during the year in lieu of dividends[1]	89	11
At 31 March 2022	**3,904**	**485**

1. The issue of shares under the scrip dividend programme is considered to be a bonus issue under the terms of the Companies Act 2006, and the nominal value of the shares is charged to the share premium account.

The share capital of the Company consists of ordinary shares of $12\frac{204}{473}$ pence nominal value each including ADSs. The ordinary shares and ADSs allow holders to receive dividends and vote at general meetings of the Company. The Company holds treasury shares but may not exercise any rights over these shares including the entitlement to vote or receive dividends. There are no restrictions on the transfer or sale of ordinary shares.

In line with the provisions of the Companies Act 2006, the Company has amended its Articles of Association and ceased to have authorised share capital.

The Company has implemented a share forfeiture programme following the completion of a tracing and notification exercise to any shareholders who have not had contact with the Company over the past 12 years, in accordance with the provisions set out in the Company's Articles of Association. Under the share forfeiture programme, the shares and dividends associated with shares of untraced members have been forfeited, with the resulting proceeds transferred to the Company to use in line with the Company's corporate responsibility strategy. During the financial year, the Company received £16 million of proceeds from the sale of untraced shares and derecognised £32 million of liabilities related to unclaimed dividends, which are reflected in share premium and the income statement respectively.

Treasury shares
At 31 March 2022, the Company held 259 million (2021: 266 million) of its own shares. The market value of these shares as at 31 March 2022 was £3,038 million (2021: £2,296 million).

For the benefit of employees and in connection with the operation of the Company's various share plans, the Company made the following transactions in respect of its own shares during the year ended 31 March 2022:

i. During the year, 4 million (2021: 4 million) treasury shares were gifted to National Grid Employee Share Trusts and 2 million (2021: 2 million) treasury shares were re-issued in relation to employee share schemes, in total representing approximately 0.2% (2021: 0.2%) of the ordinary shares in issue as at 31 March 2022. The nominal value of these shares was £1 million (2021: £1 million) and the total proceeds received were £17 million (2021: £17 million). National Grid settles share awards under its Long Term Incentive Plan and the Save As You Earn scheme, by the transfer of treasury shares to its employee share trusts.
ii. During the year, the Company made payments totalling £3 million (2021: £2 million) to National Grid Employee Share Trusts to enable the Trustees to make purchases of National Grid plc shares to settle share awards in relation to all employee share plans and discretionary reward plans. The cost of such purchases is deducted from retained earnings in the period that the transaction occurs.

The maximum number of ordinary shares held in treasury during the year was 266 million (2021: 272 million) representing approximately 6.8% (2021: 7.1%) of the ordinary shares in issue as at 31 March 2022 and having a nominal value of £33 million (2021: £34 million).

28. Other equity reserves

Other equity reserves are different categories of equity as required by accounting standards and represent the impact of a number of our historical transactions or fair value movements on certain financial instruments that the Company holds.

Other equity reserves comprise the translation reserve (see accounting policy C in note 1), cash flow hedge reserve and the cost of hedging reserve (see note 32), debt instruments at fair value through other comprehensive income reserve (FVOCI debt) and equity investments at fair value through other comprehensive income reserve (FVOCI equity) (see note 15), the capital redemption reserve and the merger reserve.

The merger reserve arose as a result of the application of merger accounting principles under the then prevailing UK GAAP, which under IFRS 1 was retained for mergers that occurred prior to the IFRS transition date. Under merger accounting principles, the difference between the carrying amount of the capital structure of the acquiring vehicle and that of the acquired business was treated as a merger difference and included within reserves. The merger reserve represents the difference between the carrying value of subsidiary undertaking investments and their respective capital structures following the Lattice demerger from BG Group plc and the 1999 Lattice refinancing.

The cash flow hedge reserve will amortise as the committed future cash flows from borrowings are paid or capitalised in fixed assets (as described in note 32). Cost of hedging, FVOCI debt and FVOCI equity reserves arose as a result of the adoption of IFRS 9 on 1 April 2018. See note 15 for further detail on FVOCI debt and FVOCI equity reserves; and note 32 in respect of cost of hedging reserve.

As the amounts included in other equity reserves are not attributable to any of the other classes of equity presented, they have been disclosed as a separate classification of equity.

	Translation £m	Cash flow hedge £m	Cost of hedging £m	FVOCI equity £m	FVOCI debt £m	Own credit £m	Capital redemption £m	Merger £m	Total £m
At 1 April 2019	750	61	17	34	48	13	19	(5,165)	(4,223)
Exchange adjustments[1]	560	—	—	—	—	—	—	—	560
Net losses taken to equity	—	(142)	(33)	(13)	(15)	(3)	—	—	(206)
Share of net losses of associates taken to equity	—	(5)	—	—	—	—	—	—	(5)
Transferred to profit or loss	—	14	(45)	—	—	—	—	—	(31)
Net losses in respect of cash flow hedging of capital expenditure	—	(17)	—	—	—	—	—	—	(17)
Tax	—	29	11	4	(2)	—	—	—	42
Cash flow hedges transferred to the statement of financial position, net of tax	—	(15)	—	—	—	—	—	—	(15)
At 1 April 2020	1,310	(75)	(50)	25	31	10	19	(5,165)	(3,895)
Exchange adjustments[1]	(1,345)	—	—	—	—	—	—	—	(1,345)
Net gains/(losses) taken to equity	—	14	11	36	80	(11)	—	—	130
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	1
Transferred to profit or loss	—	56	3	—	—	—	—	—	59
Net losses in respect of cash flow hedging of capital expenditure	—	(14)	—	—	—	—	—	—	(14)
Tax	—	(13)	8	(10)	—	2	—	—	(13)
Cash flow hedges transferred to the statement of financial position, net of tax	—	(17)	—	—	—	—	—	—	(17)
At 1 April 2021	(35)	(48)	(28)	51	111	1	19	(5,165)	(5,094)
Exchange adjustments[1]	629	—	—	—	—	—	—	—	629
Net losses taken to equity[2]	—	(96)	(2)	(70)	(11)	(1)	—	—	(180)
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	1
Transferred to profit or loss	—	40	(1)	—	—	—	—	—	39
Net losses in respect of cash flow hedging of capital expenditure	—	(1)	—	—	—	—	—	—	(1)
Tax	—	11	2	19	3	—	—	—	35
Cash flow hedges transferred to the statement of financial position, net of tax	—	8	—	—	—	—	—	—	8
At 31 March 2022	**594**	**(85)**	**(29)**	**—**	**103**	**—**	**19**	**(5,165)**	**(4,563)**

1. The exchange adjustments recorded in the translation reserve comprise a gain of £754 million (2021: loss of £1,507 million; 2020: gain of £545 million) relating to the translation of foreign operations offset by a loss of £125 million (2021: gain of £183 million; 2020: gain of £5 million) relating to borrowings, cross-currency swaps and foreign exchange forward contracts used to hedge the net investment in non-sterling denominated subsidiaries.
2. In the year ended 31 March 2022, the Group disposed of its equity instruments related to shares held as part of a portfolio of financial instruments which back some long-term employee liabilities. The equity instruments were previously measured at FVOCI and prior to the disposal the Group recognised a gain of £12 million in the year. The accumulated gain and losses of £82 million recognised in other comprehensive income were transferred to retained earnings on disposal (see note 15).

29. Net debt

We define net debt as the amount of borrowings and financing derivatives less cash and current financial investments.

(a) Composition of net debt

Net debt is comprised as follows:

	2022 £m	2021 £m	2020 £m
Cash and cash equivalents (see note 20)	**204**	157	73
Current financial investments (see note 15)	**3,145**	2,342	1,998
Borrowings (see note 21)	**(45,465)**	(31,220)	(30,794)
Financing derivatives[1] (see note 17)	**(693)**	175	133
	(42,809)	(28,546)	(28,590)

1. The financing derivatives balance included in net debt excludes the commodity derivatives (see note 17).

(b) Analysis of changes in net debt

	Notes	Cash and cash equivalents £m	Financial investments[1] £m	Borrowings £m	Financing derivatives £m	Total[2] £m
At 1 April 2019		252	1,981	(28,730)	(32)	(26,529)
Impact of transition to IFRS 16		—	—	(474)	—	(474)
Cash flow		(183)	(42)	450	450	675
Fair value gains and losses		—	1	(57)	(246)	(302)
Foreign exchange movements		4	24	(807)	—	(779)
Interest income/(charges)	6	—	34	(1,092)	(39)	(1,097)
Other non-cash movements		—	—	(84)	—	(84)
At 1 April 2020		73	1,998	(30,794)	133	(28,590)
Cash flow		95	429	(2,336)	4	(1,808)
Fair value gains and losses		—	14	159	31	204
Foreign exchange movements		(7)	(106)	1,710	—	1,597
Interest income/(charges)	6	—	7	(946)	7	(932)
Other non-cash movements		—	—	(136)	—	(136)
Reclassification to held for sale	10	(4)	—	1,123	—	1,119
At 1 April 2021		157	2,342	(31,220)	175	(28,546)
Cash flow	29(c)	9	752	(9,993)	262	(8,970)
Fair value gains and losses		—	(12)	286	(604)	(330)
Foreign exchange movements		5	53	(652)	—	(594)
Interest income/(charges)	6	—	43	(1,177)	(59)	(1,193)
Other non-cash movements		—	(15)	34	—	19
Acquisition of WPD	37	44	69	(8,286)	26	(8,147)
Reclassification to held for sale[3]	10	(11)	(87)	5,543	(493)	4,952
At 31 March 2022		**204**	**3,145**	**(45,465)**	**(693)**	**(42,809)**
Balances at 31 March 2022 comprise:						
Non-current assets		—	—	—	264	264
Current assets		204	3,145	—	34	3,383
Current liabilities		—	—	(12,121)	(136)	(12,257)
Non-current liabilities		—	—	(33,344)	(855)	(34,199)
		204	**3,145**	**(45,465)**	**(693)**	**(42,809)**

1. Cash flows on current financial investments comprise £29 million (2021: £7 million; 2020: £35 million) of interest received and £781 million of cash outflows (2021: £436 million outflows; 2020: £7 million outflows) of net cash flow movements in short-term financial investments, as presented in the consolidated cash flow statement.
2. Includes accrued interest at 31 March 2022 of £351 million (2021: £263 million; 2020: £246 million).
3. Reclassification to held for sale represents the opening net debt position of the UK Gas Transmission business. The closing net debt position of the UK Gas Transmission business is disclosed in note 10.

29. Net debt continued

(c) Reconciliation of cash flow from liabilities within net debt to cash flow statement

	2022		2021[1]		2020[1]	
	Borrowings and other £m	Financing derivatives £m	Borrowings and other £m	Financing derivatives £m	Borrowings and other £m	Financing derivatives £m
Cash flows per financing activities section of cash flow statement:						
Proceeds received from loans	**12,347**	**—**	5,150	—	3,921	—
Repayment of loans	**(1,261)**	**—**	(1,654)	—	(3,037)	—
Payments of lease liabilities	**(117)**	**—**	(107)	—	(115)	—
Net movements in short-term borrowings	**(11)**	**—**	(619)	—	(562)	—
Cash inflows on derivatives	**—**	**20**	—	17	—	46
Cash outflows on derivatives	**—**	**(114)**	—	(183)	—	(245)
Interest paid	**(998)**	**(55)**	(711)	(42)	(802)	(65)
Cash flows per financing activities section of cash flow statement	**9,960**	**(149)**	2,059	(208)	(595)	(264)
Adjustments:						
Non-net debt-related items	**33**	**—**	29	—	34	—
Derivative cash (outflow)/inflow in relation to capital expenditure	**—**	**(8)**	—	10	—	13
Derivative cash inflows per investing section of cash flow statement	**—**	**17**	—	225	—	58
Derivative cash outflows per investing section of cash flow statement	**—**	**(122)**	—	(81)	—	(281)
Cash flows relating to financing liabilities within net debt	**9,993**	**(262)**	2,088	(54)	(561)	(474)
Analysis of changes in net debt:						
Borrowings	**9,993**	**—**	2,088	—	(561)	—
Financing derivatives	**—**	**(262)**	—	(54)	—	(474)
Cash flow movements relating to financing liabilities within net debt	**9,993**	**(262)**	2,088	(54)	(561)	(474)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(d) Reconciliation of changes in liabilities arising from financing activities

The table below reconciles changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. For the purposes of this table, the liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the consolidated cash flow statement within financing activities. As a result we have separately disclosed the reconciliation below, excluding derivatives associated with our net investment hedges and derivatives associated with the hedging of capital expenditure, given that they are both classified in the consolidated cash flow statement within investing activities.

	Notes	Borrowings £m	Financing derivatives £m	Total £m
At 1 April 2019		(28,730)	228	(28,502)
Impact of transition to IFRS 16		(474)	—	(474)
Cash flow[1]		450	240	690
Fair value gains and losses		(57)	(231)	(288)
Foreign exchange movements		(807)	—	(807)
Interest charges	6	(1,092)	(9)	(1,101)
Other non-cash movements		(84)	—	(84)
At 1 April 2020		(30,794)	228	(30,566)
Cash flow[1]		(2,336)	158	(2,178)
Fair value gains and losses		159	(301)	(142)
Foreign exchange movements		1,710	—	1,710
Interest charges	6	(946)	11	(935)
Other non-cash movements		(136)	—	(136)
Reclassification to held for sale	10	1,123	—	1,123
At 1 April 2021		(31,220)	96	(31,124)
Cash flow		(9,993)	149	(9,844)
Fair value gains and losses		286	(472)	(186)
Foreign exchange movements		(652)	—	(652)
Interest charges	6	(1,177)	(54)	(1,231)
Other non-cash movements		34	—	34
Acquisition of WPD	37	(8,286)	26	(8,260)
Reclassification to held for sale[2]	10	5,543	(495)	5,048
At 31 March 2022		**(45,465)**	**(750)**	**(46,215)**

1. Comparative amounts include financing cash flows attributable to the UK Gas Transmission business which was classified as a discontinued operation in the year (see notes 1 and 10). In order to reconcile financing cash flows to the consolidated cash flow statement for the years ended 31 March 2021 and 2020, cash flows from financing activities for both continuing operations and discontinued operations should be included, along with non-debt related items in note 29(c).
2. Reclassification to held for sale represents the opening net debt position of the UK Gas Transmission business. The closing net debt position of the UK Gas Transmission business is disclosed in note 10.

30. Commitments and contingencies

Commitments are those amounts that we are contractually required to pay in the future as long as the other party meets its obligations. These commitments primarily relate to energy purchase agreements and contracts for the purchase of assets which, in many cases, extend over a long period of time. We also disclose any contingencies, which include guarantees that companies have given, where we pledge assets against current obligations that will remain for a specific period.

Contingent assets are disclosed where the Group concludes that an inflow of economic benefits is probable.

	2022 £m	2021 £m
Future capital expenditure		
Contracted for but not provided[1]	**2,881**	2,716
Energy purchase commitments[2]		
Less than 1 year	**1,386**	1,255
In 1 to 2 years	**1,366**	894
In 2 to 3 years	**1,219**	975
In 3 to 4 years	**1,189**	959
In 4 to 5 years	**1,088**	896
More than 5 years	**12,266**	10,805
	18,514	15,784
Guarantees		
Guarantee of sublease for US property (expires 2040)	**149**	149
Guarantees of certain obligations of Grain LNG (expire up to 2025)	**31**	33
Guarantees of certain obligations for construction of HVDC West Coast Link (expected expiry 2059)	**84**	85
Guarantees of certain obligations of National Grid North Sea Link Limited (various expiry dates)	**569**	584
Guarantees of certain obligations of St William Homes LLP (various expiry dates)	**44**	53
Guarantees of certain obligations of National Grid IFA 2 Limited (expected expiry 2022)	**130**	170
Guarantees of certain obligations of National Grid Viking Link Limited (expected expiry 2024)	**1,177**	1,276
Other guarantees and letters of credit (various expiry dates)	**380**	486
	2,564	2,836

1. Included within future capital expenditure is £205 million (2021: £186 million) pertaining to the UK Gas Transmission business.
2. Energy purchase commitments relate to contractual commitments to purchase electricity or gas that are used to satisfy physical delivery requirements to our customers or for energy that we use ourselves (i.e. normal purchase, sale or usage) and hence are accounted for as ordinary purchase contracts (see note 32(f)). Details of commodity contract derivatives that do not meet the normal purchase, sale or usage criteria, and hence are accounted for as derivative contracts, are shown in note 17(b).

Through the ordinary course of our operations, we are party to various litigation, claims and investigations. We do not expect the ultimate resolution of any of these proceedings to have a material adverse effect on our results of operations, cash flows or financial position.

Contingent assets
In September 2021, a fire at the IFA interconnector station in Sellindge, Kent caused significant damage to infrastructure on site. This incident has resulted in claims under the Group's insurance policy for the rebuild cost of the damaged property and lost revenue arising from the business interruption. The Group believes that a favourable outcome is probable. However, the contingent asset has not been recognised as a receivable at 31 March 2022 because receipt of the amount is dependent on the outcome of the reinsurers formally agreeing liability and signing off on the investigation report. As at 31 March 2022, the investigation report is with the reinsurers for review and the final amount and timing of any insurance proceeds is not known with certainty.

The exceptional environmental insurance recovery described in note 5 is the result of one of a number of legal proceedings that are ongoing between the Group and insurance companies who have provided historic cover over sites which were environmentally impacted in the past. Following the resolution of that claim, the Group has reassessed the likelihood of recovery in other similar legal proceedings and now believes that it is more likely than not that one or more of them will be successful. However, legal proceedings in each case still have a number of stages to complete, including in certain cases court proceedings.

31. Related party transactions

Related parties include joint ventures, associates, investments and key management personnel.

The following significant transactions with related parties were in the normal course of business. Amounts receivable from and payable to related parties are due on normal commercial terms:

	2022 £m	2021 £m	2020 £m
Sales: Goods and services supplied to a pension plan	3	3	5
Sales: Goods and services supplied to joint ventures[1]	284	79	101
Sales: Goods and services supplied to associates[2]	—	1	33
Purchases: Goods and services received from joint ventures[3]	19	35	61
Purchases: Goods and services received from associates[3]	41	43	56
Receivable from joint ventures[4]	43	263	255
Receivable from associates	1	—	1
Payable to joint ventures[5]	247	17	—
Payable to associates	4	3	4
Interest income from joint ventures	—	—	2
Interest income from associates	—	—	8
Dividends received from joint ventures[6]	123	49	34
Dividends received from associates[7]	35	32	41

1. During the year, £74 million of sales were made to Emerald Energy Venture LLC (2021: £50 million; 2020: £21 million) and a further £7 million (2021: £6 million; 2020; £32 million) of sales were made to NGET/SPT Upgrades Limited. Prior to the Group's disposal of its equity interest in St William Homes LLP on 15 March 2022, a further £202 million (2021: £14 million; 2020: £38 million) of property sites were sold to St William Homes LLP.
2. In previous years, sales related to transactions with Quadgas, until the date it ceased to be a related party following the disposal of our 39% stake in June 2019 (see note 10) and included income of £31 million in 2020 relating to a Transitional Service Agreement following the sale of the UK Gas Distribution business to Quadgas.
3. During the year, the Group received goods and services from a number of US associates, both for the transportation of gas and for pipeline services in the US, most notably, £38 million (2021: £41 million; 2020: £31 million) of purchases from Millennium Pipeline Company LLC. The Group purchased assets of £18 million (2021: £17 million; 2020: £nil) from BritNed Development Limited. The Group also purchased assets of £0.3 million (2021: £5 million; 2020: £58 million) from NGET/SPT Upgrades Limited (a joint venture).
4. Amounts receivable from joint ventures include £33 million (2021: £19 million; 2020: £nil) from Emerald Energy Venture LLC. Amounts receivable in comparative periods include amounts due from St William Homes LLP, which is no longer a related party of the Group (2021: £241 million; 2020: £242 million).
5. Amounts payable to joint ventures include £223 million due to Bight Wind Holdings LLC, NGV's joint venture with RWE Renewables, in respect of a capital call to NGV following the successful auction of six seabed leases in New York.
6. Includes dividends of £39 million (2021: £18 million; 2020: £25 million) received from BritNed Development Limited and £77 million (2021: £25 million; 2020: £8 million) from Nemo Link Limited.
7. Includes dividends of £34 million (2021: £31 million; 2020: £32 million) received from Millennium Pipeline Company LLC.

Details of investments in principal subsidiary undertakings, joint ventures and associates are disclosed in note 34, and information relating to pension fund arrangements is disclosed in note 25. For details of Directors' and key management remuneration, refer to the Directors' Remuneration Report on pages 108 – 131 and note 4(c).

32. Financial risk management

Our activities expose us to a variety of financial risks including credit risk, liquidity risk, capital risk, currency risk, interest rate risk, inflation risk and commodity price risk. Our risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential volatility of financial performance from these risks. We use financial instruments, including derivative financial instruments, to manage these risks.

Risk management related to financing activities is carried out by a central treasury department under policies approved by the Finance Committee of the Board. The objective of the treasury department is to manage funding and liquidity requirements, including managing associated financial risks, to within acceptable boundaries. The Finance Committee provides written principles for overall risk management, and written policies covering the following specific areas: foreign exchange risk, interest rate risk, credit risk, liquidity risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity. The Finance Committee has delegated authority to administer the commodity price risk policy and credit policy for US-based commodity transactions to the Energy Procurement Risk Management Committee and the National Grid USA Board of Directors. Details of key activities in the current year are set out in the Finance Committee report on page 107.

We have exposure to the following risks, which are described in more detail below:

- credit risk;
- liquidity risk;
- currency risk;
- interest rate risk;
- commodity price risk; and
- capital risk.

Where appropriate, derivatives and other financial instruments used for hedging currency and interest rate risk exposures are formally designated as fair value, cash flow or net investment hedges as defined in IFRS 9. Hedge accounting allows the timing of the profit or loss impact of qualifying hedging instruments to be recognised in the same reporting period as the corresponding impact of hedged exposures. To qualify for hedge accounting, documentation is prepared specifying the risk management objective and strategy, the component transactions and methodology used for measurement of effectiveness.

32. Financial risk management continued

Hedge accounting relationships are designated in line with risk management activities further described below. The categories of hedging entered into are as follows:
- currency risk arising from our forecasted foreign currency transactions (capital expenditure or revenues) is designated in cash flow hedges;
- currency risk arising from our net investments in foreign operations is designated in net investment hedges; and
- currency and interest rate risk arising from borrowings are designated in cash flow or fair value hedges.

Critical terms of hedging instruments and hedged items are transacted to match on a 1:1 ratio by notional values. Hedge ineffectiveness can nonetheless arise from inherent differences between derivatives and non-derivative instruments and other market factors including credit, correlations, supply and demand, and market volatilities. Ineffectiveness is recognised in the remeasurements component of finance income and costs (see note 6). Hedge accounting is discontinued when a hedging relationship no longer qualifies for hedge accounting.

Certain hedging instrument components are treated separately as costs of hedging with the gains and losses deferred in a component of other equity reserves and released systematically into profit or loss to correspond with the timing and impact of hedged exposures, or released in full to finance costs upon an early discontinuation of a hedging relationship.

Refer to sections (c) currency risk and (d) interest rate risk below for further details on hedge accounting.

(a) Credit risk

We are exposed to the risk of loss resulting from counterparties' default on their commitments including failure to pay or make a delivery on a contract. This risk is inherent in our commercial business activities. Exposure arises from derivative financial instruments, deposits with banks and financial institutions, trade receivables and committed transactions with wholesale and retail customers.

Treasury credit risk

Counterparty risk arises from the investment of surplus funds and from the use of derivative financial instruments. As at 31 March 2022, the following limits were in place for investments and derivative financial instruments held with banks and financial institutions:

	Maximum limit £m	Long-term limit £m
Triple 'A' G7 sovereign entities (AAA)	2,708	2,031
Triple 'A' vehicles (AAA)	500	—
Triple 'A' range institutions and non-G7 sovereign entities (AAA)	2,462	1,847
Double 'A+' G7 sovereign entities (AA+)	2,462	1,847
Double 'A' range institutions (AA)	1,477 to 1,970	1,108 to 1,477
Single 'A' range institutions (A)	492 to 985	369 to 739

The maximum limit applies to all transactions, including long-term transactions. The long-term limit applies to transactions which mature in more than 12 months' time.

As at 31 March 2022 and 2021, we had a number of exposures to individual counterparties. In accordance with our treasury policies, counterparty credit exposure utilisations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilisation adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties. Further information on financial investments subject to impairment provisioning is included in note 15.

Commodity credit risk

The credit policy for US-based commodity transactions is owned by the Finance Committee to the Board, which establishes controls and procedures to determine, monitor and minimise the credit exposure to counterparties.

Wholesale and retail credit risk

Our principal commercial exposure in the UK is governed by the credit rules within the regulated codes: Uniform Network Code and Connection and Use of System Code. These set out the level of credit relative to the RAV for each credit rating. In the US, we are required to supply electricity and gas under state regulations. Our policies and practices are designed to limit credit exposure by collecting security deposits prior to providing utility services, or after utility services have commenced if certain applicable regulatory requirements are met. Collection activities are managed on a daily basis. Sales to retail customers are usually settled in cash, cheques, electronic bank payments or by using major credit cards. We are committed to measuring, monitoring, minimising and recording counterparty credit risk in our wholesale business. The utilisation of credit limits is regularly monitored, and collateral is collected against these accounts when necessary.

In March 2020, the Group's US distribution business temporarily ceased certain cash collection and termination activities in response to regulatory instructions following the COVID-19 pandemic. At the time this resulted in the recognition of expected credit losses. In the year ended 31 March 2022, collection activities resumed in New England and New York and are supported by certain government COVID funding programmes, which has been factored into the assessment of expected credit losses for the year (see note 19 for further details).

32. Financial risk management continued

(a) Credit risk continued

Offsetting financial assets and liabilities

The following tables set out our financial assets and liabilities which are subject to offset and to enforceable master netting arrangements or similar agreements. The tables show the amounts which are offset and reported net in the statement of financial position. Amounts which cannot be offset under IFRS, but which could be settled net under terms of master netting arrangements if certain conditions arise, and with collateral received or pledged, are shown to present National Grid's net exposure.

Financial assets and liabilities on different transactions would only be reported net in the balance sheet if the transactions were with the same counterparty, a currently enforceable legal right of offset exists, and the cash flows were intended to be settled on a net basis.

Amounts which do not meet the criteria for offsetting on the statement of financial position, but could be settled net in certain circumstances, principally relate to derivative transactions under ISDA agreements, where each party has the option to settle amounts on a net basis in the event of default of the other party.

Commodity contract derivatives that have not been offset on the balance sheet may be settled net in certain circumstances under ISDA or North American Energy Standards Board (NAESB) agreements.

For bank account balances and bank overdrafts, there are no 'Gross amounts offset' under cash pooling arrangements (2021: £nil). Our UK bank accounts for National Grid subsidiaries previously participated in GBP, EUR and USD Composite Accounting System overdraft facilities subject to offsetting gross and net overdraft limits. EUR and USD offsetting arrangements were discontinued in the prior year and GBP offsetting arrangements have no impact as at 31 March 2022. In the US, no offsetting arrangements exist, and cash transactions are settled through Service Company bank accounts with subsequent intercompany payables and receivables reported by subsidiaries with the Service Company.

The gross amounts offset for trade payables and receivables, which are subject to general terms and conditions, are insignificant.

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2022	**Gross carrying amounts £m**	**Gross amounts offset £m**	**Net amount presented in statement of financial position £m**	**Financial instruments £m**	**Cash collateral received/ pledged £m**	**Net amount £m**
Assets						
Financing derivatives	298	–	298	(136)	(55)	107
Commodity contract derivatives	289	–	289	(8)	(50)	231
	587	–	587	(144)	(105)	338
Liabilities						
Financing derivatives	(991)	–	(991)	136	771	(84)
Commodity contract derivatives	(22)	–	(22)	8	3	(11)
	(1,013)	–	(1,013)	144	774	(95)
	(426)	–	(426)	–	669	243

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2021	Gross carrying amounts £m	Gross amounts offset £m	Net amount presented in statement of financial position £m	Financial instruments £m	Cash collateral received/ pledged £m	Net amount £m
Assets						
Financing derivatives	942	–	942	(234)	(561)	147
Commodity contract derivatives	57	–	57	(8)	–	49
	999	–	999	(242)	(561)	196
Liabilities						
Financing derivatives	(767)	–	(767)	234	467	(66)
Commodity contract derivatives	(132)	–	(132)	8	4	(120)
	(899)	–	(899)	242	471	(186)
	100	–	100	–	(90)	10

32. Financial risk management continued

(b) Liquidity risk

Our policy is to determine our liquidity requirements by the use of both short-term and long-term cash flow forecasts. These forecasts are supplemented by a financial headroom analysis which is used to assess funding requirements for at least a 24-month period and maintain adequate liquidity for a continuous 12-month period.

We believe our contractual obligations, including those shown in commitments and contingencies in note 30, can be met from existing cash and investments, operating cash flows and other financing that we reasonably expect to be able to secure in the future, together with the use of committed facilities if required.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, restrictions on disposals and financial covenants, such as restrictions on the level of subsidiary indebtedness and interest coverage. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

The following is a payment profile of our financial liabilities and derivatives:

At 31 March 2022	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(11,589)	(1,322)	(2,468)	(28,119)	(43,498)
Interest payments on borrowings[1]	(970)	(928)	(883)	(12,525)	(15,306)
Lease liabilities	(132)	(96)	(79)	(366)	(673)
Other non-interest-bearing liabilities	(3,979)	(336)	—	—	(4,315)
Contingent consideration	(37)	(8)	—	—	(45)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,149	1,008	2,075	4,726	10,958
Financing derivatives – payments[2]	(3,401)	(1,189)	(2,336)	(5,468)	(12,394)
Commodity contract derivatives – receipts[2]	1	1	—	—	2
Commodity contract derivatives – payments[2]	(29)	2	(1)	—	(28)
Derivative financial assets					
Financing derivatives – receipts[2]	4,512	316	1,427	464	6,719
Financing derivatives – payments[2]	(4,405)	(282)	(1,313)	(405)	(6,405)
Commodity contract derivatives – receipts[2]	234	37	3	—	274
Commodity contract derivatives – payments[2]	(52)	(8)	(3)	—	(63)
	(16,698)	(2,805)	(3,578)	(41,693)	(64,774)

At 31 March 2021	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(3,350)	(1,690)	(806)	(25,562)	(31,408)
Interest payments on borrowings[1]	(810)	(755)	(731)	(12,018)	(14,314)
Lease liabilities	(118)	(108)	(90)	(599)	(915)
Other non-interest-bearing liabilities	(3,207)	(350)	—	—	(3,557)
Contingent consideration	(40)	(24)	—	—	(64)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,773	749	451	4,326	9,299
Financing derivatives – payments[2]	(3,899)	(877)	(533)	(5,153)	(10,462)
Commodity contract derivatives – receipts[2]	12	—	—	—	12
Commodity contract derivatives – payments[2]	(83)	(23)	(14)	(12)	(132)
Derivative financial assets					
Financing derivatives – receipts[2]	2,162	926	833	1,789	5,710
Financing derivatives – payments[2]	(1,700)	(834)	(780)	(1,536)	(4,850)
Commodity contract derivatives – receipts[2]	21	4	1	1	27
Commodity contract derivatives – payments[2]	(21)	(4)	(2)	—	(27)
	(7,260)	(2,986)	(1,671)	(38,764)	(50,681)

1. The interest on borrowings is calculated based on borrowings held at 31 March without taking account of future issues. Floating rate interest is estimated using a forward interest rate curve as at 31 March. Payments are included on the basis of the earliest date on which the Company can be required to settle.
2. The receipts and payments line items for derivatives comprise gross undiscounted future cash flows, after considering any contractual netting that applies within individual contracts. Where cash receipts and payments within a derivative contract are settled net, and the amount to be received/(paid) exceeds the amount to be paid/(received), the net amount is presented within derivative receipts/(payments).

32. Financial risk management continued

(c) Currency risk

National Grid operates internationally with mainly pound sterling as the functional currency for the UK companies and US dollar for the US businesses. Currency risk arises from three major areas: funding activities, capital investment and related revenues, and holdings in foreign operations. This risk is managed using financial instruments including derivatives as approved by policy, typically cross-currency interest rate swaps, foreign exchange swaps and forwards.

Funding activities – our policy is to borrow in the most advantageous market available. Foreign currency funding gives rise to risk of volatility in the amount of functional currency cash to be repaid. This risk is reduced by swapping principal and interest back into the functional currency of the issuer. All foreign currency debt and transactions are hedged except where they provide a natural offset to assets elsewhere in the Group.

Capital investment and related revenues – capital projects often incur costs or generate revenues in a foreign currency, most often euro transactions done by the UK business. Our policy for managing foreign exchange transaction risk is to hedge contractually committed foreign currency cash flows over a prescribed minimum size, typically by buying euro forwards to hedge future expenditure, and selling euro forwards to hedge future revenues. For hedges of forecast cash flows our policy is to hedge a proportion of highly probable cash flows.

Holdings in foreign operations – we are exposed to fluctuations on the translation into pounds sterling of our foreign operations. The policy for managing this translation risk is to issue foreign currency debt or to replicate foreign debt using derivatives that pay cash flows in the currency of the foreign operation. The primary managed exposure arises from dollar denominated assets and liabilities held by our US operations, with a smaller euro exposure in respect of joint venture investments.

Derivative financial instruments were used to manage foreign currency risk as follows:

	2022					2021				
	Sterling £m	**Euro £m**	**Dollar £m**	**Other £m**	**Total £m**	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Cash and cash equivalents	**111**	**—**	**93**	**—**	**204**	63	—	94	—	157
Financial investments	**1,725**	**—**	**1,420**	**—**	**3,145**	1,215	—	1,127	—	2,342
Borrowings	**(22,910)**	**(7,052)**	**(14,118)**	**(1,385)**	**(45,465)**	(12,210)	(5,351)	(12,660)	(999)	(31,220)
Pre-derivative position	**(21,074)**	**(7,052)**	**(12,605)**	**(1,385)**	**(42,116)**	(10,932)	(5,351)	(11,439)	(999)	(28,721)
Derivative effect	**(1,378)**	**6,849**	**(7,570)**	**1,406**	**(693)**	(826)	5,459	(5,494)	1,036	175
Net debt position	**(22,452)**	**(203)**	**(20,175)**	**21**	**(42,809)**	(11,758)	108	(16,933)	37	(28,546)

The exposure to dollars largely relates to our net investment hedge activities and exposure to euros largely relates to hedges for our future non-sterling capital expenditure.

The currency exposure on other financial instruments is as follows:

	2022					2021				
	Sterling £m	**Euro £m**	**Dollar £m**	**Other £m**	**Total £m**	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Trade and other receivables	**407**	**—**	**1,788**	**—**	**2,195**	282	—	1,387	—	1,669
Trade and other payables	**(1,459)**	**—**	**(2,554)**	**—**	**(4,013)**	(1,207)	—	(1,878)	—	(3,085)
Other non-current liabilities	**(90)**	**—**	**(253)**	**—**	**(343)**	(77)	—	(288)	—	(365)

The carrying amounts of other financial instruments are denominated in the above currencies, which in most instances are the functional currency of the respective subsidiaries. Our exposure to dollars is due to activities in our US subsidiaries. We do not have any other significant exposure to currency risk on these balances.

Hedge accounting for currency risk

Where available, derivatives transacted for hedging are designated for hedge accounting. Economic offset is qualitatively determined because the critical terms (currency and volume) of the hedging instrument match the hedged exposure. If a forecast transaction was no longer expected to occur, the cumulative gain or loss previously reported in equity would be transferred to the income statement. This has not occurred in the current or comparative years.

Cash flow hedging of currency risk of capital expenditure and revenues is designated as hedging the exposure to movements in the spot translation rates only. The timing of forecasted transactions is not designated as a hedged risk. Gains and losses on hedging instruments arising from forward points and foreign currency basis spreads are excluded from designation and are recognised immediately in profit or loss, along with any hedge ineffectiveness. On recognition of the hedged purchase or sale in the financial statements, the associated hedge gains and losses, deferred in the cash flow hedge reserve in other equity reserves, are transferred out of reserves and included with the recognition of the underlying transaction. Where a non-financial asset or a non-financial liability results from a forecast transaction or firm commitment being hedged, the amounts deferred in reserves are included directly in the initial measurement of that asset or liability.

Net investment hedging is also designated as hedging the exposure to movements in spot translation rates only: spot-related gains and losses on hedging instruments are presented in the cumulative translation reserve within other equity reserves to offset gains or losses on translation of the hedged balance sheet exposure. Any ineffectiveness is recognised immediately in the income statement. Amounts deferred in the cumulative translation reserve with respect to net investment hedges are subsequently recognised in the income statement in the event of disposal of the overseas operations concerned. Any remaining amounts deferred in the cost of hedging reserve are also released to the income statement.

Hedges of foreign currency funding are designated as cash flow hedges or fair value hedges of forward exchange risk (hedging both currency and interest rate risk together, where applicable). Gains and losses arising from foreign currency basis spreads are excluded from designation and are treated as a cost of hedging, deferred initially in other equity reserves and released into profit or loss over the life of the hedging relationship. Hedge accounting for funding is described further in the interest rate risk section below.

32. Financial risk management continued

(d) Interest rate risk

National Grid's interest rate risk arises from our long-term borrowings. Our interest rate risk management policy is to seek to minimise total financing costs (being interest costs and changes in the market value of debt). Hedging instruments principally consist of interest rate and cross-currency swaps that are used to translate foreign currency debt into functional currency and to adjust the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the Board. The benchmark interest rates hedged are currently based on LIBOR for USD and Sterling Overnight Index Average (SONIA) for GBP.

LIBOR is being replaced as an interest rate benchmark by alternative reference rates in certain currencies including our functional currencies, USD and GBP, and foreign currencies in which we operate. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which will impact the valuations of certain liabilities. We have disclosed our exposure to LIBOR on our derivative portfolio in note 17, on our borrowings in note 21 and on our hedging arrangements in note 32(e). We are managing the risk by transitioning LIBOR cash flows to alternative reference rates on our affected contracts in line with the relevant jurisdictions. The migration project is underway, with all affected contracts where we previously paid or received GBP LIBOR amended in the year to 31 March 2022 (see note 21). The Finance Committee of the Board have delegated to the treasury department the authority to determine which benchmarks are the most appropriate. A combination of LIBOR and the successor benchmarks, primarily GBP SONIA and USD Secured Overnight Financing Rate (SOFR) will be used in the portfolio during the migration period.

We also consider inflation risk and hold some inflation-linked borrowings. We believe that these provide a partial economic offset to the inflation risk associated with our UK inflation-linked revenues.

The table in note 21 sets out the carrying amount, by contractual maturity, of borrowings that are exposed to interest rate risk before taking into account interest rate swaps.

Net debt was managed using derivative financial instruments to hedge interest rate risk as follows:

	2022					2021				
	Fixed rate £m	Floating rate £m	Inflation linked £m	Other[1] £m	Total £m	Fixed rate £m	Floating rate £m	Inflation linked £m	Other[1] £m	Total £m
Cash and cash equivalents	82	118	—	4	204	64	67	—	26	157
Financial investments	—	3,107	—	38	3,145	—	2,309	—	33	2,342
Borrowings	(30,616)	(10,484)	(4,365)	—	(45,465)	(23,163)	(1,762)	(6,295)	—	(31,220)
Pre-derivative position	(30,534)	(7,259)	(4,365)	42	(42,116)	(23,099)	614	(6,295)	59	(28,721)
Derivative effect	2,860	(3,366)	(187)	—	(693)	2,869	(2,511)	(183)	—	175
Net debt position	(27,674)	(10,625)	(4,552)	42	(42,809)	(20,230)	(1,897)	(6,478)	59	(28,546)

1. Represents financial instruments which are not directly affected by interest rate risk, such as investments in equity or other similar financial instruments.

Hedge accounting for interest rate risk

Borrowings paying variable or floating-rates expose National Grid to cash flow interest rate risk, partially offset by cash held at variable rates. Where a hedging instrument results in paying a fixed-rate, it is designated as a cash flow hedge because it has reduced the cash flow volatility of the hedged borrowing. Changes in the fair value of the derivative are initially recognised in other comprehensive income as gains or losses in the cash flow hedge reserve, with any ineffective portion recognised immediately in the income statement.

Borrowings paying fixed-rates expose National Grid to fair value interest rate risk. Where the hedging instrument pays a floating-rate, it is designated as a fair value hedge because it has reduced the fair value volatility of the borrowing. Changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the income statement to the extent the fair value hedge is effective, with the residual difference remaining as ineffectiveness.

Both types of hedges are designated as hedging the currency and interest rate risk arising from changes in forward points. Amounts accumulated in the cash flow hedge reserve (cash flow hedges only) and the deferred cost of hedging reserve (both cash flow and fair value hedges) are reclassified from reserves to the income statement on a systematic basis as hedged interest expense is recognised. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the income statement to match the timing of the hedged interest expense.

When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the income statement to match the impact of outstanding hedged items. Any remaining amounts deferred in the cost of hedging reserve are released immediately to the income statement as finance costs.

The Group early-adopted Phase I of IFRS Interest Rate Benchmark Reform amendments related to hedge accounting with effect from 1 April 2019, and Phase II with effect from 1 April 2020. The amendments impact our fair value hedging relationships where derivative cash flows will have been transitioned from paying LIBOR to paying an alternative reference rate. The hedged risk must be re-documented to reflect this, and allow existing hedge designations to continue unchanged during the period of uncertainty relating to the timing and method of benchmark migrations. This process has been completed for sterling LIBOR contracts but remains in progress for US dollar contracts.

The amendments will be applied until the earliest point in time of the Group's contracts that reference LIBOR being amended, the hedging relationship being formally discontinued or formal market conventions ending uncertainty being published and widely adopted. If amended cash flows do not cause a hedging relationship to be discontinued, then the amendments will cease to be applied only when that relationship is discontinued under IFRS 9.

The IFRS amendments impact fair value and cash flow hedges of interest rate risk and related hedging instruments, and certain net investment hedges that use cross-currency interest rate swaps to pay a foreign currency floating rate and receive a functional currency floating rate. The notional values of hedging instruments, for each type of hedging relationship impacted, are shown in the hedge accounting tables in note 32(e). These amounts also correspond to the exposures designated as hedged.

32. Financial risk management continued

(e) Hedge accounting

In accordance with the requirements of IFRS 7, certain additional information about hedge accounting is disaggregated by risk type and hedge designation type in the tables below:

Year ended 31 March 2022	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net gains/(losses) in respect of:				
Cash flow hedges	–	(103)	(1)	–
Cost of hedging	(7)	16	–	(7)
Transferred to profit or loss in respect of:				
Cash flow hedges	–	43	–	–
Cost of hedging	1	–	–	(2)
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(15)	(16)	–	(3)
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	–	–	1	10
Assets – non-current	49	67	1	82
Liabilities – current	(21)	(22)	(37)	(16)
Liabilities – non-current	(310)	(303)	(8)	–
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Jul 2022 – Sep 2044	Jun 2022 – Nov 2040	Apr 2022 – Feb 2027	Sep 2022 – Sep 2027
Spot foreign exchange range:				
GBP:USD	n/a	1.30 – 1.66	1.34 – 1.41	1.22 – 1.34
GBP:EUR	1.11 – 1.24	1.08 – 1.24	1.04 – 1.19	1.18
EUR:USD	1.13 – 1.17	1.13 – 1.15	n/a	n/a
Interest rate range:				
GBP	SONIA +84bps/+374bps	0.976% – 7.410%	n/a	n/a
USD	LIBOR +68bps/+115bps	2.095% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

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32. Financial risk management continued

(e) Hedge accounting continued

Year ended 31 March 2021	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net losses in respect of:				
Cash flow hedges	—	14	(14)	—
Cost of hedging	(15)	(24)	—	50
Transferred to profit or loss in respect of:				
Cash flow hedges	—	56	—	—
Cost of hedging	1	2	—	—
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(11)	(30)	—	6
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	—	10	2	5
Assets – non-current	187	59	1	140
Liabilities – current	—	(12)	(24)	(17)
Liabilities – non-current	(113)	(255)	(22)	—
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Jan 2023 – Jan 2043	Sep 2021 – Nov 2040	Apr 2021 – Feb 2027	Mar 2022 – Sep 2027
Spot foreign exchange range:				
GBP:USD	1.64	1.30 – 1.66	1.31 – 1.41	1.22 – 1.40
GBP:EUR	1.11 – 1.24	1.08 – 1.24	1.04 – 1.29	1.15 – 1.16
EUR:USD	1.13 – 1.17	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+408bps	0.976% – 5.845%	n/a	n/a
USD	LIBOR –68bps/+115bps	2.513% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

32. Financial risk management continued

(e) Hedge accounting continued

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge. These tables also present notional values of hedging instruments (and equal hedged exposures) impacted by IFRS 9 Interest Rate Benchmark Reform amendments.

(i) Fair value hedges of foreign currency and interest rate risk on recognised borrowings:

As at 31 March 2022		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1,2]	(3,362)	437	(55)	340	(301)	39

1. The carrying value of the hedged borrowings is £2,966 million, of which £nil is current and £2,966 million is non-current.
2. Included within the hedging instrument notional balance is £2,556 million impacted by Interest Rate Benchmark Reform amendments with £806 million still to be transitioned.

As at 31 March 2021		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1,2]	(2,755)	121	(85)	153	(127)	26

1. The carrying value of the hedged borrowings was £2,714 million, of which £nil was current and £2,714 million was non-current.
2. Included within the hedging instrument notional balance was £2,679 million impacted by Interest Rate Benchmark Reform amendments.

(ii) Cash flow hedges of foreign currency and interest rate risk:

As at 31 March 2022		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(6,287)	(48)	–	74	(74)	–
Foreign currency risk on forecasted cash flows	(835)	(40)	1	18	(18)	–

1. Included within the hedging instrument notional balance is £100 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2021		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(4,884)	(11)	(6)	(16)	16	–
Foreign currency risk on forecasted cash flows	(988)	(31)	3	17	(17)	–

1. Included within the hedging instrument notional balance was £176 million impacted by Interest Rate Benchmark Reform amendments.

(iii) Net investment hedges of foreign currency risk:

As at 31 March 2022		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Currency risk on foreign operations[1]	(3,489)	(125)	(2,643)	125	(125)	–

1. Included within the hedging instrument notional balance is £nil impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2021		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Currency risk on foreign operations[1]	(2,786)	183	(2,826)	(183)	183	–

1. Included within the hedging instrument notional balance was £nil impacted by Interest Rate Benchmark Reform amendments.

32. Financial risk management continued

(f) Commodity price risk

We purchase electricity and gas to supply our customers in the US and to meet our own energy needs. Substantially all our costs of purchasing electricity and gas for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular year that can lead to large fluctuations in the income statement. We follow approved policies to manage price and supply risks for our commodity activities.

Our energy procurement risk management policy and delegations of authority govern our US commodity trading activities for energy transactions. The purpose of this policy is to ensure we transact within pre-defined risk parameters and only in the physical and financial markets where we or our customers have a physical market requirement. In addition, state regulators require National Grid to manage commodity risk and cost volatility prudently through diversified pricing strategies. In some jurisdictions we are required to file a plan outlining our strategy to be approved by regulators. In certain cases, we might receive guidance with regard to specific hedging limits.

Energy purchase contracts for the forward purchase of electricity or gas that are used to satisfy physical delivery requirements to customers, or for energy that the Group uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. Disclosure of commitments under such contracts is made in note 30.

US states have introduced a variety of legislative requirements with the aim of increasing the proportion of our electricity that is derived from renewable or other forms of clean energy. Annual compliance filings regarding the level of Renewable Energy Certificates (and other similar environmental certificates) are required by the relevant department of utilities. In response to the legislative requirements, National Grid has entered into long-term, typically fixed-price, energy supply contracts to purchase both renewable energy and environmental certificates. We are entitled to recover all costs incurred under these contracts through customer billing.

Under IFRS, where these supply contracts are not accounted for as leases, they are considered to comprise two components, being a forward purchase of power at spot prices, and a forward purchase of environmental certificates at a variable price (being the contract price less the spot power price). With respect to our current contracts, neither of these components meets the requirement to be accounted for as a derivative. The environmental certificates are currently required for compliance purposes, and at present there are no liquid markets for these attributes. Accordingly, this component meets the expected purchase or usage exemption of IFRS 9. We expect to enter into an increasing number of these contracts, in order to meet our compliance requirements in the short to medium term. In future, if and when liquid markets develop, and to the extent that we are in receipt of environmental certificates in excess of our required levels, this exemption may cease to apply, and we may be required to account for forward purchase commitments for environmental certificates as derivatives at fair value through profit and loss.

32. Financial risk management continued

(g) Fair value analysis

Included in the statement of financial position are financial instruments which are measured at fair value. These fair values can be categorised into hierarchy levels that are representative of the inputs used in measuring the fair value. The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active, a valuation technique is used.

	2022				2021			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Assets								
Investments held at FVTPL	2,292	–	417	2,709	1,768	–	240	2,008
Investments held at FVOCI[1]	–	413	–	413	99	416	–	515
Financing derivatives	–	298	–	298	–	942	–	942
Commodity contract derivatives	–	238	51	289	–	12	45	57
	2,292	949	468	3,709	1,867	1,370	285	3,522
Liabilities								
Financing derivatives	–	(804)	(187)	(991)	–	(584)	(183)	(767)
Commodity contract derivatives	–	(15)	(7)	(22)	–	(75)	(57)	(132)
Liabilities held at fair value	–	–	–	–	(682)	–	–	(682)
Contingent consideration[2]	–	–	(41)	(41)	–	–	(57)	(57)
	–	(819)	(235)	(1,054)	(682)	(659)	(297)	(1,638)
	2,292	130	233	2,655	1,185	711	(12)	1,884

1. Investments held includes instruments which meet the criteria of IFRS 9 or IAS 19.
2. Contingent consideration relates to the acquisition of National Grid Renewables.

Level 1:	Financial instruments with quoted prices for identical instruments in active markets.
Level 2:	Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets, and financial instruments valued using models where all significant inputs are based directly or indirectly on observable market data.
Level 3:	Financial instruments valued using valuation techniques where one or more significant inputs are based on unobservable market data.

Our Level 1 financial investments and liabilities held at fair value are valued using quoted prices from liquid markets.

Our Level 2 financial investments held at fair value are valued using quoted prices for similar instruments in active markets, or quoted prices for identical or similar instruments in inactive markets. Alternatively, they are valued using models where all significant inputs are based directly or indirectly on observable market data.

Our Level 2 financing derivatives include cross-currency, interest rate and foreign exchange derivatives. We value these by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. These derivatives can be priced using liquidly traded interest rate curves and foreign exchange rates, and therefore we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 2 commodity contract derivatives include over-the-counter gas and power swaps as well as forward physical gas deals. We value our contracts based on market data obtained from the New York Mercantile Exchange (NYMEX) and the Intercontinental Exchange (ICE) where monthly prices are available. We discount based on externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties and liquidity in the market. Our commodity contracts can be priced using liquidly traded swaps. Therefore, we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 3 financing derivatives include inflation-linked swaps, where the market is illiquid. In valuing these instruments, we use in-house valuation models and obtain external valuations to support each reported fair value.

Our Level 3 commodity contract derivatives primarily consist of our forward purchases of electricity and gas that we value using proprietary models. Derivatives are classified as Level 3 where significant inputs into the valuation technique are neither directly nor indirectly observable (including our own data, which are adjusted, if necessary, to reflect the assumptions market participants would use in the circumstances).

Our Level 3 investments include equity instruments accounted for at fair value through profit and loss. These equity holdings are part of our corporate venture capital portfolio held by National Grid Partners and comprise a series of small unquoted investments where prices or valuation inputs are unobservable. These investments are either recently acquired or there have been recent funding rounds with third parties and therefore the valuation is based on the latest transaction price and any subsequent investment-specific adjustments.

Our Level 3 investments also include our investment in Sunrun Neptune 2016 LLC, which is accounted for at fair value through profit and loss. The investment is fair valued by discounting expected cash flows using a weighted average cost of capital specific to Sunrun Neptune 2016 LLC.

In light of the current ongoing impact of the COVID-19 pandemic, the valuations of certain assets and liabilities can be more subjective. While there have been significant movements in market indices, we are satisfied that there has been no significant impact on the fair values of our financial instruments measured at fair value, and that any impact is reflected in the fair values in the table above.

32. Financial risk management continued

(g) Fair value analysis continued

The changes in value of our Level 3 financial instruments are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]		Total	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
At 1 April	**(183)**	(235)	**(12)**	2	**183**	137	**(12)**	(96)
Net gains/(losses) for the year[1,2]	**(4)**	51	**56**	(16)	**102**	(2)	**154**	33
Purchases	**–**	–	**17**	(1)	**93**	32	**110**	31
Settlements	**–**	1	**(17)**	(1)	**(2)**	16	**(19)**	16
Reclassification to held for sale (note 10)	**–**	–	**–**	4	**–**	–	**–**	4
At 31 March	**(187)**	(183)	**44**	(12)	**376**	183	**233**	(12)

1. Loss of £4 million (2021: £51 million gain) is attributable to derivative financial instruments held at the end of the reporting period and has been recognised in finance costs in the income statement.
2. Gain of £27 million (2021: £46 million loss) is attributable to commodity contract derivative financial instruments held at the end of the reporting period.
3. Other comprises our investments in Sunrun Neptune 2016 LLC and the investments made by National Grid Partners, which are accounted for at fair value through profit and loss as well as the contingent consideration arising from the acquisition of National Grid Renewables.

The impacts on a post-tax basis of reasonably possible changes in significant Level 3 assumptions are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
10% increase in commodity prices[1]	**–**	–	**9**	3	**–**	–
10% decrease in commodity prices[1]	**–**	–	**(8)**	(1)	**–**	–
+10% market area price change	**–**	–	**–**	(4)	**–**	–
-10% market area price change	**–**	–	**–**	7	**–**	–
+20 basis points change in Limited Price Inflation (LPI) market curve[2]	**(84)**	(83)	**–**	–	**–**	–
-20 basis points change in LPI market curve[2]	**82**	83	**–**	–	**–**	–
+50 basis points change in discount rate	**–**	–	**–**	–	**(10)**	(5)
-50 basis points change in discount rate	**–**	–	**–**	–	**10**	5

1. Level 3 commodity price sensitivity is included within the sensitivity analysis disclosed in note 35.
2. A reasonably possible change in assumption of other Level 3 derivative financial instruments is unlikely to result in a material change in fair values.
3. The investments acquired in the period were on market terms, and sensitivity is considered insignificant at 31 March 2022.

The impacts disclosed above were considered on a contract-by-contract basis with the most significant unobservable inputs identified.

32. Financial risk management continued

(h) Capital risk management

The capital structure of the Group consists of shareholders' equity, as disclosed in the consolidated statement of changes in equity, and net debt (note 29). National Grid's objectives when managing capital are: to safeguard our ability to continue as a going concern; to remain within regulatory constraints of our regulated operating companies; and to maintain an efficient mix of debt and equity funding thus achieving an optimal capital structure and cost of capital. We regularly review and manage the capital structure as appropriate in order to achieve these objectives.

Maintaining appropriate credit ratings for our operating and holding companies is an important aspect of our capital risk management strategy and balance sheet efficiency. We monitor our balance sheet efficiency using several metrics including retained cash flow/net debt (RCF/debt), regulatory gearing and interest cover. For the year ended 31 March 2022, these metrics for the Group were 8.9% (2021: 6.6%), 81% (2021: 65%) and 4.7x (2021: 4.5x), respectively – see pages 37 and 273 – 274. As expected, regulatory gearing at 31 March 2022 was higher than our long-run projections due to the fact that we are only part way through the transactions that make up our strategic pivot. Once the strategic pivot is complete, we expect to continue to generate strong cash flows and for regulatory gearing to decrease and to settle at slightly above 70%. As a result, and combined with the benefit of our hybrid debt, we expect gearing levels, and the other standard metrics we monitor, to be consistent with our current, strong investment grade, overall Group credit rating.

We monitor the RAV gearing within National Grid Electricity Transmission plc (NGET), WPD and the regulated transmission business within National Grid Gas plc (NGG) which became a discontinued operation in the period (see note 10). This is calculated as net debt expressed as a percentage of RAV, and indicates the level of debt employed to fund our UK regulated businesses. It is compared with the level of RAV gearing indicated by Ofgem as being appropriate for these businesses, at around 55% to 65%. We also monitor net debt as a percentage of rate base for our US operating companies, comparing this with the allowed rate base gearing inherent within each of our agreed rate plans, typically around 50%.

As part of the Group's debt financing arrangements, we are subject to a number of financial covenants associated with existing borrowings and facility arrangements:

- the requirement to maintain subsidiary indebtedness relating to non-US and US subsidiaries (excluding National Grid North America Inc.) limiting the total indebtedness in absolute terms to £35 billion for non-US Subsidiaries and $35 billion for US subsidiaries. As at 31 March 2022, headroom on these covenants exceeds £10 billion;
- The Articles of Association of National Grid plc limit Group total borrowings less cash and short-term investments in absolute terms to £55 billion. As at 31 March 2022 headroom on the limit exceeds £10 billion;
- Interest cover ratios relating to the WPD companies within the Group requiring a consolidated EBITDA to interest payable of not less than 3:1. These covenants range in outturn from 5:1 to 6:1 at the reporting date; and
- Net debt to RAV gearing covenants limiting gearing to 85% of RAV for each WPD operating company. As at 31 March 2022, actual gearing of less than 60% is reported for all impacted companies.

We consider the risk of breaching these covenants as remote given the level of headroom present.

The majority of our regulated operating companies in the US and the UK are subject to certain restrictions on the payment of dividends by administrative order, contract and/or licence. The types of restrictions that a company may have that would prevent a dividend being declared or paid unless they are met include:

- the requirement to notify by certification to regulators and certain lenders;
- dividends must be approved in advance by the relevant US state regulatory commission;
- the subsidiary must have one or two recognised rating agency credit ratings of at least investment grade depending on contractual requirements;
- dividends must be limited to cumulative retained earnings, including pre-acquisition retained earnings and in line with relevant company legislation;
- the securities of National Grid plc must maintain an investment grade credit rating, and if that rating is the lowest investment grade bond rating it cannot have a negative watch/review for downgrade notice by a credit rating agency;
- the subsidiary must not carry out any activities other than those permitted by the licences;
- the subsidiary must not create any cross-default obligations or give or receive any intra-group cross-subsidies;
- the percentage of equity compared with total capital of the subsidiary must remain above certain levels; and
- in the case of WPD, the percentage of debt compared with total RAV of the subsidiary must remain below 85%.

These restrictions are subject to alteration in the US as and when a new rate case or rate plan is agreed with the relevant regulatory bodies for each operating company and, in the UK, through the normal licence review process.

As most of our business is regulated, at 31 March 2022 the majority of our net assets are subject to some of the restrictions noted above. These restrictions are not considered to be significantly onerous, nor do we currently expect they will prevent the planned payment of dividends in future in line with our dividend policy.

All the above requirements are monitored on a regular basis in order to ensure compliance. The Group has complied with all externally imposed capital requirements to which it is subject.

Notes to the consolidated financial statements continued

33. Borrowing facilities

To support our liquidity requirements and provide backup to commercial paper and other borrowings, we agree committed credit facilities with financial institutions over and above the value of borrowings that may be required. These committed credit facilities are undrawn.

At 31 March 2022, we had bilateral committed credit facilities of £5,978 million (2021: £5,410 million). In addition, we had committed credit facilities from syndicates of banks of £936 million at 31 March 2022 (2021: £115 million). An analysis of the maturity of these undrawn committed facilities is shown below:

	2022 £m	2021 £m
Undrawn committed borrowing facilities expiring:		
Less than 1 year	–	–
In 1 to 2 years	936	1,668
In 2 to 3 years	4,373	534
In 3 to 4 years	1,605	1,718
In 4 to 5 years	–	1,605
More than 5 years	–	–
	6,914	5,525

Of the unused facilities at 31 March 2022, £6,823 million (2021: £5,410 million) is available for liquidity purposes, while £91 million (2021: £115 million) is available as backup to specific US borrowings. The increase in total facility positions reflects the increased size of the Group following the acquisition of WPD. £845 million of the undrawn syndicated facilities due to mature in one to two years were renegotiated between 1 April and 19 May 2022, with no uplift in the amount and a new expiry date of May 2025.

Included in the table above within three to four years is a facility of £350 million related to National Grid Gas plc, a company treated as held for sale.

In addition, we have the following facilities which are not included in the table above:
- for the separately regulated business of National Grid Electricity System Operator Limited, the Group has a facility of £550 million (2021: £550 million). This facility is not available as Group general liquidity support;
- the Group continues to have access to Export Credit Agreements (ECAs) funding specific projects totalling £1,396 million (2021: £1,345 million), of which £489 million (2021: £446 million) is undrawn; and
- the Group entered into a loan facility in relation to the acquisition of WPD (see note 37) of £8,250 million (31 March 2021: £8,250 million) to finance the consideration, of which £8,179 million has been drawn since the year end with no further drawdown available (31 March 2021: undrawn). The bridge facility allows for the extension of the facility maturity date up to September 2023 but includes a requirement that the proceeds of the planned sales of NECO and the UK Gas Transmission business are applied to repay the facility.

34. Subsidiary undertakings, joint ventures and associates

While we present consolidated results in these financial statements as if we were one company, our legal structure is such that there are a number of different operating and holding companies that contribute to the overall result. This structure has evolved through acquisitions as well as regulatory requirements to have certain activities within separate legal entities.

Subsidiary undertakings

A list of the Group's subsidiaries as at 31 March 2022 is given below. The entire share capital of subsidiaries is held within the Group except where the Group's ownership percentages are shown. These percentages give the Group's ultimate interest and therefore allow for the situation where subsidiaries are owned by partly owned intermediate subsidiaries. Where subsidiaries have different classes of shares, this is largely for historical reasons, and the effective percentage holdings given represent both the Group's voting rights and equity holding. Shares in National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc are held directly by National Grid plc. All other holdings in subsidiaries are owned by other subsidiaries within the Group. All subsidiaries are consolidated in the Group's financial statements.

Principal Group companies are identified in **bold**. These companies are incorporated and principally operate in the countries under which they are shown. All entities incorporated in the United States are taxed in the United States on their worldwide income other than where indicated in the footnotes below. Other entities are tax resident in their jurisdiction of incorporation other than where indicated in the footnotes below.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

Birch Sites Limited
Carbon Sentinel Limited
Central Networks Trustees Limited[1]
Droylsden Metering Services Limited
Gridcom Limited
Hyder Profit Sharing Trustees Limited[1]
Icelink Interconnector Limited
Kelston Properties 2 Limited[1]
Lattice Group Employee Benefit Trust Limited
Lattice Group Limited
Lattice Group Trustees Limited
Meter Operator Services Limited*[1]
Meter Reading Services Limited*[1]
Natgrid Limited
NatGrid One Limited[2]
NatgridTW1 Limited[2]
National Grid (US) Holdings Limited[2]
National Grid (US) Investments 2 Limited[2]
National Grid (US) Investments 4 Limited[2]
National Grid (US) Partner 1 Limited[2]
National Grid Carbon Limited
National Grid Commercial Holdings Limited
National Grid Distributed Energy Limited
National Grid Electricity Group Trustee Limited
National Grid Electricity System Operator Limited
National Grid Electricity Transmission plc
National Grid Energy Metering Limited
National Grid Gas Holdings Limited
National Grid Gas plc
National Grid Grain LNG Limited
National Grid Holdings Limited[2]
National Grid Holdings One plc
National Grid Hydrogen Limited
National Grid IFA 2 Limited
National Grid Interconnector Holdings Limited
National Grid Interconnectors Limited
National Grid International Limited[2]
National Grid Metering Limited
National Grid North Sea Link Limited
National Grid Offshore Limited
National Grid Partners Limited
National Grid Plus Limited
National Grid Property Holdings Limited
National Grid Smart Limited
National Grid Ten
National Grid Thirty Six Limited
National Grid Twelve Limited[2]
National Grid Twenty Eight Limited
National Grid Twenty Seven Limited
National Grid Twenty Three Limited[2]
National Grid UK Limited
National Grid UK Pension Services Limited
National Grid Ventures Limited
National Grid Viking Link Limited
National Grid William Limited
NG Nominees Limited
NGC Employee Shares Trustee Limited
NGG Finance plc
Ngrid Intellectual Property Limited
NGT Two Limited
Port Greenwich Limited
Sheet Road Management Company Limited (51%)[3]
South Wales Electricity Share Scheme Trustees Limited[1]
South Western Helicopters Limited[1]
Supergrid Electricity Limited
Supergrid Energy Transmission Limited
Supergrid Limited
Thamesport Interchange Limited
The National Grid Group Quest Trustee Company Limited
The National Grid YouPlan Trustee Limited
Transco Limited
Warwick Technology Park Management Company (No 2) Limited (60.56%)[4]
Western Power Distribution (East Midlands) plc[1]
Western Power Distribution (South Wales) plc[1]
Western Power Distribution (South West) plc[1]
Western Power Distribution (West Midlands) plc[1]
Western Power Distribution Holding Company Limited[1]
Western Power Distribution Investments Limited[1]
Western Power Distribution plc[1]
Western Power Generation Limited[1]
Western Power Pension Trustee Limited[1]
WPD Distribution Network Holdings Limited[1]
WPD Investment Holdings limited[1]
WPD Island Limited[1]
WPD Limited[1]
WPD Midlands Limited[1]
WPD Midlands Networks Contracting Limited*[1]
WPD Property Investments Limited[1]
WPD Share Scheme Trustees Limited[1]
WPD Smart Metering Limited[1]
WPD Telecoms Limited[1]
WPD WEM Holdings Limited[1]
WPD WEM Limited[1]
WW Share Scheme Trustees Limited[1]

1. Registered office: Avonbank, Feeder Road, Bristol, Avon, BS2 0TB.
2. Companies where National Grid plc has issued guarantees over the liabilities of the companies as at 31 March 2022 and for which the companies are taking the exemption from the requirements of an audit for their individual financial statements as permitted by section 479A of the Companies Act.
3. Registered office: Netley Old Hall Farm, Dorrington, Shrewsbury, United Kingdom, SY5 7JY.
4. Registered office: Shire Hall, PO Box 9, Warwick CV34 4RL, UK.

* In process of strike-off.

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in the US

Registered office: National Registered Agents, Inc., 1209 Orange Street, Wilmington, DE 19801, USA (unless stated otherwise in footnotes).

Apple River Solar, LLC
Armenia Solar, LLC
Ashland Solar, LLC
Athens Solar, LLC
Autauga Solar, LLC
Banner Solar, LLC
Bazile Creek Wind Farm, LLC
Bee Hollow Solar, LLC
Bell Plaine Solar, LLC
Benevolent Solar, LLC
Blaze Solar, LLC[1]
Blevins Solar, LLC
Blue Ridge Wind, LLC
Blue Spring Solar, LLC
Blues Solar, LLC
Bluewater Solar, LLC
Boone Solar, LLC
Boston Gas Company[2]
Bridges Solar, LLC
British Transco Capital, Inc.[3]
British Transco Finance, Inc.[3]
Brock Solar, LLC
Broken Bridge Corp.[4]
Brook Trout Solar, LLC
Burley Solar, LLC
Burlington Solar, LLC
Burr Ridge Wind, LLC
Cage Ranch Solar II, LLC
Cage Ranch Solar III, LLC
Cage Ranch Solar, LLC
Caldwell Solar II, LLC
Caldwell Solar, LLC
Canby Solar, LLC
Cass Wind Farm, LLC
Cattle Ridge Wind Farm 2, LLC
Cedar Grove Solar, LLC
Centennial Solar, LLC
Clay Boswell Solar, LLC
Clear Creek Solar, LLC
Clermont Solar, LLC
Clinton County Solar, LLC
Coles Solar, LLC
Compass Prairie Wind, LLC
Coneflower Solar, LLC[5]
Conestoga Wind, LLC
Copperhead Solar, LLC
Creekview Solar, LLC
Crocker Wind Farm 2, LLC
Dahlia Solar, LLC[5]
Dakota Hills Wind Farm, LLC
Day Lily Solar, LLC[5]
Deatsville Solar, LLC
Deer Trail Solar, LLC
Dodson Creek Solar, LLC[6]
Donnellson Solar, LLC
Elburn Solar, LLC
Eldena Solar, LLC
Elk Creek Solar 2, LLC
Elk Creek Solar, LLC
EUA Energy Investment Corporation[2]
Exie Solar, LLC
Falls City Solar, LLC
Fayette Solar, LLC[7]
Fillmore County Solar Project, LLC
Firstview Wind Farm, LLC
Fort Solar, LLC
Front Range Wind Farm, LLC
Gardenia Solar, LLC[5]
Golden Solar, LLC
Goldendale Solar, LLC
Goldenrod Wind Farm, LLC
Goldfinch Solar, LLC
Grand Junction Solar, LLC
Granite State Power Link LLC[3]
Grant Solar 2, LLC
Grant Solar, LLC
Grayson Solar, LLC
Greenbrier Creek Solar, LLC
Greensky Solar, LLC
Greenwood Solar, LLC
Grid NY LLC[8]
Grindstone Wind Farm, LLC[9]
Hale County Solar, LLC
Hansford Energy Storage, LLC
Harmony Solar ND 2, LLC
Harmony Solar ND, LLC
Harrington Solar, LLC
Hartley Solar, LLC
Hearth Solar, LLC
Hill River Solar, LLC
Honeybee Solar, LLC
Hoosier Solar, LLC
Hoskins Solar, LLC
Illumination Solar, LLC
Innovation Solar, LLC
Itasca Energy Development, LLC[5]
Itasca Energy Services, LLC
Jack Rabbit Wind, LLC
Jackson County Solar, LLC
Junction Solar, LLC
KeySpan CI Midstream Limited[3]
KeySpan Energy Corporation[8]
KeySpan Energy Services Inc.[3]
KeySpan Gas East Corporation[8]
KeySpan International Corporation[3]
KeySpan MHK, Inc.[3]
KeySpan Midstream Inc.[3]
KeySpan Plumbing Solutions, Inc.[8]
Knox Solar, LLC
KSI Contracting, LLC[3]
KSI Electrical, LLC[3]
KSI Mechanical, LLC[3]
Lake Charlotte Solar, LLC
Lake Iris Solar, LLC
Lakeside Solar, LLC
Land Management & Development, Inc.[8]
Landwest, Inc.[8]
Lansing Solar, LLC
Leola Wind Farm, LLC
Liberty Solar, LLC
Lilac Solar, LLC[5]
Livingston County Solar, LLC
Long Mount Solar, LLC
Lordsburg Solar, LLC
Louisa Solar, LLC
Lowlands Solar, LLC
Lydia Solar, LLC
Marion County Solar, LLC
Massachusetts Electric Company[2]
Maverick Wind Farm, LLC
Meadowlands Solar, LLC
Metrowest Realty LLC[3]
Miller Creek Solar, LLC
Millers Ferry Solar, LLC
Morgan County Solar, LLC
Morning Glory Solar, LLC[5]
Muddy Creek Solar, LLC
Mustang Ridge Wind Farm, LLC
Mystic Steamship Corporation[6]
Nantucket Electric Company[2]
National Grid Development Holdings Corp.[3]
National Grid Electric Services LLC[8]
National Grid Energy Management LLC[3]
National Grid Energy Services LLC[3]
National Grid Energy Trading Services LLC[8]
National Grid Engineering & Survey Inc.[8]
National Grid Generation LLC[8]
National Grid Generation Ventures LLC[8]
National Grid Glenwood Energy Center, LLC[3]
National Grid IGTS Corp.[8]
National Grid Insurance USA Ltd[10]
National Grid Islander East Pipeline LLC[3]
National Grid LNG GP LLC[3]
National Grid LNG LLC[3]
National Grid LNG LP LLC[3]
National Grid Millennium LLC[3]
National Grid NE Holdings 2 LLC[2]
National Grid North America Inc.[3]

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

National Grid Partners Inc.[8]
National Grid Partners LLC[3]
National Grid Port Jefferson Energy Center LLC[3]
National Grid Renewables Development, LLC
National Grid Renewables E Wind, LLC[5]
National Grid Renewables Operations, LLC[3]
National Grid Renewables Projects, LLC[5]
National Grid Renewables Stutsman, LLC
National Grid Renewables, LLC[3]
National Grid Services Inc.[3]
National Grid US 6 LLC[3,†]
National Grid US LLC[3]
National Grid USA Service Company, Inc.[2]
National Grid USA[3]
NEES Energy, Inc.[2]
New England Electric Transmission Corporation[4]
New England Energy Incorporated[2]
New England Hydro Finance Company, Inc. (53.704%)[2]
New England Hydro-Transmission Corporation (53.704%)[4]
New England Hydro-Transmission Electric Company, Inc. (53.704%)[2]
New England Power Company[2]
Newport America Corporation[11]
Newton Solar, LLC
NG Renewables Energy Marketing, LLC[3]
NG Renewables Energy Services, LLC
NGNE LLC[3]
NGV Emerald Energy Venture Holdings, LLC[3]
NGV OSW Holdings, LLC[3]
NGV US Distributed Energy Inc.[3]
NGV US Transmission Inc.[3]
NGV US, LLC[3]
Niagara Mohawk Energy, Inc.[3]
Niagara Mohawk Holdings, Inc.[8]
Niagara Mohawk Power Corporation[8]
Niobrara Wind, LLC
NM Properties, Inc.[8]
Noble Solar, LLC[12]
Nordic VOS, LLC
North East Transmission Co., Inc.[3]
North Fork Wind, LLC
Northeast Renewable Link LLC[3]
Opinac North America, Inc.[3]
Parklawn Solar, LLC
Pennington Solar, LLC
Peony Solar, LLC
Philadelphia Coke Co., Inc.[3]
Pierce County Solar, LLC
Pike County Solar, LLC
Pipestone Solar, LLC
Plum Creek Wind Farm 2, LLC
Plum Creek Wind Farm, LLC
Port of the Islands North, LLC[8]
Portage Solar, LLC
Prairie Oasis Solar, LLC
Prairie Rose Wind 2, LLC[5]
Prosperity Wind Farm 2, LLC
Prosperity Wind Farm, LLC
Red Rock Solar SD, LLC
Red Wolf Solar, LLC
Regal Solar 2, LLC
Regal Solar, LLC
River North Solar, LLC
Robertson Solar, LLC
Rock Ridge Wind Farm, LLC
Rolling Hills Solar, LLC
Ross County Solar, LLC[6]
Royal Solar 2, LLC
Royal Solar, LLC
Royerton Solar, LLC
Saginaw Bay Solar, LLC
Sandstone Creek Solar 2, LLC
Sandstone Creek Solar, LLC
Sapphire Sky Wind Farm, LLC
Sherco Solar 2, LLC[5]
Sherco Solar, LLC[5]
Silver City Solar, LLC
Simpson Solar, LLC
Spotlight Solar, LLC
Spring Brook Solar, LLC
Spring River Solar, LLC
Springfield Solar Farm, LLC
Stony Brook Wind, LLC
Stony Point Solar, LLC
Stove Creek Solar, LLC
Sturgis Solar, LLC
Summit Lake Solar, LLC
Sunbeam Solar, LLC
Sunrise Solar, LLC
Sycamore Creek Solar, LLC
Thacker Solar, LLC
The Brooklyn Union Gas Company[8]
The Narragansett Electric Company[11]
Torchlight Solar, LLC[5]
Transgas Inc.[2]
Tri-City Solar, LLC
Uintah Solar, LLC
Unbridled Solar, LLC
Upper Hudson Development Inc.[8]
Valley Solar, LLC
Vermont Green Line Devco, LLC (90%)[3]
Vibrant Solar, LLC
Virgo Community Solar Gardens, LLC[5]
Virtue Solar, LLC
Vivid Solar, LLC
Wallowa Solar, LLC
Wayfinder Group, Inc.[2]
Wheatfield Solar, LLC
White Elm Wind Farm, LLC
Wild Springs Solar, LLC[5]
Wildcat Ridge Wind Farm, LLC
Wildhorse Creek Solar, LLC
Willard Solar, LLC
Williams County Solar, LLC
Wiregrass Solar, LLC
Woodlands Solar, LLC
Worthington Solar, LLC
Yellowhammer Solar, LLC
Young County Solar, LLC

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in Australia

Registered office: Level 7, 330 Collins Street, Melbourne, VIC 3000, Australia

National Grid Australia Pty Limited

Incorporated in Canada

Registered office: Stewart McKelvey LLP, c/o Charles Reagh, Queen's Marque, 600-1741 Lower Water Street, Halifax, Nova Scotia, B3J 0J2, Canada

KeySpan Energy Development Co.

Incorporated in Guernsey

Registered office: 1st & 2nd Floors Elizabeth House, Les Ruettes Brayes, St Peter Port, GY1 1EW, Guernsey, Channel Islands

WPD Limited (Guernsey)†

Registered office: PO Box 155, Mill Court, La Charroterie, St. Peter Port, Guernsey, GY1 4ET, Guernsey, Channel Islands

Aztec Insurance Limited

Incorporated in Hong Kong

Registered office: Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong

National Grid Hong Kong Limited†

Incorporated in the Isle of Man

Registered office: Third Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE, Isle of Man, UK

National Grid Insurance Company (Isle of Man) Limited
NGT Holding Company (Isle of Man) Limited*†

Incorporated in Luxembourg

Registered office: 412F, Route d'Esch, L-2086, Luxembourg, Grand Duchy of Luxembourg

National Grid Luxembourg SARL

Incorporated in the Netherlands

Registered office: Westblaak 89, 3012 KG Rotterdam, PO Box 21153, 3001 AD, Rotterdam, Netherlands

British Transco International Finance B.V.

Incorporated in the Republic of Ireland

Registered office: c/o Moore Stephens Nathans, Third Floor, Ulysses House, 23/24 Foley Street, Dublin, D01 W2T2, Ireland

National Grid Company (Ireland) Designated Activity Company*

1. Registered office: National Registered Agents, Inc., 160 Greentree Drive, Suite 101, Dover DE 19904, USA.
2. Registered office: Corporation Service Company, 84 State Street, Boston MA 02109, USA.
3. Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, USA.
4. Registered office: Corporation Service Company, 10 Ferry Street, Suite 313, Concord NH 03301, USA.
5. Registered office: National Grid Renewables Development, LLC, 8400 Normandale Lake Blvd. Suite 1200, Bloomington, MN 55437, USA.
6. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801, USA.
7. Registered office: 60 Mine Lake Court, Suite 200, Raleigh, Wake County, NC 27615, USA.
8. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
9. Registered office: National Registered Agents, Inc., 30600 Telegraph Road, Suite 2345, Bingham Farms, MI 48025-5720, USA.
10. Registered office: One MetroTech Center, Brooklyn NY 11201, USA.
11. Registered office: Corporation Service Company, 222 Jefferson Boulevard, Suite 200, Warwick RI 02888, USA.
12. Registered office: National Registered Agents, Inc., 1999 Bryan Street, Dallas, Dallas County TX 75201, USA.

* In liquidation.
† Entity is tax resident in the United Kingdom.

34. Subsidiary undertakings, joint ventures and associates continued

Joint ventures

A list of the Group's joint ventures as at 31 March 2022 is given below. All joint ventures are included in the Group's financial statements using the equity method of accounting. Principal joint ventures are identified in **bold**.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

BritNed Development Limited (50%)*
Joint Radio Company Limited (50%)[1]**
National Places LLP (50%)[2]
Nemo Link Limited (50%)
NGET/SPT Upgrades Limited (50%)†

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Bight Wind Holdings, LLC (27.27%)[3]
Clean Energy Storage Systems LLC (previously Clean Energy Generation, LLC) (50%)
Emerald Energy Venture LLC (51%)
Island Park Energy Center, LLC (50%)
Islander East Pipeline Company, LLC (50%)[3]
LI Energy Storage System, LLC (50%)
LI Solar Generation, LLC (50%)

Incorporated in France

Registered office: 1 Terrasse Bellini, Tour Initiale, TSA 41000 – 9291, Paris La Defense, CEDEX, France

IFA2 (50%)

Associates

A list of the Group's associates as at 31 March 2022 is given below. Unless otherwise stated, all associates are included in the Group's financial statements using the equity method of accounting. Principal associates are identified in **bold**.

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Clean Line Energy Partners LLC (32%)[3]
Connecticut Yankee Atomic Power Company (19.5%)[4]
Direct Global Power, Inc. (26%)[3]
Energy Impact Fund LP (9.41%)[5]
KHB Venture LLC (33.33%)[6]
Maine Yankee Atomic Power Company (24%)[7]
Millennium Pipeline Company, LLC (26.25%)[3]
New York Transco LLC (28.3%)[8]
NYSEARCH RMLD, LLC (22.63%)
The Hive IV, LLC (28.2%)[3]
Yankee Atomic Electric Company (34.5%)[9]

Incorporated in Belgium

Registered office: Avenue de Cortenbergh 71, 1000 Brussels, Belgium

Coreso SA (15.84%)

Other investments

A list of the Group's other investments as at 31 March 2022 is given below.

Incorporated in England and Wales

Registered office: 1 More London Place, London SE1 2AF, UK

Energis plc (33.06%)‡

Registered office: Third Floor, Northumberland House, 303–306 High Holborn, London, WC1V 7JZ

Electralink Limited (27.04%)

1. Registered office: Friars House, Manor House Drive, Coventry, CV1 2TE, UK.
2. Registered office: 80 Cheapside, London, EC2V 6EE, UK.
3. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801, USA.
4. Registered office: Carla Pizzella, 362 Injun Hollow Road, East Hampton CT 06424-3099, USA.
5. Registered office: Harvard Business Services, Inc., 16192 Coastal Highway, Lewes DE 19958, USA.
6. Registered office: De Maximus Inc., 135 Beaver Street, 4th Floor, Waltham MA 02452, USA.
7. Registered office: Joseph D Fay, 321 Old Ferry Road, Wiscasset ME 04578, USA.
8. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
9. Registered office: Karen Sucharzewski, 49 Yankee Road, Rowe MA 01367, USA.

* National Grid Interconnector Holdings Limited owns 284,500,000 €0.20 C Ordinary shares and one £1.00 Ordinary A share.
** National Grid Gas plc owns all £1.00 A Ordinary shares.
† National Grid Electricity Transmission plc owns 50 £1.00 A Ordinary shares.
‡ In administration.

Our interests and activities are held or operated through the subsidiaries, joint arrangements or associates as disclosed above. These interests and activities (and their branches) are established in – and subject to the laws and regulations of – these jurisdictions.

The following UK subsidiaries will take advantage of the audit exemption set out within section 479A of the Companies Act 2006 supported by guarantees issued by National Grid plc over their liabilities for the year ended 31 March 2022:

Company name	Company number
NatGrid One Limited	5521240
Natgrid TW1 Limited	7579324
National Grid Holdings Limited	3096772
National Grid International Limited	2537092
National Grid Twelve Limited	4355616
National Grid Twenty Three Limited	6999009
National Grid (US) Holdings Limited	2630496
National Grid (US) Investments 2 Limited	3784528
National Grid (US) Investments 4 Limited	3867128
National Grid (US) Partner 1 Limited	4314432

35. Sensitivities

In order to give a clearer picture of the impact on our results or financial position of potential changes in significant estimates and assumptions, the following sensitivities are presented. These sensitivities are based on assumptions and conditions prevailing at the year end and should be used with caution. The effects provided are not necessarily indicative of the actual effects that would be experienced because our actual exposures are constantly changing.

The sensitivities in the tables below show the potential impact in the income statement (and consequential impact on net assets) for a reasonably possible range of different variables each of which have been considered in isolation (i.e. with all other variables remaining constant). There are a number of these sensitivities which are mutually exclusive, and therefore if one were to happen, another would not, meaning a total showing how sensitive our results are to these external factors is not meaningful.

The sensitivities included in the tables below broadly have an equal and opposite effect if the sensitivity increases or decreases by the same amount unless otherwise stated.

(a) Sensitivities on areas of estimation uncertainty
The table below sets out the sensitivity analysis for certain areas of estimation uncertainty set out in note 1F. These estimates are those that have a significant risk of resulting in a material adjustment to the carrying values of assets and liabilities in the next year. Note that the sensitivity analysis for the useful economic lives of our gas network assets is included in note 13.

	2022		2021	
	Income statement £m	Net assets £m	Income statement £m	Net assets £m
Pensions and other post-retirement benefit liabilities (pre-tax)[1]:				
UK discount rate change of 0.5%[2]	12	1,002	4	952
US discount rate change of 0.5%[2]	16	650	17	730
UK RPI rate change of 0.5%[3]	11	733	3	723
UK long-term rate of increase in salaries change of 0.5%	4	88	1	42
US long-term rate of increase in salaries change of 0.5%	3	41	3	42
UK change of one year to life expectancy at age 65[4]	4	635	1	612
US change of one year to life expectancy at age 65	3	444	4	429
Assumed US healthcare cost trend rates change of 1%	24	414	26	437
Environmental provision:				
10% change in estimated future cash flows	188	188	170	170

1. The changes shown are a change in the annual pension and other post-retirement benefit service charge and change in the defined benefit obligations.
2. A change in the discount rate is likely to occur as a result of changes in bond yields and as such would be expected to be offset to a significant degree by a change in the value of the bond assets held by the plans. In the UK, there would also be a £164 million (2021: £257 million) net assets offset from the buy-in policies, where the accounting value of the buy-in asset is set equal to the associated liabilities.
3. The projected impact resulting from a change in RPI reflects the underlying effect on pensions in payment, pensions in deferment and resultant increases in salary assumptions. The buy-in policies would have a £119 million (2021: £190 million) net assets offset to the above.
4. In the UK, the buy-in policies and the longevity swap entered into would have a £111 million (2021: £183 million) net assets offset to the above.

Pensions and other post-retirement benefits assumptions
Sensitivities have been prepared to show how the defined benefit obligations and annual service costs could potentially be impacted by changes in the relevant actuarial assumption that were reasonably possible as at 31 March 2022. In preparing sensitivities, the potential impact has been calculated by applying the change to each assumption in isolation and assuming all other assumptions remain unchanged. This is with the exception of RPI in the UK where the corresponding change to increases to pensions in payment, increases to pensions in deferment and increases in salary are recognised.

WPD goodwill impairment assessment
Sensitivities have been performed to show the impact of reasonable changes to key assumptions in the WPD goodwill impairment test. Considering an increase in the pre-tax discount rate of 0.5% (to 5.7%) indicates the estimated value-in-use would be £1,033 million lower than WPD's carrying amount at 31 March 2022, whilst reducing the terminal growth rate to 2% results in the estimated value-in-use equalling WPD's carrying amount at 31 March 2022.

35. Sensitivities continued

(b) Sensitivities on financial instruments

We are further required to show additional sensitivity analysis under IFRS 7 and these are shown separately in the subsequent table due to the additional assumptions that are made in order to produce meaningful sensitivity disclosures.

Our net debt as presented in note 29 is sensitive to changes in market variables, primarily being UK and US interest rates, the UK RPI and the dollar to sterling exchange rate. These impact the valuation of our borrowings, deposits and derivative financial instruments. The analysis illustrates the sensitivity of our financial instruments to reasonably possible changes in these market variables.

The following main assumptions were made in calculating the sensitivity analysis for continuing operations:

- the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives portfolio, and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations in place at 31 March 2022 and 2021 respectively;
- the statement of financial position sensitivity to interest rates relates to items presented at their fair values: derivative financial instruments; our investments measured at FVTPL and FVOCI; and our liability measured at FVTPL. Further debt and other deposits are carried at amortised cost and so their carrying value does not change as interest rates move;
- the sensitivity of interest to movements in interest rates is calculated on net floating rate exposures on debt, deposits and derivative instruments;
- changes in the carrying value of derivatives from movements in interest rates of designated cash flow hedges are assumed to be recorded fully within equity; and
- changes in the carrying value of derivative financial instruments designated as net investment hedges from movements in interest rates are presented in equity as costs of hedging, with a one-year release to the income statement. The impact of movements in the dollar to sterling exchange rate are recorded directly in equity.

	2022		2021	
	Income statement £m	**Other equity reserves £m**	Income statement £m	Other equity reserves £m
Financial risk (post-tax):				
UK RPI change of 0.5%[1]	**18**	**—**	25	—
UK interest rates change of 0.5%	**41**	**134**	12	98
US interest rates change of 0.5%	**4**	**8**	6	22
US dollar exchange rate change of 10%[2]	**43**	**397**	44	285

1. Excludes sensitivities to LPI curve. Further details on sensitivities are provided in note 32(g).
2. The other equity reserves impact does not reflect the exchange translation in our US subsidiaries' net assets. It is estimated this would change by £1,670 million (2021: £1,425 million) in the opposite direction if the dollar exchange rate changed by 10%.

Our commodity contract derivatives are sensitive to price risk. Additional sensitivities in respect to commodity price risk and to our derivative fair values are as follows:

	2022		2021	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Commodity price risk (post-tax):				
10% increase in commodity prices	**53**	**53**	20	20
10% decrease in commodity prices	**(54)**	**(54)**	(21)	(21)
Assets and liabilities carried at fair value (post-tax):				
10% fair value change in derivative financial instruments[1]	**(55)**	**(55)**	14	14
10% fair value change in commodity contract derivative liabilities	**20**	**20**	6	6

1. The effect of a 10% change in fair value assumes no hedge accounting.

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Notes to the consolidated financial statements continued

36. Additional disclosures in respect of guaranteed securities

Niagara Mohawk Power Corporation, a wholly owned subsidiary of the Group, has issued preferred shares that are listed on a US national securities exchange and are guaranteed by National Grid plc. This guarantor commits to honour any liabilities should the company issuing the debt have any financial difficulties. In order to provide debt holders with information on the financial stability of the company providing the guarantee, we are required to disclose individual financial information for this company. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

The following summarised financial information is given in respect of Niagara Mohawk Power Corporation as a result of National Grid plc's guarantee, dated 29 October 2007, of Niagara Mohawk Power Corporation's 3.6% and 3.9% issued preferred shares, which amount to £29 million. National Grid plc's guarantee of Niagara Mohawk Power Corporation's preferred shares is full and unconditional. There are no restrictions on the payment of dividends by Niagara Mohawk Power Corporation or limitations on National Grid plc's guarantee of the preferred shares, and there are no factors that may affect payments to holders of the guaranteed securities.

The following summarised financial information for National Grid plc and Niagara Mohawk Power Corporation is presented on a combined basis and is intended to provide investors with meaningful and comparable financial information, and is provided pursuant to the early adoption of Rule 13-01 of Regulation S-X in lieu of the separate financial statements of Niagara Mohawk Power Corporation.

Summarised financial information is presented, on a combined basis, as at 31 March 2022. The combined amounts are presented under IFRS measurement principles. Intercompany transactions have been eliminated. Investments in other non-issuer and non-guarantor subsidiaries are included at cost, subject to impairment.

Summarised financial information for the year ended 31 March 2022 – IFRS

	National Grid plc and Niagara Mohawk Power Corporation combined £m
Combined statement of financial position	
Non-current loans to other subsidiaries	–
Non-current assets	10,068
Current loans to other subsidiaries	28,525
Current assets	2,431
Current loans from other subsidiaries	(14,512)
Current liabilities	(10,276)
Non-current loans from other subsidiaries	(2,050)
Non-current liabilities	(8,294)
Net assets[1]	5,892
Equity	5,892
Combined income statement – continuing operations	
Revenue	2,987
Operating costs	(2,358)
Operating profit	629
Other income from other subsidiaries	2,500
Other income and costs, including taxation	(360)
Profit after tax	2,769

1. Excluded from net assets above are investments in other consolidated subsidiaries with a carrying value of £14,440 million.

37. Acquisitions

Business combinations are accounted for using the acquisition method. The identifiable assets acquired and liabilities assumed are recognised at their fair values at the acquisition date.

Goodwill is initially measured as the excess of the aggregate of the consideration transferred, the amount recognised for any non-controlling interest and the acquisition-date fair values of any previously held interest in the acquiree over the fair value of the identifiable assets acquired and liabilities assumed at the acquisition date.

Acquisition-related costs are expensed as incurred and included within Other operating income and costs.

Acquisition of WPD

On 14 June 2021, National Grid plc acquired 100% of the share capital of PPL WPD Investments Limited (WPD), the holding company of Western Power Distribution plc, which is the UK's largest electricity distribution network operator. The acquisition, along with the two planned disposals disclosed in note 10, strategically pivots National Grid's UK portfolio towards electricity, in order to significantly enhance National Grid's role in the delivery of the UK's net zero targets, given that electricity distribution is expected to see a high level of asset growth as a result of the ongoing energy transition.

The total cash consideration for the transaction was £7.9 billion, all of which was paid upfront, with no further contingent or deferred consideration payable. As a result of the acquisition, one of WPD's existing borrowing facilities became repayable immediately due to a change in control clause within the original borrowing agreement. The borrowing facility was immediately replaced with an intercompany loan of £350 million from National Grid plc. National Grid funded the transaction price and the new intercompany loan by taking out a bridge financing facility (see note 33), that it will commence repaying with the proceeds of the planned disposals.

The fair values of the assets and liabilities following the finalisation of the purchase price allocation are set out below:

	IFRS book value at acquisition £m	Fair value adjustments £m	Fair value £m
Non-current assets			
Property, plant and equipment	14,077	(4,026)	10,051
Other intangible assets	49	1,714	1,763
Pension assets	402	164	566
Other non-current assets	27	—	27
Total non-current assets	14,555	(2,148)	12,407
Current assets			
Trade and other receivables	268	—	268
Financial and other investments	69	—	69
Cash	44	—	44
Other current assets	42	—	42
Total current assets	423	—	423
Total assets	14,978	(2,148)	12,830
Current liabilities			
Borrowings	(730)	—	(730)
Trade and other payables	(531)	48	(483)
Other current liabilities	(35)	—	(35)
Total current liabilities	(1,296)	48	(1,248)
Non-current liabilities			
Borrowings	(5,967)	(1,589)	(7,556)
Deferred tax	(1,013)	224	(789)
Contract liabilities	(2,706)	2,706	—
Other non-current liabilities	(56)	(21)	(77)
Total non-current liabilities	(9,742)	1,320	(8,422)
Total liabilities	(11,038)	1,368	(9,670)
Total identifiable net assets	3,940	(780)	3,160
Goodwill	1,254	3,467	4,721
Total consideration transferred	5,194	2,687	7,881
Satisfied by:			
Cash consideration			7,881
Total consideration transferred			7,881

Financial Statements

37. Acquisitions continued

The goodwill arising from the acquisition represents the future expected growth in the WPD business, the benefits that are expected to be achieved as a result of the combination of the two businesses and the expertise of the management team acquired. No component of goodwill qualifies for recognition as a separate tangible or intangible asset. The goodwill is not deductible for tax purposes and at the acquisition date, there were no material contingent liabilities.

The fair value of trade and other receivables of £270 million includes trade receivables with a fair value of £86 million. The gross contractual amount for trade receivables due is £103 million, of which £17 million was expected to be uncollectible.

Total acquisition-related costs of £110 million were recognised within Other operating income and costs, within exceptional items and remeasurements in the consolidated income statement, of which £15 million was recognised in the year ended 31 March 2021 and £95 million in the year ended 31 March 2022.

WPD generated revenues of £1,468 million and profit before tax of £781 million for the period from 14 June 2021 to 31 March 2022. If the acquisition had occurred on 1 April 2021, the Group's consolidated revenue and consolidated profit before tax from continuing operations for the 12 months ended 31 March 2022 would have been £18,806 million and £3,600 million respectively.

38. Post balance sheet events

On 6 April 2022, the UK government announced that the entirety of ESO will become part of an independent system operator public body, following the Future System Operator (FSO) consultation. The FSO, which is subject to legislative approval, will take on a number of key roles in electricity and gas in Great Britain. The Group is working closely with BEIS and Ofgem to plan and prepare for the implementation of the changes required to create the FSO.

On 11 May 2022, Ofgem approved the Group's request to return £200 million of interconnector revenue subject to the cap and floor regime to consumers ahead of schedule (see note 26). This return will take place over the next two years. The Group is now working through the formal steps outlined under the regulatory framework which will result in the finalisation of the mechanism by which the revenues will be returned.

Company accounting policies

We are required to include the stand-alone balance sheet of our ultimate Parent Company, National Grid plc, under the Companies Act 2006. This is because the publicly traded shares are actually those of National Grid plc (the 'Company') and the following disclosures provide additional information to shareholders.

A. Basis of preparation

National Grid plc is the Parent Company of the National Grid Group, which is engaged in the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited company, limited by shares. The Company is incorporated and domiciled in England, with its registered office at 1–3 Strand, London, WC2N 5EH.

The financial statements of National Grid plc for the year ended 31 March 2022 were approved by the Board of Directors on 18 May 2022. The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. Accordingly, these individual financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101). In preparing these financial statements the Company applies the recognition and measurement requirements of International Financial Reporting Standards (IFRS) as adopted by the UK, but makes amendments where necessary in order to comply with the provisions of the Companies Act 2006 and sets out below where advantage of the FRS 101 disclosure exemptions has been taken.

These individual financial statements have been prepared on a historical cost basis, except for the revaluation of financial instruments, and are presented in pounds sterling, which is the currency of the primary economic environment in which the Company operates. The comparative financial information has also been prepared on this basis.

These individual financial statements have been prepared on a going concern basis, which presumes that the Company has adequate resources to remain in operation, and that the Directors intend it to do so, for at least one year from the date the financial statements are signed. As the Company is part of a larger group it participates in the Group's centralised treasury arrangements and so shares banking arrangements with its subsidiaries. The Company is expected to generate positive cash flows or be in a position to obtain finance via intercompany loans to continue to operate for the foreseeable future.

In accordance with the exemption permitted by section 408 of the Companies Act 2006, the Company has not presented its own profit and loss account or statement of comprehensive income.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements of the Company in accordance with FRS 101:

- a cash flow statement and related notes;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management; and
- the effects of new but not yet effective IFRS standards.

The exemption from disclosing key management personnel compensation has not been taken as there are no costs borne by the Company in respect of employees, and no related costs are recharged to the Company.

As the consolidated financial statements of National Grid plc, which are available from the registered office, include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 in respect of certain disclosures required by IFRS 13 'Fair Value Measurement' and the disclosures required by IFRS 7 'Financial Instruments: Disclosures'.

There are no areas of judgement or key sources of estimation uncertainty that are considered to have a significant effect on the amounts recognised in the financial statements.

The balance sheet has been prepared in accordance with the Company's accounting policies approved by the Board and described below.

B. Fixed asset investments

Investments held as fixed assets are stated at cost less any provisions for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairments are calculated such that the carrying value of the fixed asset investment is the lower of its cost or recoverable amount. Recoverable amount is the higher of its fair value less costs of disposal and its value-in-use. The Company accounts for common control transactions at cost.

C. Tax

Current tax for the current and prior periods is provided at the amount expected to be paid or recovered using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full on temporary differences which result in an obligation at the balance sheet date to pay more tax, or the right to pay less tax, at a future date, at tax rates expected to apply when the temporary differences reverse based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is provided for using the balance sheet liability method and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax assets are recognised to the extent that it is regarded as more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

D. Foreign currencies

Transactions in currencies other than the functional currency of the Company are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Gains and losses arising on retranslation of monetary assets and liabilities are included in the profit and loss account.

E. Financial instruments

The Company's accounting policies are the same as the Group's accounting policies under IFRS, namely IAS 32 'Financial Instruments: Presentation', IFRS 9 'Financial Instruments' and IFRS 7 'Financial Instruments: Disclosures'. The Company applies these policies only in respect of the financial instruments that it has, namely investments, derivative financial instruments, debtors, cash at bank and in hand, borrowings and creditors.

The policies are set out in notes 15, 17, 19, 20, 21 and 22 to the consolidated financial statements. The Company is taking the exemption for financial instruments disclosures, because IFRS 7 disclosures are given in notes 32 and 35 to the consolidated financial statements.

F. Hedge accounting

The Company applies the same accounting policy as the Group in respect of fair value hedges and cash flow hedges. This policy is set out in note 32 to the consolidated financial statements.

G. Parent Company guarantees

The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. Such guarantees are accounted for by the Company as insurance contracts. In the event of default or non-performance by the subsidiary, a liability is recorded in accordance with IAS 37.

Company accounting policies continued

H. Share awards to employees of subsidiary undertakings
The issuance by the Company to employees of its subsidiaries of a grant over the Company's options represents additional capital contributions by the Company to its subsidiaries. An additional investment in subsidiaries results in a corresponding increase in shareholders' equity. The additional capital contribution is based on the fair value of the option at the date of grant, allocated over the underlying grant's vesting period. Where payments are subsequently received from subsidiaries, these are accounted for as a return of a capital contribution and credited against the Company's investments in subsidiaries. The Company has no employees except for the Group's Non-executive Directors (refer to the Directors' Remuneration Report on page 121).

I. Dividends
Interim dividends are recognised when they are paid to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

J. Directors' remuneration
Full details of Directors' remuneration are disclosed on pages 108 – 131.

Company balance sheet
as at 31 March

	Notes	2022 £m	2021 £m
Fixed assets			
Investments	1	**14,432**	14,389
Current assets			
Debtors (amounts falling due within one year)	2	**28,375**	20,699
Debtors (amounts falling due after more than one year)	2	**87**	143
Investments	5	**1,368**	784
Cash at bank and in hand		**45**	40
Total current assets		**29,875**	21,666
Creditors (amounts falling due within one year)	3	**(23,721)**	(18,312)
Net current assets		**6,154**	3,354
Total assets less current liabilities		**20,586**	17,743
Creditors (amounts falling due after more than one year)	3	**(4,407)**	(3,085)
Net assets		**16,179**	14,658
Equity			
Share capital	7	**485**	474
Share premium account		**1,300**	1,296
Cash flow hedge reserve		**(15)**	(3)
Cost of hedging reserve		**(3)**	(15)
Other equity reserves		**469**	426
Profit and loss account	8	**13,943**	12,480
Total shareholders' equity		**16,179**	14,658

The Company's profit after tax for the year was £2,371 million (2021: £5,107 million profit). Profits available for distribution by the Company to shareholders were £12.2 billion at 31 March 2022. The financial statements of the Company on pages 235 – 241 were approved by the Board of Directors on 18 May 2022 and were signed on its behalf by:

Paula Rosput Reynolds Chair
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Company statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Cash flow hedge reserve £m	Cost of hedging reserve £m	Other equity reserves £m	Profit and loss account £m	Total shareholders' equity £m
At 1 April 2020	470	1,301	(28)	(6)	399	6,349	8,485
Profit for the year[1]	—	—	—	—	—	5,107	5,107
Other comprehensive profit/(loss) for the year							
Transferred to/(from) equity (net of tax)	—	—	25	(9)	—	—	16
Dividends in specie (note 1)	—	—	—	—	—	2,422	2,422
Total comprehensive profit/(loss) for the year	—	—	25	(9)	—	7,529	7,545
Other equity movements							
Scrip dividend-related share issue[2]	4	(5)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Purchase of own shares	—	—	—	—	—	(2)	(2)
Share awards to employees of subsidiary undertakings	—	—	—	—	27	—	27
Equity dividends	—	—	—	—	—	(1,413)	(1,413)
At 31 March 2021	474	1,296	(3)	(15)	426	12,480	14,658
Profit for the year[1]	—	—	—	—	—	2,371	2,371
Other comprehensive profit/(loss) for the year							
Transferred (from)/to equity (net of tax)	—	—	(12)	12	—	—	—
Total comprehensive (loss)/profit for the year	—	—	(12)	12	—	2,371	2,371
Other equity movements							
Scrip dividend-related share issue[2]	11	(12)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Transactions in own shares	—	16	—	—	—	(3)	13
Share awards to employees of subsidiary undertakings	—	—	—	—	43	—	43
Equity dividends	—	—	—	—	—	(922)	(922)
At 31 March 2022	**485**	**1,300**	**(15)**	**(3)**	**469**	**13,943**	**16,179**

1. Included within profit for the year is dividend income from subsidiaries of £2,500 million (2021: £7,556 million).
2. Included within the share premium account are costs associated with scrip dividends.

Notes to the Company financial statements

1. Fixed asset investments

	Shares in subsidiary undertakings £m
Cost at 1 April 2020	14,362
Additions	2,447
Cost at 31 March 2021	16,809
Additions	43
Cost at 31 March 2022	16,852
Provision at 1 April 2020	—
Charge for the year	(2,420)
Provision at 1 April 2021	(2,420)
Charge for the year	—
Provision at 31 March 2022	(2,420)
Net book value at 31 March 2022	**14,432**
Net book value at 31 March 2021	14,389

During the year, there was a capital contribution of £43 million (2021: £27 million) which represents the fair value of equity instruments granted to subsidiaries' employees arising from equity-settled employee share schemes.

In the year ended 31 March 2021 the Company acquired 100% investments in National Grid (US) Investments 2 Limited and National Grid Hong Kong Limited from its subsidiary undertaking, National Grid Luxembourg SARL, for a total consideration of £2,420 million in the form of a dividend in specie. Then, as part of a wider Group restructuring project, National Grid (US) Investments 2 Limited was identified as a subsidiary no longer required and hence a number of accounting steps were implemented to reduce the net assets of that company to a nominal value. These steps included a capital reduction and the payment of dividends to the Company of £2,422 million. Following the receipt of these dividends, the carrying value of the investment was reviewed and an impairment charge was made to the profit and loss account of £2,420 million. It is anticipated that National Grid (US) Investments 2 Limited will be placed into voluntary liquidation in the next financial year.

The Company's direct subsidiary undertakings as at 31 March 2022 were as follows: National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc. The names of indirect subsidiary undertakings, joint ventures and associates are included in note 34 to the consolidated financial statements.

The Directors believe that the carrying value of the investments is supported by the fair value of their underlying net assets.

2. Debtors

	2022 £m	2021 £m
Amounts falling due within one year		
Derivative financial instruments (note 4)	**65**	86
Amounts owed by subsidiary undertakings	**28,299**	20,613
Other debtors	**11**	—
	28,375	20,699
Amounts falling due after more than one year		
Derivative financial instruments (note 4)	**81**	139
Deferred tax	**6**	4
	87	143

The carrying values stated above are considered to represent the fair values of the assets. For the purposes of the impairment assessment, loans to subsidiary undertakings are considered low credit risk as the subsidiaries are solvent and are covered by the Group's liquidity arrangements.

A reconciliation of the movement in deferred tax in the year is shown below:

	Deferred tax £m
At 1 April 2020	8
Charged to equity	(4)
At 31 March 2021	4
Credited to equity	2
At 31 March 2022	**6**

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Notes to the Company financial statements continued

3. Creditors

	2022 £m	2021 £m
Amounts falling due within one year		
Borrowings (note 6)	**9,029**	635
Derivative financial instruments (note 4)	**129**	34
Amounts owed to subsidiary undertakings	**14,512**	17,589
Other creditors	**51**	54
	23,721	18,312
Amounts falling due after more than one year		
Borrowings (note 6)	**2,091**	823
Derivative financial instruments (note 4)	**266**	203
Amounts owed to subsidiary undertakings	**2,050**	2,059
	4,407	3,085
Amounts owed to subsidiary undertakings falling due after more than one year are repayable as follows:		
In 1 to 2 years	**–**	–
In 2 to 3 years	**421**	–
In 3 to 4 years	**998**	425
In 4 to 5 years	**–**	997
More than 5 years	**631**	637
	2,050	2,059

The carrying values stated above are considered to represent the fair values of the liabilities.

4. Derivative financial instruments

The fair values of derivative financial instruments are:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Amounts falling due within one year	**65**	**(129)**	**(64)**	86	(34)	52
Amounts falling due after more than one year	**81**	**(266)**	**(185)**	139	(203)	(64)
	146	**(395)**	**(249)**	225	(237)	(12)

For each class of derivative, the notional contract[1] amounts are as follows:

	2022 £m	2021 £m
Cross-currency interest rate swaps	**(5,034)**	(3,604)
Foreign exchange forward contracts	**(12,322)**	(9,517)
	(17,356)	(13,121)

1. The notional contract amounts of derivatives indicate the gross nominal value of transactions outstanding at the balance sheet date.

5. Investments

	2022 £m	2021 £m
Investments in short-term money funds	**1,164**	697
Restricted balances – collateral	**204**	87
	1,368	784

6. Borrowings

The following table analyses the Company's total borrowings:

	2022 £m	2021 £m
Amounts falling due within one year		
Bank loans	**8,206**	8
Bonds	**4**	362
Commercial paper	**819**	265
	9,029	635
Amounts falling due after more than one year		
Bonds	**2,091**	823
	11,120	1,458

The maturity of total borrowings is as follows:

	2022 £m	2021 £m
Total borrowings are repayable as follows:		
Less than 1 year	**9,029**	635
In 1 to 2 years	**–**	–
In 2 to 3 years	**–**	–
In 3 to 4 years	**–**	–
In 4 to 5 years	**–**	–
More than 5 years	**2,091**	823
	11,120	1,458

The notional amount of borrowings outstanding as at 31 March 2022 was £11,215 million (2021: £1,480 million).

7. Share capital

The called-up share capital amounting to £485 million (2021: £474 million) consists of 3,904,074,348 ordinary shares of $12^{204}/_{473}$ pence each (2021: 3,814,951,606 ordinary shares of $12^{204}/_{473}$ pence each). For further information on share capital, refer to note 27 of the consolidated financial statements.

8. Shareholders' equity and reserves

At 31 March 2022, the profit and loss account reserve stood at £13,943 million (2021: £12,480 million) of which profits available for distribution by the Company to shareholders were £12.2 billion (2021: £9.9 billion).

For further details of dividends paid and payable to shareholders, refer to note 9 of the consolidated financial statements.

9. Parent Company guarantees

The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. At 31 March 2022, the sterling equivalent amounted to £2,084 million (2021: £2,108 million). The guarantees are for varying terms from less than one year to open-ended.

In addition, as part of the sectionalisation of the National Grid UK Pension Scheme on 1 January 2017, a guarantee of £1 billion has been provided to Section A. This payment is contingent on insolvency or on failure to pay pensions obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total). Refer to note 25 of the consolidated financial statements.

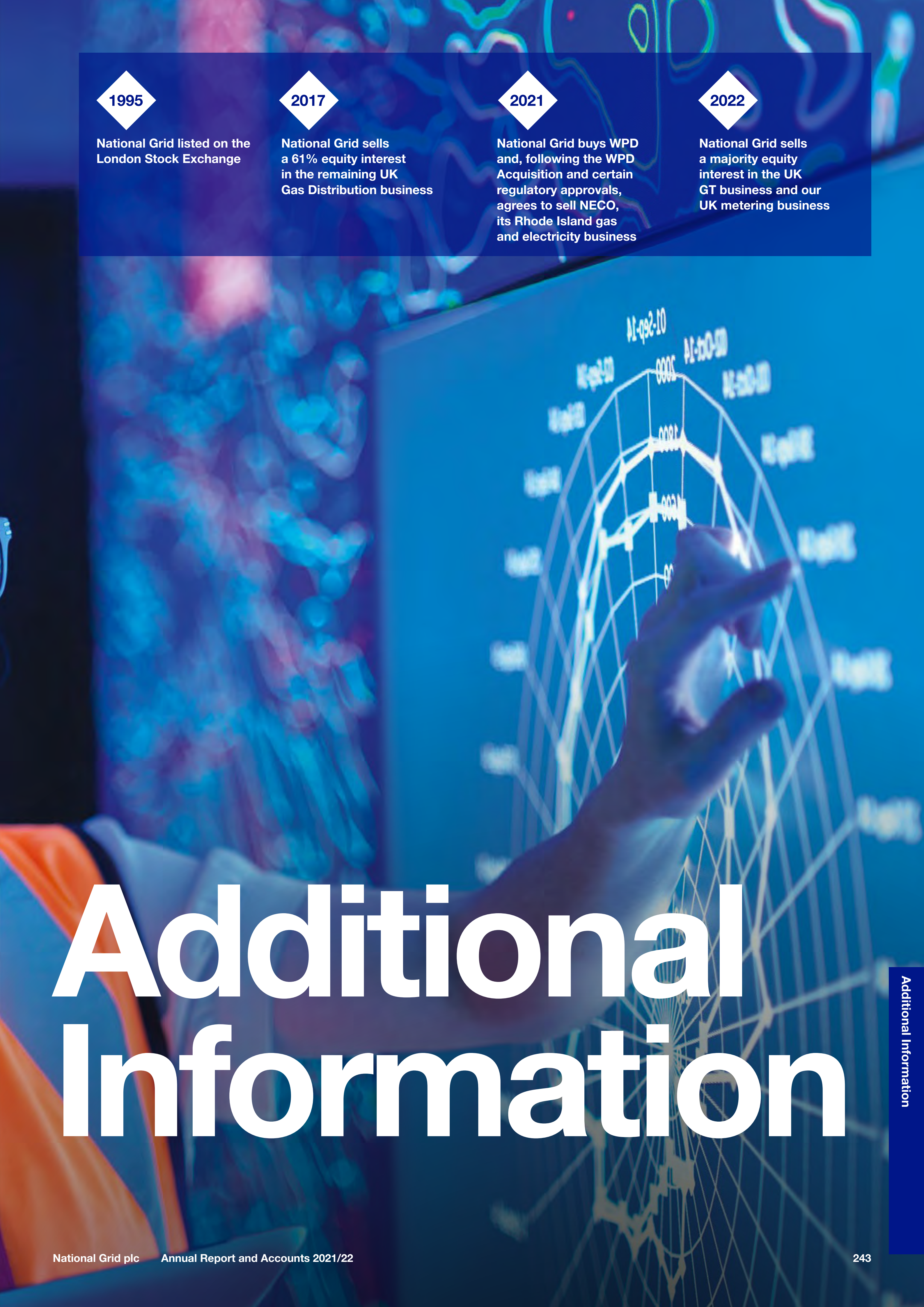
10. Audit fees

The audit fee in respect of the Parent Company was £31,000 (2021: £28,000). Fees payable to Deloitte for non-audit services to the Company are not required to be disclosed as they are included within note 4 to the consolidated financial statements.

Doing Right Now

Digitalisation

We are transforming how we connect our rapidly changing customer base to connect customers quicker and at a lower cost by digitalising our processes and standardising our designs.



1995

National Grid listed on the London Stock Exchange

2017

National Grid sells a 61% equity interest in the remaining UK Gas Distribution business

2021

National Grid buys WPD and, following the WPD Acquisition and certain regulatory approvals, agrees to sell NECO, its Rhode Island gas and electricity business

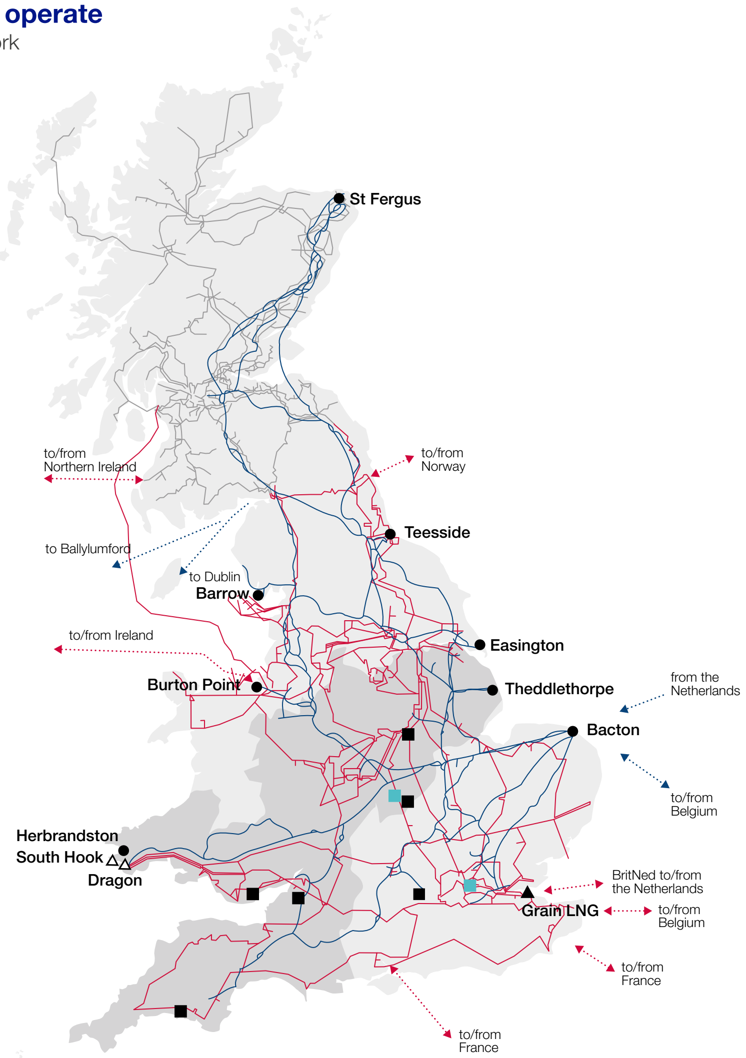
2022

National Grid sells a majority equity interest in the UK GT business and our UK metering business

Additional Information

Where we operate

Our UK network



● **UK Electricity Distribution (WPD)**

Approximately 55,533 miles (89,372 kilometres) of overhead line, 85,728 miles (137,966 kilometres) of underground cable and 189,644 transformers.

UK Transmission[1]

Scottish electricity transmission system

English and Welsh electricity transmission system

Approximately 4,484 miles (7,216 kilometres) of overhead line, 1,585 miles (2,551 kilometres) of the underground cable and 347 substations.

Gas transmission system

Approximately 4,740 miles (7,628 kilometres) of high-pressure pipe and 23 compressor stations connecting to eight distribution networks and third-party independent systems.

● Terminal

▲ LNG terminal owned by National Grid

△ LNG terminal

Electricity interconnector

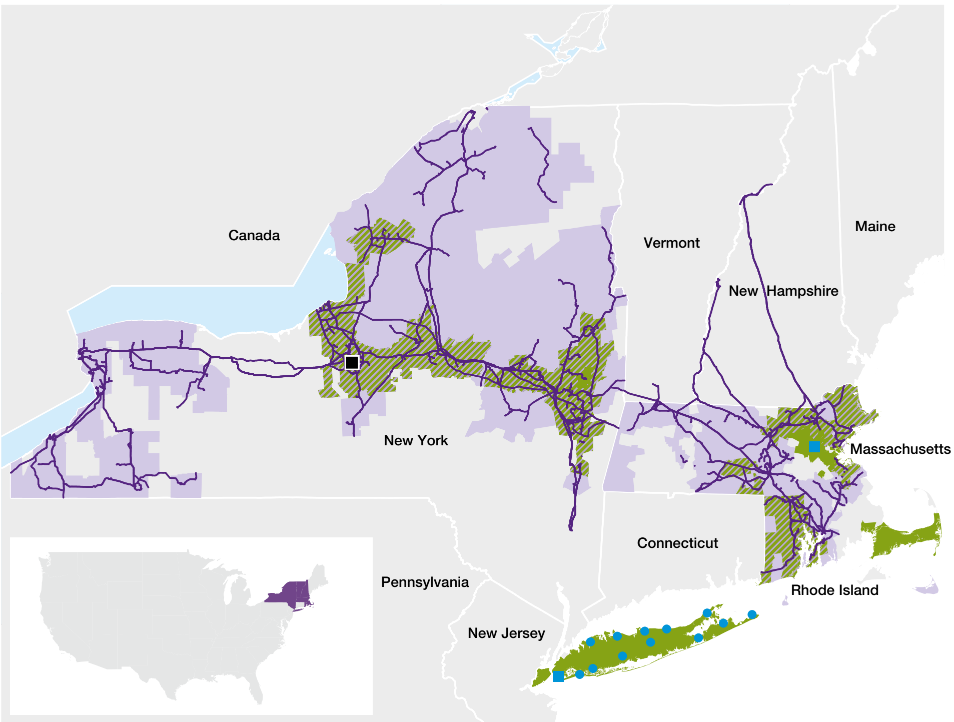
Gas interconnector

Principal offices

■ Owned office space:
Bristol, Cardiff, Castle Donington, Plymouth, Warwick and Wokingham

■ Leased office space:
Solihull and London

Our US network



US Regulated[1]

Electricity transmission network

● Gas distribution operating area

● Electricity distribution area

● Gas and electricity distribution area overlap

An electricity transmission network of approximately 8,831 miles (14,212 kilometres) of overhead line, 109 miles (175 kilometres) of underground cable and 399 transmission substations. We own and operate approximately 279 miles (449 kilometres) of high-voltage electric interconnectors in New England.

An electricity distribution network of approximately 69,291 circuit miles (111,513 kilometres) and 718 distribution substations in New England and upstate New York.

A network of approximately 36,756 miles (59,153 kilometres) of gas pipeline. Our gas pipeline network includes approximately 953 miles (1,534 kilometres) of gas transmission pipe, as defined by the US Department of Transportation.

● Generation

Principal offices

■ Owned office space:
Syracuse, New York

■ Leased office space:
Brooklyn, New York and Waltham, Massachusetts

At present, environmental issues are not preventing our UK and US businesses from utilising any material operating assets in the course of their operations.

1. Access to electricity and gas transmission assets on property owned by others is controlled through various agreements.

The business in detail

UK regulation

Our licences to participate in transmission, distribution and interconnection activities are established under the Gas Act 1986 and the Electricity Act 1989, as amended (the 'Acts'). These require us to develop, maintain and operate economic and efficient networks and to facilitate competition in the supply of gas and electricity in Great Britain (GB). They also give us statutory powers, including the right to bury our pipes or cables under public highways and the ability to use compulsory powers to purchase land so we can conduct our business.

Our licensed activities are regulated by Ofgem, which has a statutory duty under the Acts to protect the interests of consumers. To protect consumers from the ability of companies to set unduly high prices, Ofgem has established price controls that limit the amount of revenue such regulated businesses can earn. In setting price controls, Ofgem must have regard to the need to secure that licence holders are able to finance their obligations under the Acts. This should give us a level of revenue for the duration of the price control that is sufficient to meet our statutory duties and licence obligations with a reasonable return on our investments. Licensees and other affected parties can appeal price controls or within period licence modifications which have errors, including in respect of financeability.

The transmission and distribution businesses follow the RIIO (revenue = incentives + innovation + outputs) framework established by Ofgem. There are multiple price controls under this framework, including:

- RIIO-T1 (transmission, April 2013 – March 2021);
- RIIO-T2 (transmission, April 2021 – March 2026);
- RIIO-ED1 (electricity distribution, April 2015 – March 2023); and
- RIIO-ED2 (electricity distribution, April 2023 – March 2028).

While the RIIO-T1 period has finished, and confirmation of the delivered outputs and performance levels was reported through the annual reporting process in July 2021, there is a close-out process ongoing to finalise adjustments to allowed revenues in respect of a few licence condition obligations for the RIIO-T1 period; this is expected to conclude in November 2022.

Our UK gas and electricity transmission, electricity distribution (WPD) and system operator businesses operate under four separate price controls, which cover our roles as Transmission Owner (TO) and System Operator (SO) in both gas and electricity, and our electricity distribution activities. National Grid Gas Transmission (NGG) fulfils SO and TO functions for gas, National Grid Electricity Transmission fulfils the TO function for electricity, the Electricity System Operator (ESO) fulfils the SO function for electricity, and WPD fulfils electricity distribution activities. In addition to these four regulated network price controls, there is also a tariff cap price control applied to certain elements of domestic-sized metering activities carried out by National Grid Metering and regulation of our electricity interconnector interests.

Since 1 April 2019, the ESO has been a legally separate business within the National Grid Group. This means it operates under its own licence and has a separate set of regulatory arrangements, along with strict ringfences for information.

WPD operates under one regulatory framework, the RIIO-ED model. Distribution network operators (DNOs) in the UK are natural monopolies and to ensure value for money for consumers WPD is regulated by Ofgem. The operations are regulated under the distribution licence which sets the requirements that WPD needs to deliver for its customers. In addition to the base level of revenue which the DNOs are allowed to earn, there are incentives to innovate and deliver various outputs relating to customer service, network performance, the environment, connections and efficiency. The achievement or not of targets in relation to these activities can result in rewards or penalties.

More information on the regulation of the ESO, WPD and interconnectors is given in separate sections below.

RIIO price controls

The building blocks of the RIIO price control are broadly similar to the price controls historically used in the UK. There are, however, some significant differences in the mechanics of the calculations.

Under RIIO, the outputs we deliver are explicitly articulated and our allowed revenues are linked to their delivery, although some outputs and deliverables have only a reputational impact or are linked to legislation. These outputs reflect what our stakeholders have told us they want us to deliver and were determined through an extensive consultation process, which gave stakeholders a greater opportunity to influence the decisions.

Using information we have submitted, along with independent assessments, including for RIIO-T2 an independent user group report, Ofgem determines the efficient level of expected costs necessary for these deliverables to be achieved. Under RIIO this is known as 'totex', which is a component of total allowable expenditure and is broadly the sum of what was defined in previous price controls as operating expenditure (opex) and capital expenditure (capex).

A number of assumptions are necessary in setting allowances for the outputs that we will deliver, including the volumes of work that will be needed and the price of the various external inputs required to achieve them. Consequently, there are a number of uncertainty mechanisms within the RIIO framework designed to protect consumers and network companies by avoiding the need to set allowances when future needs and costs are uncertain.

Where we under- or over-spend the allowed totex for reasons that are not covered by uncertainty mechanisms, there is a 'sharing' factor. This means we share the under- or over-spend with customers through an adjustment to allowed revenues in future years. This sharing factor provides an incentive for us to provide the outputs efficiently, as we are able to keep a portion of savings we make, with the remainder benefitting our customers. Likewise, it provides a level of protection for us if we need to spend more than allowances. Alongside this, there are several specific areas where companies can submit further claims for new allowances within the period, for instance to enable net zero.

Allowed revenue to fund totex costs is split between RIIO 'fast' and 'slow' money categories using specified ratios that are fixed for the duration of the price control. Fast money represents the amount of totex we are able to recover in the year of expenditure. Slow money is added to our Regulatory Asset Value (RAV) – effectively the regulatory IOU.

For more details on the sharing factors under RIIO for our transmission businesses, please see the tables overleaf.

In addition to fast money, each year we are allowed to recover regulatory depreciation, i.e. a portion of the RAV, and a return on the outstanding RAV balance. The RAV is also indexed to a measure of inflation, using CPIH in RIIO-T2. For RIIO-T2, regulatory depreciation for ET continues on a straight-line depreciation methodology over 45 years, while Gas Transmission (GT) moves from straight-line to sum-of-digit depreciation (so that depreciation is front loaded but then lower in the later years of the life of the asset). We are also allowed to collect additional revenues related to non-controllable costs and incentives. In addition to totex sharing, RIIO incentive mechanisms can increase or decrease our allowed revenue to reflect our performance against various other measures related to our outputs. For example, in RIIO-T2 there are rewards and penalties for performance against incentives. These incentive payments are a function of allowed revenue and could result in potential upsides for electricity transmission (ET) of up to £15 million and downsides in the region of £47 million, therefore incentivising us to deliver the agreed outputs. For gas transmission (GT) the upside is £15.1 million of allowed revenue with a downside of £14 million. Ofgem will consult on the maximum range of potential upside and downside for RIIO-ED2 as part of its July 2022 publication, and finalise the position in the winter 2022 Final Determination, covering the period from April 2023 to March 2028.

The RIIO-ED1 price control

From 1 April 2015, Ofgem set an eight-year electricity price control (known as RIIO-ED1). WPD submitted an outputs-based Business Plan for the RIIO-ED1 period (2015 – 2023), which was accepted by Ofgem as 'well justified' and could therefore 'fast-track' all four WPD licensed areas; the only DNO group to be fast-tracked. WPD's modified licences took effect from 1 April 2015. Our 76 commitments within the RIIO-ED1 Business Plan fall within the following six categories: safety, reliability, environment, connections, customer satisfaction and social obligations.

These price controls include a number of mechanisms designed to help achieve their objectives. These include financial incentives that encourage us to:

- efficiently deliver, through investment and maintenance, the network outputs that customers and stakeholders require, including reliable supplies, new connections and infrastructure capacity; and
- innovate so we can continuously improve the services we provide to our customers, stakeholders and communities.

More information on RIIO-T2

In December 2019 we submitted our Business Plans to Ofgem for the RIIO-T2 period, setting out the proposed activities and expenditure to meet the needs of our customers and stakeholders in the period 1 April 2021 – 31 March 2026. These plans were developed through extensive, enhanced stakeholder engagement to improve the quality and ensure they delivered what our stakeholders need.

To support this process, independent user groups were set up in July 2018, one for GT and one for ET (the 'IUGs'). Their responsibility was to ensure that the companies were putting stakeholders at the heart of their decision-making processes so as to produce a Business Plan that was fully reflective of customers', consumers' and other stakeholders' requirements. They summarised their views in an independent report to Ofgem on the companies' RIIO-T2 Business Plans in December 2019.

The IUGs represent a cross-section of the energy industry and represent the interests of consumers, environmental and public interest groups, as well as large-scale and small-scale customers and distribution networks.

The IUGs have now taken on an enduring role through RIIO-T2. There are three key focus areas, which are to:

- scrutinise and challenge the periodic Business Plans;
- monitor, interrogate and help the business to enhance transparency of performance against commitments; and
- act as a 'critical friend' for strategy, culture and processes in key areas such as stakeholder engagement, innovation, customers, consumers and responsible business.

Ofgem published its Final Determinations in December 2020, followed by the RIIO-T2 licences and Regulatory Instructions and Guidance in February 2021. The RIIO-T2 price controls started on 1 April 2021. On 2 March 2021, National Grid announced that it was broadly accepting most of the RIIO-T2 package for its ET and GT businesses, but had decided to submit a technical appeal to the Competition and Markets Authority (CMA) in relation to ET and GT focused on Ofgem's proposed cost of equity and 'outperformance wedge' (a downward adjustment to allowed returns in expectation of future outperformance).

Key parameters from Ofgem's RIIO-T2 Determinations for GT and ET

	Gas Transmission	Electricity Transmission
Allowed Return on Equity[1]	4.55% (real, relative to CPIH)	4.25% (real, relative to CPIH), at 55% gearing (which is broadly equivalent to 4.55% at 60% gearing)
Allowed debt funding	Calculated and updated each year using an extending 'trombone-like' trailing average of iBoxx Utilities 10+ year index (increases from 10 years for 2021/22 to 14 years for 2025/26), plus 25 bps additional borrowing costs.	
Depreciation of RAV	45-year sum-of-digit regulatory depreciation applied to RIIO-T2 additions and retrospectively to 2002 – 2021 additions.	No change in policy: straight line over 45 years for post-2021 RAV additions, with pre-2021 RAV additions as per RIIO-T1.
Notional gearing	60%	55%
Split between fast/slow money	Fast: TO baseline 35%; SO baseline 66%; TO uncertainty mechanisms 25% Slow: TO baseline 65%; SO baseline 34%; TO uncertainty mechanisms 75%	Fast: TO baseline 22%; TO uncertainty mechanisms 15% Slow: TO baseline 78%; TO uncertainty mechanisms 85%
Sharing factor	39%	33%
Core baseline totex in 2018/19 prices (cumulative for the five years of RIIO-T2)	£2.1 billion	£5.8 billion

1. The cost of equity in RIIO-T2 is subject to annual adjustments that are calculated using the Capital Asset Pricing Model, through indexation of the 'risk-free rate' parameter. The 4.55% and 4.25% figures shown in this row are Ofgem's estimates of the average allowed Return on Equity over the five years of RIIO-T2, as given in the RIIO-T2 Price Control Financial Model published in November 2021.

In October 2021, the CMA found in favour of the technical arguments we put forward in respect of the 'outperformance wedge' but not on the cost of equity.

RIIO-T2 builds on the framework established for RIIO-T1. For example, it introduces a range of new mechanisms to facilitate the transition to net zero, and it increases support for innovation, for example by allowing the regulator to direct additional funding in gas transportation for hydrogen innovation, in recognition of the uncertainty around the extent networks may have a role in transporting hydrogen.

Competition in onshore transmission

Ofgem stated in its final decision on the RIIO-T1 price control that it would consider holding a competition to appoint the constructor and owner of suitably large new electricity transmission projects, rather than including these new outputs and allowances in existing transmission licensee price controls. Ofgem reiterated this view in the RIIO-T2 Determination, extending it now to gas transmission and gas distribution. In the absence, thus far, of the legislation needed to support a competition, Ofgem has developed a number of models which it has indicated it would consider using to deliver benefits of competition, the primary one of these being called the 'Competition Proxy Model', but so far this has not been used for any projects or implemented into licences. The December 2020 BEIS energy white paper reiterated the government's ambition to introduce greater competition to support the delivery of net zero targets but also explained that the introduction of legislation to support full third-party competition would be subject to available parliamentary time.

Regulation of the Electricity System Operator

A primary goal of the ESO legal separation in April 2019 was to increase transparency of our activities and help minimise any perceived conflicts of interest as we take on the challenge of driving forward the energy transformation. There are clear signals from Ofgem and the broader regulatory context that the ESO will play a crucial role in the changing energy environment. As an asset-light and service-based entity, the ESO is also fundamentally different from other regulated network companies. The RIIO-2 price control therefore implemented a bespoke framework for the ESO, recognising that it is different from other regulated businesses.

As part of the RIIO-2 process, the ESO published a five-year Business Plan in December 2019, followed by a detailed two-year delivery schedule in October 2020 (covering the two-year Business Plan 1 (BP1) period). These documents, which were developed following extensive stakeholder engagement, set out the ESO's planned activities and how they fit with its high-level ambitions. However, as the ESO's funding uses a pass-through mechanism (where all efficiently incurred costs can be recovered through regulated revenues), the ESO has the flexibility to deviate from its published plans, delivering additional activities where there is an opportunity to benefit consumers. The ESO's recent work on an Early Competition Plan and supporting the Offshore Transmission Network Review are examples of such activities.

The RIIO-2 regulatory framework includes a return on RAV but also provides additional non-RAV funding for roles and risks that are not linked to an asset base. There is no totex incentive mechanism for the ESO in RIIO-2, which means that the ESO has greater flexibility to adjust spending in order to deliver its ambitious Business Plan and maximise consumer benefit. ESO performance in RIIO-2 will continue to be assessed via an evaluative incentive approach, through a two-year incentive scheme with a total maximum reward of £30 million and maximum penalty of £12 million for the two-year period. As part of this incentive scheme, a Performance Panel (the 'Panel') of industry stakeholders scores the ESO on its performance, taking into account the delivery of its plans, numerical metrics such as balancing costs, stakeholder interactions, the benefit the ESO has delivered for consumers and the extent to which the ESO's activities have delivered value for money. The Panel scores performance and gives feedback on a six-monthly basis, with the final set of scores in summer 2023 informing the reward or penalty awarded by Ofgem at the end of the two-year BP1 period.

On 29 April 2022 the ESO published its draft plan for the Business Plan 2 (BP2) period, which runs from April 2023 to March 2025. Following engagement with industry the ESO will publish a final BP2 in August 2022. Ofgem is expected to publish its Draft Determinations on ESO's BP2 in November 2022, with Final Determinations in March 2023.

The challenge of net zero, the required speed of decarbonisation and the level of industry and societal change mean that structures and roles across the energy industry will need to evolve. In summer 2021, Ofgem and BEIS jointly consulted on the future of energy system operation. The consultation proposed that the creation of a future system operator, built on the existing capability of the ESO, is a key next step to accelerate the transition to net zero. BEIS and Ofgem have now made their final decision to proceed with the creation of a future system operator that is independent of National Grid. This decision means that, in time, the entirety of the ESO will become part of a new organisation, as well as certain long-term strategic activities for gas. The announcement does not include the operational functions of the Gas System Operator (GSO), which will remain part of NGG. We will continue to collaborate with BEIS, Ofgem and the wider industry following the outcome of this consultation.

Interconnectors regulation

Interconnectors derive their revenues from sales of capacity to users who wish to move power between market areas with different prices. Up until 31 December 2020, this was governed under European legislation and these capacity sales are classified as 'congestion revenues'. This is because the market price differences result from congestion on the established interconnector capacity which limits full price convergence. European legislation governed how congestion revenues may be used and how interconnection capacity is allocated. It requires all interconnection capacity to be allocated to the market through auctions. From 1 January 2021, interconnectors to the UK are no longer governed by European legislation, and the operation of these interconnectors is governed by individual sets of access rules which are agreed by regulators at each end of the link. This does not affect the fundamental business model for interconnectors.

Under UK legislation, interconnection businesses must be separate from transmission businesses.

There is a range of different regulatory models available for interconnector projects. These involve various levels of regulatory intervention, ranging from fully merchant (where the project is fully reliant on sales of interconnector capacity) to cap and floor.

The cap and floor regime is now the regulated route for interconnector investment in GB and may be sought by project developers who do not qualify for, or do not wish to apply for, exemptions from UK and European legislation which would facilitate a merchant development.

Regulation of WPD

Looking to the future, RIIO-ED2 covering the period 1 April 2023 – 31 March 2028, is the second electricity distribution price control to be set under the RIIO model. The first draft of our RIIO-ED2 Business Plan was submitted to Ofgem's Challenge Group on 1 July 2021 and the final submission was made on 1 December 2021. Ofgem's Draft Determinations are expected in July 2022 with Final Determinations due by winter 2022.

Following the government's recent legislation for net zero carbon by 2050, DNOs will be at the forefront of its delivery, enabling the transition to a smart, flexible, low-cost and low-carbon energy system for all consumers and network users.

Our RIIO-ED2 Business Plan has been co-created with our stakeholders, following an enhanced and extensive approach to stakeholder engagement with over 25,000 stakeholders being consulted. We provided our stakeholders an opportunity to review our Business Plan three times before the final submission to Ofgem. Our Business Plan has evolved based of the feedback from our stakeholders, the Customer Engagement Groups (CEG) and Ofgem's Challenge Group. Most notable changes have been a reduction of core commitments that demonstrate that they are all well justified, an increase to the ex-ante load-related expenditure to reflect our best view of low-carbon technology (LCT) take-up and additional strategies including the Business Innovation and Efficiency strategy, which clearly demonstrate how WPD will offer best value for our customers.

The core commitments, as included in our Business Plan, fall within three key headings driven by Ofgem. These focus on meeting the needs of consumers and network users, maintaining a safe and resilient network, and delivering an environmentally sustainable service. Every core commitment in our draft Business Plan is in response to an area of focus identified as a priority by stakeholders. Some of the key commitments include:

Sustainability: Leading the drive to net zero as early as possible

- Facilitating regions achieving net zero carbon by as early as 2028 in line with local authority ambitions.
- WPD to be net zero by 2028 for our own business carbon footprint (excluding network losses).

Connectability: Customers can connect their electric vehicles and heat pumps when they want to

- Ready for an additional 1.5 million electric vehicles and 600,000 heat pumps to be connected during RIIO-ED2, providing affordable, LCT connections without delays.
- An online tool for same day self-assessment for the connection of LCTs to our network.

Vulnerability: First class vulnerable customer support programme where everyone benefits in a smart future

- 600,000 smart energy plans offered to customers in vulnerable situations each year.
- £60 million saved by 113,000 fuel poor customers as a result of our ED2 support schemes.

Affordability: Maintain excellent customer service, safety and network performance, and transform the energy grid for future generations, whilst maintaining affordability for our customers

- Targeting 93%+ on customer satisfaction in ED2.
- Lowest ever levels of power cuts.

US regulation

Regulators

In the US, public utilities' retail transactions are regulated by state utility commissions which serve as economic regulators, approving cost recovery and authorised rates of return. The state commissions establish the retail rates to recover the cost of transmission and distribution services within their jurisdictions. They also serve the public interest by making sure utilities provide safe and reliable services at just and reasonable prices. The commissions establish service standards and approve public utility mergers and acquisitions. State commissions are also asked to approve a variety of programmes and costs related to state energy and climate goals.

The Federal Energy Regulatory Commission (FERC) regulates wholesale transactions for utilities, such as interstate transmission and wholesale electricity sales, including rates for these services, at the federal level. FERC also regulates public utility holding companies and centralised service companies, including those of our US businesses.

Regulatory process

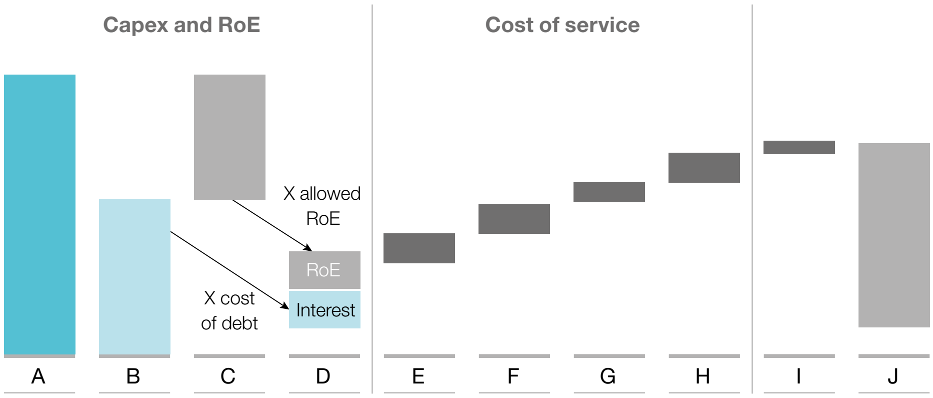
The US regulatory regime is premised on allowing the utility the opportunity to recover its cost of service and earn a reasonable return on its investments as determined by each commission. Utilities submit formal rate filings (rate cases) to the relevant state regulator when additional revenues are necessary to provide safe, reliable service to customers. Additionally, utilities can be compelled to file a rate case, either due to complaints filed with the commission or at the commission's own discretion.

The rate case is typically litigated with parties representing customers and other interests. The utility is required to prove that the requested rate change is just and reasonable, and the requested rate plan can span multiple years. In the states where we operate, it can typically take 9 – 13 months for the commission to render a final decision, although, in some instances, rules allow for longer negotiation periods which may extend the length of the rate case proceeding. Unlike the state processes, FERC, as the federal regulator, has no specified timeline for adjudicating a rate case; typically it makes a final decision retroactively when the case is completed.

Gas and electricity rates are established from a revenue requirement, or cost of service, equal to the utility's total cost of providing distribution or delivery service to its customers, as approved by the commission in the rate case. This revenue requirement includes operating expenses, depreciation, taxes, and a fair and reasonable return on shareholder capital invested in certain components of the utility's regulated asset base or 'rate base'.

The final revenue requirement and rates for service are approved in the rate case decision. The revenue requirement is derived from a comprehensive study of the utility's total costs during a representative 12-month period, referred to as a test year. Each commission has its own rules and standards for adjustments to the test year. These may include forecast capital investments and operating costs.

US regulatory revenue requirement



A Rate base
B Debt
C Equity
D Return
E Controllable costs
F Non-controllable costs
G Depreciation
H Taxes
I Lagged recoveries
J Allowed revenue

Our rate plans

Each operating company has a set of rates for service. We have three electric distribution operations (upstate New York, Massachusetts and Rhode Island) and five gas distribution networks (upstate New York, New York City, Long Island, Massachusetts and Rhode Island).

Our distribution operating companies have revenue-decoupling mechanisms that delink their revenues from the quantity of energy delivered and billed to customers. These mechanisms remove the natural disincentive utility companies have for promoting and encouraging customer participation in energy-efficiency programmes that lower energy end use and distribution volumes.

We bill our customers for their use of electricity and gas services. Customer bills typically cover the cost of the commodity (electricity or gas delivered), and charges covering our delivery service. With the exception of residential gas customers in Rhode Island, our customers are allowed to select an unregulated competitive supplier for the commodity component of electricity and gas utility services.

A substantial proportion of our costs, in particular electricity and gas commodity purchases, are 'pass-through' costs, fully recoverable from our customers. We recover 'pass-through' costs through making separate charges to customers, designed to recover those costs with no profit. We adjust the charges from time to time, often annually to make sure that any over- or under-recovery of these costs is returned to, or recovered from, our customers.

Our rate plans are designed to a specific allowed Return on Equity (RoE), by reference to an allowed operating expense level and rate base. Some rate plans include earnings-sharing mechanisms that allow us to retain a proportion of the earnings above our allowed RoE, achieved through improving efficiency, with the balance benefitting customers.

In addition, our performance under certain rate plans is subject to service performance targets. We may be subject to monetary penalties in cases where we do not meet those targets.

Our FERC-regulated transmission companies use formula rates (instead of periodic stated rate cases) to set rates annually that recover their cost of service. Through the use of annual true-ups, formula rates recover our actual costs incurred and the allowed RoE based on the actual transmission rate base each year. We must make annual formula rate filings documenting the revenue requirement that customers can review and challenge.

Revenue for our wholesale transmission businesses in New England and New York is collected from wholesale transmission customers. These are typically other utilities and include our own New England electricity distribution businesses. With the exception of upstate New York, which continues to combine retail transmission and distribution rates to end-use customers, these wholesale transmission costs are generally incurred by distribution utilities on behalf of their customers. They are fully recovered as a pass-through from end-use customers, as approved by each state commission.

Our Long Island generation plants sell capacity to the Long Island Power Authority (LIPA) under 15-year and 25-year power supply agreements and within wholesale tariffs approved by FERC. Through the use of cost-based formula rates, these long-term contracts provide a similar economic effect to cost-of-service rate regulation.

One measure used to monitor the performance of our regulated businesses is a comparison of achieved RoE to allowed RoE. However, this measure cannot be used in isolation, as several factors may prevent us from achieving the allowed RoE. These include financial market conditions, regulatory lag (e.g. the time period after a rate or expense is approved for recovery but before we collect the same from customers) and decisions by the regulator preventing cost recovery in rates from customers.

We work to increase achieved RoE through:

- productivity improvements;
- positive performance against incentives or earned savings mechanisms, such as available energy-efficiency programmes; and
- filing a new rate case when achieved returns are lower than those the Company could reasonably expect to attain through a new rate case.

US regulatory filings

The objectives of our rate case filings are to make sure we have the right cost of service and are able to earn a fair and reasonable rate of return, while providing a safe, reliable and economical service. To achieve these objectives and reduce regulatory lag, we have been successful in many cases in obtaining relief, such as:

- revenue decoupling mechanisms;
- capital trackers;
- commodity-related bad debt true-ups;
- pension and other post-employment benefit true-ups, separately from base rates; and
- performance-based frameworks such as incentives and multi-year plans.

We explain these terms in the table on page 252.

Below, we summarise significant, recent developments in rate filings and the regulatory environment. A joint proposal setting forth a three-year rate plan for KEDNY and KEDLI was approved by the New York State Public Service Commission (NYPSC) in August 2021. A joint proposal, setting forth a three-year rate plan for Niagara Mohawk, was approved by the NYPSC in January 2022.

An amended settlement agreement setting forth a three-year rate plan for The Narragansett Electric Company was approved by the Rhode Island Public Utilities Commission (RIPUC) in August 2018. The multi-year rate plan includes an interim fourth year, effective 1 September 2021.

In November 2018, we made a full rate case filing for Massachusetts Electric which resulted in a five-year performance-based ratemaking plan in September 2019. In November 2020, we made a full rate case filing for Boston Gas resulting in a five-year performance-based ratemaking plan in September 2021.

Massachusetts

Massachusetts Electric and Nantucket Electric rate cases

We filed a rate case for Massachusetts Electric and Nantucket Electric with the MADPU on 15 November 2018 with new rates effective on 1 October 2019. The Massachusetts Electric rate case was the first for Massachusetts Electric and Nantucket Electric since the case was filed in 2015. It updated the electric companies' rates to more closely align revenues with the cost of service and bring their earned RoEs closer to the allowed RoE. New rates were approved with an allowed RoE of 9.6% on an equity ratio of 53.5%. The MADPU approved a five-year performance-based ratemaking plan, which adjusts distribution rates annually based on a predetermined formula. As part of its decision, the MADPU required a management audit addressing the Company's strategic planning processes, staffing decisions and its relationship to National Grid USA Service Company, among other items.

Boston Gas Company rate case

On 30 September 2021, the MADPU issued an order in Boston Gas Company's most recent rate case. The MADPU decision: (1) allowed an increase in base revenues of $144.86 million, as compared with the request for $220.74 million; (2) authorised a RoE of 9.70%, raised from the previous RoE of 9.5%; (3) authorised a capital structure of 53.44% equity and 46.56% debt; and (4) allowed for recovery of the costs of 133 new, incremental full-time employees. The decision also approved the Company's proposed five-year performance-based ratemaking plan which adjusts distribution rates annually based on a predetermined formula. Boston Gas had also presented its Future of Heat proposals to address Massachusetts' ambitious greenhouse gas emissions reduction goals. These proposals are innovative programmes and demonstration projects that the Company has developed to reduce emissions, promote gas demand response, and encourage the development of sustainable heating options and new technologies to advance low-carbon heating solutions. Ultimately, the MADPU elected to remove our Future of Heat proposals from the rate case without prejudice for their consideration as part of other proceedings. Subsequently, on 15 December 2021, the MADPU approved the Company's geothermal district energy demonstration programme for five years with a budget of $15.6 million.

Electric vehicles (EV)

To support Massachusetts' zero emission vehicle targets, in July 2021 the Company filed its Phase III EV charging programme with the MADPU, building on the success of two prior programmes and representing the second-largest such proposal in the US. The proposal requests MADPU approval for $278 million in spending to enable 7,500 public and workplace ports, 24,000 residential ports, and 600 fleet charging ports, as well to support electric school bus conversions in environmental justice communities, and expansion of the Company's off-peak charging rebate programme.

Investigation into role of gas distribution companies in achieving climate change goals

On 29 October 2020, the MADPU issued an order opening an investigation into the role of gas distribution companies in achieving Massachusetts' 2050 climate goals. On or before 18 March 2022, each company was required to submit a proposal to the MADPU that includes its recommendations and plans for helping Massachusetts achieve its 2050 climate goals, supported by an independent consultant's report, that incorporates feedback and advice obtained through a stakeholder process. Supported by the consultant's analysis, National Grid's proposal envisions meeting the state's 2050 climate goals by utilising a decarbonised and integrated gas and electric system that:

- increases investment in and adoption of energy-efficiency measures;
- eliminates fossil fuels from our gas supply by pursuing delivery of fossil-free gas such as renewable natural gas and renewable hydrogen through our network to all our customers;
- enables customer use of hybrid heating by supporting customer adoption of heating technologies best suited to their needs; and
- utilises targeted electrification, including new solutions such as networked geothermal where safe and cost-effective.

Management audit

On 30 September 2019, in its decision regarding Massachusetts Electric Company and Nantucket Electric Company's most recent request for a change in base distribution rates, the MADPU required a comprehensive independent management audit of the Company, including a review of its relationship to the NGSC.

The final audit report was issued on 29 March 2021. On 30 April 2021, the Company filed a proposal for implementation of the audit's recommendations. The DPU issued a final order on 24 November 2021, directing Massachusetts Electric Company and Nantucket Electric Company to implement the recommendations contained in the Final Report and file a comprehensive update regarding implementation of the recommendations at or around the time of its next base rate proceeding.

The MADPU inquiry regarding COVID-19 customer assistance and ratemaking matters

Starting with the First Set of Orders on 24 March 2020, the Chairman of the MADPU issued a series of orders in response to the Governor's declaration of a state of emergency due to the COVID-19 pandemic. In the First Set of Orders, the MADPU prohibited the utilities from terminating service to any customer (including residential, commercial and industrial customers) for non-payment of utility bills until the state of emergency is lifted. The state extended the moratorium for residential customers several times, with the last extension until 1 July 2021, while the moratorium for commercial and industrial (C&I) expired in autumn 2020. Effective 1 July 2021, the Company resumed normal collection activities, which includes issuing notices of amounts in arrears and alerting customers that their service is subject to disconnection for non-payment.

On 31 December 2020, the MADPU approved the consensus implementation issues related to the ratemaking treatment of the COVID-19 customer assistance programmes and determined that the remaining contested issues, including the extent to which the companies will be allowed to recover their COVID-19 costs, should be fully adjudicated in a new proceeding which is currently pending before the MADPU.

Grid Modernisation Plan (GMP)

On 19 August 2015, the Company, together with Nantucket Electric, filed its first proposed GMP with the MADPU. On 10 May 2018, the MADPU issued an order in this proceeding. The order approved $82 million in grid-facing investments over three years in: (1) conservation voltage reduction and volt/volt-amps reactive optimisation; (2) advanced distribution automation; (3) feeder monitors; (4) communications and information/operational technologies; and (5) advanced distribution management/distribution supervisory control and data acquisition. The MADPU allowed recovery of both operation and maintenance expenses and capital costs through a reconciling mechanism. The MADPU did not approve any customer-facing (i.e. advanced metering infrastructure (AMI)) investments; the DPU said it would address these in a further investigation to see if there are ways to achieve cost-effective deployment of these investments. The Company has filed annual reports and cost recovery filings with the MADPU for its GMP in 2019, 2020 and 2021. The Company filed its next proposed four-year GMP (for calendar years 2022 – 2025) on 1 July 2021, which includes proposals to continue the previously-approved investments (designated as 'Track 1' in the proceeding), invest in a distributed energy resource management system (DERMS), conduct two demonstration projects, and deploy AMI (designated as Track 2 in the proceeding). Proceedings on Track 1 have concluded, and on 30 December 2021, the MADPU issued an interim order allowing investments in Track 1 to continue pending the MADPU's final order on Track 1. The MADPU's investigation of Track 2 is ongoing, with orders expected sometime in 2022.

New York

Downstate New York 2019 rate cases

In August 2021, the NYSPSC approved a three-year rate plan for our downstate New York gas businesses, commencing retroactively from 1 April 2020 through to 31 March 2023. The rate plan includes: an 8.8% RoE and 48% equity ratio; gas revenue decreases of $4.7 million for KEDNY and $22.8 million for KEDLI in 2020/21, gas revenue increases of $47 million for KEDNY and $28.9 million for KEDLI in 2021/22, and gas revenue increases of $73.3 million for KEDNY and $26.2 million for KEDLI in 2022/23; funding for a three-year capital plan of approximately $2 billion for KEDNY and $1.3 billion for KEDLI; annual reconciliation mechanisms for certain non-controllable costs (e.g. property taxes, pension/OPEBs, and site investigation remediation costs); a gas safety and reliability surcharge to recover the costs of incremental leak-prone pipe replacement; and a number of incentive mechanisms, including earnings adjustment mechanisms (EAMs), which provide a potential incentive of approximately $3.9 million and $2.5 million annually for KEDNY and KEDLI respectively. There is an option to extend the plan for a fourth rate year with a net plant capital tracker. The rate plan agreement includes a commitment by the Company to evaluate the impact of New York's climate laws on its gas business and infrastructure, including the depreciation of its gas assets.

NMPC rate case

In January 2022, the NYPSC approved a three-year rate settlement for NMPC's electric and gas business commencing retroactively from 1 July 2021 and continuing through 30 June 2024. The rate plan provides for electric revenue increases of $49 million for the rate year ending 30 June 2022, $96 million for the rate year ending 30 June 2023 and $110 million for the rate year ending 30 June 2024, and gas revenue increases of $13 million for the rate year ending 30 June 2022, $29 million for the rate year ending 30 June 2023, and $33 million for the rate year ending 30 June 2024. The rate plan includes: a 9.0% RoE and 48% equity ratio; funding for a three-year capital plan of approximately $2.5 billion for electric and $0.8 billion for gas; annual reconciliation mechanisms for certain non-controllable costs (e.g. property taxes, pension/OPEBs, and site investigation remediation costs); a gas safety and reliability surcharge to recover the costs of incremental leak-prone pipe replacement; and a number of incentive mechanisms, including EAMs, which provide a potential incentive of approximately $106 million and $8 million annually for electric and gas, respectively. The settlement also provides funding for NMPC's advanced metering infrastructure deployment in its upstate New York service territory. There is an option to extend the rate plan to 31 March 2025 and the agreement includes a commitment by the Company to evaluate the impact of New York's climate laws on its gas business and infrastructure, including the depreciation of its gas assets.

Downstate gas supply constraints

In November 2019, the Company entered into a settlement agreement with the state of New York that resolved all claims relating to KEDNY and KEDLI's imposition of restrictions on service connections implemented in 2019. A total of $36 million in customer assistance, gas conservation measures and clean energy investments was committed by the companies, along with the appointment of an external monitor and the requirement to deliver a plan to address service to customers through winter 2020/21. In the interest of promoting transparency and to assure the public of the Company's commitment to identifying long-term solutions for the region's energy challenges, we extended the engagement of the external monitor through September 2021. The settlement agreement also provided a framework for identifying longer-term solutions to address the supply constraints in downstate New York. We developed a range of options to address the natural gas constraints facing the region, which were presented at a series of public meetings in the downstate New York service territory. KEDNY and KEDLI are now working with regulators, stakeholders and customers to implement long-term solutions to the gas supply constraints in the region. In February 2021, the NYPSC approved an amendment to the Settlement Agreement, which repurposed $20 million of shareholder funding to offset the costs of KEDNY and KEDLI's energy efficiency and demand response programmes.

In September 2021, the monitor issued a closing report that summarised our performance under the settlement over the course of the 18-month term of the monitorship, described our efforts to implement the monitor's various recommendations, and offered new recommendations related to the ongoing efforts to meet gas demand in downstate New York.

COVID-19 response New York

The New York State Legislature, in response to the financial impacts of COVID-19 on utility customers, enacted a moratorium on service terminations for non-payment of any overdue charges for the duration of the COVID-19 state of emergency. Further, for customers who attest to a change in financial circumstances due to the COVID-19 pandemic, these protections were extended to 21 December 2021, an additional 180 days following the end of the declared state of emergency.

Fraud investigation

On 17 June 2021, five former National Grid employees in the downstate New York facilities department were arrested on federal charges alleging conspiracy and bribery. National Grid has been identified as a victim of the alleged crimes and will continue to cooperate with the government's investigation. The NYPSC is reviewing the matter and the MADPU and the RIPUC have each issued requests for information related to the alleged criminal conduct. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, we do not expect this matter will have a material adverse effect on the Company's results of operations, financial position or cash flows.

Other important regulatory updates

On 12 February 2021, the Department of Public Service Staff issued white papers on gas system planning that propose:

- a process for modernising the long-term gas planning process in New York; and
- procedures for managing future moratoria on new gas service connections resulting from supply constraints.

'The Gas Planning Paper' proposes significant changes to the reporting and regulatory oversight for gas supply planning, including that the NYPSC direct New York's distribution companies to begin filing long-term supply plans every three years. These supply plans would be similar in many respects to our long-term report for downstate New York, in terms of identifying and analysing various supply options to address different demand scenarios. The NYPSC proposes potential financial incentive mechanisms for developing non-pipeline alternatives, including potential incentives for sourcing renewable natural gas and promoting electrification. 'The Moratorium Paper' proposes a roadmap for managing future moratoria, including requirements for stakeholder notifications, communications plans and applicant management. An NYPSC decision in this proceeding is pending.

In September 2021, the NYPSC approved Niagara Mohawk's petition seeking approval to dispatch and market the output from a Company-owned energy storage facility into the wholesale markets administered by the New York Independent System Operator, Inc. (NYISO). The facility consists of a single 2MW/3MWh energy storage unit that was installed to mitigate a potential thermal overload of a substation transformer but is only needed for local reliability support during the summer months of June to September. The NYPSC authorised the Company to bid the energy, capacity and/or ancillary services available from the facility into the NYISO-administered wholesale markets when not needed for local reliability support with the financial gains from any such market transactions accruing entirely to the benefit of Niagara Mohawk's customers. This authorisation for dual participation will provide financial benefits to the Company's customers that funded the facility and will provide valuable learning opportunities in advance of managing the third-party-owned bulk energy storage projects being procured through competitive requests for proposals pursuant to NYPSC orders.

In addition, in October 2021, KEDNY and KEDLI filed to secure approval for a demand-side management programme that would deploy unprecedented levels of non-infrastructure solutions (e.g. the energy efficiency and demand response programme) to meet customers' energy needs and address a looming gas capacity shortfall on the Company's systems in a manner that supports New York's aggressive climate goals. A NYPSC decision is pending.

Rhode Island

Rhode Island combined gas and electric rate case

On 24 August 2018, the RIPUC approved the terms of an Amended Settlement Agreement (ASA), which took effect on 1 September 2018. We are currently in year four of the Company's multi-year rate plan. On 30 June 2021, the Division consented to an extension of the term of the rate plan such that the Company is not required to file its next rate case so that new rates take effect no later than 1 September 2022. The ASA will remain in effect and the Company will continue to operate under the current rate plan until a new rate plan is approved by the RIPUC. The Company filed a copy of the Division consent letter with the RIPUC on 15 July 2021. Base distribution rates will remain at the Rate Year 3 levels until the next base rate case. The ASA includes an Electric Transportation Initiative (ET Initiative) to facilitate the growth of EV options and scaling of the market for EV charging equipment to advance Rhode Island's zero emission vehicles and greenhouse gas emissions policy goals. The ET Initiative includes the following five components:

- off-Peak Charging Rebate Pilot;
- charging Station Demonstration Programme;
- discount Pilot for Direct Current Fast Charging (DCFC) Station Accounts;
- fleet Advisory Services; and
- electric Transportation Initiative Evaluation.

As of the end of Rate Year 2, the Charging Station Demonstration Programme achieved 72% of ET Initiative targets for Level 2 ports and 7% of the target for DCFC ports. The ASA also includes two energy storage demonstration projects because storage is critical for achieving Rhode Island's clean energy future, as it provides the ability to optimise system performance over time and allows intermittent renewable resources to make a larger contribution to the State's overall energy supply mix.

Rhode Island Aquidneck Island gas service interruption

On 21 January 2019, we suffered a significant loss of gas supply to the distribution system that serves our customers on Aquidneck Island in Rhode Island. As a result, we made the decision to interrupt the gas service to the Aquidneck Island system to protect the safety of our customers and the public. Overall, approximately 7,500 customers lost their gas service. On 23 September 2020, we published a long-term capacity study for energy solutions for Aquidneck Island for stakeholder feedback. The Company has since gathered extensive stakeholder feedback regarding a long-term solution for Aquidneck Island and has identified the solution, which it shared with stakeholders in October 2021.

Power Sector Transformation/Advanced Metering Functionality and Grid Modernisation Plan

On 27 November 2017, we filed a Power Sector Transformation (PST) Vision and Implementation Plan (PST Plan) in conjunction with our combined gas and electric rate case. The PST Plan proposed a suite of investments, including the full deployment of Advanced Metering Functionality (AMF) and grid modernisation investments. On 21 January 2021, following more than two years of extensive collaboration with regulators and key stakeholders, we filed an Updated AMF Business Case and GMP with the RIPUC. The Updated AMF Business Case provides a detailed plan to provide customers with greater control, choice and convenience in their energy consumption through the full-scale deployment of approximately 525,000 electric AMF meters, 277,000 gas modules and the associated communications network. GMP presents a 5-year implementation plan, and a 10-year roadmap of investments necessary to manage the electric distribution grid more granularly considering a range of Distributed Energy Resource (DER) adoption levels through 2030, as well as a comprehensive cost benefit analysis. Cost recovery for the specific projects and programmes in the GMP will be separately requested as part of future Infrastructure, Safety and Reliability (ISR Plans) or rate cases. Pursuant to written order issued on 14 July 2021, the RIPUC stayed the AMF and GMP proceedings pending further consideration following the issuance of a final order by the Division on the PPL Transaction. The RIPUC did not rule on whether or not to consolidate the matters.

Infrastructure, Safety and Reliability Plans

FY 2023 Gas and Electric ISR Plans were filed on 17 and 20 December 2021 respectively for effect 1 April 2022. The Electric ISR Plan proposed capital spending of $104.8 million, plus $13.2 million for total operation and maintenance expenses. The Gas ISR Plan proposed total capital spending of $175.66 million. The RIPUC approved the Gas and Electric ISR Plans on 29 March 2022. There will be a further hearing for the Gas ISR Plan on one issue on 1 June 2022. The RIPUC's ruling on the Electric ISR Plan required the Company to review all distributed generation (DG) projects for which the CIAC did not cover the full cost of the project, reasons why, impact on rate base and associated revenue requirement. The Company is required to file a report on this by 1 August 2022.

COVID-19 response in Rhode Island

In response to the COVID-19 emergency, effective on 16 March 2020, the RIPUC ordered all electric and natural gas utilities to immediately cease certain collection activities, including termination of service for non-payment. On 13 July 2020, the RIPUC, after finding that an emergency still existed for customers eligible for the low-income rate, extended the moratorium on utility shut-offs until 1 November 2020 for customers qualifying for a low-income discount and until 30 September 2020 for remaining residential customers of National Grid. All COVID-19-related moratoria have now expired, and the Company has resumed collection activities.

Federal Energy Regulatory Commission

Complaints on New England transmission allowed RoE

In September 2011, December 2012, July 2014 and April 2016, a series of four complaints were filed with FERC against certain transmission owners, including our New England electricity transmission business. These complaints aimed to lower the base RoE, which FERC had authorised at 11.14% prior to the first complaint. FERC issued orders resolving only the first complaint, with the last order in March 2015, lowering the base RoE to 10.57%. A number of parties, including the Company, appealed FERC's order on the first complaint to the US federal court. On 14 April 2017, the court vacated FERC's order and remanded the first complaint back to FERC. This required FERC to reconsider the methodology it adopted in its order. On 5 June 2017, the New England Transmission Owners (NETOs), including the Company, submitted a filing to FERC to document the reinstatement of their transmission rates that had been in effect on 15 October 2014. FERC denied this filing and stated that, until further notice, the base RoE in New England must remain at the filed rate of 10.57%. On 6 November 2017, the NETOs, including the Company, sought rehearing of the FERC order denying the filing to reinstate their transmission rates that previously had been in effect.

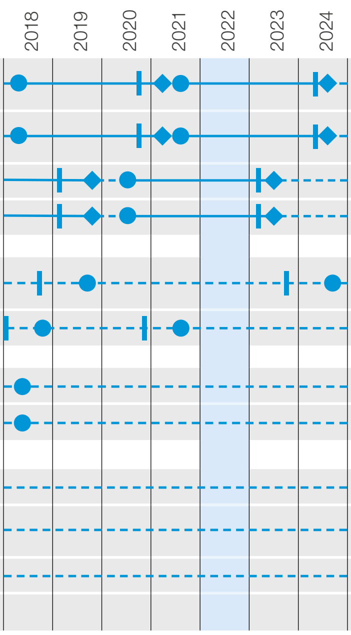
The business in detail continued

On 28 August 2020, after determining that this rehearing request had been deemed denied, the NETOs, including the Company, appealed to a US federal court FERC's order denying the filing to reinstate their transmission rates that previously had been in effect. On 2 October 2020, in response to an unopposed motion by FERC, the US federal court held this appeal in abeyance for four months.

On 16 October 2018, FERC issued a Preliminary Order Directing Brief on our four New England RoE complaints. In this order, FERC proposed a new methodology for determining whether an existing RoE remains just and reasonable and also for determining a new RoE where an existing RoE is found to be unjust and unreasonable. FERC also proposed to set the base RoE in New England at 10.41% with a 13.08% cap on incentives. Briefs were due in January 2019 and responses to the briefs were filed on 8 March 2019. FERC is under no deadline to act on the briefs and it is too early to determine when or how FERC will come to a decision.

On 21 November 2019, FERC issued an order addressing customer complaints involving the transmission RoE for the transmission owners in the Midcontinent Independent System Operator region (MISO TOs). FERC issued an order on rehearing addressing the initial order on 21 May 2020. On 19 November 2020, FERC issued a further order on rehearing reaching the same result as the 21 May 2020 order. In those orders, FERC adopted a revised methodology for determining base RoEs for the MISO TOs. This differed significantly from the methodology and framework set forth in its 16 October 2018 Preliminary Order, which proposed a new RoE methodology in the dockets covering the four RoE complaints against the NETOs. On 23 December 2019, the NETOs filed a Supplemental Paper Hearing Brief and a Motion to Supplement the Record in the NETOs' RoE dockets to respond to the new methodology adopted in the November 2019 MISO TOs' order, as there is uncertainty as to whether the outcome in that proceeding may be applied to the NETOs' cases. Further changes to the FERC RoE methodology applicable to the Company are possible as a result of the orders in the MISO TOs' proceeding and the issues raised in pending pleadings in the NETOs' proceedings. Given the significant uncertainty relating to FERC's methodology, the Company is unable to predict the potential effect of the 21 November 2019, 21 May 2020 and 19 November 2020 MISO TO orders on the NETOs' RoE dockets or the outcome of the four complaints. Further, the Company cannot reasonably estimate a range of gain or loss for any of the four complaint proceedings.

Summary of US price controls and rate plans



		Rate base (31 Mar 2022)	Equity-to-debt ratio	Allowed Return on Equity	Achieved Return on Equity (31 Mar 2022)	Revenue decoupling†	Capital tracker‡	Commodity-related bad debt true-up§	Pension/OPEB true-up◊
New York Public Service Commission	Niagara Mohawk[1] (upstate, electricity)	$6,603m	48:52	9.0%	8.5%	✓	P	P	✓
	Niagara Mohawk (upstate, gas)	$1,584m	48:52	9.0%	8.1%	✓	P	P	✓
	KEDNY (downstate)[2]	$5,429m	48:52	8.8%	8.1%	P	P	P	✓
	KEDLI (downstate)[3]	$3,369m	48:52	8.8%	11.0%	P	P	P	✓
Massachusetts Department of Public Utilities	Massachusetts Electric/Nantucket Electric	$3,049m	53:47	9.6%	7.1%	✓	P	✓	✓
	Massachusetts Gas	$3,820m	53:47	9.7%	6.9%	✓	P	✓	✓
Rhode Island Public Utilities Commission	Narragansett Electric	$983m	51:49	9.3%	8.4%	✓	✓	P	✓
	Narragansett Gas	$1,218m	51:49	9.3%	8.4%	✓	✓	P	✓
Federal Energy Regulatory Commission	Narragansett	$788m	50:50	10.6%	12.5%	n/a	✓	n/a	✓
	Canadian Interconnector/Other[4]	$46m	65:35	11.1%	11.1%	n/a	✓	n/a	✓
	New England Power	$2,260m	63:37	10.6%	10.9%	n/a	✓	n/a	✓
	Long Island Generation	$426m	48:52	9.9%	14.1%	n/a	✓	n/a	✓

1. Both transmission and distribution, excluding stranded costs.
2. KeySpan Energy Delivery New York (the Brooklyn Union Gas Company).
3. KeySpan Energy Delivery Long Island (KeySpan Gas East Corporation).
4. Equity ratio and Return on Equity values are for the Canadian Interconnector only.

Rate filing made
New rates effective
Rate plan ends
Rates continue indefinitely
Multi-year rate plan

✓ Feature in place
P Feature partially in place

†Revenue decoupling
A mechanism that removes the link between a utility's revenue and sales volume so that the utility is indifferent to changes in usage. Revenues are reconciled to a revenue target, with differences billed or credited to customers. This allows the utility to support energy efficiency.

‡Capital tracker
A mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

§Commodity-related bad debt true-up
A mechanism that allows a utility to reconcile commodity-related bad debt either to actual commodity-related bad debt or to a specified commodity-related bad debt write-off percentage. For electricity utilities, this mechanism also includes working capital.

◊Pension/OPEB true-up
A mechanism that reconciles the actual non-capitalised costs of pension and OPEB and the actual amount recovered in base rates. The difference may be amortised and recovered over a period or deferred for a future rate case.

Internal control and risk factors

Disclosure controls

Our management, including the Chief Executive and Chief Financial Officer, have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as at 31 March 2022. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives; however, their effectiveness has limitations, including the possibility of human error and the circumvention or overriding of the controls and procedures.

Even effective disclosure controls and procedures provide only reasonable assurance of achieving their objectives. Based on the evaluation, the Chief Executive and Chief Financial Officer concluded that the disclosure controls and procedures are effective to provide reasonable assurance that information required for disclosure in the reports that we file and submit under the Exchange Act is recorded, processed, summarised and reported as and when required and that such information is accumulated and communicated to our management, including the Chief Executive and Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure.

Internal control over financial reporting

Our management, including the Chief Executive and Chief Financial Officer, have carried out an evaluation of our internal control over financial reporting pursuant to the Disclosure Guidance and Transparency Rules sourcebook and Section 404 of the Sarbanes-Oxley Act 2002. As required by Section 404, management is responsible for establishing and maintaining an adequate system of internal control over financial reporting (as defined in Rules 13(a)-5(f) and 15(d)-15(f) under the Exchange Act).

Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes, in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's evaluation of the effectiveness of the Company's internal control over financial reporting was based on the revised Internal Control-Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission. Using this evaluation, management concluded that our internal control over financial reporting was effective as at 31 March 2022.

Deloitte LLP, which has audited our consolidated financial statements for the year ended 31 March 2022, has also audited the effectiveness of our internal control over financial reporting.

During the year, we implemented a new enterprise resource planning (ERP) and general ledger system in the UK for ET and GT, resulting in changes to our reporting system; subject to that, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Risk factors

Management of our risks is an important part of our internal control environment, as we describe on pages 28 – 32. In addition to the principal risks listed, we face a number of inherent risks that could have a material adverse effect on our business, financial condition, results of operations and reputation, as well as the value and liquidity of our securities.

Any investment decision regarding our securities and any forward-looking statements made by us should be considered in the light of these risk factors and the cautionary statement set out on page 288. An overview of the key inherent risks we face is provided below.

Risk factors

Law, regulation and political and economic uncertainty

Changes in law or regulation, or decisions by governmental bodies or regulators and increased political and economic uncertainty, could materially adversely affect us.

Most of our businesses are utilities or networks subject to regulation by governments and other authorities. Changes in law or regulation or regulatory policy and precedent (including changes arising as a result of the UK's exit from the European Union), as well as legislation introduced to facilitate the attainment of net zero emissions targets, and decisions of governmental bodies or regulators in the countries or states in which we operate could materially adversely affect us. We may fail to deliver any one of our customer, investor and wider stakeholder propositions due to increased political and economic uncertainty.

If we fail to respond to or meet our own commitments as a leader in relation to climate change and the energy transition, we may be unable to influence future energy policy and deliver our strategy.

Decisions or rulings concerning the following (as examples) could have a material adverse impact on our results of operations, cash flows, the financial condition of our businesses and the ability to develop those businesses in the future:

- the determination and implementation of the RIIO-T2 and RIIO-ED2 price controls; whether licences, approvals or agreements to operate or supply are granted, amended or renewed; whether consents for construction projects are granted in a timely manner; or whether there has been any breach of the terms of a licence, approval or regulatory requirement; and
- timely recovery of incurred expenditure or obligations; the ability to pass through commodity costs; a decoupling of energy usage and revenue, and other decisions relating to the impact of general economic conditions on us, our markets and customers; implications of climate change and of advancing energy technologies; whether aspects of our activities are contestable; and the level of permitted revenues and dividend distributions for our businesses and in relation to proposed business development activities.

For further information, see pages 245– 252, which explain our regulatory environment in detail.

Potentially harmful activities

Aspects of the work we do could potentially harm employees, contractors, members of the public or the environment.

Potentially hazardous activities that arise in connection with our business include: the generation, transmission and distribution of electricity; and the storage, transmission and distribution of gas. Electricity and gas utilities also typically use and generate hazardous and potentially hazardous products and by-products. In addition, there may be other aspects of our operations that are not currently regarded or proved to have adverse effects but could become so, such as the effects of electric and magnetic fields.

A significant safety or environmental incident, or the failure of our safety processes or of our occupational health plans, as well as the breach of our regulatory or contractual obligations or our climate change targets, could materially adversely affect our results of operations and our reputation.

Safety is a fundamental priority for us, and we commit significant resources and expenditure to ensuring process safety; to monitoring personal safety, occupational health and environmental performance; and to meeting our obligations under negotiated settlements.

We are subject to laws and regulations in the UK and US governing health and safety matters to protect the public and our employees and contractors, who could potentially be harmed by these activities, as well as laws and regulations relating to pollution, the protection of the environment, and the use and disposal of hazardous substances and waste materials.

These expose us to costs and liabilities relating to our operations and properties, including those inherited from predecessor bodies, whether currently or formerly owned by us, and sites used for the disposal of our waste.

The cost of future environmental remediation obligations is often inherently difficult to estimate, and uncertainties can include the extent of contamination, the appropriate corrective actions and our share of the liability. We are increasingly subject to regulation in relation to climate change and are affected by requirements to reduce our own carbon emissions (including our own commitment to reduce our greenhouse gas emissions to net zero by 2050) as well as to enable reduction in energy use by our customers. If more onerous requirements are imposed or our ability to recover these costs under regulatory frameworks changes, this could have a material adverse impact on our business, reputation, results of operations and financial position.

Infrastructure and IT systems

We may suffer a major network failure or interruption, or may not be able to carry out critical operations due to the failure of infrastructure, data or technology or a lack of supply.

Operational performance could be materially adversely affected by: a failure to maintain the health of our assets or networks; inadequate forecasting of demand and inadequate record keeping or control of data or failure of information systems and supporting technology. This, in turn, could cause us to fail to meet agreed standards of service, incentive and reliability targets, or be in breach of a licence, approval, regulatory requirement or contractual obligation. Even incidents that do not amount to a breach could result in adverse regulatory and financial consequences, as well as harming our reputation.

Where demand for electricity or gas exceeds supply, including where we do not adequately forecast and respond to disruptions in energy supplies, and our balancing mechanisms are not able to mitigate this fully, a lack of supply to consumers may damage our reputation.

In addition to these risks, we may be affected by other potential events that are largely outside our control, weather (including as a result of climate change and major storms), unlawful or unintentional acts of third parties, insufficient or unreliable supply, or force majeure.

Weather conditions can affect financial performance, and severe weather that causes outages or damages infrastructure, together with our actual or perceived response, could materially adversely affect operational and potentially business performance and our reputation.

Malicious attack, sabotage or other intentional acts, including breaches of our cyber security, may also damage our assets (which include critical national infrastructure) or otherwise significantly affect corporate activities and, as a consequence, have a material adverse impact on our reputation, business, results of operations and financial condition.

Unauthorised access to, or deliberate breaches of, our IT systems may also lead to manipulation of our proprietary business data or customer information. Unauthorised access to private customer information may make us liable for a violation of data privacy regulations. Even where we establish business continuity controls and security against threats to our systems, these may not be sufficient.

Pandemics

We face risks related to health epidemics and other outbreaks.

As seen in the context of COVID-19, pandemics and their associated counter-measures may affect countries, communities, supply chains and markets, including the UK and our service territory in the US. The spread of such pandemics could have adverse effects on our workforce, which could affect our ability to maintain our networks and provide service. In addition, disruption of supply chains could adversely affect our systems or networks.

Pandemics such as COVID-19 can also result in extraordinary economic circumstances in our markets which could negatively affect our customers' ability to pay our invoices in the US or the charges payable to the system operators for transmission services in the UK. Measures such as the suspension of debt collection and customer termination activities across our service area in response to such pandemics are likely to result in near-term lower customer collections, and could result in increasing levels of bad debt and associated provisions.

The extent to which pandemics such as COVID-19 may affect our liquidity, business, financial condition, results of operations and reputation will depend on future developments, which are highly uncertain and cannot be predicted, and will depend on the severity of the relevant pandemic, the scope, duration, cost to National Grid and overall economic impact of actions taken to contain it or treat its effects.

Business performance

Current and future business performance may not meet our expectations or those of our regulators and shareholders.

Earnings maintenance and growth from our regulated gas and electricity businesses will be affected by our ability to meet or exceed efficiency targets and service quality standards set by, or agreed with, our regulators.

If we do not meet these targets and standards, or if we are not able to deliver our rate plans strategy successfully, we may not achieve the expected benefits, our business may be materially adversely affected and our performance, results of operations and reputation may be materially harmed and we may be in breach of regulatory or contractual obligations.

Growth and business development activity

Failure to respond to external market developments and execute our growth strategy may negatively affect our performance. Conversely, new businesses or activities that we undertake alone or with partners may not deliver target outcomes and may expose us to additional operational and financial risk.

Failure to grow our core business sufficiently and have viable options for new future business over the longer term, or failure to respond to the threats and opportunities presented by emerging technology or innovation (including for the purposes of adapting our networks to meet the challenges of increasing distributed energy resources), could negatively affect the Group's credibility and reputation and jeopardise the achievement of intended financial returns.

Our business development activities, including the WPD Acquisition, the NECO Sale, the NGGT Sale and the delivery of our growth ambition, involve acquisitions, disposals, joint ventures, partnering and organic investment opportunities, such as development activities relating to changes to the energy mix and the integration of distributed energy resources and other advanced technologies. These are subject to a wide range of both external uncertainties (including the availability of potential investment targets and attractive financing and the impact of competition for onshore transmission in both the UK and US) and internal uncertainties (including actual performance of our existing operating companies and our business planning model assumptions and ability to integrate acquired businesses effectively). As a result, we may suffer unanticipated costs and liabilities and other unanticipated effects.

We may also be liable for the past acts, omissions or liabilities of companies or businesses we have acquired, which may be unforeseen or greater than anticipated. In the case of joint ventures, we may have limited control over operations and our joint venture partners may have interests that diverge from our own.

The occurrence of any of these events could have a material adverse impact on our results of operations or financial condition, and could also impact our ability to enter into other transactions.

Financing and liquidity

An inability to access capital markets at commercially acceptable interest rates could affect how we maintain and grow our businesses.

Our businesses are financed through cash generated from our ongoing operations, bank lending facilities and the capital markets, particularly the long-term debt capital markets.

Some of the debt we issue is rated by credit rating agencies, and changes to these ratings may affect both our borrowing capacity and borrowing costs. In addition, restrictions imposed by regulators may also limit how we service the financial requirements of our current businesses or the financing of newly acquired or developing businesses.

Financial markets can be subject to periods of volatility and shortages of liquidity, for example, as a result of unexpected political or economic events or the COVID-19 pandemic. If we were unable to access the capital markets or other sources of finance at commercially acceptable rates for a prolonged period, our cost of financing may increase, the discretionary and uncommitted elements of our proposed capital investment programme may need to be reconsidered, and the manner in which we implement our strategy may need to be reassessed.

Such events could have a material adverse impact on our business, results of operations and prospects.

Some of our regulatory agreements impose lower limits for the long-term unsecured debt credit ratings that certain companies within the Group must hold or the amount of equity within their capital structures, including a limit requiring National Grid plc to hold an investment-grade long-term senior unsecured debt credit rating.

In addition, some of our regulatory arrangements impose restrictions on the way we can operate. These include regulatory requirements for us to maintain adequate financial resources within certain parts of our operating businesses and may restrict the ability of National Grid plc and some of our subsidiaries to engage in certain transactions, including paying dividends, lending cash and levying charges.

The inability to meet such requirements, or the occurrence of any such restrictions, may have a material adverse impact on our business and financial condition.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, restrictions on disposals and financial covenants, such as restrictions on the level of subsidiary indebtedness.

Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

Exchange rates, interest rates and commodity price indices

Changes in foreign currency rates, interest rates or commodity prices could materially impact earnings or our financial condition.

We have significant operations in the US and are therefore subject to the exchange rate risks normally associated with non-UK operations including the need to translate US assets, liabilities, income and expenses into sterling (our reporting currency).

In addition, our results of operations and net debt position may be affected because a significant proportion of our borrowings, derivative financial instruments and commodity contracts are affected by changes in interest rates, commodity price indices and exchange rates, in particular the dollar-to-sterling exchange rate.

Furthermore, our cash flow may be materially affected as a result of settling hedging arrangements entered into to manage our exchange rate, interest rate and commodity price exposure, or by cash collateral movements relating to derivative market values, which also depend on the sterling exchange rate into the euro and other currencies.

Internal control and risk factors continued

Post-retirement benefits

We may be required to make significant contributions to fund pension and other post-retirement benefits.

We participate in a number of pension schemes that together cover substantially all our employees. In both the UK and US, such schemes include various large defined benefit schemes where the scheme assets are held independently of our own financial resources.

In the US, we also have other post-retirement benefit schemes. Estimates of the amount and timing of future funding for the UK and US schemes are based on actuarial assumptions and other factors, including: the actual and projected market performance of the scheme assets; future long-term bond yields; average life expectancies; and relevant legal requirements.

Actual performance of scheme assets may be affected by volatility in debt and equity markets.

Changes in these assumptions or other factors may require us to make additional contributions to these pension schemes which, to the extent they are not recoverable under our price controls or state rate plans, could materially adversely affect the results of our operations and financial condition.

Customers and counterparties

Customers and counterparties may not perform their obligations.

Our operations are exposed to the risk that customers, suppliers, banks and other financial institutions, and others with whom we do business, will not satisfy their obligations, which could materially adversely affect our financial position.

This risk is significant where our subsidiaries have concentrations of receivables from gas and electricity utilities and their affiliates, as well as industrial customers and other purchasers, and may also arise where customers are unable to pay us as a result of increasing commodity prices or adverse economic conditions.

To the extent that counterparties are contracted with for physical commodities (gas and electricity) and they experience events that impact their own ability to deliver, we may suffer supply interruption as described in Infrastructure and IT systems on page 254.

There is also a risk to us where we invest excess cash or enter into derivatives and other financial contracts with banks or other financial institutions. Banks who provide us with credit facilities may also fail to perform under those contracts.

Employees and others

We may fail to attract, develop and retain employees with the competencies (including leadership and business capabilities), values and behaviours required to deliver our strategy and vision and ensure they are engaged to act in our best interests.

Our ability to implement our strategy depends on the capabilities and performance of our employees and leadership at all levels of the business. Our ability to implement our strategy and vision may be negatively affected by the loss of key personnel or an inability to attract, integrate, engage and retain appropriately qualified personnel (including people with the skills to help us deliver on our net zero commitments) or if significant disputes arise with our employees.

As a result, there may be a material adverse effect on our business, financial condition, results of operations and prospects.

There is a risk that an employee or someone acting on our behalf may breach our internal controls or internal governance framework, or may contravene applicable laws and regulations. This could have an impact on the results of our operations, our reputation and our relationship with our regulators and other stakeholders.

Index to Directors' Report and other disclosures

Shareholder information

Articles of Association

The following description is a summary of the material terms of our Articles of Association (Articles) and applicable English law. It is a summary only and is qualified in its entirety by reference to the Articles.

At the 2021 AGM, the Company's shareholders approved updated Articles which now take account of recent changes to company law and market changes, including in particular the flexibility for the Company to hold general meetings by allowing combined physical and electronic general meetings (also known as 'hybrid' meetings).

Summary

The Articles set out the Company's internal regulations. Copies are available on our website and upon request. Amendments to the Articles have to be approved by at least 75% of those voting at a general meeting of the Company. Subject to company law and the Articles, the Directors may exercise all the powers of the Company. They may delegate authorities to committees and day-to-day management and decision making to individual Executive Directors. We set out the committee structure on page 91.

General

The Company is incorporated under the name National Grid plc and is registered in England and Wales with registered number 4031152. Under the Companies Act 2006, the Company's objects are unrestricted.

Directors

Under the Articles, a Director must disclose any personal interest in a matter and may not vote in respect of that matter, subject to certain limited exceptions. As permitted under the Companies Act 2006, the Articles allow non-conflicted Directors to authorise a conflict or potential conflict for a particular matter. In doing so, the non-conflicted Directors must act in a way they consider, in good faith, will be most likely to promote the success of the Company for the benefit of the shareholders as a whole.

The Directors (other than a Director acting in an executive capacity) are paid fees for their services. In total, these fees must not exceed £2,000,000 per year or any higher sum decided by an ordinary resolution at a general meeting of shareholders. In addition, special pay may be awarded to a Director who acts in an executive capacity, serves on a committee, performs services which the Directors consider to extend beyond the ordinary duties of a Director, devotes special attention to the business of National Grid, or goes or lives abroad on the Company's behalf. Directors may also receive reimbursement for expenses properly incurred, and may be awarded pensions and other benefits. The compensation awarded to the Executive Directors is determined by the Remuneration Committee. Further details of Directors' remuneration are set out in the Directors' Remuneration Report (see pages 108 – 131.

The Directors may exercise all the powers of National Grid to borrow money. However, the aggregate principal amount of all the Group's borrowings outstanding at any time must not exceed £55 billion or any other amount approved by shareholders by an ordinary resolution at a general meeting.

Directors can be appointed or removed by the Board or shareholders at a general meeting. Directors must stand for election at the first AGM following their appointment to the Board and the Articles provide, in line with market practice, that they must be recommended by the Board or the Company must have received written confirmation of their willingness to act as Director. Each Director must retire at least every three years, although they will be eligible for re-election. In accordance with best practice introduced by the UK Corporate Governance Code, all Directors wishing to continue in office currently offer themselves for re-election annually. No person is disqualified from being a Director or is required to vacate that office by reason of attaining a maximum age.

A Director is not required to hold shares in National Grid plc in order to qualify as a Director.

Rights, preferences and restrictions

(i) Dividend rights

National Grid may not pay any dividend otherwise than out of profits available for distribution under the Companies Act 2006 and other applicable provisions of English law. In addition, as a public company, National Grid may only make a distribution if, at the time of the distribution, the amount of its net assets is not less than the aggregate of its called-up share capital and undistributable reserves (as defined in the Companies Act 2006), and to the extent that the distribution does not reduce the amount of those assets to less than that aggregate. Ordinary shareholders and American Depositary Share (ADS) holders receive dividends.

Subject to these points, shareholders may, by ordinary resolution, declare dividends in accordance with the respective rights of the shareholders, but not exceeding the amount recommended by the Board. The Board may pay interim dividends if it considers that National Grid's financial position justifies the payment. Any dividend or interest unclaimed for 12 years from the date when it was declared or became due for payment will be forfeited and revert to National Grid, and the Articles clarify that the Company may use such unclaimed dividends for the Company's benefit as the Directors may think fit.

(ii) Voting rights

Subject to any rights or restrictions attached to any shares and to any other provisions of the Articles, at any general meeting on a show of hands, every shareholder who is present in person will have one vote and, on a poll, every shareholder will have one vote for every share they hold. On a show of hands or poll, shareholders may cast votes either personally or by proxy. A proxy need not be a shareholder. Under the Articles, all substantive resolutions at a general meeting must be decided on a poll and the Articles further provide that voting on resolutions at a general meeting that is held at least in part using an electronic platform must be decided on a poll. Ordinary shareholders and ADS holders can vote at general meetings.

(iii) Liquidation rights

In a winding up, a liquidator may (in each case with the sanction of a special resolution passed by the shareholders and any other sanction required under English law): (a) divide among the shareholders the whole or any part of National Grid's assets (whether the assets are of the same kind or not); the liquidator may, for this purpose, value any assets and determine how the division should be carried out as between shareholders or different classes of shareholders, or (b) transfer any part of the assets to Trustees on trust for the benefit of the shareholders as the liquidator determines. In neither case will a shareholder be compelled to accept assets upon which there is a liability.

(iv) Restrictions

There are no restrictions on the transfer or sale of ordinary shares. Some of the Company's employee share plans, details of which are contained in the Directors' Remuneration Report, include restrictions on the transfer of ordinary shares while the ordinary shares are subject to the plan. Where, under an employee share plan operated by the Company, participants are the beneficial owners of the ordinary shares but not the registered owner, the voting rights may be exercised by the registered owner at the direction of the participant. Treasury shares do not attract a vote or dividends.

(v) Variation of rights

Subject to applicable provisions of English law, the rights attached to any class of shares of National Grid may be varied or cancelled. This must be with the written consent of the holders of three quarters in nominal value of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

General meetings
AGMs must be convened each year within six months of the Company's accounting reference date upon 21 clear days' advance written notice. Under the Articles, any other general meeting may be convened provided at least 14 clear days' written notice is given, subject to annual approval of shareholders. In certain limited circumstances, the Company can convene a general meeting by shorter notice. The notice must specify, among other things, the nature of the business to be transacted, the place, the date and the time of the meeting. The 2022 AGM will be held as a hybrid meeting. Please ensure you continue to monitor our website at nationalgrid.com/investors for any updates to the arrangements for the AGM.

Rights of non-residents
There are no restrictions under the Articles that would limit the rights of persons not resident in the UK to vote in relation to ordinary shares.

Disclosure of interests
Under the Companies Act 2006, National Grid may, by written notice, require a person whom it has reasonable cause to believe to be or to have been, in the last three years, interested in its shares to provide additional information relating to that interest. Under the Articles, failure to provide such information may result in a shareholder losing their rights to attend, vote or exercise any other right in relation to shareholders' meetings.

Under the UK Disclosure Guidance and Transparency Rules (DTR) sourcebook, there is also an obligation on a person who acquires or ceases to have a notifiable interest in shares in National Grid to notify the Company of that fact. The disclosure threshold is 3% and disclosure is required each time the person's direct and indirect holdings reach, exceed or fall below each 1% threshold thereafter.

The UK City Code on Takeovers and Mergers imposes strict disclosure requirements regarding dealings in the securities of an offeror or offeree company, and also on their respective associates, during the course of an offer period. Other regulators in the UK, US and elsewhere may have, or assert, notification or approval rights over acquisitions or transfers of shares.

Depositary payments to the Company

The Bank of New York Mellon (the 'Depositary') reimburses the Company for certain expenses it incurs in relation to the ADS programme. The Depositary also pays the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses for the mailing of annual and interim financial reports, printing and distributing dividend cheques, the electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimiles and telephone calls. It also reimburses the Company for certain investor relationship programmes or special investor relations promotional activities. There are limits on the amount of expenses for which the Depositary will reimburse the Company, but the amount of reimbursement is not necessarily tied to the amount of fees the Depositary collects from investors.

For the period 19 May 2021 to 18 May 2022, the Company received a total of $1,862,578.41 in reimbursements from the Depositary consisting of $323,055.00, $1,017,402.60 and $522,120.81 received in June 2021, October 2021 and January 2022 respectively. Fees that are charged on cash dividends will be apportioned between the Depositary and the Company.

Any questions from ADS holders should be directed to the Depositary at the contact details on page 287.

Documents on display

National Grid is subject to the US Securities and Exchange Commission (SEC) reporting requirements for foreign companies. The Company's Form 20-F and other filings can be viewed on the National Grid website as well as the SEC website at sec.gov.

Events after the reporting period

There were no events after the reporting period.

Exchange controls

There are currently no UK laws, decrees or regulations that restrict the export or import of capital, including, but not limited to, foreign exchange control restrictions, or that affect the remittance of dividends, interest or other payments to non-UK resident holders of ordinary shares except as otherwise set out in Taxation on pages 260 and 261 and except in respect of the governments of and/or certain citizens, residents or bodies of certain countries (described in applicable Bank of England Notices or European Union Council Regulations in force as at the date of this document).

Share information

National Grid ordinary shares are listed on the London Stock Exchange under the symbol NG. The ADSs are listed on the New York Stock Exchange under the symbol NGG.

Description of securities other than equity securities: depositary fees and charges
The Depositary collects fees by deducting them from the amounts distributed or by selling a portion of distributable property for:

- delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them; and
- making distributions to investors (including, it is expected, cash dividends).

The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

The Company's Deposit agreement under which the ADSs are issued allows a fee of up to $0.05 per ADS to be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2021/22 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to distribution of the cash dividend.

Persons depositing or withdrawing shares must pay:	For:
$5.00 per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; cancellation of ADSs for the purpose of withdrawal, including if the Deposit agreement terminates; and distribution of securities distributed to holders of deposited securities that are distributed by the Depositary to ADS holders.
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	Cable, telex and facsimile transmissions (when expressly provided in the Deposit agreement); and converting foreign currency to dollars.
Taxes and other governmental charges the Depositary or the Custodian has to pay on any ADS or share underlying an ADS, for example stock transfer taxes, stamp duty or withholding taxes	As necessary.

Material interests in shares

As at 31 March 2022, National Grid had been notified of the following holdings in voting rights of 3% or more in the issued share capital of the Company:

	Number of ordinary shares	% of voting rights[1]	Date of last notification of interest
BlackRock, Inc.	255,529,542	7.04	6 December 2021
The Capital Group Companies, Inc.	184,152,007	5.05	26 January 2022

1. This number is calculated in relation to the issued share capital at the time the holding was disclosed.

As at 18 May 2022, no further notifications have been received.

The rights attached to ordinary shares are detailed on page 257. All ordinary shares and all major shareholders have the same voting rights. The Company is not, to the best of its knowledge, directly or indirectly controlled.

Share capital

As at 18 May 2022, the share capital of the Company consists of ordinary shares of $12^{204/473}$ pence nominal value each and ADSs, which represent five ordinary shares each.

Authority to purchase shares

Shareholder approval was given at the 2021 AGM to purchase up to 10% of the Company's share capital (being 355,533,053 ordinary shares). The Directors intend to seek shareholder approval to renew this authority at the 2022 AGM.

In some circumstances, the Company may find it advantageous to have the authority to purchase its own shares in the market, where the Directors believe this would be in the interests of shareholders generally. The Directors believe that it is an important part of the financial management of the Company to have the flexibility to repurchase issued shares to manage its capital base, including actively managing share issuances from the operation of the scrip dividend scheme. It is expected that repurchases to manage share issuances under the scrip dividend scheme will not exceed 2.5% of the issued share capital (excluding treasury shares) per annum.

When purchasing shares, the Company has taken, and will continue to take, into account market conditions prevailing at the time, other investment and financing opportunities, and the overall financial position of the Company.

At the 2021 AGM, the Company sought authority to purchase ordinary shares in the capital of the Company as part of the management of the dilutive effect of share issuances under the scrip dividend scheme. During the year, the Company did not purchase any of its own shares.

	Number of shares	Total nominal value	% of called up share capital
Shares held in Treasury purchased in prior years[1]	265,759,757	£33,037,365.14[2]	6.97[1]
Shares purchased and held in Treasury during the year	–	–	–
Shares transferred from Treasury during the year (to employees under employee share plans)	6,628,537	£824,012.63[2]	0.17[3]
Maximum number of shares held in Treasury during the year	265,759,757	£33,037,365.14[2]	6.81[3]

1. Called-up share capital: 3,814,951,606 ordinary shares as at 31 March 2021.
2. Nominal value: $12^{204/473}$ pence per ordinary share.
3. Called-up share capital: 3,904,074,348 ordinary shares as at the date of this report.

As at the date of this report, the Company held 257,369,050 ordinary shares as treasury shares. This represented 6.59% of the Company's called-up share capital.

Authority to allot shares

Shareholder approval was given at the 2021 AGM to allot shares of up to one third of the Company's share capital. The Directors are seeking this same level of authority this year. The Directors consider that the Company will have sufficient flexibility with this level of authority to respond to market developments and that this authority is in line with investor guidelines.

The Directors currently have no intention of issuing new shares or of granting rights to subscribe for or convert any security into shares. This is except in relation to, or in connection with, the operation and management of the Company's scrip dividend scheme and the exercise of options under the Company's share plans. No issue of shares will be made that would effectively alter control of the Company without the sanction of shareholders in a general meeting.

The Company expects to actively manage the dilutive effect of share issuance arising from the operation of the scrip dividend scheme. In some circumstances, additional shares may be allotted to the market for this purpose under the authority provided by this resolution. Under these circumstances, it is expected that the associated allotment of new shares (or rights to subscribe for or convert any security into shares) will not exceed 1% of the issued share capital (excluding treasury shares) per annum.

Dividend waivers

The Trustee of the National Grid Employee Share Trust, which is independent of the Company, waived the right to dividends paid during the year. They have also agreed to waive the right to future dividends, in relation to the ordinary shares and ADSs held by the trust.

Under the Company's ADS programme, the right to dividends in relation to the ordinary shares underlying the ADSs was waived during the year, under an arrangement whereby the Company pays the monies to satisfy any dividends separately to the Depositary for distribution to ADS holders entitled to the dividend. This arrangement is expected to continue for future dividends.

Shareholder information continued

Shareholder analysis

The following table includes a brief analysis of shareholder numbers and shareholdings as at 31 March 2022:

	Number of shareholders	% of shareholders[1]	Number of shares	% of shares[1]
1 – 50	141,757	19.96	4,410,988	0.11
51 – 100	177,985	25.06	12,528,070	0.32
101 – 500	302,501	42.59	63,621,498	1.63
501 – 1,000	43,615	6.14	30,360,976	0.78
1,001 – 10,000	41,714	5.87	101,954,170	2.61
10,001 – 50,000	1,678	0.24	30,965,205	0.79
50,001 – 100,000	236	0.03	17,223,477	0.44
100,001 – 500,000	424	0.06	101,578,492	2.60
500,001 – 1,000,000	132	0.02	94,228,626	2.41
1,000,001+	294	0.04	3,447,202,846	88.30
Total	710,336	100	3,904,074,348	100

1. Percentages have been rounded to two decimal places.

Taxation

This section provides information about certain US federal income tax and UK tax consequences for US Holders (defined below) of owning ADSs and ordinary shares. A US Holder is the beneficial owner of ADSs or ordinary shares who:

- is for US federal income tax purposes (i) an individual citizen or resident of the US; (ii) a corporation created or organised under the laws of the US, any state thereof or the District of Columbia; (iii) an estate, the income of which is subject to US federal income tax without regard to its source; or (iv) a trust, if a court within the US is able to exercise primary supervision over the administration of the trust and one or more US persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for US federal income tax purposes;
- is not resident in the UK for UK tax purposes; and
- does not hold ADSs or ordinary shares in connection with the conduct of a business or the performance of services in the UK or otherwise in connection with a branch, agency or permanent establishment in the UK.

This section is not a comprehensive description of all the US federal income tax and UK tax considerations that may be relevant to any particular investor (including consequences under the US alternative minimum tax or net investment income tax). Neither does it address state, local or other tax laws. National Grid has assumed that shareholders, including US Holders, are familiar with the tax rules applicable to investments in securities generally and with any special rules to which they may be subject. This discussion deals only with US Holders who hold ADSs or ordinary shares as capital assets. It does not address the tax treatment of investors who are subject to special rules. Such investors may include:

- financial institutions;
- insurance companies;
- dealers in securities or currencies;
- investors who elect mark-to-market treatment;
- entities treated as partnerships or other pass-through entities and their partners;
- individual retirement accounts and other tax-deferred accounts;
- tax-exempt organisations;
- investors who own (directly or indirectly) 10% or more of our shares (by vote or value);
- investors who hold ADSs or ordinary shares as a position in a straddle, hedging transaction or conversion transaction;
- individual investors who have ceased to be resident in the UK for a period of five years or less;
- persons that have ceased to be US citizens or lawful permanent residents of the US; and
- US Holders whose functional currency is not the US dollar.

The statements regarding US and UK tax laws and administrative practices set forth below are based on laws, treaties, judicial decisions and regulatory interpretations that were in effect on the date of this document. These laws and practices are subject to change without notice, potentially with retroactive effect. In addition, the statements set forth below are based on the representations of the Depositary and assume that each party to the Deposit agreement will perform its obligations thereunder in accordance with its terms.

US Holders of ADSs generally will be treated as the owners of the ordinary shares represented by those ADSs for US federal income tax purposes. For the purposes of the Tax Convention, the Estate Tax Convention and UK tax considerations, this discussion assumes that a US Holder of ADSs will be treated as the owner of the ordinary shares represented by those ADSs. HMRC has stated that it will continue to apply its long-standing practice of treating a holder of ADSs as holding the beneficial interest in the ordinary shares represented by the ADSs; however, we note that this is an area of some uncertainty and may be subject to change.

US Holders should consult their own advisors regarding the tax consequences of buying, owning and disposing of ADSs or ordinary shares depending on their particular circumstances, including the effect of any state, local or other tax laws.

Taxation of dividends

The UK does not currently impose a withholding tax on dividends paid to US Holders.

US Holders should assume that any cash distribution paid by us with respect to ADSs or ordinary shares will be reported as dividend income for US federal income tax purposes. While dividend income received from non-US corporations is generally taxable to a non-corporate US Holder as ordinary income for US federal income tax purposes, dividend income received by a non-corporate US Holder from us generally will be taxable at the same favourable rates applicable to long-term capital gains provided (i) either: (a) we are eligible for the benefits of the Tax Convention or (b) ADSs or ordinary shares are treated as 'readily tradable' on an established securities market in the US; and (ii) we are not, for our taxable year during which the dividend is paid or the prior year, a passive foreign investment company for US federal income tax purposes (a PFIC), and certain other requirements are met. We expect that our shares will be treated as 'readily tradable' on an established securities market in the US as a result of the trading of ADSs on the New York Stock Exchange. We also believe we are eligible for the benefits of the Tax Convention.

Based on our audited financial statements and the nature of our business activities, we believe that we were not treated as a PFIC for US federal income tax purposes with respect to our taxable year ended 31 March 2022. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income and the nature of our business activities, we do not anticipate becoming a PFIC in the foreseeable future.

Dividends received by corporate US Holders with respect to ADSs or ordinary shares will not be eligible for the dividends-received deduction that is generally allowed to corporations.

Taxation of capital gains

Subject to specific rules relating to assets that derive at least 75% of their value from UK land, US Holders will not be subject to UK taxation on any capital gain realised on the sale or other disposition of ADSs or ordinary shares.

Provided that we are not a PFIC for any taxable year during which a US Holder holds their ADSs or ordinary shares, upon a sale or other disposition of ADSs or ordinary shares, a US Holder generally will recognise a capital gain or loss for US federal income tax purposes that is equal to the difference between the US dollar value of the amount realised on the sale or other disposition and the US Holder's adjusted tax basis in the ADSs or ordinary shares. Such capital gain or loss generally will be long-term capital gain or loss if the ADSs or ordinary shares were held for more than one year. For non-corporate US Holders, long-term capital gain is generally taxed at a lower rate than ordinary income. A US Holder's ability to deduct capital losses is subject to significant limitations.

US information reporting and backup withholding tax
Dividend payments made to US Holders and proceeds paid from the sale, exchange, redemption or disposal of ADSs or ordinary shares to US Holders may be subject to information reporting to the US Internal Revenue Service (IRS). Such payments may be subject to backup withholding taxes if the US Holder fails to provide an accurate taxpayer identification number or certification of exempt status or fails to comply with applicable certification requirements.

US Holders should consult their tax advisors about these rules and any other reporting obligations that may apply to the ownership or disposition of ADSs or ordinary shares. Such obligations include reporting requirements related to the holding of certain foreign financial assets.

UK stamp duty and stamp duty reserve tax (SDRT)

Transfers of ordinary shares
SDRT at the rate of 0.5% of the amount or value of the consideration will generally be payable on any agreement to transfer ordinary shares that is not completed using a duly stamped instrument of transfer (such as a stock transfer form).

The SDRT liability will be cancelled where an instrument of transfer is executed and duly stamped before the expiry of the six-year period beginning with the date on which the agreement is made. If a claim is made within the specified period, any SDRT which has been paid will be refunded. SDRT is due whether or not the agreement or transfer is made or carried out in the UK and whether or not any party to that agreement or transfer is a UK resident.

Purchases of ordinary shares completed using a stock transfer form will generally result in a UK stamp duty liability at the rate of 0.5% (rounded up to the nearest £5) of the amount or value of the consideration. Paperless transfers under the CREST paperless settlement system will generally be liable to SDRT at the rate of 0.5%, and not stamp duty. SDRT is generally the liability of the purchaser, and UK stamp duty is usually paid by the purchaser or transferee.

Transfers of ADSs
No UK stamp duty will be payable on the acquisition or transfer of existing ADSs or beneficial ownership of ADSs (in each case in the form of American Depositary Receipts), provided that any instrument of transfer or written agreement to transfer is executed outside the UK and remains at all times outside the UK.

An agreement for the transfer of ADSs in the form of American Depositary Receipts will not result in an SDRT liability. A charge to stamp duty or SDRT may arise on the transfer of ordinary shares to the Depositary or The Bank of New York Mellon as agent of the Depositary (the 'Custodian').

The rate of stamp duty or SDRT will generally be 1.5% of the value of the consideration or, in some circumstances, the value of the ordinary shares concerned. However, there is no 1.5% SDRT charge on the issue of ordinary shares (or, where it is integral to the raising of new capital, the transfer of ordinary shares) to the Depositary or the Custodian.

The Depositary will generally be liable for the stamp duty or SDRT. Under the terms of the Deposit agreement, the Depositary will charge any tax payable by the Depositary or the Custodian (or their nominees) on the deposit of ordinary shares to the party to whom the ADSs are delivered against such deposits. If the stamp duty is not a multiple of £5, the duty will be rounded up to the nearest multiple of £5.

UK inheritance tax
An individual who is domiciled in the US for the purposes of the Estate Tax Convention and who is not a UK national for the purposes of the Estate Tax Convention will generally not be subject to UK inheritance tax in respect of (i) the ADSs or ordinary shares on the individual's death or (ii) a gift of the ADSs or ordinary shares during the individual's lifetime. This is not the case where the ADSs or ordinary shares are part of the business property of the individual's permanent establishment in the UK or relate to a fixed base in the UK of an individual who performs independent personal services.

Special rules apply to ADSs or ordinary shares held in trust.

In the exceptional case where the ADSs or shares are subject both to UK inheritance tax and to US federal gift or estate tax, the Estate Tax Convention generally provides for the tax paid in the UK to be credited against tax paid in the US or vice versa.

Capital gains tax (CGT) for UK resident shareholders
You can find CGT information relating to National Grid shares for UK resident shareholders on the Investors section of our website. Share prices on specific dates are also available on our website.

Other disclosures

All-employee share plans

The Company has a number of all-employee share plans as described below, which operated during the year. These allow UK- or US-based employees to participate in tax-advantaged plans and to become shareholders in National Grid.

Sharesave

UK employees are eligible to participate in the Sharesave plan. Under this plan, participants may contribute between £5 and £500 each month, for a fixed period of three years, five years or both. Contributions are taken from net salary. At the end of the fixed period, participants may use their savings to purchase ordinary shares in National Grid at a 20% discounted option price, which is set at the time of each annual Sharesave launch.

Share Incentive Plan (SIP)

UK employees are eligible to participate in the SIP. Contributions up to £150 per month are deducted from participants' gross salary and used to purchase National Grid ordinary shares each month. The shares are placed in a UK resident trust and are available to the individual with tax advantages after a five-year period.

US Incentive Thrift Plan

The Thrift Plan is open to all US employees of participating National Grid companies; this is a tax-advantaged savings plan (commonly referred to as a 401k plan). This is a defined contribution (DC) pension plan that gives participants the opportunity to invest up to applicable federal salary limits. The federal limits for calendar year 2021 were: for pre-tax contributions, a maximum of 50% of salary limited to $19,500 for those under the age of 50 and $26,000 for those aged 50 and above; and for post-tax contributions, up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) could not exceed 50% of compensation, and was further subject to the combined federal annual contribution limit of $58,000. For the calendar year 2022, participants may invest up to the applicable federal salary limits: for pre-tax contributions, this is a maximum of 50% of salary limited to $20,500 for those under the age of 50 and $27,000 for those aged 50 and above; for post-tax contributions, this is up to 15% of salary. The total amount of employee contributions (pre-tax and post-tax) may not exceed 50% of compensation, and is further subject to the combined federal annual contribution limit of $61,000.

US Employee Stock Purchase Plan (ESPP)

Employees of National Grid's participating US companies are eligible to participate in the ESPP (commonly referred to as a 423b plan). Eligible employees have the opportunity to purchase ADSs in National Grid on a monthly basis at a 15% discounted price. Under the plan, employees may contribute up to 20% of base pay each year, up to a maximum annual contribution of $25,000, to purchase ADSs.

Change of control provisions

No compensation would be paid for loss of office of Directors on a change of control of the Company. As at 31 March 2022, the Company had borrowing facilities of £4.7 billion available to it with a number of banks, which, on a change of control of the Company following a takeover bid, may alter or terminate; however, the Company is currently not drawing on any of such borrowing facilities. All of the Company's share plans contain provisions relating to a change of control. Outstanding awards and options would normally vest and become exercisable on a change of control, subject to the satisfaction of any performance conditions at that time. In the event of a change of control of the Company, a number of governmental and regulatory consents or approvals are likely to be required, arising from laws or regulations of the UK or the US. Such consents or approvals may also be required for acquisitions of equity securities that do not amount to a change of control.

No other agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid are considered to be significant in terms of their potential impact on the business as a whole.

Code of Ethics

In accordance with US legal requirements, the Board has adopted a Code of Ethics for senior financial professionals. This Code is available on our website (where any amendments or waivers will also be posted). There were no amendments to, or waivers of, our Code of Ethics during the year.

Conflicts of interest

In accordance with the Companies Act 2006, the Board has a policy and procedure in place for the disclosure and authorisation (if appropriate) of actual and potential conflicts of interest. The Board continues to monitor and note possible conflicts of interest that each Director may have, including a review on appointment. The Directors are regularly reminded of their continuing obligations in relation to conflicts, and are required to review and confirm their external interests annually. During the year ended 31 March 2022, no new actual or potential conflicts of interest were identified that required approval by the Board. The Board has considered and noted a number of situations in relation to which no actual conflict of interest was identified.

Corporate governance practices: differences from New York Stock Exchange (NYSE) listing standards

The Company is listed on the NYSE and is therefore required to disclose differences in its corporate governance practices adopted as a UK listed company, compared with those of a US company. The corporate governance practices of the Company are primarily based on the requirements of the Corporate Governance Code 2018 but substantially conform to those required of US companies listed on the NYSE.

The following is a summary of the significant ways in which the Company's corporate governance practices differ from those followed by US companies under Section 303A Corporate Governance Standards of the NYSE.

The NYSE rules and the Code apply different tests for the independence of Board members.

The NYSE rules require a separate nominating/corporate governance committee composed entirely of independent directors. There is no requirement for a separate corporate governance committee in the UK. Under the Company's corporate governance policies, all Directors on the Board discuss and decide upon governance issues, and the People & Governance Committee makes recommendations to the Board with regard to certain responsibilities of a corporate governance committee.

The NYSE rules require listed companies to adopt and disclose corporate governance guidelines. While the Company reports compliance with the Code in each Annual Report and Accounts, the UK requirements do not require the Company to adopt and disclose separate corporate governance guidelines.

The NYSE rules require a separate audit committee composed of at least three independent members. While the Company's Audit & Risk Committee exceeds the NYSE's minimum independent Non-executive Director membership requirements, it should be noted that the quorum for a meeting of the Audit & Risk Committee, of two independent Non-executive Directors, is less than the minimum membership requirements under the NYSE rules.

The NYSE rules require a compensation committee composed entirely of independent directors, and prescribe criteria to evaluate the independence of the committee's members and its ability to engage external compensation advisors. While the Code prescribes different independence criteria, the Non-executive Directors on the Company's Remuneration Committee have each been deemed independent by the Board under the NYSE rules. Although the evaluation criteria for appointment of external advisors differ under the Code, the Remuneration Committee is solely responsible for the appointment, retention and termination of such advisors.

Directors' indemnity

The Company has arranged, in accordance with the Companies Act 2006 and the Articles, qualifying third-party indemnities against financial exposure that Directors may incur in the course of their professional duties. Equivalent qualifying third-party indemnities were, and remain, in force for the benefit of those Directors who stood down from the Board in prior financial years for matters arising when they were Directors of the Company. Alongside these indemnities, the Company places Directors' and Officers' liability insurance cover for each Director. To the extent appropriate and required, similar indemnities have also been given to directors of subsidiary and other associated companies, who also benefit from Directors' and Officers' liability insurance cover.

Employees

We negotiate with recognised unions.
It is our policy to maintain well developed communications and consultation programmes and there have been no material disruptions to our operations from labour disputes during the past three years. National Grid believes that it can conduct its relationships with trade unions and employees in a satisfactory manner. Further details on the Company's colleagues can be found on pages 65 and 66.

Human rights

We launched our Responsible Business Charter in October 2020 focusing on five key areas. One of the areas is our people and our commitment to ensuring all our people are treated fairly and given the opportunity to thrive at work. As a responsible, purpose-led company, the way in which we conduct ourselves allows us to build trust with the people we work with by doing things in the right way, building our reputation as a responsible and ethical company that our stakeholders want to do business with and our employees want to work for.

Our employees are at the heart of what we do, which is why we're proud to be one of 173 companies and one of 50 FTSE 100 companies who participated in the 2022 Workforce Disclosure Initiative which encourages transparency from companies on how they manage workers with the goal of improving the quality of jobs in company operations and supply chains. This year we improved our Scorecard rating to 86% overall, from 82% last year, and received a special mention in the supply chain data category.

National Grid does not have direct operations in countries of high concern with respect to human rights, therefore we do not have a specific policy relating to human rights. However, respect for human rights is incorporated into our employment practices and our values. We treat everyone fairly and equally, without discrimination. Respecting others and valuing DEI are integral to our Code of Ethics and we provide unconscious bias training to all our people to build awareness of cultural differences and the importance of diversity, and the necessity of achieving equity and inclusion. Our Global Supplier Diversity Policy outlines our commitments and expectation that DEI is embedded in all aspects of business in our supply chain.

We acknowledge that there may be potential risks in our wider supply chain, and we recognise that the relationship we have with our suppliers can influence how they support our commitment to acting responsibly.

We produce an annual Modern Slavery Statement which outlines the actions we take to assess potential risk in our wider operations and take actions to address this. This includes working collaboratively in the sector through a number of membership organisations to build awareness and capability in the supply chain. In the last Business and Human Rights Resource Centre Report assessing FTSE 100 modern slavery statements, we were recognised as one of a small cluster of leaders standing out. We publish our Statement on the Home Office modern slavery registry and encourage our suppliers to publish a statement on modern slavery regardless of whether this is a legal obligation to do so.

We are signatories to the UK Construction Protocol, which is a joint agreement with many of the largest firms in the UK construction sector focused on eradicating modern slavery and exploitation in the building industry. We are also founding signatory members of the People Matter Charter which was created to help organisations up and down the supply chain to bring challenges related to decent work together into one workforce strategy. The Charter has eight commitments that can apply to any organisation, of any size including aspects supporting human rights.

We are members of the UNGC Modern Slavery Working Group and take part in a peer review of our Modern Slavery Statement to share best practice and identify areas for improvement. We are actively involved in Utilities Against Slavery, which is a collaborative initiative aimed at working together to eradicate slavery and exploitation in the UK utilities sector and its supply chains. Through this we worked with the Supply Chain Sustainability School to deliver a series of six training session over six months to our shared network of suppliers.

We aim to maintain fairness across the organisation for pay and make sure our pay practices do not show bias. In the US, we pay all our employees at least the minimum wage or above the minimum wage requirements. In the UK, we are accredited Living Wage Foundation employers. Our commitment to our direct employees extends to our contractors and the work they do on behalf of National Grid and is actively promoted through our supply chain and embedded in our contract terms and conditions and contract management discussions. We believe that everyone should be appropriately rewarded for their time and effort. We also go above the Living Wage Foundation accreditation requirements and voluntarily pay our trainees/apprentices the real living wage. We undertake a real living wage review and produce a report to the Living Wage Foundation each year to ensure continued alignment. This includes an increase to individual internal salaries as required and annual communication of the new real living wage rates to our supply chain. We include a review of implementation of the real living wage in supply chain contracts where low wages could be a risk, including our catering, cleaning, waste management and main construction contracts.

Our Supplier Code of Conduct is updated and communicated to our suppliers annually and clearly sets out our expectations to share our commitment to respecting, protecting and promoting human rights. This includes alignment to the UN Guiding Principles, the 10 Principles of the United Nations Global Compact (UNGC), the International Labour Organization (ILO) minimum standards, the Ethical Trading Initiative (ETI) Base Code, the UK Modern Slavery Act 2015, the US Victims of Trafficking and Violence Protection Act 2000, the US Department of State Principles Combatting Human Trafficking and, for our UK suppliers, the requirements of the Living Wage Foundation.

Unresolved SEC staff comments

There are no unresolved SEC staff comments required to be reported.

Property, plant and equipment

This information can be found in Note 13 Property, plant and equipment on pages 180 – 182, Note 21 Borrowings on pages 192 – 194 and Where we operate on page 244.

Listing Rule 9.8.4 R cross-reference table

Information required to be disclosed by LR 9.8.4 R (starting on page indicated):

Interest capitalised	Page 167
Publication of unaudited financial information	Not applicable
Details of long-term incentive schemes	Pages 114, 128 and 130
Waiver of emoluments by a director	Not applicable
Waiver of future emoluments by a director	Not applicable
Non-pre-emptive issues of equity for cash	Not applicable
Item (7) in relation to major subsidiary undertakings	None
Parent participation in a placing by a listed subsidiary	Not applicable
Contracts of significance	Page 264
Provision of services by a controlling shareholder	Not applicable
Shareholder waivers of dividends	Page 259
Shareholder waivers of future dividends	Page 259
Agreements with controlling shareholders	Not applicable

Political donations and expenditure

At this year's AGM, the Directors will again seek authority from shareholders, on a precautionary basis, for the Company and its subsidiaries to make donations to registered political parties and other political organisations and/or incur political expenditure as such terms are defined in the Companies Act 2006. In each case, donations will be in amounts not exceeding £125,000 in aggregate. The definitions of these terms in the Companies Act 2006 are very wide. As a result, this can cover bodies such as those concerned with policy review, law reform and the representation of the business community (for example trade organisations). It could include special interest groups, such as those involved with the environment, which the Company and its subsidiaries might wish to support, even though these activities are not designed to support or influence support for a particular party. The Companies Act 2006 states that all-party parliamentary groups are not political organisations for these purposes, meaning the authority to be sought from shareholders is not relevant to interactions with such groups. The Company has no intention of changing its current practice of not making political donations or incurring political expenditure within the ordinary meaning of those words. This authority is, therefore, being sought to ensure that none of the Company's activities inadvertently infringe these rules.

National Grid made no political donations and did not incur any political expenditure during the year, as such terms are defined for the purposes of the Companies Act 2006 and the Political Parties, Elections and Referendums Act 2000. National Grid USA's affiliated New York and federal political action committees (PAC) made political donations in the US totalling $79,375 (£58,796) during the year. National Grid USA's affiliated New York PAC (NYPAC) was funded partly by contributions from National Grid USA and certain of its subsidiaries and partly by voluntary employee contributions. National Grid USA's affiliated federal PAC was funded wholly by voluntary employee contributions. The NYPAC did not receive any corporate contribution during the past fiscal year.

Material contracts

On 17 March 2021, we agreed to buy WPD from PPL, and, conditional upon the completion of the WPD Acquisition and certain regulatory approvals, agreed to sell NECO to PPL. The share purchase agreements for the WPD Acquisition and the NECO sale, together with the sponsor agreement between the Company and Barclays Bank plc (Barclays) dated 31 March 2021 (pursuant to which the Company appointed Barclays as sponsor in connection with the WPD Acquisition and the publication of its shareholder circular for approval of the WPD Acquisition), as well as the acquisition facility dated 17 March 2021 required for the WPD Acquisition, comprising a £8.25 billion term loan facility and a £1.105 billion revolving loan facility term between the Company, Barclays and Goldman Sachs as lenders and lead arrangers, constitute material contracts for the Company.

On 27 March 2022, we also announced the sale of a 60% stake in our UK Gas Transmission (which owns and operates the gas transmission network across Great Britain) and UK metering business. We also entered into an option for the potential sale of the remaining 40% stake with the purchasing consortium. The acquisition agreement and the option agreement in connection with this transaction constitute material contracts for the Company.

In addition, each of our Executive Directors has a Service Agreement and each Non-executive Director has a Letter of Appointment. Apart from these, no contract (other than contracts entered into in the ordinary course of business) has been entered into by the Group within the two years immediately preceding the date of this report that is, or may be, material; or which contains any provision under which any member of the Group has any obligation or entitlement which is material to the Group at the date of this report.

Research, development and innovation activity

Investment in research and development during the year for the Group is outlined in Note 4 on page 162. We only disclose directly incurred expenditure, and not those amounts our partners contribute to joint or collaborative projects. Collaborating across the industry has played a crucial role in our ability to develop new programmes and deliver value to our stakeholders throughout 2021/22.

UK Electricity

Electricity Transmission innovation has increased focus on meeting the UK's net zero 2050 targets. As a result, our project portfolio has been developed around the themes of delivering cleaner and cheaper energy. As the pace of climate change and its effects increase, we can expect the technology evolution and delivery of the energy transition to accelerate. Responding to this challenge will mean having to think very broadly about the art of the possible and engaging with other sectors; during 2021/22 we have identified five whole-system approach projects.

Collaboration is a crucial part of the way we innovate in Electricity Transmission. Sharing and being open to new ideas from across industries and academia allows us to develop projects to transform energy systems and bring the greatest possible benefits to our customers, stakeholders and end consumers. For us, that involves finding the right specialist partners to work with us on the right challenges, while giving stakeholders plenty of time and opportunity to contribute and influence our decision making. We have therefore set up a new framework for a wider range of UK universities to work with us on delivering the energy transition and addressing consumer vulnerabilities.

We are partnered with the Energy Innovation Centre (EIC), which provides us with a forum to work together with other networks on common challenges that centre on SF_6, vulnerable customers and net zero substations. Together with EIC, SPEN and SEE, we launched Call for Innovation 2021 for suppliers to showcase their ideas for managing the existing SF_6 inventory. Responses were received from several suppliers addressing improved leak detection, leak sealing and SF_6 capture.

Additionally, we have continued engaging with innovative organisations through our membership of the Infrastructure Industry Innovation Partnership (i3P). Its large network of experts and innovators is helping drive transformation within the infrastructure and construction industry to deliver infrastructure for the future.

We have been granted the Strategic Innovation Funding for a total of £400,000, to deliver the discovery phase of three projects to support network innovation that contributes to the achievement of net zero, while delivering real net benefits to network consumers.

Ofgem approved our business model for our Deeside Centre for Innovation in October 2021 and progress has been made with the construction of the OHL and substation area. Over the past 12 months, our innovation programme at the centre has included trialling three new innovative projects to cut harmful environmental emissions. From reducing SF_6 from its pipework, to trialling a cement-free concrete, to capturing waste heat from electricity transformers to generate hot water and space heating for homes and businesses, these projects are another step forward on the journey to meet net zero targets by 2050. We are aiming to open the facility for wider industry use in October 2022.

We continue to progress innovative ideas into our business as usual practices particularly as the resilience requirements of electricity networks will need to evolve with a changing energy landscape as society adapts how it uses energy to meet the 2050 net zero decarbonisation target and national infrastructure sectors become increasingly interdependent. The outputs of our projects help to plan for future resilience requirements and effectively ensure the UK has a prepared robust transmission network.

WPD

WPD's innovation project portfolio has been expanded to new areas, enabling it to work with industries it has never worked with before. Driven by the Group ambition to meet net zero and recognising that this cannot be delivered if there is no collaboration with other key industries, WPD has focused on increasing collaboration with crucial sectors that need to decarbonise to enable the UK meet its net zero targets. WPD has created and is delivering Network Innovation Allowance (NIA) projects in collaboration with water utilities, environmental management experts and leaders in climate change adaptation. WPD is proud to have started its largest NIA project focusing on consumer vulnerability, called Vulnerability and Energy Networks, Identification and Consumption Evaluation (VENICE). VENICE is developing ways to predict consumer vulnerability, measuring the impact the pandemic had on the networks and using a community energy scheme to find the right approaches needed to engage with the fuel poor in the energy transition.

WPD continued leading our work on EVs and Vehicle to Grid (V2G) by delivering the Electric Nation Powered Up project, which is trialling V2G and strengthening our relationship with the transport industry.

The work on the electrification of heat is now increasing significantly in scale through our Network Innovation Competition (NIC) project, Equinox. Equinox's focus is to make heat flexibility accessible to DNOs and beneficial to customers by running the UK's largest heat flexibility trial.

Values of decarbonisation, excellence and value for money continue to shape WPD's innovation strategy which sets priority areas and commitments. WPD's projects focus on decarbonisation and net zero, heat, transport, data and communities/consumer vulnerability. Stakeholder engagement through webinars, innovation events and innovation themed weeks has enabled us to ensure WPD's innovation strategy reflects stakeholders' needs and priorities. WPD's strategy has also been developed further to include our RIIO-ED2 strategic aims and plans which were created through extensive engagement with customers and stakeholders as part of the RIIO-ED2 Business Plan consultation process.

Electricity System Operator

The ESO has used the first year of RIIO-2 to ramp up its innovation activities. The ESO was awarded an initial £23 million NIA funding from Ofgem, now accessible as a flexible amount across the five-year regulatory period (previously an annual allowance in RIIO-1). This has allowed the ESO to increase the size and number of innovation projects in our pipeline, helping to address priority challenges or opportunities across all the ESO roles. For 2021/22, the ESO has spent £4.43 million on innovation projects; the pipeline of approved projects continues to increase significantly as we continue into 2022/23. The Virtual Energy System (VirtualES) will be a cornerstone of ESO innovation going forward; this programme aims to establish an interconnected network of digital twins for individual components of the energy system, eventually creating a digital replica of the whole energy system. This would unlock greater insights and drive better decisions required for GB to achieve net zero targets, more quickly and efficiently. We have started initial projects to develop a common framework for the VirtualES. In parallel, new innovation projects are currently developing the specific tools and use-cases of the VirtualES to highlight the potential and shared benefits from this future industry-led resource.

UK Gas

In our first year of RIIO-T2, Gas Transmission innovation has developed its portfolio of energy transition projects to meet the UK's net zero 2050 targets. Alongside this energy transitional innovation, asset innovation has developed a focused team to deploy innovations from RIIO-T1 and drive 'business as usual' innovation. The key highlights of 2021/22 include the following:

- The portfolio of NIA projects has sanctioned 25 projects with several further projects under development for 2022/23.
- Development of 11 collaborative SIF Discovery project applications, with 10 being successfully funded for March – April 2022.
- Further development of the Hydrogen in the National Transmission System (HyNTS) programme aligned to future hydrogen investments: HyNTS deblending continued for demonstration later in RIIO-T2 allowing for the separation of hydrogen in a natural gas mix and HyNTS compression exploring the capability of NTS compression systems to both be fuelled and compressed hydrogen methane blends.
- Successful kick-off of the £12.7 million HyNTS FutureGrid NIC project at DNV's Spadeadam Test and Research Centre. Progress includes decommissioned assets delivered to site and remedial works undertaken, groundworks completed ready for construction and standalone hydrogen testing commencing. The project will demonstrate that the National Transmission System (NTS) can transport hydrogen ready for Project Union (the UK hydrogen backbone).
- Reduction of methane emissions through the CH4RGE project that looks at reducing methane emissions from rotating gas equipment and has successfully attained first stage funding for demonstration of the systems and capabilities.
- Deployment of the valve remediation techniques under the Valve Care Toolbox project to provide a suite of solutions that allow for repair rather than replacement of valves.

US research and development

Research and development (R&D) work in the US focused on the advancement of products, processes, systems technologies and work methods that may be new to National Grid. This is accomplished by working with internal departments to identify where strategic R&D investment is needed and is likely to prove beneficial. To achieve these goals, we work in collaboration with technical organisations, academia and vendors in the energy sector that align with our goals and objectives to provide a safe, reliable, efficient and clean service. We continue to focus our R&D on increasing public safety, supporting the integration of renewable resource, protecting our workforce and reducing the cost of the work we perform.

Research efforts are designed with the focus on shared learnings across jurisdictions to help reduce cost and allow for a faster pace of technology adoption.

In 2021/22, we continued to invest and participate in several significant pilot projects with the intention of obtaining operational knowledge and experience of technology-driven system impacts.

US Electricity

New England – Distribution

- In January 2022, we reached a milestone of connecting more than 3 GW of renewable distributed generation across our network – enough to power approximately 600,000 homes. National Grid is ranked as the second utility in the nation for non-residential solar installations and seventh for residential solar installations.
- We are implementing grid modernisation technologies such as Fault Location, Isolation and Service Restoration (FLISR) to improve resilience. FLISR helps optimise system performance by reducing customer outage duration. The programme reduces the minutes of interruption experienced by customers by automatically rerouting power in a way that the electric system previously was not capable of. As an example, in the midst of the 2021 nor'easter, the FLISR scheme was active on feeders from West Salem and Saugus in the North Shore District in New England. A tree limb created a mainline fault condition between the West Salem substation circuit breaker and the first downstream pole-top recloser on the line. FLISR logic was activated and quickly restored service to 1,531 customers in 16 seconds. The remaining 2,356 customers experiencing the outage had their service restored in 141 minutes after the repairs to the feeder were completed. Had this FLISR scheme not been implemented, all 3,887 customers would have experienced the full outage. Another example occurred in February 2021, when a storm in East Boxford, Massachusetts knocked out power to approximately 1,000 customers. FLISR enabled the restoration of power to 400 of the customers almost immediately and minimised restoration time for the remaining 600. These events demonstrated the self-healing capabilities provided by the Advanced Data Analytics/FLISR investments.

New England – Transmission

- National Grid successfully deployed the dynamic line ratings technologies on two transmission lines in New England. This technology allows maximum utilisation of the existing transmission line capacity and supports the Company's net zero emissions goal.
- National Grid successfully deployed the dynamic transformer ratings technologies on two substation transformers. This technology allows maximum utilisation of the existing transformer capacity and supports the Company's net zero emissions goal.

New York – Transmission

- In New York, we have a joint development agreement with the New York Power Authority (NYPA) for co-investment in the Smart Path Connect transmission project to enable the delivery of approximately 1 GW of large-scale renewable generation. Expected to be in service by the end of 2025, this project will deliver 1,000 MWs of renewable energy across New York.

Other disclosures continued

New York – Distribution

- We are working to procure a battery storage non-wire alternative project known as Old Forge, which is a 20 MW and 40 MWh battery designed to operate as a Microgrid, increasing reliability and resiliency of the local grid for 7,565 customers for two hours during peak load periods. In addition, this battery will be providing wholesale market value during Blue-sky days by bidding into the NYISO wholesale electric market, returning any money earned to customers.
- In New York, we are helping grow participation in community distributed generation through a novel customer billing solution we developed and proposed to our regulators. We also recently received approval for Solar for All, a programme to increase solar access for 175,000 of our income-eligible customers. We have proposed a similar programme called MA Community Shared Solar.
- In downstate New York, we launched a portfolio of Weatherisation Programmes aimed to reduce natural gas peak demand, save our customers energy and provide them with a more comfortable and resilient home. Every home weatherised is equivalent to carbon sequestered by an entire acre of US forests a year.

Calibration across multiple jurisdictions

- We are moving from interconnecting to integrating of DERs so we can better utilise them for the system needs. We are implementing Advanced Distribution Management Systems (ADMS) that will support distribution control room operations by providing greater visibility, situation awareness, and optimisation of the distribution system and have created digital products for implementing our DERMS solution so we can streamline DER interconnections and reduce costs for customers.
- One of the big initiatives we're looking to do is implement an AMI installation programme, which is foundational to a lot of other initiatives that rely on that near-real-time customer data.
- AMI will provide more granular energy usage data to enable customers to better understand and choose between DER offerings (i.e. distributed generation, storage, EV, demand response and energy-efficiency solutions) to better manage their energy usage and costs.

Hydrogen pilots

- We are researching how hydrogen will perform in our existing gas infrastructure through our membership with a US Department of Energy funded consortium called Hyblend and through work with the New York State Energy Research Development Authority (NYSERDA) and Stony Brook University.
- We are also partnering with Standard Hydrogen Corporation to develop the nation's first multi-use, renewable hydrogen-based energy storage and delivery system in New York, which is pending regulatory approval. The system will have the ability to power fuel cell vehicles, shift energy peaking, provide backup power and blend hydrogen into the gas network – all from one system and site.
- We have partnered with the town of Hempstead on Long Island, NY to use hydrogen to heat 800 homes and fuel a fleet of municipal vehicles, which will be active by 2024.

Electric vehicles

- National Grid has helped our customers to deploy almost 4,411 EV chargers, with 46% located in environmental or disadvantaged communities.
- We partnered with the city of Beverly on an electric school bus project where the bus delivers stored energy back to the grid to help meet peak energy demand. Not only does this approach reduce local emissions and strengthen the grid, but participants receive a financial incentive. This past summer the Beverly bus discharged nearly 3 MWh of electricity stored in its battery system to the regional electric grid over the course of 30 events.
- Internally, we have light-duty EVs in our fleet. We also are one of the first utilities to introduce an electric backhoe into our fleet and we are testing Ford's first E-Transit vans in downstate New York and Massachusetts.

Digital strategy

We are adopting an agile product methodology and digital approach to implement our business strategy for fast delivery of customer outcomes. We are moving ahead with the following projects:

- Active Resource Integration: An integrated platform that will dynamically manage distributed generation power export for short duration constraints to avoid costly electric system upgrades. It will help optimise DER network utilisation through curtailment management, offering flexible interconnection service at an economic cost and timeframe to developers/customers.
- Vegetation Management Optimisation (VMO): A risk-based vegetation management planning tool using satellite imagery and artificial intelligence to optimise when we prune vegetation and manage hazardous trees on our system. Efficiencies identified are being reinvested to improve reliability and storms costs. We worked with AiDash, a National Grid Partner, and were the first in our industry to implement at a system level.
- Digital product for totex optimisation of Electric workplans. At its core, FutureNow leverages data-driven value models and an optimisation engine to drive equal or better distribution and transmission workplan outcomes at significantly reduced cost. Every project is evaluated along common value drivers (i.e. reliability, capacity, safety and risk) and the overall workplan is resource-balanced in a semi-automated fashion that will save the business hundreds of hours of manual labor annually. FutureNow also drives organisational efficiencies by integrating workplan information from multiple systems into one unified platform, and is envisioned to unlock additional value by applying predictive analytics to improve electric workplan adherence and on-time/on-budget execution.
- On My Way: a digital work dispatch and completion tool. An integrated digital solution focused on better supporting field operations, particularly line crews and trouble workers, by putting in place digital work packages and allowing for more efficient job coordination, assignment and execution. The goal is to move from paper-based work dispatch to digitalised work packages and real-time job dispatch/update/close from any location, thereby generating full time equivalent capacity for reallocation and reductions in fuel and paper costs.

US Gas

New York

- While partnering with a robotics company and another utility, we have been developing and testing new technology to locate inadvertent sewer cross-bores created when using some trenchless technology. This technology is deployed in our gas main immediately after installation, prior to the introduction of natural gas. It differs from the current process, which requires us to gain access to the municipal sewer system. Deployment will reduce the risk and cost associated with sewer cross-bores. We constructed a functional sewer system covering five hectares at one of our facilities to test the accuracy of the technology. We purposefully created cross-bores in the system at several points to determine if the technology could locate them. The technology found all the cross-bores with no false negatives. After achieving positive results deploying this technology in a controlled test bed at one of our NY facilities, the next step was to test this process in the field. This technology was tested after new pipe installation via trenchless methods as well as in validation runs where sewer cross-bores were identified in the field through the existing process. In all cases, the technology was able to verify the locations of the cross-bores accurately. In 2021, we performed 13 inspections with the acoustic cross-bore detector and covered over 18,000 feet of main, 10,000 feet of which was newly installed main, via horizontal directional drilling. We also started knowledge sharing sessions with a California utility which is using the same technology on services to identify any potential cross-bores. The goal is to further validate the technology statistically in 2022.
- National Grid is working on the development of an integrated safety solution, known as 'Grid of Things', comprising various Internet of Things (IoT) connected devices aimed at preventing gas-related incidents at customer locations. The concept of the integrated safety solution comprises a smart metering device, smart methane detector and devices with the ability to cut off gas flow to the customer. The solution will monitor various hazardous

scenarios such as flooding, fire, gas leaks and abnormal pressure conditions (over-pressure/under-pressure), among others, and can communicate alarm conditions to the utility, customers or both over wireless protocols. The primary goal of this safety solution is to mitigate hazards that can lead to gas-related safety incidents within a customer location, as well as notify the customers and respond to such events in a quicker manner if they were to occur. Another key focus of this initiative is to determine a solution that will work in gas only territories where AMI solutions are not currently available. We've worked with various end device manufacturers to develop prototype solutions that communicate on long-range wide area network (LoRaWAN) communications and have performed a successful pilot demonstration in 2021. Through this pilot, we confirmed that these devices can achieve carrier grade communications while achieving greater than 20-year expected battery lifetimes. The next step is to integrate AMI or cellular communications into these devices and test their performance over different communication networks.
- We have partnered with another NY utility and a company in California on the development of an advanced residential methane detector (RMD) which is focused on early detection of gas leaks. This technology is focused on improving the detection of leaks to maximise response time to real hazards. The RMD is in its third prototype phase of development and has shown to be capable of precise and accurate detection of methane at the parts per million level. Several of these prototypes have been deployed at a test facility that is undergoing various methane dispersion tests to mimic typical household leak scenarios. Dispersion testing results showed that the advanced RMD was able to detect gas faster than traditional sensors across a broader range of leak scenarios.
- National Grid is actively supporting research into the ability to provide green hydrogen in its gas distribution systems with the intention of decarbonising gas service in order to provide our customers an effective option to meet the goals of NY's Climate Leadership and Community Protection Act (CLCPA). We are investing in and/or formally collaborating in several targeted R&D projects with various other organisations. The development of hydrogen energy systems is one of the key components of the Low Carbon Resources Initiative (LCRI), which has Technical Support Committees to guide R&D relevant to hydrogen, including renewable fuels, electrolysis and end use. The Company also supports the development of R&D projects in the Operations Technology Development (OTD), Utilization Technology Development and NYSEARCH programmes that primarily support investigations of pipeline integrity with increasing use of hydrogen blending as well as understanding and minimising the impact on end-use equipment. The Company is also a founding member of the Institute for Gas Innovation and Technology (I-GIT) at Stony Brook University that is funded separately and includes R&D into power-to-gas concepts. I-GIT is also leading a two-year NYSERDA project into the impacts of hydrogen blending in NY's gas distribution systems including non-destructive examination of used piping exposed to hydrogen, for which the Company's cost-share was approved in Cases 19-G-0309 and 19-G-0310. I-GIT is also the academic lead for the national $14 million HyBlend Collaborative Research and Development Agreement (CRADA). This HyBlend programme is sponsored by the US Department of Energy's Hydrogen and Fuel Cell Technologies Office in the Office of Energy Efficiency and Renewable Energy and 22 industry and academic participants, which will identify and evaluate the technical and safety requirements for introducing hydrogen blending into US gas distribution systems. The HyBlend CRADA is being led by the National Renewable Energy Laboratory (NREL) and implemented by six other national laboratories. The project kicked off in August 2021 and will take about two years.

The Company is pursuing the above R&D efforts to drive innovations that will improve safety, reliability and operational efficiency of our gas business operations.

Other unaudited financial information

Alternative performance measures/non-IFRS reconciliations

Within the Annual Report, a number of financial measures are presented. These measures have been categorised as alternative performance measures (APMs), as per the European Securities and Markets Authority (ESMA) guidelines and the Securities and Exchange Commission (SEC) conditions for use of non-GAAP financial measures.

An APM is a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined under IFRS. The Group uses a range of these measures to provide a better understanding of its underlying performance. APMs are reconciled to the most directly comparable IFRS financial measure where practicable.

The Group has defined the following financial measures as APMs derived from IFRS: net revenue, the various adjusted operating profit, earnings and earnings per share metrics detailed in the 'adjusted profit measures' section below, net debt, capital investment, funds from operations (FFO), FFO interest cover and retained cash flow (RCF)/adjusted net debt. For each of these we present a reconciliation to the most directly comparable IFRS measure. We present 'constant currency' comparative period performance and capital investment by applying the current year average exchange rate to the relevant US dollar amounts in the comparative periods presented, to remove the year-on-year impact of foreign exchange translation.

We also have a number of APMs derived from regulatory measures which have no basis under IFRS; we call these Regulatory Performance Measures (RPMs). They comprise: Group RoE, operating company RoE, regulated asset base, regulated financial performance, regulatory gearing, Asset Growth, Value Added, including Value Added per share and Value Growth. These measures include the inputs used by utility regulators to set the allowed revenues for many of our businesses.

We use RPMs to monitor progress against our regulatory agreements and certain aspects of our strategic objectives. Further, targets for certain of these performance measures are included in the Company's Annual Performance Plan (APP) and Long-Term Performance Plan (LTPP) and contribute to how we reward our employees. As such, we believe that they provide close correlation to the economic value we generate for our shareholders and are therefore important supplemental measures for our shareholders to understand the performance of the business and to ensure a complete understanding of Group performance.

As the starting point for our RPMs is not IFRS, and these measures are not governed by IFRS, we are unable to provide meaningful reconciliations to any directly comparable IFRS measures, as differences between IFRS and the regulatory recognition rules applied have built up over many years. Instead, for each of these we present an explanation of how the measure has been determined and why it is important, and an overview as to why it would not be meaningful to provide a reconciliation to IFRS.

Alternative performance measures

Net revenue

Net revenue is revenue less pass-through costs, such as UK system balancing costs, gas and electricity commodity costs in the US. Pass-through costs are fully recoverable from our customers and are recovered through separate charges that are designed to recover those costs with no profit. Where revenue received or receivable exceeds the maximum amount permitted by our regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery.

	2022			2021			2020		
	Gross revenue[1] £m	**Pass-through costs £m**	**Net revenue £m**	Gross revenue £m	Pass-through costs £m	Net revenue £m	Gross revenue £m	Pass-through costs £m	Net revenue £m
UK Electricity Transmission	**2,035**	**(152)**	**1,883**	1,974	(151)	1,823	1,986	(177)	1,809
UK Electricity Distribution	**1,482**	**(125)**	**1,357**	—	—	—	—	—	—
UK Electricity System Operator	**3,455**	**(3,215)**	**240**	2,018	(1,911)	107	1,716	(1,351)	365
New England	**4,550**	**(2,050)**	**2,500**	4,214	(1,784)	2,430	4,235	(1,997)	2,238
New York	**5,561**	**(2,161)**	**3,400**	4,605	(1,469)	3,136	4,601	(1,463)	3,138
NGV and Other	**1,216**	**—**	**1,216**	864	—	864	834	—	834
Sales between segments	**(39)**	**—**	**(39)**	(10)	—	(10)	(12)	—	(12)
Total – continuing operations	**18,260**	**(7,703)**	**10,557**	13,665	(5,315)	8,350	13,360	(4,988)	8,372
Discontinued operations	**1,362**	**(397)**	**965**	1,114	(233)	881	1,180	(242)	938
Total	**19,622**	**(8,100)**	**11,522**	14,779	(5,548)	9,231	14,540	(5,230)	9,310

1. Excluding exceptional income.

Adjusted profit measures

In considering the financial performance of our business and segments, we use various adjusted profit measures in order to aid comparability of results year-on-year. The various measures are presented on pages 37 – 49 and reconciled below.

Adjusted results – these exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by management that is used to derive part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in note 5 to the financial statements.

Underlying results – further adapts our adjusted results for continuing operations to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues, including revenue incentives, as governed by our rate plans in the US or regulatory price controls in the UK (but excluding totex-related allowances and adjustments or allowances for pension deficit contributions). For 2021/22, as highlighted on page 269, our underlying results exclude £16 million (2020/21: £111 million) of timing differences as well as £163 million (2020/21: £150 million) of major storm costs (as costs exceeded our $100 million threshold in both 2021/22 and 2020/21). We expect to recover major storm costs incurred through regulatory mechanisms in the US.

Constant currency – the adjusted profit measures are also shown on a constant currency basis to show the year-on-year comparisons excluding any impact of foreign currency translation movements.

Reconciliation of statutory, adjusted and underlying profits and earnings – at actual exchange rates – continuing operations

Year ended 31 March 2022	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	**1,055**	**12**	**1,067**	**85**	**–**	**1,152**
UK Electricity Distribution	**909**	**–**	**909**	**(22)**	**–**	**887**
UK Electricity System Operator	**5**	**2**	**7**	**47**	**–**	**54**
New England	**764**	**(21)**	**743**	**32**	**111**	**886**
New York	**1,095**	**(315)**	**780**	**(126)**	**52**	**706**
NGV and Other	**543**	**(236)**	**307**	**–**	**–**	**307**
Total operating profit	**4,371**	**(558)**	**3,813**	**16**	**163**	**3,992**
Net finance costs	**(1,022)**	**(59)**	**(1,081)**	**–**	**–**	**(1,081)**
Share of post-tax results of joint ventures and associates	**92**	**56**	**148**	**–**	**–**	**148**
Profit before tax	**3,441**	**(561)**	**2,880**	**16**	**163**	**3,059**
Tax	**(1,258)**	**589**	**(669)**	**3**	**(42)**	**(708)**
Profit after tax	**2,183**	**28**	**2,211**	**19**	**121**	**2,351**

Year ended 31 March 2021	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,080	14	1,094	(42)	–	1,052
UK Electricity Distribution	–	–	–	–	–	–
UK Electricity System Operator	(53)	(7)	(60)	130	–	70
New England	614	(3)	611	11	105	727
New York	695	(30)	665	12	45	722
NGV and Other	65	52	117	–	–	117
Total operating profit	2,401	26	2,427	111	150	2,688
Net finance costs	(795)	(70)	(865)	–	–	(865)
Share of post-tax results of joint ventures and associates	58	8	66	–	–	66
Profit before tax	1,664	(36)	1,628	111	150	1,889
Tax	(360)	26	(334)	(23)	(39)	(396)
Profit after tax	1,304	(10)	1,294	88	111	1,493

Year ended 31 March 2020	Statutory £m	Exceptionals and remeasurements £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,104	5	1,109	(85)	–	1,024
UK Electricity Distribution	–	–	–	–	–	–
UK Electricity System Operator	212	(1)	211	(61)	–	150
New England	470	53	523	157	–	680
New York	370	465	835	82	–	917
NGV and Other	123	3	126	–	–	126
Total operating profit	2,279	525	2,804	93	–	2,897
Net finance costs	(966)	37	(929)	–	–	(929)
Share of post-tax results of joint ventures and associates	87	1	88	–	–	88
Profit before tax	1,400	563	1,963	93	–	2,056
Tax	(370)	8	(362)	(35)	–	(397)
Profit after tax	1,030	571	1,601	58	–	1,659

Other unaudited financial information continued

Reconciliation of adjusted and underlying profits from continuing operations – at constant currency

Year ended 31 March 2021	Adjusted at actual exchange rate £m	At constant currency: Constant currency adjustment £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,094	—	1,094	(42)	—	1,052
UK Electricity Distribution	—	—	—	—	—	—
UK Electricity System Operator	(60)	—	(60)	130	—	70
New England	611	(3)	608	11	104	723
New York	665	(4)	661	12	45	718
NGV and Other	117	—	117	—	—	117
Total operating profit	2,427	(7)	2,420	111	149	2,680
Net finance costs	(865)	4	(861)	—	—	(861)
Share of post-tax results of joint ventures and associates	66	—	66	—	—	66
Profit before tax	1,628	(3)	1,625	111	149	1,885

Year ended 31 March 2020	Adjusted at actual exchange rate £m	At constant currency: Constant currency adjustment £m	Adjusted £m	Timing £m	Major storm costs £m	Underlying £m
UK Electricity Transmission	1,109	—	1,109	(85)	—	1,024
UK Electricity Distribution	—	—	—	—	—	—
UK Electricity System Operator	211	—	211	(61)	—	150
New England	523	(24)	499	149	—	648
New York	835	(38)	797	79	—	876
NGV and Other	126	—	126	—	—	126
Total operating profit	2,804	(62)	2,742	82	—	2,824
Net finance costs	(929)	27	(902)	—	—	(902)
Share of post-tax results of joint ventures and associates	88	(1)	87	—	—	87
Profit before tax	1,963	(36)	1,927	82	—	2,009

Earnings per share calculations from continuing operations – at actual exchange rates

The table below reconciles the profit after tax from continuing operations as per the previous tables back to the earnings per share from continuing operations for each of the adjusted profit measures. Earnings per share is only presented for those adjusted profit measures that are at actual exchange rates, and not for those at constant currency.

Year ended 31 March 2022	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	**2,183**	**(1)**	**2,182**	**3,599**	**60.6**
Adjusted	**2,211**	**(1)**	**2,210**	**3,599**	**61.4**
Underlying	**2,351**	**(1)**	**2,350**	**3,599**	**65.3**

Year ended 31 March 2021	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	1,304	(1)	1,303	3,523	37.0
Adjusted	1,294	(1)	1,293	3,523	36.7
Underlying	1,493	(1)	1,492	3,523	42.4

Year ended 31 March 2020	Profit after tax £m	Non-controlling interest £m	Profit after tax attributable to shareholders £m	Weighted average number of shares millions	Earnings per share pence
Statutory	1,030	(1)	1,029	3,461	29.7
Adjusted	1,601	(1)	1,600	3,461	46.2
Underlying	1,659	(1)	1,658	3,461	47.9

Reconciliation of total Group statutory operating profit to 'adjusted earnings excluding timing and major storm costs'

	Including timing and major storm costs			Excluding timing and major storm costs		
Year ended 31 March	**2022 £m**	2021 £m	2020 £m	**2022 £m**	2021 £m	2020 £m
Continuing operations						
Adjusted operating profit	**3,813**	2,427	2,804	**3,992**	2,688	2,897
Adjusted net finance costs	**(1,081)**	(865)	(929)	**(1,081)**	(865)	(929)
Share of post-tax results of joint ventures and associates	**148**	66	88	**148**	66	88
Adjusted profit before tax	**2,880**	1,628	1,963	**3,059**	1,889	2,056
Adjusted tax	**(669)**	(334)	(362)	**(708)**	(396)	(397)
Adjusted profit after tax	**2,211**	1,294	1,601	**2,351**	1,493	1,659
Attributable to non-controlling interests	**(1)**	(1)	(1)	**(1)**	(1)	(1)
Adjusted earnings from continuing operations	**2,210**	1,293	1,600	**2,350**	1,492	1,658
Exceptional items after tax	**(320)**	(52)	(445)	**(320)**	(52)	(445)
Remeasurements after tax	**292**	62	(126)	**292**	62	(126)
Earnings from continuing operations	**2,182**	1,303	1,029	**2,322**	1,502	1,087
Discontinued operations						
Adjusted operating profit	**654**	499	503	**734**	595	557
Adjusted net finance costs	**(218)**	(77)	(114)	**(218)**	(77)	(114)
Share of post-tax results of joint ventures and associates	**–**	–	–	**–**	–	–
Adjusted profit before tax	**436**	422	389	**516**	518	443
Adjusted tax	**(92)**	(82)	(72)	**(107)**	(100)	(82)
Adjusted profit after tax	**344**	340	317	**409**	418	361
Attributable to non-controlling interests	**–**	–	–	**–**	–	–
Adjusted earnings from discontinued operations	**344**	340	317	**409**	418	361
Exceptional items after tax	**(163)**	(5)	(60)	**(163)**	(5)	(60)
Remeasurements after tax	**(10)**	2	(22)	**(10)**	2	(22)
Earnings from discontinued operations	**171**	337	235	**236**	415	279
Total Group (continuing and discontinued operations)						
Adjusted operating profit	**4,467**	2,926	3,307	**4,726**	3,283	3,454
Adjusted net finance costs	**(1,299)**	(942)	(1,043)	**(1,299)**	(942)	(1,043)
Share of post-tax results of joint ventures and associates	**148**	66	88	**148**	66	88
Adjusted profit before tax	**3,316**	2,050	2,352	**3,575**	2,407	2,499
Adjusted tax	**(761)**	(416)	(434)	**(815)**	(496)	(479)
Adjusted profit after tax	**2,555**	1,634	1,918	**2,760**	1,911	2,020
Attributable to non-controlling interests	**(1)**	(1)	(1)	**(1)**	(1)	(1)
Adjusted earnings from continuing and discontinued operations	**2,554**	1,633	1,917	**2,759**	1,910	2,019
Exceptional items after tax	**(483)**	(57)	(505)	**(483)**	(57)	(505)
Remeasurements after tax	**282**	64	(148)	**282**	64	(148)
Total Group earnings from continuing and discontinued operations	**2,353**	1,640	1,264	**2,558**	1,917	1,366

Reconciliation of adjusted EPS to statutory earnings (including and excluding the impact of timing and major storm costs)

	Including timing and major storm costs			Excluding timing and major storm costs		
Year ended 31 March	**2022 pence**	2021 pence	2020 pence	**2022 pence**	2021 pence	2020 pence
Adjusted EPS from continuing operations	**61.4**	36.7	46.2	**65.3**	42.4	47.9
Exceptional items and remeasurements after tax from continuing operations	**(0.8)**	0.3	(16.5)	**(0.8)**	0.3	(16.5)
EPS from continuing operations	**60.6**	37.0	29.7	**64.5**	42.7	31.4
Adjusted EPS from discontinued operations	**9.6**	9.7	9.2	**11.4**	11.8	10.4
Exceptional items and remeasurements after tax from discontinued operations	**(4.8)**	(0.1)	(2.4)	**(4.8)**	(0.1)	(2.4)
EPS from discontinued operations	**4.8**	9.6	6.8	**6.6**	11.7	8.0
Total adjusted EPS from continuing and discontinued operations	**71.0**	46.4	55.4	**76.7**	54.2	58.3
Total exceptional items and remeasurements after tax from continuing and discontinued operations	**(5.6)**	0.2	(18.9)	**(5.6)**	0.2	(18.9)
Total Group EPS from continuing and discontinued operations	**65.4**	46.6	36.5	**71.1**	54.4	39.4

Timing and regulated revenue adjustments
As described on pages 245 – 252, our allowed revenues are set in accordance with our regulatory price controls or rate plans. We calculate the tariffs we charge our customers based on the estimated volume of energy we expect will be delivered during the coming period. The actual volumes delivered will differ from the estimate. Therefore, our total actual revenue will be different from our total allowed revenue. These differences are commonly referred to as timing differences. If we collect more than the allowed revenue, adjustments will be made to future prices to reflect this over-recovery, and if we collect less than the allowed level of revenue, adjustments will be made to future prices to reflect the under-recovery. In the US, a substantial portion of our costs are pass-through costs (including commodity and energy-efficiency costs) and are fully recoverable from our customers. Timing differences between costs of this type being incurred and their recovery through revenue are also included in timing. The amounts calculated as timing differences are estimates and subject to change until the variables that determine allowed revenue are final.

Our continuing operating profit for the year includes a total estimated in-year under-collection of £16 million (2020/21: £111 million under-collection). For continuing operations, our closing balance at 31 March 2022 was £53 million over-recovered. Excluding discontinued operations, there was a cumulative under-recovery of £190 million at 31 March 2022 (2021: under-recovery of £70 million) in the UK. In the US, cumulative timing over-recoveries at 31 March 2022 were £293 million (2021: £198 million over-recovery). The total estimated in-year over- or under-collection excludes opening balance adjustments related to estimates or finalisation of balances as part of regulatory submissions.

In addition to the timing adjustments described above, as part of the RIIO price controls in the UK, outperformance against allowances as a result of the totex incentive mechanism, together with changes in output-related allowances included in the original price control, will almost always be adjusted in future revenue recoveries, typically starting in two years' time. We also receive revenues in relation to certain costs incurred or expected to be incurred (for example pension deficit contributions), with differences between revenues received and cost incurred adjusted in future revenue recoveries, e.g. after a triennial actuarial pension funding valuation has been concluded. Our current IFRS revenues and earnings include these amounts that relate to certain costs incurred in prior years or that will need to be repaid or recovered in future periods. Such adjustments will form an important part of the continuing difference between reported IFRS results and underlying economic performance based on our regulatory obligations.

For our UK regulated businesses as a whole (including discontinued operations), timing and regulated revenue adjustments totalled a return of £190 million in the year (2020/21: £184 million return). In the US, accumulated regulatory entitlements cover a range of different areas, with the most significant being environmental remediation and pension assets, as well as deferred storm costs. All regulatory entitlements are recoverable (or repayable) over different periods, which are agreed with the regulators to match the expected payment profile for the liabilities.

	UK Electricity Transmission £m	**UK Electricity Distribution £m**	**UK Electricity System Operator £m**	**New England £m**	**New York £m**	**Continuing £m**	**Discontinued £m**	**Total £m**
1 April 2021 opening balance[1]	**–**	**–**	**(80)**	**(266)**	**465**	**119**	**(76)**	**43**
Over/(under)-recovery	**(85)**	**22**	**(47)**	**(32)**	**126**	**(16)**	**(80)**	**(96)**
31 March 2022 closing balance to (recover)/return[2]	**(85)**	**22**	**(127)**	**(298)**	**591**	**103**	**(156)**	**(53)**

	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	Continuing £m	Discontinued £m	Total £m
1 April 2020 opening balance[1]	(52)	–	70	(254)	479	243	16	259
Over/(under)-recovery	42	–	(130)	(11)	(12)	(111)	(96)	(207)
31 March 2021 closing balance to (recover)/return[2,3]	(10)	–	(60)	(265)	467	132	(80)	52

	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	Continuing £m	Discontinued £m	Total £m
1 April 2019 opening balance[1]	(141)	–	14	(108)	558	323	59	382
Over/(under)-recovery	85	–	61	(149)	(79)	(82)	(54)	(136)
31 March 2020 closing balance to (recover)/return[2,3]	(56)	–	75	(257)	479	241	5	246

1. Opening balances have been restated to reflect the finalisation of calculated over/(under)-recoveries in the UK and the US.
2. The closing balance (including discontinued operations) at 31 March 2022 was £45 million under-recovered (translated at the closing rate of $1.31:£1). 31 March 2021 was £48 million over-recovered (translated at the closing rate of $1.38:£1). 31 March 2020 was £264 million over-recovered (translated at the closing rate of $1.24:£1).
3. New England and New York in-year over/(under)-recovery and all New England and New York balances have been translated using the average exchange rate of $1.35 for the year ended 31 March 2022.

Capital investment

'Capital investment' or 'investment' refer to additions to property, plant and equipment and intangible assets, and contributions to joint ventures and associates, other than the St William Homes LLP joint venture during the period. We also include the Group's investments by National Grid Partners during the period, which are classified for IFRS purposes as non-current financial assets in the Group's consolidated statement of financial position.

Investments made to our St William Homes LLP arrangement are excluded based on the nature of this joint venture arrangement. We typically contributed property assets to the joint venture in exchange for cash and accordingly did not consider these transactions to be in the nature of capital investment.

Year ended 31 March	At actual exchange rates			At constant currency		
	2022 £m	2021 £m	% change	**2022 £m**	2021 £m	% change
UK Electricity Transmission	**1,195**	984	21	**1,195**	984	21
UK Electricity Distribution	**899**	—	n/a	**899**	—	n/a
UK Electricity System Operator	**108**	88	23	**108**	88	23
New England	**1,561**	1,437	9	**1,561**	1,429	9
New York	**1,960**	1,738	13	**1,960**	1,729	13
NGV and Other	**462**	480	(4)	**462**	480	(4)
Group capital expenditure – continuing	**6,185**	4,727	31	**6,185**	4,710	31
Equity investment, funding contributions and loans to joint ventures and associates[1]	**461**	81	469	**461**	81	469
Investments in financial assets (National Grid Partners)	**93**	35	166	**93**	35	166
Group capital investment – continuing	**6,739**	4,843	39	**6,739**	4,826	40
Discontinued operations	**261**	204	28	**261**	204	28
Group capital expenditure – total	**7,000**	5,047	39	**7,000**	5,030	39

1. Excludes £25 million (2021: £nil) equity contribution to the St William Homes LLP joint venture.

Net debt

See note 29 on page 208 for the definition and reconciliation of net debt.

Funds from operations and interest cover

FFO is the cash flows generated by the operations of the Group. Credit rating metrics, including FFO, are used as indicators of balance sheet strength.

Year ended 31 March	**2022 £m**	2021[1] £m	2020[1] £m
Interest expense (income statement)	**1,146**	977	1,119
Hybrid interest reclassified as dividend	**(38)**	(38)	(39)
Capitalised interest	**152**	131	122
Pensions interest adjustment	**11**	(16)	16
Unwinding of discount on provisions	**(73)**	(78)	(77)
Interest charge (discontinued operations)	**218**	—	—
Adjusted interest expense	**1,416**	976	1,141
Net cash inflow from operating activities	**5,490**	4,461	4,715
Interest received on financial instruments	**40**	16	73
Interest paid on financial instruments	**(1,053)**	(835)	(957)
Dividends received	**166**	80	75
Working capital adjustment	**(361)**	(312)	(269)
Excess employer pension contributions	**99**	116	176
Hybrid interest reclassified as dividend	**38**	38	39
Add back accretions	**241**	—	—
Difference in net interest expense in income statement to cash flow	**(177)**	(138)	(187)
Difference in current tax in income statement to cash flow	**72**	(67)	67
Current tax related to prior periods	**(35)**	8	(45)
Cash flow from discontinued operations	**668**	—	(97)
Other fair value adjustments	**—**	22	—
Funds from operations (FFO)	**5,188**	3,389	3,590
FFO interest cover ((FFO + adjusted interest expense)/adjusted interest expense)	**4.7x**	4.5x	4.1x

1. Numbers for 2021 and 2020 reflect the calculations for the total Group as based on the published accounts for the respective years.

Retained cash flow/adjusted net debt

RCF/adjusted net debt is one of two credit metrics that we monitor in order to ensure the Group is generating sufficient cash to service its debts, consistent with maintaining a strong investment-grade credit rating. We calculated RCF/adjusted net debt applying the methodology used by Moody's, as this is one of the most constrained calculations of credit worthiness. The net debt denominator includes adjustments to take account of the equity component of hybrid debt.

Year ended 31 March	2022 £m	2021[1] £m	2020 £m
Funds from operations (FFO)	**5,188**	3,389	3,590
Hybrid interest reclassified as dividend	**(38)**	(38)	(39)
Ordinary dividends paid to shareholders	**(922)**	(1,413)	(892)
RCF	**4,228**	1,938	2,659
Borrowings[2]	**45,465**	32,339	30,794
Less:			
50% hybrid debt	**(1,027)**	(1,032)	(1,054)
Cash and cash equivalents	**(190)**	(157)	(73)
Financial and other investments	**(2,292)**	(1,768)	(1,278)
Underfunded pension obligations	**326**	467	1,442
Borrowings in held for sale	**5,234**	–	–
Derivative balances removed from debt[3]	**–**	–	(116)
Currency swaps[3]	**–**	–	203
Nuclear decommissioning liabilities reclassified as debt[3]	**–**	–	6
Collateral – cash received under collateral agreements	**–**	(582)	(785)
Accrued interest removed from short-term debt[3]	**–**	–	(246)
Adjusted net debt (includes pension deficit)	**47,516**	29,267	28,893
RCF/adjusted net debt	**8.9%**	6.6%	9.2%

1. Numbers for 2021 reflect the calculations for the total Group as based on the published accounts for that year.
2. Including borrowings in NECO and UK Gas Transmission classified as held for sale.
3. Below agency threshold, prior year not restated.

Regulatory Performance Measures

Regulated financial performance – UK

Regulatory financial performance is a pre-interest and tax measure, starting at segmental operating profit and making adjustments (such as the elimination of all pass-through items included in revenue allowances and timing) to approximate regulatory profit for the UK regulated activities. This measure provides a bridge for investors between a well-understood and comparable IFRS starting point and through the key adjustments required to approximate regulatory profit. This measure also provides the foundation to calculate Group RoE.

For the reasons noted above, the table below shows the principal differences between the IFRS operating profit and the regulated financial performance, but is not a formal reconciliation to an equivalent IFRS measure.

UK Electricity Transmission

Year ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**1,067**	1,094	1,109
Movement in regulatory 'IOUs'	**82**	59	21
Deferred taxation adjustment	**26**	53	60
RAV indexation – 2% CPIH (2020 & 2021: 3% RPI) long-run inflation	**287**	418	401
Regulatory vs IFRS depreciation difference	**(433)**	(434)	(448)
Fast money/other	**(44)**	57	70
Pensions	**(42)**	(41)	(40)
Performance RAV created	**75**	110	122
Regulated financial performance	**1,018**	1,316	1,295

UK Electricity Distribution

9.5 months ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**909**	n/a	n/a
Movement in regulatory 'IOUs'	**(42)**	n/a	n/a
Deferred taxation adjustment	**28**	n/a	n/a
RAV indexation – 3% RPI long-run inflation	**198**	n/a	n/a
Regulatory vs IFRS depreciation difference	**(358)**	n/a	n/a
Fast money/other	**(34)**	n/a	n/a
Pensions	**(111)**	n/a	n/a
Performance RAV created	**9**	n/a	n/a
Regulated financial performance	**599**	n/a	n/a

UK Electricity System Operator

Year ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**7**	(60)	211
Movement in regulatory 'IOUs'	**31**	129	(120)
Deferred taxation adjustment	**(4)**	7	3
RAV indexation – 2% CPIH (2020 & 2021: 3% RPI) long-run inflation	**5**	6	5
Regulatory vs IFRS depreciation difference	**27**	(5)	(11)
Fast money/other	**(24)**	(29)	(44)
Pensions	**(10)**	(13)	(12)
Performance RAV created	**—**	1	(3)
Regulated financial performance	**32**	36	29

UK Gas Transmission

Year ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**654**	499	503
Less non-regulated profits	**(150)**	(157)	(155)
Movement in regulatory 'IOUs'	**72**	34	67
Deferred taxation adjustment	**13**	12	25
RAV indexation – 2% CPIH (2020 & 2021: 3% RPI) long-run inflation	**126**	189	185
Regulatory vs IFRS depreciation difference	**(281)**	(88)	(77)
Fast money/other	**(4)**	25	(17)
Pensions	**—**	(34)	(34)
Performance RAV created	**3**	(23)	(24)
Regulated financial performance	**433**	457	473

Regulated financial performance – US

New England

Year ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**743**	611	523
Provision for bad and doubtful debts (COVID-19), net of recoveries[1]	**—**	(7)	63
Major storm costs	**111**	105	—
Timing	**32**	11	157
Depreciation adjustment[2]	**(67)**	—	—
US GAAP pension adjustment	**11**	2	(2)
Regulated financial performance	**830**	722	741

1. New England financial performance includes an adjustment reflecting our expectation for future recovery of COVID-19-related provision for bad and doubtful debts.
2. The depreciation adjustment relates to the impact of the cessation of depreciation for NECO under IFRS following reclassification as held for sale.

New York

Year ended 31 March	2022 £m	2021 £m	2020 £m
Adjusted operating profit	**780**	665	835
Provision for bad and doubtful debts (COVID-19), net of recoveries[1]	**—**	127	54
Major storm costs	**52**	45	—
Timing	**(126)**	12	82
US GAAP pension adjustment	**66**	1	(2)
Regulated financial performance	**772**	850	969

1. New York financial performance includes an adjustment reflecting our expectation for future recovery of COVID-19-related provision for bad and doubtful debts.

Total regulated financial performance

Year ended 31 March	2022 £m	2021 £m	2020 £m
UK Electricity Transmission	**1,018**	1,316	1,295
UK Electricity Distribution	**599**	n/a	n/a
UK Electricity System Operator	**32**	36	29
UK Gas Transmission	**433**	457	473
New England	**830**	722	741
New York	**772**	850	969
Total regulated financial performance	**3,684**	3,381	3,507

New England and New York timing, major storms costs and movement in UK regulatory 'IOUs' – Revenue related to performance in one year may be recovered in later years. Where revenue received or receivable exceeds the maximum amount permitted by our regulatory agreement, adjustments will be made to future prices to reflect this over-recovery. No liability is recognised under IFRS, as such an adjustment to future prices relates to the provision of future services. Similarly, no asset is recognised under IFRS where a regulatory agreement permits adjustments to be made to future prices in respect of an under-recovery. In the UK, this is calculated as the movement in other regulated assets and liabilities.

Performance RAV – UK performance efficiencies are in part remunerated by the creation of additional RAV which is expected to result in future earnings under regulatory arrangements. This is calculated as in-year totex outperformance multiplied by the appropriate regulatory capitalisation ratio and multiplied by the retained company incentive sharing ratio.

Pension adjustment – Cash payments against pension deficits in the UK are recoverable under regulatory contracts. In US Regulated operations, US GAAP pension charges are generally recoverable through rates. Revenue recoveries are recognised under IFRS but payments are not charged against IFRS operating profits in the year. In the UK, this is calculated as cash payments against the regulatory proportion of pension deficits in the UK regulated business, whereas in the US, it is the difference between IFRS and US GAAP pension charges.

2% CPIH and 3% RPI RAV indexation – Future UK revenues are expected to be set using an asset base adjusted for inflation. This is calculated as UK RAV multiplied by 2% long-run CPIH inflation assumption under RIIO-2 and a 3% long-run RPI inflation assumption under RIIO-1.

UK deferred taxation adjustment – Future UK revenues are expected to recover cash taxation cost including the unwinding of deferred taxation balances created in the current year. This is the difference between: (a) IFRS underlying EBITDA less other regulatory adjustments; and (b) IFRS underlying EBITDA less other regulatory adjustments less current taxation (adjusted for interest tax shield) then grossed up at full UK statutory tax rate.

Regulatory depreciation – US and UK regulated revenues include allowance for a return of regulatory capital in accordance with regulatory assumed asset lives. This return does not form part of regulatory profit.

Fast/slow money adjustment – The regulatory remuneration of costs incurred is split between in-year revenue allowances and the creation of additional RAV. This does not align with the classification of costs as operating costs and fixed asset additions under IFRS accounting principles. This is calculated as the difference between IFRS classification of costs as operating costs or fixed asset additions and the regulatory classification.

Regulated asset base

The regulated asset base is a regulatory construct, based on predetermined principles not based on IFRS. It effectively represents the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulated asset base over the long term, and this in turn contributes to delivering shareholder value. Our regulated asset base comprises of our regulatory asset value in the UK, plus our rate base in the US.

Maintaining efficient investment in our regulated asset base ensures we are well positioned to provide consistently high levels of service to our customers and increases our revenue allowances in future years. While we have no specific target, our overall aim is to achieve between 6% and 8% growth in regulated asset base each year through continued investment in our networks in both the UK and US.

In the UK, the way in which our transactions impact RAV is driven by principles set out by Ofgem. In a number of key areas these principles differ from the requirements of IFRS, including areas such as additions and the basis for depreciation. Further, our UK RAV is adjusted annually for inflation. RAV in each of our retained UK businesses has evolved over the period since privatisation in 1990, and as a result, historical differences between the initial determination of RAV and balances reported under UK GAAP at that time still persist. In the case of WPD, differences arise as the result of acquisition fair value adjustments (where PP&E at acquisition has been valued above RAV). Due to the above, substantial differences exist in the measurement bases between RAV and an IFRS balance metric, and therefore, it is not possible to provide a meaningful reconciliation between the two.

In the US, rate base is a regulatory measure determined for each of our main US operating companies. It represents the value of property and other assets or liabilities on which we are permitted to earn a rate of return, as set out by the regulatory authorities for each jurisdiction. The calculations are based on the applicable regulatory agreements for each jurisdiction and include the allowable elements of assets and liabilities from our US companies. For this reason, it is not practical to provide a meaningful reconciliation from the US rate base to an equivalent IFRS measure. However, we include the calculation below.

'Total regulated and other balances' for our UK regulated businesses include the under or over-recovery of allowances that those businesses target to collect in any year, which are based on the regulator's forecasts for that year. Under the UK price control arrangements, revenues will be adjusted in future years to take account of actual levels of collected revenue, costs and outputs delivered when they differ from those regulatory forecasts. In the US, other regulatory assets and liabilities include regulatory assets and liabilities which are not included in the definition of rate base, including working capital where appropriate.

'Total regulated and other balances' for NGV and Other businesses includes assets and liabilities as measured under IFRS, but excludes certain assets and liabilities such as pensions, tax, net debt and goodwill. This also includes a £101 million deferred balance for separation and transaction costs already incurred related to the sale of NECO and UK Gas Transmission, which is expected to be offset against the proceeds received on disposal of these businesses in 2022/23.

Year ended 31 March (£m at constant currency)	RAV, rate base or other business assets 2022 £m	2021[1] £m	Total regulated and other balances 2022[2,3] £m	2021[1,2,3] £m
UK Electricity Transmission	**15,486**	14,328	**15,274**	14,050
UK Electricity Distribution	**9,250**	—	**9,307**	—
UK Electricity System Operator	**296**	240	**439**	351
UK Gas Transmission (excluding metering)	**6,561**	6,308	**6,657**	6,335
New England	**9,255**	8,673	**11,052**	10,154
New York	**12,923**	12,014	**13,747**	12,528
Total regulated	**53,771**	41,563	**56,476**	43,418
NGV and Other businesses (including discontinued metering business)	**5,226**	4,920	**4,348**	4,584
Total Group regulated and other balances	**58,997**	46,483	**60,824**	48,002

1. Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for segmental reorganisation, opening balance adjustments following the completion of the UK regulatory reporting pack process and finalisation of US balances.
2. Includes totex-related regulatory IOUs of £271 million (2021: £293 million), over-recovered timing balances of £346 million (2021: £153 million under-recovered) and under-recovered legacy balances related to previous price controls of £9 million (2021: £nil).
3. Includes assets for construction work-in-progress of £2,139 million (2021: £1,671 million), other regulatory assets related to timing and other cost deferrals of £759 million (2021: £714 million) and net working capital liabilities of £277 million (2021: £390 million).

New England and New York rate base and other total regulated and other balances for 31 March 2021 have been re-presented in the table above at constant currency. At actual currency the values were £9.7 billion and £11.9 billion respectively.

Group RoE

Group RoE provides investors with a view of the performance of the Group as a whole compared with the amounts invested by the Group in assets attributable to equity shareholders. It is the ratio of our regulatory financial performance to our measure of equity investment in assets. It therefore reflects the regulated activities as well as the contribution from our non-regulated businesses together with joint ventures and non-controlling interests.

We use Group RoE to measure our performance in generating value for our shareholders, and targets for Group RoE are included in the incentive mechanisms for executive remuneration within both the APP and LTPP schemes.

Group RoE is underpinned by our regulated asset base. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical. However, we do include the calculations below.

Calculation: Regulatory financial performance including a long-run inflation assumption (3% RPI for RIIO-1; 2% CPIH for RIIO-2), less adjusted interest and adjusted taxation divided by equity investment in assets:

- adjusted interest removes interest on pensions, capitalised interest in regulated operations and unwind of discount rate on provisions;
- adjusted taxation adjusts the Group taxation charge for differences between IFRS profit before tax and regulated financial performance less adjusted interest; and
- equity investment in assets is calculated as the total opening UK regulatory asset value, the total opening US rate base plus goodwill plus opening net book value of National Grid Ventures and Other activities (excluding certain amounts such as pensions, tax and commodities) and our share of joint ventures and associates, minus opening net debt as reported under IFRS restated to the weighted average £/$ exchange rate for the year.

Year ended 31 March	2022 £m	2021 £m	2020 £m
Regulated financial performance	**3,684**	3,381	3,507
Operating profit of other activities – continuing operations	**330**	144	153
Operating profit of other activities – discontinued operations	**150**	157	155
Group financial performance	**4,164**	3,682	3,815
Share of post-tax results of joint ventures and associates	**148**	66	88
Non-controlling interests	**(1)**	(1)	(1)
Adjusted total Group interest charge (including discontinued)	**(1,191)**	(882)	(1,069)
Total Group tax charge (including discontinued)	**(761)**	(416)	(433)
Tax on adjustments	**43**	(175)	(117)
Total Group financial performance after interest and tax	**2,402**	2,274	2,283
Opening rate base/RAV	**41,043**	39,552	37,459
Opening other balances	**4,864**	3,984	3,304
Opening goodwill	**5,266**	5,295	5,435
Opening capital employed	**51,173**	48,831	46,198
Opening net debt	**(30,072)**	(27,398)	(27,194)
Opening equity	**21,101**	21,433	19,004
Return on Equity[1]	**11.4%**	10.6%	12.0%

1. Group RoE methodology amended in 2021/22 to calculate accretion charge on inflation-linked debt at long-run inflation rates. This provides alignment to treatment of RAV indexation in the metric. Prior year comparatives have not been restated.

Other unaudited financial information continued

UK and US regulated RoE

Year ended 31 March	Regulatory Debt: Equity assumption	Achieved Return on Equity 2022 %	2021 %	Base or Allowed Return on Equity 2022 %	2021 %
UK Electricity Transmission	55/45 (2021: 60/40)	7.7	13.8	6.3	10.2
UK Electricity Distribution	65/35	13.6	—	9.6	—
UK Gas Transmission	60/40 (2021: 62.5/37.5)	7.8	9.6	6.6	10.0
New England	Avg. 46/54	8.3	7.5	9.8	9.8
New York	Avg. 52/48	8.8	6.7	8.9	9.0

UK businesses' regulated RoEs

UK regulated businesses' RoEs are a measure of how the businesses are performing against the assumptions used by our UK regulator. These returns are calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure, at the cost of debt assumed by the regulator, and that inflation is equal to a long-run assumption of 3% RPI under RIIO-1 and 2% CPIH under RIIO-2. They are calculated by dividing elements of out/under-performance versus the regulatory contract (i.e. regulated financial performance disclosed above) by the average equity RAV in line with the regulatory assumed capital structure and adding to the base allowed RoE.

These are important measures of UK regulated businesses' performance, and our operational strategy continues to focus on these metrics. These measures can be used to determine how we are performing under the RIIO framework and also helps investors to compare our performance with similarly regulated UK entities. Reflecting the importance of these metrics, they are also key components of the APP scheme.

The respective businesses' UK RoEs are underpinned by their RAVs. For the reasons noted above, no reconciliation to IFRS has been presented, as we do not believe it would be practical.

US businesses' regulated RoEs

US regulated businesses' RoEs are a measure of how the businesses are performing against the assumptions used by the US regulators. This US operational return measure is calculated using the assumption that the businesses are financed in line with the regulatory adjudicated capital structure and allowed cost of debt. The returns are divided by the average rate base (or where a reported rate base is not available, an estimate based on rate base calculations used in previous rate filings) multiplied by the adjudicated equity portion in the regulatory adjudicated capital structure.

These are important measures of our New England and New York regulated businesses' performance, and our operational strategy continues to focus on these metrics. This measure can be used to determine how we are performing and also helps investors compare our performance with similarly regulated US entities. Reflecting the importance of these metrics, they are also key components of the APP scheme.
The New England and New York businesses' returns are based on a calculation which gives proportionately more weighting to those businesses which have a greater rate base. For the reasons noted above, no reconciliations to IFRS for the RoE measures have been presented, as we do not believe it would be practical to reconcile our IFRS balance sheet to the equity base.

The table below shows the principal differences between the IFRS result of the New England and New York segments, and the 'returns' used to derive their respective US jurisdictional RoEs. In outlining these differences, we also include the aggregated business results under US GAAP for New England and New York jurisdictions.

In respect of 2020/21 and 2019/20, this measure is the aggregate operating profit of our US OpCo entities' publicly available financial statements prepared under US GAAP for the New England and New York jurisdictions respectively. For 2021/22, this measure represents our current estimate, since local financial statements have yet to be prepared.

	2022 £m	2021 £m	2020 £m
Underlying IFRS operating profit for New England segment	886	727	680
Underlying IFRS operating profit for New York segment	706	722	917
Weighted average £/$ exchange rate	$1.348	$1.341	$1.287

	New England			New York		
	2022 $m	2021 $m	2020 $m	2022 $m	2021 $m	2020 $m
Underlying IFRS operating profit for US segments	**1,194**	974	874	**951**	969	1,181
Adjustments to convert to US GAAP as applied in our US OpCo entities						
Adjustment in respect of customer contributions	**(35)**	(28)	(24)	**(30)**	(31)	(25)
Pension accounting differences[1]	**14**	8	43	**88**	(2)	(51)
Environmental charges recorded under US GAAP	**3**	(14)	2	**42**	(94)	(95)
Storm costs and recoveries recorded under US GAAP	**(75)**	(86)	(43)	**(8)**	(27)	34
Other regulatory deferrals, amortisation and other items	**(253)**	58	(5)	**46**	43	1
Results for US regulated OpCo entities, aggregated under US GAAP[2]	**848**	912	847	**1,089**	858	1,045
Adjustments to determine regulatory operating profit used in US RoE						
Levelisation revenue adjustment	**—**	—	—	**—**	—	(122)
Adjustment for COVID-19-related provision for bad and doubtful debts[3]	**—**	(44)	84	**—**	171	66
Net other	**71**	(14)	(13)	**85**	(16)	74
Regulatory operating profit	**919**	854	918	**1,174**	1,013	1,063
Pensions[1]	**7**	(31)	(4)	**107**	(13)	21
Regulatory interest charge	**(227)**	(221)	(200)	**(316)**	(314)	(285)
Regulatory tax charge	**(179)**	(155)	(183)	**(263)**	(185)	(216)
Regulatory earnings used to determine US RoE	**520**	447	531	**702**	501	583

1. Following a change in US GAAP accounting rules, an element of the pensions charge is reported outside operating profit with effect from 2019.
2. Based on US GAAP accounting policies as applied by our US regulated OpCo entities.
3. US RoE includes an adjustment reflecting our expectation for future recovery of COVID-19-related bad and doubtful debt costs.

	New England			New York		
	2022 $m	2021 $m	2020 $m	2022 $m	2021 $m	2020 $m
US equity base (average for the year)	**6,253**	5,960	5,422	**7,946**	7,452	6,721
US jurisdiction RoE	**8.3%**	7.5%	9.8%	**8.8%**	6.7%	8.7%

Value Added and Value Added per share and Value Growth

Value Added is a measure that reflects the value to shareholders of our cash dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), and corresponding growth in net debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision making and long-term management incentive arrangements.

Value Added is derived using our regulated asset base and, as such, it is not practical to provide a meaningful reconciliation from this measure to an equivalent IFRS measure due to the reasons set out for our regulated asset base. However, the calculation is set out in the Financial review. Value Added per share is calculated by dividing Value Added by the weighted average number of shares (3,599 million) set out in note 8.

Value Growth of 12.8% (2021: 9.4%) is derived from Value Added by adjusting Value Added to normalise for our estimate of the long-run inflation rate (3% RPI for RIIO-1 and our RPI-linked net debt; 2% CPIH for RIIO-2). In 2021, the numerator for Value Growth was £2,730 million (2021: £1,995 million). The denominator is Group equity as used in the Group RoE calculation, adjusted for foreign exchange movements.

Asset growth

Asset growth is the annual percentage increase in our RAV and rate base and other business balances (including the assets of NGV and NGP) calculated at constant currency.

Regulatory gearing

Regulatory gearing is a measure of how much of our investment in RAV and rate base and other elements of our invested capital (including our investments in NGV, UK property and other assets and US other assets) is funded through debt. Comparative amounts as at 31 March 2021 are presented at historical exchange rates and have not been restated for opening balance adjustments.

As at 31 March	2022 £m	2021 £m	
UK RAV	**31,593**	20,872	
US rate base	**22,178**	20,041	
Other invested capital included in gearing calculation	**5,226**	4,458	
Total assets included in gearing calculation	**58,997**	45,371	
Net debt (including 100% of hybrid debt and held for sale)	**(48,043)**	(29,665)	change
Group gearing (based on 100% of net debt including held for sale)	**81%**	65%	16% pts
Group gearing (excluding 50% of hybrid debt from net debt) including held for sale	**80%**	63%	17% pts

Commentary on consolidated financial statements
for the year ended 31 March 2021

In compliance with SEC rules, we present a summarised analysis of movements in the income statement and an analysis of movements in adjusted operating profit (for the continuing Group) by operating segment. This should be read in conjunction with the 31 March 2022 Financial review included on pages 36 – 49.

Analysis of the income statement for the year ended 31 March 2021

Revenue

Revenue from continuing operations for the year ended 31 March 2021 increased by £305 million to £13,665 million. Revenues were driven by a £302 million increase in UK Electricity System Operator (mainly as a result of higher balancing service pass-through costs, offset by year-on-year timing under-recoveries). Rate increases in both New England and New York were more than offset by lower revenues for commodity pass-through costs. Revenue from NGV and Other increased by £34 million, related to our US renewables business and Partners gains, partly offset by lower Property sales.

Operating costs

Operating costs from continuing activities for the year ended 31 March 2021 of £10,939 million were £92 million higher than prior year. This increase in costs was offset by a £499 million reduction in exceptional items and remeasurements income compared to 2019/20, principally related to the US environmental provision booked in 2019/20 and year-on-year movements in commodity contract remeasurements. In addition, higher operating costs were driven by higher UK BSIS pass-through costs, higher workforce costs and higher depreciation as a result of continued asset investment. This was partially offset by the impact of lower costs in respect of purchases of gas and electricity and the impact of movement in foreign exchange.

In addition to the operating costs of £10,939 million above, provisions for bad and doubtful debts of £325 million were recorded, £91 million higher than the year ended 31 March 2020, principally as a result of the continued impact of COVID-19 on the Group's operations.

Net finance costs

For the year ended 31 March 2021, net finance costs from continuing operations before exceptional items and remeasurements were £64 million lower than the year ended 31 March 2020 at £865 million driven by the impact of lower inflation on our RPI-linked debt, new debt issued at lower rates, a higher net debt as a result of asset growth, termination fees incurred in the prior year and favourable foreign exchange movements, partly offset by higher interest on pension and OPEB liabilities and a higher benefit from interest on tax settlements in 2019/20.

Tax

The tax charge on profits before exceptional items and remeasurements of £334 million was £28 million lower than the year ended 31 March 2020. This was mainly related to a lower level of profit before tax in the year ended 31 March 2021 compared to the year ended 31 March 2020.

Exceptional items and remeasurements

In the year ended 31 March 2021, exceptional items included a £50 million charge in relation to our new operating model implementation costs alongside a £24 million charge in relation to transaction and separation costs (principally in relation to the acquisition of WPD). A £14 million credit was also recognised relating to the release of environmental provisions for one of our Superfund sites for the which the original provision was treated as an exceptional item.

In the prior year, exceptional items included a £400 million charge associated with changes in our environmental provisions and an additional deferred tax charge of £148 million reflecting the impact of the remeasurement of the Group's deferred tax liabilities as a result of a change in the substantively enacted UK corporation tax rate.

Remeasurement gains of £34 million were recognised on commodity contracts in the year ended 31 March 2021 compared with losses of £125 million in the year ended 31 March 2020.

Finance costs for the year ended 31 March 2021 included a net gain of £70 million on financial remeasurements of derivative financial instruments and financial assets at fair value through profit or loss, compared to a net loss of £37 million on financial remeasurements in the year ended 31 March 2020.

Share of post-tax results of joint ventures and associates before exceptional items for the year ended 31 March 2021 were £66 million compared to £88 million in the year ended 31 March 2020, principally due to reduced profits in St William, our Property joint venture.

Profit after tax from discontinued operations

Profit after tax from discontinued operations increased by £102 million to £337 million. This included exceptional costs and remeasurements of £3 million in 2020/21 compared to £82 million in 2019/20. Excluding exceptional items and remeasurements, adjusted operating profit was broadly flat compared to the year ended 31 March 2020. There was an overall reduction of £37 million in the net financing costs attributable to discontinued operations mostly driven by the impact of RPI on our inflation-linked debt. Tax for discontinued operations was £82 million in the year ended 31 March 2021, a £10 million higher tax charge than the prior year driven by higher levels of profit.

Adjusted earnings and EPS from continuing operations

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the Group's results on an 'adjusted profit' basis, described further in note 5. See page 270 for a reconciliation of adjusted basic EPS to EPS.

The above earnings performance translated into adjusted EPS in the year ended 31 March 2021 of 36.7p, compared to 46.2p in the year ended 31 March 2020. Including discontinued operations, adjusted EPS in the year ended 31 March 2021 of 46.4p, compared to 55.4p in the year ended 31 March 2020.

Exchange rates

Our financial results are reported in sterling. Transactions for our US operations are denominated in dollars, so the related amounts that are reported in sterling depend on the dollar to sterling exchange rate. The table below shows the average and closing exchange rates of sterling to US dollars.

	2020/21	2019/20	% change
Weighted average (income statement)	**1.34**	1.29	4%
Year end (statement of financial position)	**1.38**	1.24	11%

The movement in foreign exchange during the year ended 31 March 2021 has resulted in a £374 million decrease in revenue, a £55 million decrease in adjusted operating profit and a £65 million decrease in underlying operating profit.

Analysis of the adjusted operating profit by segment for the year ended 31 March 2021

UK Electricity Transmission

For the year ended 31 March 2021, revenue in the UK Electricity Transmission segment decreased by £12 million to £1,974 million, and adjusted operating profit increased by £15 million to £1,094 million. Revenue was lower principally as the result of lower pass-through costs and lower incentives. Excluding pass-through costs, net revenue was £14 million higher, as a result of income from legal settlements, the result of RAV indexation from inflation, offset by adverse MOD adjustments, lower base revenues and lower timing over-recoveries (incentives and lower collection of prior period under-recoveries). Regulated controllable costs were £16 million lower, reflecting inflation and higher IT costs, but these were more than offset by efficiency savings. Depreciation and amortisation was £29 million higher due to prior year impairment, a full year of Western Link and provision releases in the year ended 31 March 2021. Other costs were £21 million higher, principally the result of credits related to diversions arising in the prior year.

Capital expenditure increased by £33 million compared with the year ended 31 March 2020 to £984 million reflecting increased activity on Hinkley Seabank, London Power Tunnels 2 and higher capex on the Dorset Visual Impact Provision project in the year ended 31 March 2021.

UK Electricity System Operator

For the year ended 31 March 2021, revenue in the UK Electricity System Operator segment increased by £302 million to £2,018 million but this was principally as the result of higher pass-through costs, which increased from £1,351 million in 2019/20 to £1,911 million in 2020/21 (principally reflecting higher balancing service costs due to reduced demand as a result of COVID-19 and higher intervention costs required to balance the grid). Excluding pass-through costs, net revenue was £271 million lower, as the result of £130 million timing under-recoveries in 2020/21 compared to £60 million over-recoveries in 2019/20 (mainly lower volumes and the impact of the BSUoS deferral scheme). Regulated controllable costs were broadly flat, with inflation and higher IT costs being offset by efficiency savings. Depreciation and amortisation was £9 million higher due to higher asset commissioning.

Capital expenditure decreased by £4 million compared with the year ended 31 March 2020.

New England

Revenue in the New England segment decreased by £21 million to £4,214 million and adjusted operating profit increased by £88 million to £611 million.

The weaker US dollar decreased revenue and operating profit in the year ended 31 March 2021. Excluding the impact of foreign exchange rate movements, revenue increased by £137 million. Of this increase, £134 million was due to decrease in commodity pass-through costs charged on to customers, and £139 million was due to year-on-year timing movements as a result of under-collection of revenues compared to our regulatory allowances in the year ended 31 March 2020. Excluding pass-through costs and timing swings, net revenue increased by £410 million at constant currency, principally reflecting increased revenue allowances under rate plans. Regulated controllable costs increased by £76 million (excluding the impact of foreign exchange) as a result of increased IT costs and inflation partly offset by efficiency savings.

Capital expenditure increased by £127 million (excluding the impact of foreign exchange movements) to £1,437 million, mainly related to increased investment in wholesale networks (including line and cable relocation in NECO, higher LNG spend and also asset refurbishment in New England Power.

New York

Revenue in our New York segment increased by £4 million to £4,605 million, but adjusted operating profit decreased by £170 million to £665 million.

The weaker US dollar decreased revenue and operating profit in the year ended 31 March 2021. Excluding the impact of foreign exchange rate movements, revenue increased by £176 million. Of this increase, £64 million was due to increases in commodity pass-through costs charged on to customers, and £67 million was due to year-on-year timing movements as a result of under-collection of revenues compared to our regulatory allowances in the year ended 31 March 2020. Excluding pass-through costs and timing swings, net revenue increased by £179 million at constant currency, principally reflecting increased revenue allowances under rate plans.

Excluding the impact of foreign exchange movements, regulated controllable costs increased by £24 million as a result of increased IT costs and inflation offset by cost efficiencies. Bad debt expense increased by £132 million at constant currency, driven by additional provisions for receivables related to the impact of COVID-19.

Depreciation and amortisation increased by £34 million year-on-year (excluding foreign exchange adjustments) to £453 million due to ongoing investment in our networks.

Capital expenditure decreased by £16 million (excluding the impact of foreign exchange) to £1,738 million, mainly the consequence of reduced investment in downstate New York (gas pipeline and mandated gas works) which were impacted by disruptions due to COVID-19, mostly offset by damage repair (driven by storm activity in Niagara Mohawk) and accelerated spend in REV (New York's 'Reforming the Energy Vision' programme) and Grid Modernisation, higher IT spend and lease additions.

NGV and Other

For the year ended 31 March 2021, revenue in the NGV and Other segment increased by £30 million to £864 million and adjusted operating profit decreased by £9 million to £117 million. This reflected higher revenues in our US renewables business, partly offset by lower site sales in our commercial property business and reduced income from support services supplied to Cadent compared to the prior year.

Capital investment was significantly lower at £480 million in 2020/21, representing a decrease of £82 million year-on-year. This was principally due to the £209 million acquisition of Geronimo in 2019/20, lower investment in IFA2 which became operational in 2020/21, reduced cable converter spend on North Sea Link, but increased investment in Viking Link and higher investments in NG Partners.

Discontinued operations – UK Gas Transmission (and metering)

For the year ended 31 March 2021, revenue in the UK Gas Transmission segment decreased by £66 million to £1,114 million and adjusted operating profit decreased by £4 million to £499 million. Revenue was impacted by lower pass-through costs, adverse year-on-year timing under-recoveries. Net revenue (adjusted for timing) was higher, reflecting the impact of prior year return of Fleetwood allowances and the RPI uplift, partly offset by re-opener allowances in 2019/20 for cyber and data centres and reduced meter population (as these are replaced by smart meters). Regulated controllable costs were £5 million lower principally driven by efficiency savings. Depreciation and amortisation was lower mainly due to reduction in meter population.

Capital expenditure reduced by £84 million to £204 million, mainly related to the completion of the Feeder 9 gas pipeline replacement project and Peterborough and Huntingdon compressor stations.

Five-year summary financial information

Financial summary (unaudited)

The financial summary set out below has been derived from the audited consolidated financial statements of National Grid for the five financial years ended 31 March 2022. It should be read in conjunction with the consolidated financial statements and related notes, together with the Strategic Report. The information presented below is adjusted for the matters described in the footnotes below for the years ended 31 March 2022, 2021, 2020, 2019 and 2018 where relevant and has been prepared under IFRS as issued by the IASB and as adopted by the UK.

Summary income statement (£m)	2022	2021[1]	2020[1]	2019[1]	2018[1]
Continuing operations					
Revenue	**18,449**	13,665	13,360	13,730	13,836
Operating profit					
Before exceptional items, remeasurements	**3,813**	2,427	2,804	2,963	2,809
Exceptional items, remeasurements	**558**	(26)	(525)	(536)	19
Profit before tax					
Before exceptional items, remeasurements	**2,880**	1,628	1,963	2,156	2,058
Exceptional items, remeasurements	**561**	36	(563)	(595)	119
Profit after tax from continuing operations					
Before exceptional items, remeasurements	**2,211**	1,294	1,601	1,736	1,562
Exceptional items, remeasurements	**(28)**	10	(571)	(456)	1,600
Profit/(loss) after tax from discontinued operations					
Before exceptional items, remeasurements	**344**	340	317	322	499
Exceptional items, remeasurements	**(173)**	(3)	(82)	(88)	(110)
Gain on disposal of UK Gas Distribution after tax	**—**	—	—	—	—
Total profit for the year	**2,354**	1,641	1,265	1,514	3,551
Profit for the year attributable to equity shareholders					
Before exceptional items, remeasurements	**2,554**	1,633	1,917	2,055	2,060
Exceptional items, remeasurements	**(201)**	7	(653)	(544)	1,490
Gain on disposal of UK Gas Distribution after tax	**—**	—	—	—	—
Total	**2,353**	1,640	1,264	1,511	3,550
Earnings per share					
Basic – continuing operations (pence)	**60.6**	37.0	29.7	44.3	102.5
Diluted – continuing operations (pence)	**60.3**	36.8	29.6	44.1	102.1
Basic – total (pence)	**65.4**	46.6	36.5	44.6	102.6
Diluted – total (pence)	**65.0**	46.3	36.3	44.4	102.1
Weighted average number of shares – basic (millions)	**3,599**	3,523	3,461	3,386	3,461
Weighted average number of shares – diluted (millions)	**3,616**	3,540	3,478	3,401	3,476
Dividends per ordinary share					
Paid during the year (pence)	**49.37**	49.00	47.83	46.52	128.97
Approved or proposed during the year (pence)	**50.97**	49.16	48.57	47.34	45.93
Paid during the year ($)	**0.628**	0.628	0.615	0.607	1.751
Approved or proposed during the year ($)	**0.682**	0.682	0.625	0.618	0.624

1. Items previously reported have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation in 2022. Items previously reported for 2018 have been re-presented to reflect our investment in Quadgas HoldCo Limited being presented as a discontinued operation in 2019.

Summary statement of net assets (£m)	2022	2021	2020	2019	2018
Non-current assets	**76,897**	57,278	61,759	55,466	52,106
Current assets	**17,963**	9,938	5,801	7,946	6,681
Total assets	**94,860**	67,216	67,560	63,412	58,787
Current liabilities	**(24,770)**	(9,368)	(8,564)	(9,129)	(8,697)
Non-current liabilities	**(46,234)**	(37,988)	(39,203)	(34,715)	(31,242)
Total liabilities	**(71,004)**	(47,356)	(47,767)	(43,844)	(39,939)
Net assets	**23,856**	19,860	19,793	19,568	18,848
Total shareholders' equity	**23,833**	19,839	19,771	19,548	18,832

Definitions and glossary of terms

Our aim is to use plain English in this Annual Report and Accounts. However, where necessary, we do use a number of technical terms and abbreviations. We summarise the principal ones below, together with an explanation of their meanings. The descriptions below are not formal legal definitions. Alternative and Regulatory Performance Measures are defined on pages 268 – 279.

A

Adjusted interest
A measure of the interest charge of the Group, calculated by making adjustments to the Group reported interest charge.

Adjusted net debt
A measure of the indebtedness of the Group, calculated by making adjustments to the Group reported borrowings, including adjustments made to include elements of pension deficits and exclude elements of hybrid debt financing.

Adjusted results (also referred to as headline results)
Financial results excluding the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such. This is a measure used by National Grid management that forms part of the incentive target set annually for remunerating certain Executive Directors, and further details of these items are included in note 5 to the financial statements.

American Depositary Shares (ADSs)
Securities of National Grid listed on the New York Stock Exchange, each of which represents five ordinary shares. They are evidenced by American Depositary Receipts or ADRs.

Annual General Meeting (AGM)
Meeting of shareholders of the Company held each year to consider ordinary and special business as provided in the Notice of AGM.

B

BEIS
The Department for Business, Energy and Industrial Strategy, the UK government department responsible for business, industrial strategy, and science and innovation with energy and climate change policy.

bps
Basis point (bp, bps) is a unit that is equal to 1/100th of 1% and is typically used to denote the movement in a percentage-based metric such as interest rates or RoE. A 0.1% change in a percentage represents 10 basis points.

Board
The Board of Directors of the Company (for more information, see pages 88 and 89).

BritNed
BritNed Development Limited, a joint venture company in which National Grid and TenneT, the Dutch national transmission system operator, each hold 50% of the shares.

C

Called-up share capital
Shares (common stock) that have been issued and have been fully paid for.

Capital tracker
In the context of our US rate plans, this is a mechanism that allows the recovery of the revenue requirement of incremental capital investment above that embedded in base rates, including depreciation, property taxes and a return on the incremental investment.

Carbon capture usage and storage (CCUS)
The process of capturing carbon dioxide (CO_2) for the purpose of recycling it for further usage and/or determining safe and permanent storage options for it.

Carrying value
The amount at which an asset or a liability is recorded in the Group's statement of financial position and the Company's balance sheet.

Child risk
A management team or directorate level owned or managed risk that has a supportive or contributing relationship to a GPR or other risk at a higher escalation level.

The Company, the Group, National Grid, we, our or us
We use these terms to refer to either National Grid plc itself or to National Grid plc and/or all or certain of its subsidiaries, depending on context.

Consolidated financial statements
Financial statements that include the results and financial position of the Company and its subsidiaries together as if they were a single entity.

Constant currency
'Constant currency basis' refers to the reporting of the actual results against the results for the same period last year, which, in respect of any US$ currency denominated activity, have been translated using the average US$ exchange rate for the year ended 31 March 2022, which was $1.3483 to £1. The average rate for the year ended 31 March 2021 was $1.34 to £1, and for the year ended 31 March 2020 was $1.29 to £1. Assets and liabilities as at 31 March 2021 have been retranslated at the closing rate at 31 March 2022 of $1.3144 to £1. The closing rate for the balance sheet date 31 March 2021 was $1.38 to £1.

Contingent liabilities
Possible obligations or potential liabilities arising from past events for which no provision has been recorded, but for which disclosure in the financial statements is made.

COP26
The 26th UN Climate Change Conference of the Parties which the UK hosted at the Scottish Event Campus in Glasgow from 1 to 12 November 2021. The climate talks brought together heads of state, climate experts and campaigners to agree coordinated action to tackle climate change. The Company was a principal partner of COP26.

COVID-19
COVID-19 or coronavirus disease 2019 is an infectious disease caused by severe acute respiratory syndrome.

CPIH
The UK Consumer Prices Index including Owner Occupiers' Housing Costs as published by the Office for National Statistics.

D

DB
Defined benefit, relating to our UK or US (as the context requires) final salary pension schemes.

DC
Defined contribution, relating to our UK or US (as the context requires) pension schemes to which National Grid, as an employer, pays contributions based on a percentage of employees' salaries.

Deferred tax
For most assets and liabilities, deferred tax is the amount of tax that will be payable or receivable in respect of that asset or liability in future tax returns as a result of a difference between the carrying value for accounting purposes in the statement of financial position or balance sheet and the value for tax purposes of the same asset or liability.

Deposit agreement
The amended and restated deposit agreement entered into between National Grid plc, the Depositary and all the registered holders from time to time of ADRs, pursuant to which ADSs have been issued, dated 23 May 2013, and any related agreement.

Depositary
The Bank of New York Mellon acting as ADS depositary.

Derivative
A financial instrument or other contract where the value is linked to an underlying index, such as exchange rates, interest rates or commodity prices. In most cases, we exclude contracts for the sale or purchase of commodities that are used to supply customers or for our own needs from this definition.

Directors/Executive Directors/ Non-executive Directors
The Directors/Executive Directors and Non-executive Directors of the Company, whose names are set out on pages 88 and 89 of this document.

Distributed energy resources (DER)
Decentralised assets, generally located behind the meter, covering a range of technologies including solar, storage, electric vehicle charging, district heating, smart street lighting and combined heat and power.

Definitions and glossary of terms continued

Diversity, equity and inclusion (DEI)
National Grid is committed to creating a work environment where people are treated fairly and where everyone feels respected, valued and empowered to reach their full potential. Our mission is to build a business that represents, reflects and celebrates the cultures and communities we serve.

Dollars or $
Except as otherwise noted, all references to dollars or $ in this Annual Report and Accounts relate to the US currency.

Dth
Decatherm, being an amount of energy equal to 1 million British thermal units (BTUs), equivalent to approximately 293 kWh.

E

Earnings per share (EPS)
Profit for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Electricity System Operator (ESO)
The party responsible for the long-term strategy, planning and real-time operation (balancing supply and demand) of the electricity system in Great Britain.

Electricity Transmission (ET)
National Grid's UK electricity transmission business.

Employee engagement
A key performance indicator (KPI), based on the percentage of favourable responses to certain indicator questions repeated in each employee survey. It is used to measure how employees think, feel and act in relation to National Grid. Research shows that a highly engaged workforce leads to increased productivity and employee retention. We use employee engagement as a measure of organisational health in relation to business performance.

Employee resource group (ERG)
A group of employees who join together in their workplace based on shared characteristics or life experiences.

Estate Tax Convention
The convention between the US and the UK for the avoidance of double taxation with respect to estate and gift taxes.

EU
The European Union (EU) is the economic and political union of 27 member states located in Europe. The UK left the European Union on 31 January 2020.

Exchange Act
The US Securities Exchange Act 1934, as amended.

F

FERC
The US Federal Energy Regulatory Commission.

Finance lease
A lease where the asset is treated as if it was owned for the period of the lease, and the obligation to pay future rentals is treated as if they were borrowings. Also known as a capital lease.

Financial year
For National Grid this is an accounting year ending on 31 March. Also known as a fiscal year.

FRS
A UK Financial Reporting Standard as issued by the UK Financial Reporting Council (FRC). It applies to the Company's individual financial statements on pages 235 – 241, which are prepared in accordance with FRS 101.

Funds from Operations (FFO)
A measure used by the credit rating agencies of the operating cash flows of the Group after interest and tax but before capital investment.

G

Gas Transmission (GT)
National Grid's UK gas transmission business.

Grain LNG
National Grid Grain LNG Limited.

Great Britain (GB)
England, Wales and Scotland.

Green capital investment (green capex)
Capital expenditure invested in decarbonisation of energy systems and considered to be aligned with the principles of the EU Taxonomy legislation at the date of reporting.

Group Principal Risk (GPR)
A principal risk faced by the Company as monitored and assessed by the Board, details of which are set out on pages 28 – 32.

Group Value Growth
Group Value Growth is Group-wide Value Added expressed as a proportion of Group equity. See page 43 for an explanation of Value Added.

Groupwide value added
Normalised for assumed long run inflation expressed as a proportion of group equity.

GW
Gigawatt, an amount of power equal to 1 billion watts (10^9 watts).

GWh
Gigawatt hours, an amount of energy equivalent to delivering 1 billion watts (10^9 watts) of power for a period of one hour.

H

HMRC
HM Revenue & Customs. The UK tax authority.

HVDC
High-voltage, direct-current electric power transmission that uses direct current for the bulk transmission of electrical power, in contrast to the more common alternating current systems.

I

IAS or IFRS
An International Accounting Standard (IAS) or International Financial Reporting Standard (IFRS), as issued by the International Accounting Standards Board (IASB). IFRS is also used as the term to describe international generally accepted accounting principles as a whole.

Individual financial statements
Financial statements of a company on its own, not including its subsidiaries or joint ventures and associates.

Interest cover
A measure used by the credit rating agencies, calculated as FFO plus adjusted interest divided by adjusted interest.

J

Joint venture (JV)
A company or other entity that is controlled jointly with other parties.

K

KEDLI
KeySpan Gas East Corporation, also known as KeySpan Energy Delivery Long Island.

KEDNY
The Brooklyn Union Gas Company, also known as KeySpan Energy Delivery New York.

KPI
Key performance indicator.

kW
Kilowatt, an amount of power equal to 1,000 watts.

L

LIPA
The Long Island Power Authority.

LNG
Liquefied natural gas is natural gas that has been condensed into a liquid form, typically at temperatures at or below -161°C (-258°F).

Lost time injury (LTI)
An incident arising out of National Grid's operations that leads to an injury where the employee or contractor normally has time off for the following day or shift following the incident. It relates to one specific (acute) identifiable incident which arises as a result of National Grid's premises, plant or activities, and was reported to the supervisor at the time and was subject to appropriate investigation.

Lost time injury frequency rate (LTIFR)
The number of lost time injuries (LTIs) per 100,000 hours worked in a 12-month period.

M

MADPU
The Massachusetts Department of Public Utilities.

MW
Megawatt, an amount of power equal to 1 million watts (10^6 watts).

MWh
Megawatt hours, an amount of energy equivalent to delivering 1 million watts (10^6 watts) of power for a period of one hour.

N

National Grid Metering Limited (NGM)
The Company's UK regulated metering business.

National Grid Partners (NGP)
The Company's venture investment and innovation business established in November 2018.

National Grid Renewables (NGR)
This business, which includes the renewables development company formerly known as Geronimo, is a leading developer of wind and solar generation based in Minneapolis in the US. National Grid acquired Geronimo in July 2019.

National Grid Ventures (NGV)
The Company's division that operates outside its core UK and US Regulated businesses, comprising a broad range of activities in the UK and US, including National Grid Renewables, electricity interconnectors, the Grain LNG terminal and energy metering, as well as being tasked with investment in adjacent businesses and distributed energy opportunities.

National Transmission System (NTS)
The gas National Transmission System in Great Britain.

NECO
The Narragansett Electric Company, National Grid's electricity transmission and distribution service provider to, as well as a natural gas distribution company in, Rhode Island.

NECO Sale
The agreed sale by National Grid to PPL of NECO, conditional upon completion of the WPD Acquisition and receipt of certain regulatory approvals, which is expected to complete by the end of Q1 2022/23.

Nemo Link
Nemo Link Limited, a joint venture company in which National Grid and Elia, the Belgian national transmission system operator, each hold 50% of the shares.

Net Promoter Score (NPS)
A commonly used tool to measure customer experience to gauge the loyalty of a company's customer relationships. It is an index ranging from -100 to +100.

Net zero
Net zero means that a person, legal entity (such as a company), country or other body's own emissions of greenhouse gases are either zero or that its remaining greenhouse gas emissions are balanced by schemes to offset, through the removal of an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

New England
The term refers to a region within the northeastern US that includes the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. National Grid's New England operations are primarily in the states of Massachusetts and Rhode Island.

NGGT Sale
The sale, agreed by the Company and announced on 27 March 2022, of a 60% equity stake in its UK Gas Transmission and legacy metering businesses to a consortium comprising Macquarie Asset Management and British Columbia Investment Management Corporation. The sale is subject to certain antitrust and regulatory conditions and is expected to close in the second half of 2022. The consortium also has an option on the remaining 40%, on broadly similar terms which can be exercised through the first half of 2023.

Northeastern US
The northeastern region of the US, comprising the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

NYPSC
The New York Public Service Commission.

O

Ofgem
The UK Office of Gas and Electricity Markets is part of the UK Gas and Electricity Markets Authority (GEMA), which regulates the energy markets in the UK.

OPEB
Other post-employment benefits.

Ordinary shares
Voting shares entitling the holder to part ownership of a company. Also known as common stock. National Grid's ordinary shares have a nominal value of $12^{204/473}$ pence following the share consolidation approved at the General Meeting of the Company held on 19 May 2017.

P

Paris Agreement
The agreement, also known as the Paris Climate Accord, within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020, and adopted by consensus on 12 December 2015.

PPL
PPL Corporation, a US energy company headquartered in Pennsylvania.

Price control
The mechanism by which Ofgem sets restrictions on the amounts of revenue we are allowed to collect from customers in our UK businesses. The allowed revenues are intended to cover efficiently incurred operational expenditure, capital expenditure and financing costs, including a Return on Equity invested.

R

Rate base
The base investment on which the utility is authorised to earn a cash return. It includes the original cost of facilities, minus depreciation, an allowance for working capital and other accounts.

Rate plan
The term given to the mechanism by which a US utility regulator sets terms and conditions for utility service, including, in particular, tariffs and rate schedules. The term can mean a multi-year plan that is approved for a specified period, or an order approving tariffs and rate schedules that remain in effect until changed as a result of future regulatory proceedings. Such proceedings can be commenced through a filing by the utility or on the regulator's own initiative.

Regulated controllable costs
Total operating costs under IFRS less depreciation and certain regulatory costs where, under our regulatory agreements, mechanisms are in place to recover such costs in current or future periods.

Regulatory asset value (RAV)
The value ascribed by Ofgem to the capital employed in the relevant licensed business. It is an estimate of the initial market value of the regulated asset base at privatisation, plus subsequent allowed additions at historical cost, less the deduction of annual regulatory depreciation. Deductions are also made to reflect the value realised from the disposal of certain assets that formed part of the regulatory asset base. It is also indexed to the RPI to allow for the effects of inflation.

Regulatory IOUs
Net under/over-recoveries of revenue from output-related allowance changes, the totex incentive mechanism, legacy price control cost true-up and differences between allowed and collected revenues.

Retained cash flow (RCF)
A measure of the cash flows of the Group used by the credit rating agencies. It is calculated as funds from operations less dividends paid and costs of repurchasing scrip shares.

Revenue decoupling
Revenue decoupling is the term given to the elimination of the dependency of a utility's revenue on the volume of gas or electricity transported. The purpose of decoupling is to encourage energy-efficiency programmes by eliminating the disincentive a utility otherwise has to such programmes.

RIIO
Revenue = Incentives + Innovation + Outputs, the regulatory framework for energy networks issued by Ofgem.

RIIO-T1
The regulatory framework for transmission networks that was implemented in the eight-year price controls started on 1 April 2013.

RIIO-T2
The regulatory framework for transmission networks issued by Ofgem which started on 1 April 2021.

RIIO-ED1
The regulatory framework for electricity distribution networks issued by Ofgem which started on 1 April 2014.

RIIO-ED2
The regulatory framework for electricity distribution networks expected to be issued by Ofgem to start on 1 April 2023.

Definitions and glossary of terms continued

RIPUC
The Rhode Island Public Utilities Commission.

RPI
The UK retail price index as published by the Office for National Statistics.

S

Scope 1 greenhouse gas emissions
Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are owned or controlled by the Company. Examples include emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2 greenhouse gas emissions
Scope 2 emissions are greenhouse gas emissions from the generation of purchased electricity consumed by the Company. Purchased electricity is defined as electricity, heat, steam or cooling that is purchased or otherwise brought into the organisational boundary of the Company. Scope 2 emissions physically occur at the facility where electricity is generated.

Scope 3 greenhouse gas emissions
Scope 3 emissions are indirect greenhouse gas emissions as a consequence of the operations of the Company, but are not owned or controlled by the Company, such as emissions from third-party logistics providers, waste management suppliers, travel suppliers, employee commuting, and combustion of sold gas by customers.

SEC
The US Securities and Exchange Commission, the financial regulator for companies with registered securities in the US, including National Grid and certain of its subsidiaries.

SF_6
Sulphur hexafluoride is an inorganic, colourless, odourless and non-flammable greenhouse gas. SF_6 is used in the electricity industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear and other electrical equipment. The Kyoto Protocol estimated that the global warming potential over 100 years of SF_6 is 23,900 times more potent than that of CO_2.

Share premium
The difference between the amount shares are issued for and the nominal value of those shares.

Subsidiary
A company or other entity that is controlled by National Grid.

Swaption
A swaption gives the buyer, in exchange for an option premium, the right, but not the obligation, to enter into an interest-rate swap at some specified date in the future. The terms of the swap are specified on the trade date of the swaption.

T

Task Force on Climate-related Financial Disclosures (TCFD)
A body, established in 2015 comprising 31 members from across the G20, whose role is to develop recommendations for more informed investment and enable stakeholders to better understand the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risk.

Tax Convention
The income tax convention between the US and the UK.

Taxes borne
Those taxes that represent a cost to the Company and are reflected in our results.

Taxes collected
Those taxes that are generated by our operations but do not affect our results. We generate the commercial activity giving rise to these taxes and then collect and administer them on behalf of tax authorities.

TCFD recommendations or recommended disclosures
The 11 recommended disclosures set out in the June 2017 TCFD report entitled 'Recommendations of the Task Force on Climate-related Financial Disclosures'.

Tonne
A unit of mass equal to 1,000 kilogrammes, equivalent to approximately 2,205 pounds.

Tonnes carbon dioxide equivalent (tCO_2e)
A measure of greenhouse gas emissions in terms of the equivalent amount of carbon dioxide.

Total Societal Impact (TSI)
TSI is a methodology that attempts to calculate the total benefit to society from a company's products, services, operations, core capabilities and activities.

Totex
Total expenditure, comprising capital and operating expenditure.

Treasury shares
Shares that have been repurchased but not cancelled. These shares can then be allotted to meet obligations under the Company's employee share schemes.

U

UK
The United Kingdom, comprising England, Wales, Scotland and Northern Ireland.

UK Corporate Governance Code (the 'Code')
Guidance, issued by the Financial Reporting Council in 2018, on how companies should be governed, applicable to UK listed companies, including National Grid, in respect of reporting periods starting on or after 1 January 2019.

UK GAAP
Generally accepted accounting practices in the UK. These differ from IFRS and from US GAAP.

Underlying EPS
Underlying results for the year attributable to equity shareholders of the Company allocated to each ordinary share.

Underlying results
The financial results of the Company, adjusted to exclude the impact of exceptional items and remeasurements that are treated as discrete transactions under IFRS and can accordingly be classified as such, and to take account of volumetric and other revenue timing differences arising due to the in-year difference between allowed and collected revenues as well as major storm costs (where these are above $100 million threshold in a given year).

US
The United States of America, its territories and possessions; any state of the United States and the District of Columbia.

US GAAP
Generally accepted accounting principles in the US. These differ from IFRS and from UK GAAP.

US state regulators (state utility commissions)
In the US, public utilities' retail transactions are regulated by state utility commissions, including the New York Public Service Commission (NYPSC), the Massachusetts Department of Public Utilities (MADPU) and the Rhode Island Public Utilities Commission (RIPUC).

V

Value Added
Value Added is a measure to capture the value created through investment attributable to equity holders, being the change in total regulated and non-regulated assets including goodwill (both at constant currency) plus the cash dividend paid in the year plus share repurchase costs less the growth in net debt (at constant currency). This is then presented on an absolute and a per share basis.

Value Growth
Value Growth is the Value Added, adjusted to normalise for a 3% long-run RPI inflation rate, expressed as a proportion of Group equity. See page 279.

W

WPD
National Grid's UK electricity distribution business, comprising Western Power Distribution Holding Company Limited and its subsidiaries. The group is the UK's largest electricity distribution business and includes four distribution network operators.

WPD Acquisition
The acquisition by National Grid of WPD, which completed on 14 June 2021.

Want more information or help?

Equiniti

For queries about ordinary shares:

0800 169 7775
This is a Freephone number from landlines within the UK; mobile costs may vary. Lines are open 8.30am to 5.30pm, Monday to Friday, excluding public holidays. If calling from outside the UK: +44 (0) 800 169 7775. Calls from outside the UK will be charged at the applicable international rate.

Visit help.shareview.co.uk for information regarding your shareholding (from here you will also be able to email a query securely).

National Grid Share Register
Equiniti
Aspect House
Spencer Road, Lancing
West Sussex BN99 6DA

The Bank of New York Mellon

For queries about American Depositary Shares:

1-800-466-7215
If calling from outside the US:
+1-201-680-6825

adrbnymellon.com
Email:
shrrelations@cpushareownerservices.com

BNY Mellon – ADR
PO Box 505000
Louisville, KY 40233-5000

Further information about National Grid, including share price and interactive tools, can be found on our website: nationalgrid.com/investors

Beware of share fraud

Investment scams are often sophisticated and difficult to spot. Shareholders are advised to be wary of any unsolicited advice or offers, whether over the telephone, through the post or by email. If you receive any unsolicited communication, please check that the company or person contacting you is properly authorised by the Financial Conduct Authority (FCA) before getting involved. Be ScamSmart and visit fca.org.uk/scamsmart. You can report calls from unauthorised firms to the FCA by calling 0800 111 6768.

Financial calendar

The following dates have been announced or are indicative:

19 May 2022	2021/22 full-year results
1 June 2022	Ordinary shares go ex-dividend for 2021/22 final dividend
3 June 2022	ADRs go ex-dividend for 2021/22 final dividend
6 June 2022	Record date for 2021/22 final dividend
10 June 2022	Scrip reference price announced
11 July 2022	2022 AGM
20 July 2022 (5.00pm London time)	Scrip election date
17 August 2022	2021/22 final dividend paid to qualifying shareholders
10 November 2022	2022/23 half-year results
23 November 2022	ADRs go ex-dividend for 2022/23 interim dividend
24 November 2022	Ordinary shares go ex-dividend for 2022/23 interim dividend
25 November 2022	Record date for 2022/23 interim dividend
1 December 2022	Scrip reference price announced
12 December 2022 (5.00pm London time)	Scrip election date for 2022/23 interim dividend
11 January 2023	2022/23 interim dividend paid to qualifying shareholders

Dividends

The Directors are recommending a final dividend of 33.76 pence per ordinary share ($2.0929 per ADS) to be paid on 17 August 2022 to shareholders on the register as at 6 June 2022. Further details on dividend payments can be found on page 49. If you live outside the UK, you may be able to request that your dividend payments are converted into your local currency.

Under the Deposit agreement, a fee of up to $0.05 per ADS can be charged for any cash distribution made to ADS holders, including cash dividends. ADS holders who receive cash in relation to the 2021/22 final dividend will be charged a fee of $0.02 per ADS by the Depositary prior to the distribution of the cash dividend.

From August 2022, all National Grid dividends will be paid directly into bank or building society accounts for ordinary shareholders. Please make sure you have completed and returned a bank mandate form. Benefits include the following:

- Your dividend reaches your account on the payment day.
- It helps the environment by saving over 500,000 A4 pieces of paper annually.
- It is more secure – cheques sometimes get lost in the post.
- No more trips to the bank.

Elect to receive your dividends as additional shares: Join our scrip dividend scheme; no stamp duty or commission to pay.

Electronic communications

Please register at shareview.co.uk.

It only takes a few minutes to register – just have your 11-digit Shareholder Reference Number to hand. You will be sent an Activation Code to complete registration.

Once you have registered, you can elect to receive your shareholder communications electronically.

Registered office

National Grid plc was incorporated on 11 July 2000. The Company is registered in England and Wales No. 4031152, with its registered office at 1–3 Strand, London WC2N 5EH.

Share dealing

Postal share dealing: Equiniti offers our European Economic Area resident shareholders a share dealing service by post. This service is available to private shareholders resident within the European Economic Area, the Channel Islands or the Isle of Man. If you hold your shares in CREST, you are not eligible to use this service. For more information and to obtain a form, please visit shareview.co.uk or call Equiniti on 0800 169 7775.

Internet and telephone share dealing: Equiniti also offers telephone and online share dealing at live prices. For full details, together with terms and conditions, please visit shareview.co.uk. You can call Equiniti on 0345 603 7037 for further details, or to arrange a trade. Lines are open Monday to Friday, 8.00am to 4.30pm for dealing, and until 6.00pm for enquiries.

ShareGift: If you only have a small number of shares that would cost more for you to sell than they are worth, you may wish to consider donating them to ShareGift. ShareGift is a registered charity (No. 1052686) which specialises in accepting such shares as donations. For more information, visit sharegift.org or contact Equiniti.

Individual Savings Accounts (ISAs): ISAs for National Grid shares are available from Equiniti. For more information, call Equiniti on 0345 0700 720 or visit eqi.co.uk.

Cautionary statement

This document comprises the Annual Report and Accounts for the year ended 31 March 2022 for National Grid plc and its subsidiaries.

It contains the Directors' Report and Financial Statements, together with the independent auditor's report thereon, as required by the Companies Act 2006. The Directors' Report, comprising pages 1 – 131 and 242 – 288 has been drawn up in accordance with the requirements of English law, and liability in respect thereof is also governed by English law. In particular, the liability of the Directors for these reports is solely to National Grid.

This document contains certain statements that are neither reported financial results nor other historical information. These statements are forward-looking statements within the meaning of section 27A of the Securities Act of 1933, as amended, and section 21E of the Securities Exchange Act of 1934, as amended. These statements include information with respect to our financial condition, our results of operations and businesses, strategy, plans and objectives. Words such as 'aims', 'anticipates', 'expects', 'should', 'intends', 'plans', 'believes', 'outlook', 'seeks', 'estimates', 'targets', 'may', 'will', 'continue', 'project' and similar expressions, as well as statements in the future tense, identify forward-looking statements. This document also references climate-related targets and climate-related risks which differ from conventional financial risks in that they are complex, novel and tend to involve projection over long-term scenarios which are subject to significant uncertainty and change.

These forward-looking statements and targets are not guarantees of our future performance and are subject to assumptions, risks and uncertainties that could cause actual future results to differ materially from those expressed in or implied by such forward-looking statements and targets. Many of these assumptions, risks and uncertainties relate to factors that are beyond our ability to control or estimate precisely, such as changes in laws or regulations, including any arising as a result of the United Kingdom's exit from the European Union; announcements from and decisions by governmental bodies or regulators, including those relating to the RIIO-T2 and RIIO-ED2 price controls and proposals for the future of system operation in the United Kingdom; the timing of construction and delivery by third parties of new generation projects requiring connection; breaches of, or changes in, environmental, climate change, and health and safety laws or regulations, including breaches or other incidents arising from the potentially harmful nature of our activities; network failure or interruption, the inability to carry out critical non-network operations, and damage to infrastructure, due to adverse weather conditions, including the impact of major storms as well as the results of climate change, due to counterparties being unable to deliver physical commodities, or due to the failure of or unauthorised access to or deliberate breaches of our IT systems and supporting technology; failure to adequately forecast and respond to disruptions in energy supply; performance against regulatory targets and standards and against our peers with the aim of delivering stakeholder expectations regarding costs and efficiency savings, as well as against targets and standards designed to deliver net zero; and customers and counterparties (including financial institutions) failing to perform their obligations to the Company. Other factors that could cause actual results to differ materially from those described in this document include fluctuations in exchange rates, interest rates and commodity price indices; restrictions and conditions (including filing requirements) in our borrowing and debt arrangements, funding costs and access to financing; regulatory requirements for us to maintain financial resources in certain parts of our business and restrictions on some subsidiaries' transactions, such as paying dividends, lending or levying charges; the delayed timing of recoveries and payments in our regulated businesses and whether aspects of our activities are contestable; the funding requirements and performance of our pension schemes and other post-retirement benefit schemes; the failure to attract, develop and retain employees with the necessary competencies, including leadership and business capabilities, and any significant disputes arising with our employees or breaches of laws or regulations by our employees; the failure to respond to market developments, including competition for onshore transmission; the threats and opportunities presented by emerging technology; the failure by the Company to respond to, or meet its own commitments as a leader in relation to, climate change development activities relating to energy transition, including the integration of distributed energy resources; and the need to grow our business to deliver our strategy, as well as incorrect or unforeseen assumptions or conclusions (including unanticipated costs and liabilities) relating to business development activity, including the integration of WPD, the sale of the Company's Rhode Island gas and electricity business and the sale of a 60% stake in the Group's UK Gas Transmission business, and joint ventures.

For further details regarding these and other assumptions, risks and uncertainties that may affect National Grid, please read the Strategic Report and the risk factors on pages 253 – 256 of this document. In addition, new factors emerge from time to time and we cannot assess the potential impact of any such factor on our activities or the extent to which any factor, or combination of factors, may cause actual future results to differ materially from those contained in any forward-looking statement. Except as may be required by law or regulation, the Company undertakes no obligation to update any of its forward-looking statements, which speak only as of the date of this document.

The contents of any website references in this document do not form part of this document.

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The paper used in this report has been Carbon Balanced with the World Land Trust, an international conservation charity, which offsets carbon emissions through the purchase and preservation of high conservation value land.

Through protecting standing forests, under threat of clearance, carbon is locked in that would otherwise be released. These protected forests are then able to continue absorbing carbon from the atmosphere, referred to as REDD (Reduced Emissions from Deforestation and forest Degradation). This is now recognised as one of the most cost-effective and swiftest ways to arrest the rise in atmospheric CO_2 and global warming effects. Additional to the carbon benefits is the flora and fauna this land preserves, including a number of species identified as at risk of extinction on the IUCN Red List of Threatened Species.

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National Grid plc
1–3 Strand
London WC2N 5EH
United Kingdom

nationalgrid.com

7-25 Consolidated Financial Statement 2019/20 National Grid North America Inc

nationalgrid

National Grid North America Inc. and Subsidiaries

Consolidated Financial Statements

For the years ended March 31, 2020 and 2019

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES

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USA

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www.deloitte.com

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
National Grid North America Inc. and Subsidiaries

We have audited the accompanying consolidated financial statements of National Grid North America Inc. and Subsidiaries (the "Company"), which comprise the consolidated balance sheets and statements of capitalization as of March 31, 2020 and 2019, and the related consolidated statements of operations and comprehensive income, cash flows, and changes in shareholders' equity for each of the two years in the period ended March 31, 2020, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of National Grid North America Inc. and Subsidiaries as of March 31, 2020 and 2019, and the results of their operations and their cash flows for each of the two years in the period ended March 31, 2020 in accordance with accounting principles generally accepted in the United States of America.

Deloitte + Touche LLP

August 5, 2020

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(in millions of dollars)

	Years Ended March 31,	
	2020	2019
Operating revenues	**$ 12,259**	$ 12,815
Operating expenses:		
Purchased electricity	**1,713**	1,914
Purchased gas	**1,662**	2,276
Operations and maintenance	**4,451**	4,661
Depreciation and amortization	**1,231**	1,173
Other taxes	**1,309**	1,251
Total operating expenses	**10,366**	11,275
Operating income	**1,893**	1,540
Other income (deductions):		
Interest on long-term debt, net	**(625)**	(582)
Other interest, including affiliate interest, net	**(127)**	(185)
Income from equity method investments	**42**	51
Other income, net	**103**	40
Total other income (deductions)	**(607)**	(676)
Income before income taxes	**1,286**	864
Income tax expense	**279**	198
Income from continuing operations	**1,007**	666
Income from discontinued operations, net of taxes	**-**	6
Net income	**1,007**	672
Net income attributed to non-controlling interests	**(3)**	(2)
Net income attributed to common shareholders	**$ 1,004**	$ 670
Other comprehensive income, net of taxes:		
Unrealized gains on securities, net of tax expense (benefit) of $3 and $0 in 2020 and 2019, respectively	**8**	1
Change in pension and other postretirement obligations, net of tax expense (benefit) of ($46) and $0 in 2020 and 2019, respectively	**(133)**	20
Unrealized losses on hedges, net of tax expense (benefit) of ($20) and ($11) in 2020 and 2019, respectively	**(56)**	(28)
Total other comprehensive income	**(181)**	(7)
Comprehensive income	**$ 826**	$ 665
Less: Comprehensive income attributed to non-controlling interest	**(3)**	(2)
Comprehensive income attributed to common shareholders	**$ 823**	$ 663

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions of dollars)

	Years Ended March 31, 2020	2019
Operating activities:		
Net income	**$ 1,007**	$ 672
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**1,231**	1,173
Regulatory amortization	**24**	22
Deferred income tax expense and amortization of investment tax credits	**326**	246
Bad debt expense	**279**	188
Losses (gains) from financial investments	**41**	(37)
Income from equity method investments	**(42)**	(51)
Allowance for equity funds used during construction	**(52)**	(62)
Other, net	**49**	44
Dividends received from equity method investments	**67**	50
Pension and postretirement benefits expenses, net	**138**	235
Pension and postretirement benefits contributions	**(192)**	(294)
Environmental remediation payments	**(103)**	(50)
Changes in operating assets and liabilities:		
Accounts receivable and unbilled revenues, net	**99**	(49)
Accounts receivable from/payable to affiliates, net	**(33)**	(9)
Inventory	**(146)**	(21)
Regulatory assets and liabilities, net	**(446)**	345
Derivative instruments	**138**	(81)
Prepaid and accrued taxes	**100**	(105)
Accounts payable and other liabilities	**49**	1
Other, net	**(104)**	111
Net cash provided by operating activities	**2,430**	2,328
Investing activities:		
Capital expenditures	**(3,830)**	(3,113)
Cost of removal	**(287)**	(245)
Proceeds from sales of property, plant and equipment	**61**	-
Contributions to equity method investments	**(100)**	(99)
Acquisition of Geronimo and Emerald	**(173)**	-
Purchases of financial investments	**(73)**	(152)
Proceeds from sales of financial investments	**120**	89
Other, net	**(6)**	(17)
Net cash used in investing activities	**(4,288)**	(3,537)
Financing activities:		
Payments on long-term debt	**(1,292)**	(2,573)
Proceeds from long-term debt	**953**	3,191
Payment of debt issuance costs	**(16)**	(26)
Commercial paper issued	**5,911**	8,032
Commercial paper paid	**(6,255)**	(7,178)
Advances from affiliates	**300**	-
Equity infusion from Parent	**2,525**	-
Payments under sale and leaseback arrangement	**-**	(27)
Other, net	**-**	3
Net cash provided by financing activities	**2,126**	1,422
Net increase in cash, cash equivalents, restricted cash and special deposits	**268**	213
Net cashflow from discontinued operations - operating	**-**	(1)
Cash, cash equivalents, restricted cash and special deposits, beginning of year	**665**	453
Cash, cash equivalents, restricted cash and special deposits, end of year	**$ 933**	$ 665
Supplemental disclosures:		
Interest paid	**$ (638)**	$ (639)
Income taxes refunded	**140**	45
Significant non-cash items:		
Capital-related accruals included in accounts payable	**217**	299
ROU assets obtained in exchange for operating lease liabilities	**876**	-

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31,	
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 617**	$ 547
Restricted cash and special deposits	**316**	118
Accounts receivable	**2,299**	2,530
Allowance for doubtful accounts	**(551)**	(445)
Unbilled revenues	**491**	556
Inventory	**590**	394
Regulatory assets	**607**	359
Derivative instruments	**29**	33
Prepaid taxes	**244**	350
Other	**168**	131
Total current assets	**4,810**	4,573
Equity method investments	**596**	406
Property, plant and equipment, net	**37,871**	34,299
Non-current assets:		
Regulatory assets	**6,254**	5,136
Goodwill	**7,232**	7,129
Derivative instruments	**22**	28
Postretirement benefits	**377**	382
Financial investments	**695**	760
Other	**188**	170
Total non-current assets	**14,768**	13,605
Total assets	**$ 58,045**	$ 52,883

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31, 2020	March 31, 2019
LIABILITIES AND CAPITALIZATION		
Current liabilities:		
Accounts payable	**$ 1,598**	$ 1,742
Accounts payable to affiliates	**9**	35
Advance from affiliate	**300**	-
Commercial paper	**811**	1,144
Current portion of long-term debt	**1,041**	1,280
Taxes accrued	**124**	124
Customer deposits	**102**	106
Interest accrued	**184**	192
Regulatory liabilities	**868**	1,065
Derivative instruments	**243**	71
Renewable energy certificate obligations	**264**	221
Payroll and benefits accruals	**332**	339
Other	**708**	391
Total current liabilities	**6,584**	6,710
Non-current liabilities:		
Regulatory liabilities	**6,226**	6,276
Asset retirement obligations	**105**	99
Deferred income tax liabilities, net	**3,705**	3,402
Postretirement benefits	**2,615**	1,837
Environmental remediation costs	**2,222**	1,902
Derivative instruments	**237**	125
Operating lease liabilities	**660**	-
Other	**731**	792
Total non-current liabilities	**16,501**	14,433
Commitments and contingencies (Note 15)		
Capitalization:		
Common stock	**12,116**	9,616
Retained earnings	**6,537**	5,451
Accumulated other comprehensive loss	**(395)**	(132)
Common shareholders' equity	**18,258**	14,935
Non-controlling interests	**63**	25
Total equity	**18,321**	14,960
Long-term debt	**16,639**	16,780
Total capitalization	**34,960**	31,740
Total liabilities and capitalization	**$ 58,045**	$ 52,883

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CAPITALIZATION
(in millions of dollars)

			March 31,	
			2020	2019
Common equity			**$ 18,258**	$ 14,935
Non-controlling interests			**63**	25
Long-term debt:	Interest Rate	Maturity Date		
European Medium Term Note	Variable	August 2020 – June 2028	**3,417**	3,542
Convertible Bond	Variable	November 2020	**497**	521
Export Credit Agreements	Variable	December 2025 – March 2027	**816**	449
Notes Payable[1]	2.72% - 9.75%	December 2020 – March 2049	**11,033**	11,540
First Mortgage Bonds	6.90% - 9.63%	May 2020 – April 2028	**104**	105
State Authority Financing Bonds	3.23% - 3.48%	December 2023 – July 2029	**424**	424
State Authority Financing Bonds	Variable	November 2020 – August 2042	**410**	410
Term Loan	Variable	March 2022	**100**	-
Intercompany Note[2]	Variable	July 2022 – July 2027	**972**	1,172
Total debt			**17,773**	18,163
Unamortized debt discount			**(39)**	(40)
Unamortized debt issuance costs			**(54)**	(63)
Current portion of long-term debt			**(1,041)**	(1,280)
Total long-term debt			**16,639**	16,780
Total capitalization			**$ 34,960**	$ 31,740

[1] See Note 12, "Capitalization" under "Notes Payable" for additional details.
[2] See Note 17, "Related Party Transactions".

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(in millions of dollars)

				Accumulated Other Comprehensive Income (Loss)							
	Common Stock [1]	Cumulative Preferred Stock	Additional Paid-in Capital	Unrealized Gain (Loss) on Securities	Pension and Other Postretirement Benefits	Hedging Activity	Foreign Currency translation	Total Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non-Controlling Interests [2]	Total
Balance as of March 31, 2018	**$ -**	**$ 35**	**$ 9,562**	**$ 14**	**$ (22)**	**$ 43**	**$ (139)**	**$ (104)**	**$ 4,761**	**$ 23**	**$ 14,277**
Net income	-	-	-	-	-	-	-	-	670	2	672
Other comprehensive income (loss):											
Unrealized gain on securities, net of $0 tax expense	-	-	-	1	-	-	-	1	-	-	1
Change in pension and other postretirement obligations, net of $0 tax expense	-	-	-	-	20	-	-	20	-	-	20
Unrealized gain on hedges, net of $11 tax expense	-	-	-	-	-	(28)	-	(28)	-	-	(28)
Total comprehensive income											665
Impact of adoption of recognition and measurement of financial assets and liabilities standard	-	-	-	(8)	-	(13)	-	(21)	20	-	(1)
Stock-based compensation	-	-	19	-	-	-	-	-	-	-	19
Balance as of March 31, 2019	**$ -**	**$ 35**	**$ 9,581**	**$ 7**	**$ (2)**	**$ 2**	**$ (139)**	**$ (132)**	**$ 5,451**	**$ 25**	**$ 14,960**
Net income	-	-	-	-	-	-	-	-	1,004	3	1,007
Other comprehensive income (loss):											
Unrealized gains on securities, net of $3 tax expense	-	-	-	8	-	-	-	8	-	-	8
Change in pension and other postretirement obligations, net of ($46) tax expense (benefit)	-	-	-	-	(133)	-	-	(133)	-	-	(133)
Unrealized losses on hedges, net of ($20) tax expense (benefit)	-	-	-	-	-	(56)	-	(56)	-	-	(56)
Total comprehensive income											826
Equity infusion from Parent	-	-	2,525	-	-	-	-	-	-	-	2,525
Other transfer		(35)								35	-
Impact of adoption of reclassification of certain tax effects from accumulated other comprehensive income standard	-	-	-	(2)	(85)	5	-	(82)	82	-	-
Reclassification of accumulated other comprehensive income components	-	-	-	(12)	(2)	14	-	-	-	-	-
Stock-based compensation	-	-	10	-	-	-	-	-	-	-	10
Balance as of March 31, 2020	**$ -**	**$ -**	**$ 12,116**	**$ 1**	**$ (222)**	**$ (35)**	**$ (139)**	**$ (395)**	**$ 6,537**	**$ 63**	**$ 18,321**

(1) The Company had 230 and 196 shares of common stock authorized, issued and outstanding, with a par value of $0.10 per share at March 31, 2020 and 2019.

(2) NGUSA subsidiaries had 372,641 shares of cumulative preferred stock authorized, issued and outstanding, with par values of either $100 or $50 per share at March 31, 2020 and 2019. See Note 18, "Preferred Stock".

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

National Grid North America Inc. (“NGNA” or “the Company”) is a Delaware corporation that was created in the United States (“U.S.”) as an indirect wholly-owned subsidiary of National Grid plc (the “Parent”), a public limited company incorporated under the laws of England and Wales. It is the intermediate holding company of National Grid USA (“NGUSA”) and acts as a funding company on behalf of the Parent for certain subsidiaries’ borrowings.

NGUSA has two major lines of business, “Gas Distribution” and “Electric Services,” and operates various energy services and investment companies. The Company’s Gas Distribution business consists of five gas distribution subsidiaries which provide gas distribution services to customers in the areas of central, northern, and eastern New York, the New York City boroughs of Brooklyn, Queens, and Staten Island, and the Long Island Counties of Nassau and Suffolk, as well as the states of Massachusetts and Rhode Island. The Company’s Electric Services business primarily consists of five electric distribution subsidiaries which provide electric services to customers in the areas of eastern, central, northern, and western New York, as well as the states of Massachusetts and Rhode Island and operate electric transmission facilities in Massachusetts, New Hampshire, Rhode Island, Maine, and Vermont.

The Company’s wholly-owned New England subsidiaries include: New England Power Company (“NEP”), The Narragansett Electric Company (“Narragansett”), Massachusetts Electric Company (“Massachusetts Electric”), Nantucket Electric Company (“Nantucket”), and Boston Gas Company (“Boston Gas”). The Company’s wholly-owned New York subsidiaries include: Niagara Mohawk Power Corporation (“Niagara Mohawk”), National Grid Generation, LLC (“Genco”), The Brooklyn Union Gas Company (“Brooklyn Union”), and KeySpan Gas East Corporation (“KeySpan Gas East”).

Genco provides energy services and supply capacity to and produces energy for the use of customers of the Long Island Power Authority (“LIPA”) on Long Island, New York. The services provided to LIPA through the Power Supply Agreement, which was amended and restated for a maximum term of 15 years in May 2013, provide LIPA with electric generating capacity, energy conversion, and ancillary services from the Company’s Long Island generating units.

The Company’s energy investments business consists of development investments such as natural gas pipelines, as well as certain other domestic energy-related investments. The Company has a wholly-owned subsidiary, National Grid LNG LLC, which is engaged in the business of receiving, storing, and redelivering liquefied natural gas (“LNG”) in liquid and gaseous states, through facilities located in Providence, Rhode Island. The Company also owns a 53.7% interest in two hydro-transmission electric companies which are consolidated into these financial statements.

The Company uses the equity method of accounting for its investments in affiliates when it has the ability to exercise significant influence over operating and financial policies, but does not control the affiliates. The Company’s share of the earnings or losses of such affiliates is reported through the line item Income from equity method investments in the accompanying consolidated statements of operations and comprehensive income (see Note 7, “Equity Method Investments” for additional details)

The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”), including the accounting principles for rate-regulated entities, as applicable. The consolidated financial statements reflect the ratemaking practices of the applicable regulatory authorities.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Non-controlling interests of majority-owned subsidiaries are calculated based upon the respective non-controlling interest ownership percentages. All intercompany transactions with consolidated subsidiaries have been eliminated in consolidation.

Under its holding company structure, the Company does not have significant independent operations or sources of income of its own and conducts most of its operations through its subsidiaries. As a result, the Company depends on the earnings and cash flow of, and dividends or distributions from, its subsidiaries to provide the funds necessary to meet its debt and contractual obligations. Furthermore, a substantial portion of the Company's consolidated assets, earnings, and cash flow is derived from the operations of its regulated utility subsidiaries, whose legal authority to pay dividends or make other distributions to the Company is subject to regulation by state regulatory authorities.

On May 31, 2019, Boston Gas and Colonial Gas ("Colonial Gas"), an affiliated gas distribution company, filed a joint petition with the Massachusetts Department of Public Utilities ("DPU") for authorization for legal consolidation. The companies requested that the DPU confirm that Boston Gas, as the surviving corporation of the consolidation, will continue to have all the franchise rights and obligations that were previously held by Boston Gas and Colonial Gas. On December 16, 2019, the legal consolidation of Boston Gas and Colonial Gas was approved by the DPU in Docket D.P.U. 19-69, which became effective March 15, 2020, with Boston Gas as the sole surviving entity.

During the year ended March 31, 2020, the Company sold its ownership interest in nine investments that were part of the NGP business to the Parent. See Note 7, "Equity Method Investments" for additional details.

On July 11, 2019, NGV acquired 100% of the share capital of Geronimo Energy LLC ("Geronimo") and 51% of Emerald Energy Venture LLC ("Emerald"), which is controlled by the Company and Washington State Investment Board ("WSIB").. Whereas Geronimo develops the assets, Emerald has a right of first refusal to buy, build and operate those assets (see Note 6, "Acquisition of Geronimo and Emerald" for additional details).

The Company's unregulated operations are not material to report as a separate business segment.

The novel coronavirus ("COVID-19") pandemic has disrupted the U.S. and global economies and is having a significant impact on global health. In March 2020, COVID-19 was declared a pandemic by the World Health Organization ("WHO") and the Centers for Disease Control and Prevention. Due to this uncertainty, the valuations of certain assets and liabilities are necessarily more subjective. In particular, we identified the recoverability of customer receivables in relation to retail customers, in consideration of the suspension of debt collection activities and customer termination activities as an area of estimation uncertainty. In March 2020, the Company ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimize risk to employees. The Company has also ceased customer termination activities as requested by relevant local authorities. The Company is monitoring COVID-19 developments closely.

The Company has evaluated subsequent events and transactions through August 5, 2020, the date of issuance of these consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

In preparing consolidated financial statements that conform to U.S. GAAP, the Company must make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and the disclosure of contingent assets and liabilities included in the consolidated financial statements. Such estimates and assumptions include the impact of the ongoing COVID-19 pandemic and are reflected in the accompanying financial statements. Actual results could differ from those estimates.

Regulatory Accounting

The Federal Energy Regulatory Commission ("FERC"), the New York Public Service Commission ("NYPSC"), the DPU, and the Rhode Island Public Utilities Commission ("RIPUC") regulate the rates the Company's regulated subsidiaries charge their customers in the applicable states. In certain cases, the rate actions of the FERC, NYPSC, DPU and RIPUC can result in accounting that differs from non-regulated companies. In these cases, the subsidiaries defer costs (as regulatory assets) or recognize obligations (as regulatory liabilities) if it is probable that such amounts will be recovered from, or refunded to, customers through future rates. In accordance with Accounting Standards Codification ("ASC") 980, "Regulated Operations," regulatory assets and liabilities are reflected on the consolidated balance sheets consistent with the treatment of the related costs in the ratemaking process.

Revenue Recognition

Revenues are recognized for energy services provided on a monthly billing cycle basis and for sales of capacity and energy to LIPA under terms of the amended and restated Power Supply Agreement ("A&R PSA"), with rates approved by the FERC. The A&R PSA is accounted for as an operating lease. The Company records unbilled revenues for the estimated amount of services rendered from the time meters were last read to the end of the accounting period (see Note 3, "Revenue" for additional details).

Other Taxes

The Company's subsidiaries collect taxes and fees from customers such as sales taxes, other taxes, surcharges, and fees that are levied by state or local governments on the sale or distribution of gas and electricity. The Company accounts for taxes that are imposed on customers (such as sales taxes) on a net basis (excluded from revenues), while taxes imposed on the Company, such as excise taxes, are recognized on a gross basis. Excise taxes collected and paid for the years ended March 31, 2020 and 2019, were $170 million and $115 million, respectively.

Income Taxes

Federal and state income taxes have been computed utilizing the asset and liability approach that requires the recognition of deferred tax assets and liabilities for the tax consequences of temporary differences by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. Deferred income taxes also reflect the tax effect of net operating losses, capital losses, and general business credit carryforwards. The Company assesses the available positive and negative evidence to estimate whether sufficient future taxable income of the appropriate tax character will be generated to realize the benefits of existing deferred tax assets. When the evaluation of the evidence indicates that the Company will not be able to realize the benefits of existing deferred tax assets, a valuation allowance is recorded to reduce existing deferred tax assets to the net realizable amount.

The effects of tax positions are recognized in the consolidated financial statements when it is more likely than not that the position taken, or expected to be taken, in a tax return will be sustained upon examination by taxing authorities based on the technical merits of the position. The financial effect of changes in tax laws or rates is accounted for in the period of enactment. Deferred investment tax credits are amortized over the useful life of the underlying property.

NGNA files consolidated federal tax returns including all of the activities of its subsidiaries. Each subsidiary determines its tax provision based on the separate return method, modified by a benefits-for-loss allocation pursuant to a tax sharing agreement between NGNA and its subsidiaries. The benefit of consolidated tax losses and credits are allocated to the NGNA subsidiaries giving rise to such benefits in determining each subsidiary's tax expense in the year that the loss or credit arises. In a year that a consolidated loss or credit carryforward is utilized, the tax benefit utilized in consolidation is paid proportionately to the subsidiaries that gave rise to the benefit regardless of whether that subsidiary would have utilized the benefit. The tax sharing agreement also requires NGNA to allocate its parent tax losses, excluding deductions from acquisition indebtedness, to each subsidiary in the consolidated federal tax return with taxable income. The allocation of NGNA's parent tax losses to its subsidiaries is accounted for as a capital contribution and is performed in conjunction with the annual intercompany cash settlement process following the filing of the federal tax return.

Cash and Cash Equivalents

Cash equivalents consist of short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalents are carried at cost which approximates fair value.

Restricted Cash and Special Deposits

Restricted cash consists of margin calls to the New York Mercantile Exchange ("NYMEX") and collateral paid to the Company's counterparties for outstanding commodity and financial derivative instruments. Special deposits primarily consist of health care deposits, a release of property account for mortgaged property under a mortgage trust indenture, interconnection deposits, and amounts reserved for potential environmental violations. The Company had restricted cash of $244 million and $76 million and special deposits of $72 million and $42 million as of March 31, 2020 and 2019, respectively.

Accounts Receivable and Allowance for Doubtful Accounts

The Company recognizes an allowance for doubtful accounts to record accounts receivable at estimated net realizable value. The allowance is determined based on a variety of factors including, for each type of receivable, applying an estimated reserve percentage to each aging category, taking into account historical collection and write-off experience, and management's assessment of collectability from individual customers, as appropriate. The collectability of receivables is continuously assessed and, if circumstances change, the allowance is adjusted accordingly. Receivable balances are written off against the allowance for doubtful accounts when the accounts are disconnected and/or terminated and the balances are deemed to be uncollectible. The Company recorded bad debt expense of $279 million and $188 million for the years ended March 31, 2020 and 2019, respectively, within operations and maintenance in the accompanying consolidated statements of operations and comprehensive income. For the year ended March 31, 2020, the bad debt expense is reflective of an additional provision in relation to the impact of COVID-19.

Inventory

Inventory is composed of materials and supplies, gas in storage, purchased Renewable energy certificates ("RECs"), and emission credits.

Materials and supplies are stated at weighted average cost, which represents net realizable value, and are expensed or capitalized as used. There were no significant write-offs of obsolete inventory for the years ended March 31, 2020 or 2019.

Gas in storage is stated at weighted average cost and the related cost is recognized when delivered to customers. Existing rate orders allow the Company to pass directly through to customers the cost of purchased gas, along with any applicable authorized delivery surcharge adjustments. Gas costs passed through to customers are subject to regulatory approvals and are reported periodically to the applicable state regulators.

RECs are stated at cost and used to measure compliance with renewable energy standards. RECs are held primarily for consumption. Emission credits are comprised of sulfur dioxide, nitrogen oxide ("NOx"), and carbon dioxide credits. Emission credits are valued at the lower of weighted average cost or net realizable value and are held primarily for consumption or may be sold to third-party purchasers.

The Company had materials and supplies of $247 million and $159 million, gas in storage of $182 million and $124 million, purchased RECs of $143 million and $100 million, and emission credits of $18 million and $11 million as of March 31, 2020 and 2019, respectively.

Derivative Instruments

The Company uses derivative instruments to manage commodity price, interest rate, and foreign currency rate risk. All derivative instruments, except those that qualify for the normal purchase normal sale exception, are reported at fair value on the consolidated balance sheets.

All commodity costs, including the impact of derivative instruments, are passed on to customers through the Company's commodity rate adjustment mechanisms. Regulatory assets or regulatory liabilities are recorded to defer the recognition of unrealized losses or gains on derivative instruments, respectively. The gains or losses on the settlement of these contracts are recognized as purchased electricity and purchased gas in the accompanying consolidated statements of operations and comprehensive income and then refunded to, or collected from, customers consistent with regulatory requirements.

Qualifying derivative instruments may be designated as either cash flow hedges or fair value hedges. The effective portion of the change in fair value of a cash flow hedge is recorded in accumulated other comprehensive income ("AOCI"), net of related tax effects, and the ineffective portion is reported in earnings. Amounts in AOCI are reclassified into earnings in the same period or periods during which the hedged item affects earnings. The effective portion of the change in the fair value of a fair value hedge is offset in the accompanying consolidated statements of operations and comprehensive income by changes in the hedged item. If the hedge relationship is terminated, the fair value adjustment to the hedged item continues to be reported as part of the basis of the item and is amortized to the accompanying consolidated statements of operations and comprehensive income as a yield adjustment over the remainder of the hedging period. For the years ended March 31, 2020 and 2019, the Company recorded ineffectiveness related to cash flow hedges of a $1 million gain and $2 million gain, respectively within other income (deductions), net in the accompanying consolidated statements of operations and comprehensive income.

The Company has certain non-trading instruments for the physical purchase of electricity that qualify for the normal purchase normal sale exception and are accounted for upon settlement. If the Company was to determine that a contract no longer qualifies for the normal purchase normal sale exception, the Company would recognize the fair value of the contract and, if applicable, account for the gains and losses using the regulatory accounting described above.

The Company's accounting policy is to not offset fair value amounts recognized for derivative instruments and related cash collateral receivable or payable with the same counterparty under a master netting agreement, but rather to record and present the fair value of the derivative instrument on a gross basis, with related cash collateral receivable and payable recorded within restricted cash and special deposits, and in other current liabilities, respectively, on the consolidated balance sheets.

Variable Interest Entities

A variable interest entity ("VIE") is an entity that does not have sufficient equity at risk to permit it to finance its activities without additional subordinated financial support, or whose equity investors lack the obligation to absorb losses, the right to receive residual returns, or the right to make decisions about the activities that most significantly impact the entity's economic performance. The primary beneficiary is the enterprise that has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and the obligation to absorb losses or right to receive benefits that could be significant to the VIE. The primary beneficiary holds a controlling financial interest in the entity and is required to consolidate the VIE.

The Company determines whether it is the primary beneficiary of a VIE by evaluating the purpose and design of the entity, the nature of the VIE's risks and the risks that the Company absorbs, who has the power to direct the activities of the VIE that most significantly impact the economic performance of the VIE, and who has the obligation to absorb losses or receive benefits that could be significant to the VIE.

Through its wholly-owned subsidiary, National Grid Generation Ventures LLC ("Ventures"), the Company owns a 50% interest in each of four individual LLCs (Island Park Energy Center LLC, LI Solar Generation LLC, LI Energy Storage System LLC, and Clean Energy Generation LLC). Each of the four individual entities is a variable interest entity, however the Company is not the primary beneficiary as it does not have the power to direct the most significant activities of each entity. The Company accounts for its 50% ownership interest in each entity using the equity method of accounting.

Power Purchase Agreements

Certain of the Company's subsidiaries enter into power purchase agreements ("PPAs") to procure electricity to serve their electric service customers. The Company first evaluates whether such agreements contain a lease. In performing this evaluation, the Company considers whether the terms of the PPA provide the Company with the right to direct use of the generating facility and if the Company has the right to obtain substantially all of the economic benefits derived from use of the facility. In determining whether the Company has the right to direct use of the facility, the Company will consider which rights have the most significant impact on the economic benefits to be derived from the asset; for example, dispatch rights or the right to be involved in the facility's design. If the PPA is determined to contain a lease, the Company assesses whether it should be classified as a finance lease or an operating lease.

If the PPA does not contain a lease, the Company next assesses whether the contract is a derivative or includes one or more embedded derivatives. In making this determination, the Company assesses whether the PPA includes a notional amount or payment provision through the contract's delivery requirements or terms of default. If the PPA is a derivative or contains one or more embedded derivatives, the Company will assess whether the requirements for election of the normal purchases and normal sales scope exception are met. If the requirements for the election are not met or the election is not made, the Company reports the derivative at fair value on the consolidated balance sheet. If the election is made, the Company accounts for the PPA as an executory contract whereby costs are recognized as electricity is purchased. If the contract does not contain a lease and is not a derivative, the Company accounts for the PPA as an executory contract.

The Company also assesses whether the PPA is a variable interest in a VIE. In determining whether the PPA is a variable interest, the Company assesses whether the contract absorbs certain risks, such as commodity price risk, that the VIE was designed to pass on to its interest holders. If the PPA is determined to be a variable interest in a VIE, the Company determines whether it is the primary beneficiary.

Natural Gas Long-Term Arrangements

Certain of the Company's subsidiaries enter into long-term gas contracts to procure gas to serve their gas customers. Those contracts include Asset Management Agreements, Baseload, and Peaking gas contracts. Similar to the PPAs noted above, the Company evaluates whether such agreements are leases, derivative instruments, or executory contracts and performs an assessment under the guidance for VIEs.

Fair Value Measurements

The Company measures derivative instruments, securities, pension and postretirement benefit other than pension plan ("PBOP") assets, and financial investments for which it has elected the fair value option at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following is the fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that a company has the ability to access as of the reporting date;
- Level 2: inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data;
- Level 3: unobservable inputs, such as internally-developed forward curves and pricing models for the asset or liability due to little or no market activity for the asset or liability with low correlation to observable market inputs; and
- Not categorized: certain investments are not categorized within the fair value hierarchy. These investments are typically in commingled funds or limited partnerships that are not publicly traded and have ongoing subscription and redemption activity. As a practical expedient, the fair value of these investments is the Net Asset Value ("NAV") per fund share, derived from the underlying securities' quoted prices in active markets.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The Company uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs.

Hypothetical liquidation at book value

The Company accounts for its share of the earnings of the projects owned by Emerald using the equity method of accounting under the hypothetical liquidation at book value ("HLBV"). Under this method, the Company calculates the amount each owner would receive if the partnership were liquidated at book value at the end of each measurement period based on the contractual liquidation provisions in the applicable partnership agreements. The change in amount allocated to each partner after adjusting for distributions and contributions is recorded as income or loss for that period in the consolidated statements of operations.

Property, Plant and Equipment

Property, plant and equipment is stated at cost. The cost of repairs and maintenance is charged to expense and the cost of renewals and betterments that extend the useful life of property, plant and equipment is capitalized. The capitalized cost of additions to property, plant and equipment includes costs such as direct material, labor and benefits, and an allowance for funds used during construction ("AFUDC").

Depreciation is computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update the composite rates and are approved by the state authorities. The average composite rates for the years ended March 31, 2020 and 2019 are as follows:

	Composite Rates	
	Years Ended March 31,	
	2020	2019
Electric	**2.7%**	2.9%
Gas	**2.6%**	2.8%
Common	**9.2%**	8.7%

Depreciation expense, for regulated subsidiaries, includes a component for the estimated cost of removal, which is recovered through rates charged to customers. Any difference in cumulative costs recovered and costs incurred is recognized as a regulatory liability. When property, plant and equipment is retired, the original cost, less salvage, is charged to accumulated depreciation, and the related cost of removal is removed from the associated regulatory liability. The Company recognized a regulatory liability for the amount that was in excess of costs incurred of $1.7 billion at both March 31, 2020 and 2019.

Allowance for Funds Used During Construction

The Company records AFUDC, which represents the debt and equity costs of financing the construction of new property, plant and equipment. The equity component of AFUDC is reported in in other income (deductions) within the accompanying consolidated statements of operations and comprehensive income. The debt component of AFUDC is reported as an offset to other interest, including affiliate interest. After construction is completed, the Company is permitted to recover these costs through their inclusion in rate base. The Company recorded AFUDC related to equity of $52 million and $62 million and AFUDC related to debt of $39 million and $34 million for the years ended March 31, 2020 and 2019, respectively. The average AFUDC rates for the years ended March 31, 2020 and 2019 were 5.7% and 6.1%, respectively.

Impairment of Long-Lived Assets

The Company tests long-lived assets for impairment when events or changes in circumstances indicate that the carrying amount of the asset (or asset group) may not be recoverable. If identified, the recoverability of an asset is determined by comparing its carrying value to the estimated undiscounted cash flows that the asset is expected to generate. If the comparison indicates that the carrying value is not recoverable, an impairment loss is recognized for the excess of the carrying value over the estimated fair value. For the year ended March 31, 2020, there was an impairment charge of $16 million against a corporate real-estate right-of-use ("ROU") asset. The impairment arose due to the Company's decision to exit a leased property prior to the end of the lease term. In estimating the impairment charge, the Company determined fair value using an income approach. For the year ended March 31, 2019, there were no impairment losses recognized for long-lived assets.

Goodwill

The Company tests goodwill for impairment annually on January 1, and when events occur, or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The Company tests goodwill residing at NGUSA based upon four identified reporting units, aligned with its jurisdictional operational model. The acquisition of Geronimo and Emerald generated additional goodwill of $103 million as of March 31, 2020 (see Note 6, "Acquisition of Geronimo and Emerald" for additional details). The goodwill generated from the acquisition was allocated to a new reporting unit.

The Company has early adopted Accounting Standards Update ("ASU") No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which eliminates step two from the two-step goodwill impairment test. The revised one-step approach requires a recoverability test based on a comparison of the Company's estimated fair value for each reporting unit with the reporting unit's carrying value, including goodwill. If the estimated fair value exceeds carrying value, goodwill is not considered impaired. If the carrying value exceeds the estimated fair value, the Company is required to recognize an impairment charge for such excess, limited to the allocated amount of goodwill.

For the year ended March 31, 2020, fair value was calculated utilizing the income approach. The Company believes that this approach provides the most reliable information about estimated fair value. Based on the resulting fair values from the annual analyses, the Company determined that no adjustment to goodwill was required at March 31, 2020 or 2019.

Financial Investments

The Company holds a range of financial and other investments, which include short-term money funds and investments in equity or available-for-sale debt securities.

Corporate owned life insurance policies ("COLI") and Trust owned life insurance policies ("TOLI") are measured at cash surrender value with increases and decreases in the value of these assets recorded in the consolidated statements of operations.

Debt securities are measured at fair value with changes in fair value recorded through other comprehensive income.

Equity securities consist of shares held as part of a portfolio of financial instruments, such as corporate stocks and mutual funds, and are measured at fair value with changes in fair value recorded in the consolidated statements of operations.

The Company has mutual funds and money market funds representing funds designated for Supplemental Executive Retirement Plans ("SERPs"). These investments are measured at fair value with changes in fair value recorded in the consolidated statements of operations.

Other financial investments are primarily comprised of corporate venture capital investments held by NGP and are measured at fair value with changes in fair value recorded in the consolidated statements of operations.

The following table presents the financial investments recorded on the consolidated balance sheets:

	March 31,	
	2020	2019
	(in millions of dollars)	
COLI/TOLI	**$ 273**	$ 288
Debt securities	**162**	157
Equity securities	**199**	214
Supplemental Executive Retirement Plans	**34**	29
Other	**27**	72
Total financial investments	**$ 695**	$ 760

Asset Retirement Obligations

Asset retirement obligations are recognized for legal obligations associated with the retirement of property, plant and equipment, primarily associated with the Company's gas distribution and electric generation facilities. Asset retirement obligations are recorded at fair value in the period in which the obligation is incurred, provided fair value can be reasonably estimated. In the period in which new asset retirement obligations, or changes to the timing or amount of existing retirement obligations are recorded, the associated asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset. In each subsequent period the asset retirement obligation is accreted to its present value. The Company applies regulatory accounting guidance, whereby accretion costs associated with asset retirement obligations are recorded as increases to regulatory assets on the consolidated balance sheets. These regulatory assets represent timing differences between the recognition of costs in accordance with U.S. GAAP and costs recovered through the ratemaking process.

Employee Benefits

The Company has defined benefit pension plans and postretirement benefit other than pension plans for its employees. The Company recognizes all pension and PBOP plans' funded status on the consolidated balance sheets as a net liability or asset with an offsetting adjustment to accumulated other comprehensive income ("AOCI") in shareholders' equity. If the cost of providing these plans is recovered in rates through the Company's regulated subsidiaries, the net funded status is offset by a regulatory asset or liability. The Company measures and records its pension and PBOP funded status at the year-end date. Pension and PBOP plan assets are measured at fair value, using the year-end market value of those assets.

New and Recent Accounting Guidance

Accounting Guidance Recently Adopted

Leases

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-02 "Leases" ("Topic 842") and further amended the standard in 2018 and 2019. The new standard supersedes the lease accounting guidance under Topic 840. Under the new standard, a lease is defined as a contract, or part of a contract, that conveys the right to control the use of one or more identified assets for a period of time in exchange for consideration. Lessees will need to recognize leases on the balance sheet as a right of use ("ROU") asset and a related lease liability and classify each lease component as either operating or finance. The lease liability will be equal to the present value of lease payments. The right-of-use asset will be based on the liability, subject to certain adjustments, such as initial direct costs. Lessor accounting under Topic 842 remains largely consistent with Topic 840.

The Company adopted this new guidance on April 1, 2019 using the modified retrospective approach. The Company recognized approximately $784 million of operating lease liabilities and ROU assets on the balance sheet upon transition at

April 1, 2019. The implementation of the guidance did not have a material impact on the Company's results of operations or statement of cash flows, as the pattern of recognition of operating lease expense was consistent with Topic 840. The Company's leases are further discussed in Note 8, "Property, Plant and Equipment" and Note 16, "Leases."

Comprehensive income – stranded tax effects

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement–Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income," which allows a reclassification from AOCI to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act ("Tax Act"). The Company adopted the guidance on April 1, 2019, resulting in a $82 million adjustment to retained earnings which was reclassified from AOCI.

Derivatives and Hedging

The Company adopted the revised hedge accounting requirements of ASU Topic 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities" effective April 1, 2019. A modified retrospective approach was applied. Hedging relationships were deemed to continue and were not redesignated. From the adoption date, qualifying unrealized gains and losses excluded from hedging relationships but treated as a "cost of hedging" are deferred within AOCI and released systematically into profit or loss to match the timing of hedged items. The impact of transitioning to the revised standard was not material to the consolidated financial statements.

Reference Rate

The UK and US financial regulators, working with regulators around the world, announced that LIBOR in certain currencies including GBP and USD will cease to exist by the end of 2021, and will be replaced as interest rate benchmarks by alternative reference rates ("ARRs").

Facilitation of the Effects of ASU No. 2020-04 (Topic 848) Reference Rate Reform on Financial Reporting was issued and became immediately effective for all entities as of March 12, 2020 through December 31, 2022. The amendments in this Update provide optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The amendments are elective and apply to all entities, subject to meeting certain criteria, that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. No elections to apply the amendments have been made at March 31, 2020. The Company is still assessing the potential impact related to replacing LIBOR ARRs.

As the Company has not amended any of its current agreements that have LIBOR as a reference rate between March 12 and March 31, 2020, this accounting standard update did not impact the financial statements for the year ended March 31, 2020.

Accounting Guidance Not Yet Adopted

Intangibles - Goodwill and Other

In August 2018, the FASB issued ASU No. 2018-15 "Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40), Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract" to help entities evaluate the accounting for fees paid by a customer under a cloud computing arrangement that is a service contract. The amendment will align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. For the Company, the requirements in this update are effective for the fiscal year ending March 31, 2021 and interim periods within. The Company is currently assessing the application of the new guidance to determine if it will have a material impact on the presentation, results of operations, cash flows, and/or financial position of the Company.

Pension and Postretirement Benefits

In August 2018, the FASB issued ASU No. 2018-14 “Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans,” which modifies the disclosure requirements for employers that sponsor define benefit pension or other postretirement plans, including elimination of certain current disclosure requirements. For the Company, the requirements of the new standard will be effective for the fiscal year ending March 31, 2021. The Company is currently assessing the impact of this standard.

Fair Value

In August 2018, the FASB issued ASU No. 2018-13 “Fair Value Measurement (Topic 820), Disclosure Framework–Changes to the Disclosure Requirements for Fair Value Measurement” which modifies certain disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement. For the Company, the requirements of the new standard will be effective for the fiscal year ending March 31, 2021, and interim periods within. The Company is currently assessing the impact of this standard.

Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU No. 2016-13 “Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements”, which requires a financial asset (or a group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. In May 2019, the FASB issued ASU 2019-05, “Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief”, permitting entities to irrevocably elect the fair value option for financial instruments that were previously recorded at amortized cost basis within the scope of Topic 326, with the exception of held-to-maturity debt securities. For the Company, the requirements in these updates, as amended in November 2019 by ASU 2019-10 “Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates”, will be effective for the fiscal year ending March 31, 2024, including interim periods within. The Company is currently assessing the application of this standard to determine if it will have a material impact on the presentation, results of operations, cash flows, and financial position of the Company.

Income Tax

In December 2019, the FASB issued ASU No. 2019-12 “Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes” which simplifies various aspects of the accounting for income taxes by eliminating certain exceptions to current requirements. The standard also enhances and simplifies other requirements, including tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. The standard is effective for the Company in the fiscal year ending March 31, 2022, and interim periods within. The Company is currently assessing the impact of this standard on its financial statements.

Reclassifications

Certain reclassifications have been made to the consolidated financial statements to conform the prior period’s balances to the current period’s presentation. These reclassifications had no effect on reported income, total assets, or stockholders’ equity as previously reported.

3. REVENUE

The following table presents, for the years ended March 31, 2020 and 2019, revenue from contracts with customers, as well as additional revenue from sources other than contracts with customers, disaggregated by major source:

	Years ended March 31	
	2020	2019
	(in millions of dollars)	
Revenue from contracts with customers:		
Electric services	**$ 5,935**	$ 6,269
Gas distribution	**5,201**	5,729
Off system sales	**146**	322
Total revenue from contracts with customers	**11,282**	12,320
Revenue from regulatory mechanisms	**413**	(10)
Other revenue	**564**	505
Total operating revenues	**$ 12,259**	$ 12,815

Electric Services and Gas Distribution: Revenue from contracts with customers, includes electric services and gas distribution. Electric services are comprised of electric distribution and transmission services.

The Company's subsidiaries own and maintain electric and natural gas distribution networks. Distribution revenues are primarily from the sale of electricity, gas, and related services to retail customers. Distribution sales are regulated by the applicable state agencies, which are responsible for determining the prices and other terms of services as part of the ratemaking process. The arrangement where a utility provides a service to a customer in exchange for a price approved by a regulator is referred to as a tariff sales contract. Gas and electric distribution revenues are derived from the regulated sale and distribution of electricity and natural gas to residential, commercial, and industrial customers within the Company's service territory under the tariff rates. The tariff rates approved by the regulator are designed to recover the costs incurred by the Company for products and services provided along with a return on investment.

The performance obligation related to these sales is to provide electricity or natural gas to the customers on demand. The electricity or natural gas supplied under the tariff represents a single performance obligation as it is a series of distinct goods or services that are substantially the same. The performance obligation is satisfied over time because the customer simultaneously receives and consumes the electricity or natural gas as the Company provides these services. The Company records revenues related to distribution sales based upon the approved tariff rate and the volume delivered to the customers, which corresponds with the amount the Company has the right to invoice.

Distribution revenue also includes estimated unbilled amounts, which represent the estimated amounts due from retail customers for electricity and natural gas provided to customers by the Company, but not yet billed. Unbilled revenues are determined based on estimated unbilled sales volumes for the respective customer classes and then applying the applicable tariff rate to those volumes. Actual amounts billed to customers when the meter readings occur, may be different from the estimated amounts.

Certain customers have the option to obtain electricity or natural gas from other suppliers. In those circumstances revenue is only recognized for providing delivery of the commodity to the customer.

Transmission services are provided as demanded by the customers and represents a single performance obligation. The price for the services provided are based on the underlying tariff rates established by FERC related to both Niagara Mohawk and New York Independent System Operator ("NYISO"). The performance obligation is satisfied over time as the transmission services are provided by Niagara Mohawk. Niagara Mohawk records revenue related to transmission services based on the volumes delivered and the approved tariff rates, which corresponds with the amount Niagara Mohawk has the right to invoice, as it is entitled to compensation for the performance completed to date.

Generation revenue is derived from billings to LIPA for the electric generation capacity and, to the extent requested, energy from the Company's existing oil and gas-fired generating plants as discussed in Note 15, "Commitments and Contingencies" under "Electric Services and LIPA Agreements."

Off system sales: Represents direct sales of gas to participants in the wholesale natural gas marketplace, which occur after customers' demands are satisfied.

Revenue from regulatory mechanisms: The Company's regulated subsidiaries record revenues in accordance with accounting principles for rate-regulated operations for arrangements between the regulated subsidiaries and their respective regulators, which are not accounted for as contracts with customers. These include various deferral mechanisms such as capital trackers, energy efficiency programs, storm deferral, and other programs that also qualify as Alternative Revenue Programs ("ARPs"). ARPs enable the regulated subsidiaries to adjust rates in the future, in response to past activities or completed events. The regulated subsidiaries' electric and gas distribution rates have revenue decoupling mechanisms ("RDM"), which allow for periodic adjustments to delivery rates as a result of the reconciliation between allowed revenue and billed revenue. The regulated subsidiaries also have other ARPs related to the achievement of certain objectives, demand side management initiatives, and certain other ratemaking mechanisms. Revenues from ARPs are recognized with a corresponding offset to a regulatory asset or liability account, when the regulatory-specified events or conditions have been met, when the amounts are determinable, and are probable of recovery (or payment) through future rate adjustments within 24-months from the end of the annual reporting period.

Other Revenue: Includes lease income and other transactions that are not considered contracts with customers. The lease income primarily includes the electric generation revenue, which is derived from billings to LIPA for the electric generation capacity and, to the extent requested, energy from the Company's existing oil and gas-fired generating plants as discussed in Note 15, "Commitments and Contingencies" under "Electric Services and LIPA Agreements."

4. REGULATORY ASSETS AND LIABILITIES

The Company records regulatory assets and liabilities that result from the ratemaking process. Regulatory deferrals are recorded by each legal entity as right of offset does not exist across the Company's regulated subsidiaries. The following table presents the regulatory assets and regulatory liabilities recorded on the consolidated balance sheets:

	March 31,	
	2020	2019
	(in millions of dollars)	
Regulatory assets		
Current:		
Derivative instruments	**$ 177**	$ 15
Gas cost adjustment	**77**	105
Rate adjustment mechanisms	**155**	94
Renewable energy certificates	**72**	81
Revenue decoupling mechanism	**93**	42
Other	**33**	22
Total	**607**	359
Non-current:		
Environmental response costs	**2,618**	2,249
Net metering deferral	**220**	166
Postretirement benefits	**2,004**	1,496
Recovery of acquisition premium	**159**	167
Storm costs	**334**	307
Other	**919**	751
Total	**6,254**	5,136
Regulatory liabilities		
Current:		
Energy efficiency	**410**	432
Gas costs adjustment	**110**	110
Rate adjustment mechanisms	**68**	99
Revenue decoupling mechanism	**178**	240
Transmission service	**62**	93
Other	**40**	91
Total	**868**	1,065
Non-current:		
Carrying charges	**292**	243
Cost of removal	**1,670**	1,685
Environmental response costs	**150**	162
Postretirement benefits	**144**	233
Regulatory tax liability, net	**2,795**	2,835
Other	**1,175**	1,118
Total	**6,226**	6,276

Carrying charges: The Company records carrying charges on regulatory balances for which cash expenditures have been made and are subject to recovery, or for which cash has been collected and is subject to refund. Carrying charges are not recorded on items for which expenditures have not yet been made.

Cost of removal: Represents cumulative amounts collected, but not yet spent, to dispose of property, plant and equipment. This liability is discharged as removal costs are incurred.

Derivative instruments: The Company evaluates open commodity derivative instruments for regulatory deferral by determining if they are probable of recovery from, or refund to, customers through future rates. Derivative instruments that qualify for recovery are recorded at fair value, with changes in fair value recorded as regulatory assets or regulatory liabilities in the period in which the change occurs.

Energy efficiency: Represents the difference between revenue billed to customers through the Company's energy efficiency charge and the costs of the Company's energy efficiency programs as approved by the state authorities.

Environmental response costs: The regulatory asset represents deferred costs associated with the Company's share of the estimated costs to investigate and perform certain remediation activities at former manufactured gas plant ("MGP") sites and related facilities. The Company believes future costs, beyond the expiration of current rate plans, will continue to be recovered through rates. The regulatory liability represents the excess of amounts received in rates over the Company's actual site investigation and remediation ("SIR") costs.

Gas costs adjustment: The Company is subject to rate adjustment mechanisms for commodity costs, whereby an asset or liability is recognized resulting from differences between actual revenues and the underlying cost of supply. These amounts will be refunded to, or recovered from, customers over the next year.

Net metering deferral: Net metering deferral reflects the recovery mechanism for costs associated with customer installed on-site generation facilities, including the costs of renewable generation credits. This surcharge provides the Company with a mechanism to recover such amounts.

Postretirement benefits: The regulatory asset balance represents the Company's, unamortized, non-cash accrual of net pension actuarial gains and losses in addition to actual costs associated with Company's pension plans in excess of amounts received in rates that are to be collected in future periods. The regulatory liability represents the Company's, unamortized, non-cash accrual of net PBOP actuarial gains and losses in addition to excess amounts received in rates over actual costs of the Company's PBOP plans that are to be passed back in future periods.

Rate adjustment mechanisms: In addition to commodity costs, the Company is subject to a number of additional rate adjustment mechanisms whereby an asset or liability is recognized resulting from differences between actual revenues and the underlying cost being recovered or differences between actual revenues and targeted amounts as approved by the applicable state regulatory bodies.

Recovery of acquisition premium: Represents the unrecovered amount (plus related taxes) by which the purchase price paid exceeded the net book value of Colonial Gas' assets in the 1998 acquisition of Colonial Gas by Eastern Enterprises, Inc. In exchange for certain rate concessions and the achievement of certain merger savings targets, the DPU has allowed Colonial Gas to recover the acquisition premium in rates through August 2039.

Regulatory tax liability, net: Represents over-recovered federal and state deferred taxes of the Company primarily as a result of regulatory flow through accounting treatment, state income tax rate changes and excess federal deferred taxes as a result of the Tax Act.

Renewable energy certificates: Represents deferred costs associated with the Company's compliance obligations with Renewable Portfolio Standards ("RPS") in Rhode Island and Massachusetts. The RPS is legislation established to foster the development of new renewable energy sources. The regulatory asset will be recovered over the next year.

Revenue decoupling mechanism ("RDM"): As approved by the applicable state regulatory bodies, the Company has electric and gas RDMs which allow for an annual adjustment to the Company's delivery rates as a result of the reconciliation between allowed and actual billed revenues. Any difference is recorded as a regulatory asset or regulatory liability.

Storm costs: The Company is allowed to recover storm costs from retail delivery service customers. This balance reflects costs yet to be recovered. See Note 5, "Rate Matters," for additional information regarding the recovery of storm costs.

Transmission service: Massachusetts Electric and Nantucket (the "Massachusetts Electric Companies") and Narragansett arrange transmission service on behalf of their customers and bill the costs of those services to customers, pursuant to the Transmission Service Cost Adjustment Provision. Any over or under recoveries of these costs are passed on to customers receiving transmission service over the subsequent year.

5. RATE MATTERS

Niagara Mohawk

Electric and Gas Filing

On April 28, 2017, Niagara Mohawk filed a proposal to reset electric and natural gas delivery prices beginning in April 2018. On January 19, 2018, Niagara Mohawk reached a settlement agreement with the NYPSC Staff and other parties to the case and filed a Joint Proposal for a three-year rate plan. The proposal reflects the new federal tax law changes and provides a cumulative revenue requirement increase of $241 million and $61 million for the electric and gas business, respectively, based on a 9.0% return on equity ("ROE") and 48% common equity ratio. On March 15, 2018, the NYPSC issued a final order approving the Joint Proposal and the new rates took effect on April 1, 2018.

As of March 31, 2018, resulting from the order, a new electric rate plan settlement credit of $45 million and a new gas rate plan settlement credit of $28 million were established. These credits are included in other non-current regulatory liabilities in the preceding table within Note 4, "Regulatory Assets and Liabilities." Niagara Mohawk applied $38 million of existing regulatory liabilities towards the creation of these credits. As authorized under the order, the Electric Rate Plan Settlement Deferral Credit balances are being amortized at the rate of $6 million per rate year to compensate the write-down of pre-Automated Meter Reading investments. The order authorizes Niagara Mohawk to fund $14 million in gas safety programs and compliance improvement programs form the Gas Rate Plan Settlement Deferral Credit balances. Further amortizations relating to meter investments, gas safety, or the settlement of other rate plan issues may be authorized in future proceedings.

Due to the impacts of COVID-19, Niagara Mohawk filed petitions to postpone for four months the electric and gas delivery rate increases that were scheduled to go into effect on April 1, 2020, and recover the increase over the period August 1, 2020 through March 31, 2021. The petitions were approved by the NYPSC.

On July 31, 2020, Niagara Mohawk submitted a rate filing with the NYPSC to update its electric and gas distribution rates. New rates are expected to become effective in July 2021.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient Accumulated Deferred Income Taxes ("ADIT"), related to the Tax Act. The order applies to public utility transmission providers with formula rates and stated rates and provides that public utilities with formula rates submit a compliance filing within 30 days of the effective date of the final rule or in the public utilities next annual informational filing following the issuance of the final rule. The compliance filing must demonstrate how the public utilities formula rate adjusts rate base via a Rate Adjustment mechanism, returns or recovers excess or deficient ADIT via an Income Tax Allowance Mechanism and must include an ADIT worksheet to support the excess or deficient ADIT calculation and amortization. The ADIT worksheet must be populated and will be a new and permanent worksheet. The mechanisms and worksheet must remain applicable to any future changes to tax rates that give rise to excess or deficient ADIT, including changes to state and local tax rates. Excess or deficient ADIT associated with future tax rate changes will automatically be included in a public utility's formula rate without the need for a Section 205 filing. The order does not prescribe a recovery/refund period for deficient/excess ADIT for unprotected excess/deficient ADIT that it not subject to the normalization requirements. FERC will evaluate proposed amortization periods on a case by case basis. Niagara Mohawk has submitted a compliance filing with the June 14, 2020 annual informational filing.

On August 9, 2018, the NYPSC issued an order in its generic proceeding considering the impacts of federal tax reform. NYPSC Staff had advocated that unless already reflected in rates all New York utilities implement a sur-credit by October 1, 2018 that would reflect the immediate effects of the Tax Act and also return any deferred benefits to customers. In response, the Company's New York subsidiaries filed a proposal to (i) delay any sur-credit to January 1 to offset scheduled rate increases and (ii) retain any deferred benefits, including accumulated deferred federal income taxes ("ADFIT"), for future rate moderation.

The NYPSC's order effectively approved all aspects of Niagara Mohawk's proposal. The NYPSC agreed that Niagara Mohawk should be allowed to defer both the pass back of calendar year 2018 tax savings (to the extent not already returned in the new rate plan) and the amortization of excess ADFIT balances, and use the benefits as a rate moderator when base rates are next revised. Specifically, the NYPSC directed that:

- for Niagara Mohawk, no sur-credit is required as the current rate plan already reflects the reduction of the tax rate to 21% and the termination of bonus depreciation. The NYPSC approved Niagara Mohawk's proposal to defer the tax benefit realized for the three-month period (January-March) prior to new rates, of $18 million for electric and $5 million for gas, to offset future rate increases or investments.

- Brooklyn Union and KeySpan Gas East (the "New York Gas Companies") implement a sur-credit to reflect the lower tax rate effective January 1, 2019 to offset planned rate increases and retain the calendar year 2018 deferred amounts for future rate mitigation and/or to offset investments. Deferring the tax benefits until January 1, 2019 results in a deferred balance of $40 million for Brooklyn Union and $31 million for KeySpan Gas East.

New York Management Audit

Under the New York Public Service Law, the NYPSC is required to conduct periodic audits of various aspects of public utility activities. In 2018 the NYPSC initiated a comprehensive management and operations audit of the Company's three New York regulated businesses. New York law requires periodic management audits of all utilities at least once every five years. The Company's New York regulated business last underwent a New York management audit in 2014 and 2015, when the NYPSC audited the Company's New York gas business.

In September 2018, the NYPSC selected Saleeby Consulting Group as the independent auditor to perform the audit. The Company was fully committed to the audit with the goal of demonstrating its full capabilities and receiving meaningful feedback that would drive useful recommendations to improve the Company's New York regulated businesses electric and gas operations for the benefit of its customers. The audit began in November 2018 and ran until August 2019, with a final report due in September 2019. Unexpectedly, in October 2019, the NYPSC employees advised us that they were terminating the contract with the auditors, effective immediately, because of the poor quality of the draft audit report by the auditor, with no fault whatsoever on the part of the Company. NYPSC employees advised of their intention to complete the management audit themselves. The Audit is expected to be complete sometime in the second half of 2020.

The New York Gas Companies

Rate Case Filing

On January 29, 2016, the New York Gas Companies filed to adjust their base gas rates, to be effective from January 1, 2017. The filing requested to increase gas delivery base revenues. On September 7, 2016, the New York Gas Companies filed a Joint Proposal establishing a three-year rate plan beginning January 1, 2017 and ending December 31, 2019. The NYPSC issued an order approving the Joint Proposal on December 15, 2016 and the new rates went into effect beginning January 1, 2017.

The rate plan provided for a revenue increase of $384 million in the first year, an additional $61 million in the second year, and an additional $76 million in the third year, for a cumulative three-year increase of $1.3 billion, for the New York Gas Companies. In an effort to mitigate the potential bill impacts that the revenue increases would have on customers in the first year, the revenue increases are levelized over the three-year rate period. As such, for U.S. GAAP reporting, revenues are recognized equal to the amounts actually billed to customers during each period rather than per the provisions of the rate plan. The settlement is based upon a 9% ROE and 48% common equity ratio and includes an earnings sharing mechanism in which customers will share earnings when the New York Gas Companies' ROE is in excess of 9.5%.

Key provisions of the settlement include funding for removal of a specific mileage of leak prone pipe ("LPP") in each rate year. Additionally, recovery of proactive LPP replacement costs incurred in excess of this mileage are permitted and recovered through the Gas Safety and Reliability Surcharge. This also includes a positive revenue adjustment mechanism for unit cost savings versus those specific in rates.

The New York Gas Companies have capital tracker mechanisms that reconcile the New York Gas Companies' capital expenditures to the amounts permitted in rates. The Net Utility Plant and Depreciation Expense tracker applies to the New York Gas Companies' aggregate total average net plant and depreciation expense combined and was a downward only reconciliation through the end of rate year three and a two-way tracker in the period following the expiration of the term of the Company's rate plan. Under the City/State Construction Reconciliation, the New York Gas Companies are authorized to defer 90% of the revenue requirement impact difference (excluding operations and maintenance expense) between actual and forecast city/state construction costs for future recovery from or return to customers.

The New York Gas Companies' RDM was also adjusted to include revenue-per-class RDMs for industrial and commercial customers not previously subject to the RDM.

Each rate year, the New York Gas Companies' will fully reconcile actual SIR expense to the Forecast Rate Allowance. Any under or over expenditures will be deferred for future refund to or recovery from customers (with the exception of the Citizens site). Brooklyn Union will continue to absorb 10% of the remaining investigation costs for the Citizens site. In the event that KeySpan Gas East incurs unanticipated expenses relating to SIR costs incremental to the forecast rate allowance, KeySpan Gas East may file a petition requesting that the NYPSC approve recovery of incremental costs through KeySpan Gas East's SIR Recovery Surcharge.

Brooklyn Union's environmental SIR expense has also been moved from a surcharge to base rates. Beginning in January 2018, to the extent that the difference between actual SIR expense and the Forecast Rate Allowance exceeds $25 million on a cumulative basis, Brooklyn Union will utilize its SIR Recovery Surcharge. The surcharge is designed to provide recovery for the differences between actual SIR expenses and the amounts allowed in rates and will be calculated annually and be limited to an amount no greater than 2% of Brooklyn Union's prior year aggregate revenues. Differences over this threshold will be deferred for future recovery. The terms of the rate plan continue beyond rate year three until the Commission issues an Order in the current rate proceeding.

On April 30, 2019, KeySpan Gas East and Brooklyn Union filed to increase revenues for the twelve months ending March 31, 2021 ("Rate Year"). The New York Gas Companies filed Corrections and Updates on July 3, 2019, which requested rate increases of $61 million for KeySpan Gas East and $195 million for Brooklyn Union. The filings propose to invest over $1.5 billion in the Rate Year to modernize the New York Gas Companies' gas infrastructure by replacing aging pipelines, implementing safety improvements, enhancing storm hardening and resiliency, and reducing methane emissions. The filings also include proposals to enhance gas safety and promote a sustainable and affordable path toward a low-carbon energy future. After a series of litigation hearings held from February 10, 2020 through February 25, 2020 by an administrative law judge, on June 5, 2020 the Company informed the NYPSC and the administrative law judge of the intention to resume settlement discussions. Settlement discussions resumed on June 15, 2020 and are ongoing at this time. To facilitate those discussions, the New York Gas Companies requested an additional three-month extension of the suspension period, such that new rates would now become effective November 1, 2020. The final approved rate order will include a make-whole provision that will assure the New York Gas Companies are restored to the same financial position they would have been in had new rates gone into effect on April 1, 2020.

Downstate Gas Moratorium

On May 15, 2019, the New York Gas Companies stopped fulfilling applications for new firm service connections, or requests for additional firm load from existing customers, in the affected areas of its service territory because the available firm gas supplies are insufficient to keep pace with demand. On October 11, 2019, the NYPSC issued an "Order Instituting Proceeding and to Show Cause" that directed the Company to provide gas service to a subset of previously denied applicants and show cause why the Company should not be subject to financial penalties.

On November 24, 2019, the New York Gas Companies reached settlements resolving the Order to Show Cause relating to the downstate gas moratorium. The settlement was approved November 26, 2019 in a one Commissioner Order by the NYPSC. Specifically, the New York Gas Companies are lifting the moratorium for approximately two years and implementing $35 million in customer assistance, demand response, energy efficiency and other shareholder funded programs. The settlement also provides for the appointment of a monitor to oversee gas supply operations and compliance with the settlement.

The New York Gas Companies also agreed to develop a range of options to address the natural gas constraints facing the region, which were presented at a series of public meetings in the downstate New York service territory. These meetings were designed to facilitate a dialogue with customers, residents, advocates, business leaders and local elected officials on potential solutions. Following the public meetings, the New York Gas Companies published a report that summarized the pubic feedback and provided additional information and analysis on the various long-term natural gas supply options. The New York Gas Companies are now working with regulators, stakeholders, and customers to find long-term solutions to the gas supply constraints in the region.

Downstate Order to Show Cause

On July 12, 2019, the NYPSC initiated a proceeding requiring the New York Gas Companies to demonstrate why a penalty action should not be commenced for more than 1,600 alleged gas safety violations. The alleged violations concern the NYPSC's investigation of improper operator qualification and related issues following a 2016 anonymous letter alleging a contractor had facilitated employees cheating on operator qualification exams. The NYPSC also alleges violations for both employees and other contractors' workers whose qualifications had lapsed. The order directs the New York Gas Companies to respond within 45 days. The New York Gas Companies filed a response to the allegation. At this time, The New York Gas Companies are unable to determine the amount and probability of any potential penalty.

On November 15, 2018, the NYPSC issued an Order to Show Cause against KeySpan Gas East for violations of gas safety regulations designed to ensure underground gas pipelines are protected from corrosion. KeySpan Gas East filed a response to the allegations. At this time, KeySpan Gas East is unable to determine the amount and probability of any potential penalty.

The Massachusetts Electric Companies

Electric Rate Case Filing

On November 15, 2018, the Massachusetts Electric Companies, filed an application for new base distribution rates that became effective October 1, 2019. On September 30, 2019, and updated on October 11, 2019, the DPU approved an overall net increase in base distribution revenue of approximately $40 million based upon a 9.6% return on equity, with 53.49% equity, 46.43% long-term debt and 0.08% preferred stock capital structure. The DPU approved a five-year performance-based ratemaking ("PBR") plan, which adjusts base distribution revenue annually based on a pre-determined formula. With the approval of the PBR plan, the Company agreed not to file for an effective change in base distribution rates outside of the operation of the PBR plan for five-years and the CIRM will be discontinued after a transition period.

The approved net increase includes an increase in annual funding of the storm fund from $11 million to $16 million per year and an extension of the storm fund replenishment factor through November 2023.

Tax Act

In February 2018, the DPU opened an investigation to examine the effect of the Tax Act on the rates of the investor-owned utilities in Massachusetts as of January 1, 2018 and directed the utilities to account for any revenues associated with the difference between the previous and current corporate income tax rates, and establish a regulatory liability for excess recovery in rates of ADIT. On May 1, 2018, the Massachusetts Electric Companies submitted their proposal for reducing electric rates prospectively, and for addressing ADIT. On June 29, 2018, the DPU approved the Massachusetts Electric Companies' proposal for reducing rates prospectively, and directed the Massachusetts Electric Companies to reduce rates effective July 1, 2018 and reduce their annual target revenue in its RDM by $28 million, subsequently corrected to $26 million. On December 21, 2018, the DPU issued an order requiring all utilities to begin crediting in rates the amortization of excess deferred federal income taxes, to the extent such amortization was not already included in base distribution rates, through the combination of factors associated with certain reconciling mechanisms and a separate factor for the amortization of the remaining amounts. The DPU approved the Massachusetts Electric Companies' compliance filing and proposed tariff allowing for the credit to customers of the amortization of the remaining amounts on January 28, 2019, and noted it would investigate the proposed refund of excess ADIT associated with the tax credit provision in D.P.U. 19-05, the Massachusetts Electric Companies' annual retail rate filing proceeding, and the excess ADIT associated with reconciling mechanisms in the individual dockets for those mechanisms.

In February 2019, the DPU issued an order finding that the Massachusetts utilities were not required to refund tax savings previously accrued from January 1, 2018 through June 30, 2018, as a result of the federal income tax rate reduction. The Massachusetts Electric Companies previously estimated that the total amount that would be subject to refund was approximately $14 million. On March 7, 2019, the Attorney General's ("AG") Office filed a motion for clarification and reconsideration, requesting that the DPU provide additional clarity regarding its February 2019 ruling, and to reconsider its determination to allow utilities to keep the federal tax savings accrued from January 1, 2018 through June 30, 2018. The Motion for Clarification and Reconsideration is still pending.

Grid Modernization Plan

On August 19, 2015, the Massachusetts Electric Companies filed their proposed grid modernization plan with the DPU, with four different proposed investment scenarios. On May 10, 2018, the DPU issued an order in this proceeding. The order approves $82 million in grid-facing investments over three years in: (1) Conservation Voltage Reduction and Volt VAR Optimization; (2) advanced distribution automation; (3) feeder monitors; (4) communications and information/operational technologies; and (5) advanced distribution management/distribution supervisory control and data acquisition. The DPU allowed recovery of both operation and maintenance expense and capital costs through a reconciling mechanism, and in the future will consider grid modernization plans in separate dockets (i.e., not through rate cases). The DPU did not approve any customer-facing (i.e., advanced metering infrastructure) investments; the DPU will address these in a further investigation to see if there are ways to achieve cost-effective deployment of advanced metering functionality ("AMF"). The DPU found there needs to be widespread adoption of dynamic pricing in order for AMF to be successful, and it needs to address how to facilitate this first. The DPU also refined its grid modernization objectives to place additional focus on improved access to the distribution system planning process. The DPU recently extended the term of the first three-year grid modernization plan (2018-2020) to four years so the current grid modernization plan now runs through 2021.

Operational and Management Audit

On September 30, 2019, in its decision regarding the Company's most recent request for a change in base distribution rates, DPU stated that pursuant to its supervisory authority it would require a comprehensive independent management audit of the Company, including a review of its relationship to the National Grid Service Company. On November 25, 2019, the DPU opened the investigation to undertake an independent audit. The audit will be conducted in two phases and will include data from the last five years. Phase I of the audit must be complete by November 16, 2020, while Phase II is expected to be completed by December 1, 2021. The Company cannot predict the outcome of this proceeding, at this time.

The Massachusetts Gas Companies

General Rate Case

Effective October 1, 2018, the DPU approved a combined rate increase for the Massachusetts Gas Companies. The DPU authorized an allowed ROE of 9.5% and an equity ratio of 53%. In addition, the DPU approved funding the Gas Business Enablement program. The Gas Business Enablement program is being developed to consolidate and modernize the Massachusetts Gas Companies' systems and operating platforms to facilitate internal efficiencies and improve customers' experience. The DPU denied the Massachusetts Gas Companies' request to increase rates for certain post-test year capital investments, instead requiring the Massachusetts Gas Companies to include those investments in a subsequent base rate case. The Massachusetts Gas Companies filed a motion for reconsideration of certain aspects of the DPU decision. The motion for reconsideration is still pending. The Massachusetts Gas Companies cannot predict the outcome of this motion.

Tax Act

In February 2018, the DPU opened an investigation to examine the effect of the Tax Act on the rates of the investor-owned utilities in Massachusetts as of January 1, 2018, and directed the utilities to account for any revenues associated with the difference between the previous and current corporate income tax rates, and establish a regulatory liability for excess recovery in rates of ADIT. The Massachusetts Gas Companies' filing was submitted to the DPU on May 1, 2018. In its June 29, 2018 order, the DPU allowed the Massachusetts Gas Companies to defer the effect of the tax reduction until new rates resulting from the then-pending rate case became effective on October 1, 2018, at which time the Massachusetts Gas Companies were directed to refund the three-month tax savings deferral to customers over one year, and the Massachusetts Gas Companies included this amount in their rate case compliance filing. On December 21, 2018, the DPU issued an order requiring all utilities to begin crediting in rates the amortization of excess deferred federal income taxes, to the extent such amortization was not already included in base distribution rates, through the combination of factors associated with certain reconciling mechanisms and a separate factor for the amortization of the remaining amounts. The Massachusetts Gas Companies included an estimate of amortization of excess deferred federal income taxes in their 2017 rate case, and the DPU required a filing by May 1, 2019 to update the balance of excess deferred federal income taxes and associated amortization. By order dated September 24, 2018 in D.P.U. 18-15-D ("Order 18-15-D"), the DPU approved the Massachusetts Gas Companies' methodology for calculating the amount of excess ADIT and proposed amortization periods for protected and unprotected amounts. On May 1, 2019, consistent with the DPU's directives in Order 18-15-D, the Massachusetts Gas Companies provided a final calculation of protected and unprotected excess ADIT amounts, and a final calculation of the amortization periods applicable to protected excess ADIT.

In February 2019, the DPU issued an order finding that the Massachusetts utilities were not required to refund tax savings previously accrued from January 1, 2018 through June 30, 2018 as a result of the federal income tax rate reduction. On March 7, 2019, the AG's office filed a motion for clarification and reconsideration requesting that the DPU provide additional clarity regarding its February 2019 ruling, and to reconsider its determination to allow utilities to keep the federal tax savings accrued from January 1, 2018 through June 30, 2018. The Massachusetts Gas Companies initially recorded a $7 million regulatory liability relating to this matter, pending the outcome of the AG's motion. To date, the DPU has not acted on or given any indication that it intends to act on the AG's motion. As a result, the Massachusetts Gas Companies no longer consider it probable that the federal tax savings will need to be refunded, so have reversed the $7 million regulatory liability as of March 2020.

Independent Statewide Pipeline Safety Audit

On November 30, 2018, the DPU initiated an independent statewide pipeline safety audit of the natural gas distribution systems in Massachusetts and hired an independent auditor. The auditor is assessing the safety of the gas systems in the entire state and made certain recommendations for improvements. As part of Phase I of the audit, the Massachusetts Gas Companies submitted responses to information requests from the auditor and made a presentation to the auditor in January 2019. In May 2019 the independent auditor issued a Phase I Summary Report with 11 preliminary recommendations general to all the gas companies in Massachusetts, which include taking steps to improve emergency response plans, establishing programs and training for process safety hazard identification in the field, and addressing resource issues at the gas companies and in state government. Phase II of the audit has been completed with the issuance of the auditor's final report on January 31, 2020, which contained both general and specific company findings. There were no individual company penalties or fines included in the report. The auditor's process is now over, and there are no further actions pending.

NEP

Transmission Return on Equity and Recovery of Transmission Costs

Transmission revenues are based on a formula rate that recovers NEP's actual costs plus a return on investment. Approximately 74% of NEP's transmission facilities are included under regional network service ("RNS") rates. NEP earns an additional 0.5% ROE incentive adder on RNS-related transmission facilities approved under the Regional Transmission Organization's ("RTO") Regional System Plan and placed in service on or before December 31, 2008. It also earns a 1.25% ROE incentive on its portion of New England East-West Solution ("NEEWS") (see the "New England East-West Solution" section).

NEP's transmission rates applicable to transmission service through October 15, 2014 reflected a base ROE of 11.14% applicable to NEP's transmission facilities, plus an additional 0.5% RTO participation adder applicable to transmission facilities included under the RNS rate. On October 16, 2014, the FERC issued an order, Opinion No. 531-A, reducing the base ROE applicable to transmission assets from 11.14% to 10.57% effective as of the date of the order and establishing a maximum ROE of 11.74%. On March 3, 2015, the FERC issued an Order on Rehearing, Opinion No. 531-B, affirming the 10.57% base ROE and clarifying that the 11.74% maximum ROE applies to all individual transmission projects with ROE incentives previously granted by the FERC. On April 14, 2017, the U.S. Court of Appeals for the D.C. Circuit (Court of Appeals) vacated and remanded FERC's Opinion No. 531 (and successor orders), through which the FERC had lowered the New England Transmission Owners ("NETO") return on equity from 11.14% to 10.57% and capped the total incentives at 11.74%.

On October 16, 2018, the FERC issued an order on all four of NEP's ROE complaints (see the "FERC ROE Complaints" section in Note 15, "Commitments and Contingencies") describing how it intends to address the issues that were remanded by the Court. The FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable and, if so, how to calculate a replacement ROE. The FERC stated that these calculations were merely preliminary and asked the parties to the NE Complaint cases to brief FERC and check the numbers. NEP along with other New England Transmission Operators ("NETO") filed a brief supporting FERC's new methodology and confirming the illustrative numbers that FERC arrived at in the October 2018 order containing a 10.41% base ROE. FERC has not issued a final order on the briefs submitted by NEP and the base ROE in NE remains at a 10.57%.

On November 21, 2019, the FERC issued an order on the Midcontinent ISO transmission owners ("MISO") ROE complaint docket addressing transmission ROEs. In that order, the FERC adopted a new methodology for determining base ROEs for the MISO and expressed that it was setting new ROE policies nationwide, which differed significantly from the methodology and framework set forth in its October 16, 2018 FERC order on the NETOs' ROE dockets. On December 23, 2019, the NETOs filed a Supplemental Paper Hearing Brief and a Motion to supplement the record in the NETO ROE dockets to respond to the new methodology proposed in the MISO order. There is uncertainty to whether the order is applicable to the NETOs' cases and if so, would have a negative effect on NEP's base ROE. On January 21, 2020, the FERC issued an order granting rehearing for further consideration to give the FERC more time to act on the substantive issues of the MISO ROE proceedings.

On May 21, 2020, the FERC issued a revised order on the MISO ROE complaint docket addressing the substantive issues identified with the November 2019 order. The November 2019 order proposed the application of the average of two models to judge whether ROEs are just and reasonable which resulted in a reduced ROE of 9.88%, from 10.32%, when the proposed methodology is applied to the two MISO ROE complaints. The May 2020 order proposes the average of three models to judge whether ROEs are just and reasonable. When applied to the two MISO ROE complaints the revised methodology using the average of three models resulted in a base ROE of 10.02%, an increase from the methodology proposed in the November 2019 order.

The FERC orders on the MISO ROE complaint proceedings, and the proposed revised ROE methodology, are specific to MISO however the FERC could order the revised methodology be applied to all transmission companies including our own ROE complaint proceedings. On May 12, 2020, NEP filed jointly with other NETOs supplemental arguments in the ROE Notice of Inquiry ("NOI") docket, which was commenced on March 21, 2019 and to which NEP previously responded, addressing concerns with ROE policy making and the methodologies proposed by the FERC in the MISO ROE compliant proceedings. From NEP's perspective, the May 21, 2020 FERC order on the MISO ROE complaint proceedings represents an improvement from the November 2019 order but it does not address all the arguments filed jointly by NEP and the NETOs.

Until the FERC issues a final decision on NEP's own ROE complaints or an order applying the revised ROE methodology proposed in the MISO orders to all transmission companies, there is significant uncertainty, and at this time, NEP does not know the impact to NEP's current base ROE.

Stranded Cost Recovery

Under the settlement agreements approved by state commissions and the FERC, NEP is permitted to recover stranded costs (those costs associated with its former generating investments (nuclear and non-nuclear) and related contractual commitments that were not recovered through the sale of those investments). NEP earns a return on equity ("ROE") related to stranded cost recovery consisting of nuclear-related investments. In Massachusetts and Rhode Island, the current ROEs are 9.2% and 10.46%, respectively. NEP will recover its remaining non-nuclear stranded costs until the costs associated with its decommissioned nuclear units cease, refer to "Decommissioning Nuclear Units" section in Note 15, "Commitments and Contingencies".

Transmission Incentive Policy Inquiry

On March 21, 2019, the FERC announced a NOI seeking comments on possible improvements to its electric transmission incentives policy to ensure that it appropriately encourages the development of the infrastructure needed to ensure grid reliability and reduce congestion to reduce the cost of power for consumers. NEP filed comments in the NOI docket on June 26, 2019 and filed reply comments on August 26, 2019.

On March 19, 2020, the FERC issued a Notice of Proposed Rulemaking ("NOPR"). In the NOPR, the FERC proposes to shift the test for transmission incentives from risks and challenges to an approach based on benefits to customers. The NOPR also proposes to: 1) Increase the incentives for joining and remaining a member of a Regional Transmission Organization, an Independent System Operator or other commission-approved transmission organization from 50 basis points to 100 basis points; 2) Provide 50 basis point to transmission projects that meet a pre-construction benefit-to-cost ratio in the top 25% of projects examined over a sample period and an additional 50 basis points for projects that meet a post-construction benefit-to-cost ratio in the top 10% percent of projects over the same sample period; 3) Provide 50 basis points for projects that demonstrate reliability benefits by providing quantitative analysis and 4) Offer a 100 basis point incentive for transmission technologies that enhance reliability, efficiency, and capacity as well as improve the operation of new or existing transmission facilities. The NOPR also proposes a 250 basis point cap on total ROE incentives rather than limitation to the zone of reasonableness. Comments are requested within 90 days of publication in the Federal Register after which, at some point, the Commission will issue a final rule. NEP filed comments in response to the NOPR on July 1, 2020.

Tax Cuts and Jobs Act

On March 15, 2018, the FERC initiated multiple proceedings intended to adjust FERC-jurisdictional rates to reflect the corporate tax changes as a result of the passage of the Tax Act. Of the proceedings initiated relevant to NEP is the NOI seeking comments on the effects of the Tax Act on all FERC-jurisdiction rates and a Notice of Proposed Rulemaking NOPR issued as a result of the NOI. In response to the FERC NOI, NEP made recommendations designed to mitigate the cash flow impacts of the expected refunds including providing flexibility regarding the methods used to refund ADIT to customers and providing flexibility regarding the time period of the flow back. In the NOPR, the FERC proposed to give the flexibility NEP proposed.

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act. The order applies to public utility transmission providers with formula rates and stated rates and provides that public utilities with formula rates submit a compliance filing within 30 days of the effective date of the final rule or in the public utilities next annual informational filing following the issuance of the final rule. The compliance filing must demonstrate how the public utilities formula rate adjusts rate base via a Rate Adjustment mechanism, returns or recovers excess or deficient ADIT via an Income Tax Allowance Mechanism and must include an ADIT worksheet to support the excess or deficient ADIT calculation and amortization. The ADIT worksheet must be populated and will be a new and permanent worksheet. The mechanisms and worksheet must remain applicable to any future changes to tax rates that give rise to excess or deficient ADIT, including changes to state and local tax rates. Excess or deficient ADIT associated with future tax rate changes will automatically be included in a public utility's formula rate without the need for a Section 205 filing. The order does not prescribe a recovery/refund period for deficient/excess ADIT for unprotected excess/deficient ADIT that is not subject to the normalization requirements. FERC will evaluate proposed amortization periods on a case by case basis. NEP plans to submit a compliance filing in July 2020 with the annual RNS informational filing.

New England East-West Solution ("NEEWS") Project

In September 2008, NEP, its affiliate Narragansett, and Northeast Utilities jointly filed an application with the FERC to recover financial incentives for the NEEWS project, pursuant to the FERC's Transmission Pricing Policy Order No. 679. NEEWS consists of a series of inter-related transmission upgrades identified in the New England Regional System Plan and is being undertaken to address a number of reliability problems in Connecticut, Massachusetts, and Rhode Island. Effective November 18, 2008, the FERC granted (1) an incentive ROE of 12.89% (125 basis points above the approved base ROE of 11.64% including the RTO participation adder), (2) 100% construction work in progress in rate base, and (3) recovery of plant abandoned for reasons beyond the companies' control. As discussed in the preceding section, effective October 16, 2014, the FERC issued a series of orders establishing a maximum ROE of 11.74% that effectively caps the NEEWS incentive ROE at that level. The NEEWS upgrades were placed in service in December 2015.

Narragansett

General Rate Case

Narragansett reached a settlement agreement with the Rhode Island Division of Public Utilities and Carriers ("Division") and several other intervening parties to increase distribution revenue for its electric and gas operations over the three-year period commencing September 1, 2018, which was approved by the RIPUC on August 24, 2018. This settlement is an agreement that was reached in response to the base distribution revenue increase requests that Narragansett filed with the RIPUC on November 27, 2017. Pursuant to the settlement, electric distribution revenue will increase by approximately $14 million, $11 million, and $4 million and gas distribution revenue will increase by approximately $6 million, $8 million, and $4 million annually, on September 1, 2018, September 1, 2019 and September 1, 2020, respectively. The settlement reflects an allowed return on equity ("ROE") rate of 9.275% based on a common equity ratio of approximately 51%. Previously, Narragansett was entitled to earn an allowed ROE of 9.5%, with a common equity ratio of approximately 49.1%.

These revenue increases are intended to fund significant systems-related investments, including the replacement of several aging operational systems used in Narragansett's electric and gas businesses with newer integrated systems that will be shared by Narragansett and its electric and gas affiliates. The settlement identifies several additional metrics for tracking and reporting purposes only, some of which may become eligible for a financial performance incentive during the term of the multi-year rate plan. The increases set in place for the second and third years of the settlement may be reopened for recovery of the implementation of advanced metering and grid modernization costs.

Tax Act

The RIPUC opened a docket to address the change in the federal corporate income tax rate and other changes resulting from the Tax Act that was signed into law in December 2017. Specifically, the RIPUC requested Narragansett's proposal for how it planned to reduce rates associated with the income taxes recovered from customers on the equity component of the return on investment included in revenue taxed at the new lower income tax rate of 21% effective January 1, 2018, and how it planned to return to customers the reduction in its net deferred income tax liabilities resulting from the 14% decrease in the federal income tax rate from 35%. Effective September 1, 2018, Narragansett reduced its revenue requirement for the distribution electric and gas rates in effect for the impacts of the Tax Act as appropriate. On January 24, 2019, Narragansett filed with the RIPUC a settlement agreement among Narragansett, the Division, the Office of Energy Resources, and the State of Rhode Island Office of the Lieutenant Governor, pursuant to which approximately $5 million and $3 million will be provided to electric and gas customers, respectively, which reflect the benefits of Narragansett's reduced federal corporate income tax payment obligations for the period January 1, 2018 through August 31, 2018. The RIPUC approved the settlement agreement on May 17, 2019, as filed. Refunds to electric customers began in July 2019 and will continue through June 2020 and refunds to gas customers began in November 2019 and will continue through October 2020.

Suspension of Service Terminations and Certain Collections Activities

At an open meeting on March 16, 2020, the RIPUC issued an order prohibiting all electric, natural gas, water, and sewer utilities from engaging in certain collections activities, including termination of residential and non-residential service for nonpayment (the "Order"). The RIPUC also directed Narragansett to temporarily suspend late fees, interest charges, credit card fees, debit card fees and ACH fees, along with authorizing Narragansett to track these costs for later review by the RIPUC. On May 15, 2020, pursuant to the RIPUC's directive, Narragansett filed a plan with the RIPUC and the Division that details Narragansett's plans for recommencing collection activities when the RIPUC lifts the moratorium on utility terminations (the "Plan"). The Plan consists of a four-phase approach, including initial efforts primarily focused on "bill health" messaging and assuring that customers are aware of the programs and services available to assist them with managing and paying their bills. Narragansett has also responded to requests for information from the RIPUC regarding collections activities and financial implications, as well as one set of informal data requests from the Division.

At an open meeting on July 13, 2020, the RIPUC addressed the current moratorium on ceasing certain collection activities and notices of termination with disconnection dates, through July 17, 2020. In the proceeding, the RIPUC found that the moratorium on shutoffs for customers eligible for Narragansett's low-income rate is extended through November 2020. Additionally, through September 30, 2020, Narragansett will continue to not terminate service to any residential customer for nonpayment. The RIPUC also found that until further ordered by the RIPUC any residential customer whose service has been terminated for nonpayment scheduled will be entitled to have service restored upon the satisfaction of certain conditions. Lastly, customers meeting the Arrearage Management Program ("AMP") eligibility requirements who would otherwise be terminated but for the Order may be enrolled in the AMP program without any termination notice needed.

6. ACQUISITION OF GERONIMO AND EMERALD

On July 11, 2019, National Grid Ventures acquired 100% of the share capital of Geronimo and 51% of Emerald, which is controlled by the Company and WSIB. This is the Company's first ownership stake in wind generation and an expansion of solar generation activities. Whereas Geronimo develops the assets, Emerald has a right of first refusal to buy, build and operate those assets.

The total consideration for acquisition of Geronimo and Emerald was $261 million, satisfied by a combination of cash and contingent consideration. The fair value of contingent consideration recognized is determined as the present value of our best estimate of the value that we will be required to pay, taking into consideration management's estimates of the volume and timing of successful development activity by Geronimo over the relevant period. As of March 31, 2020, the purchase price allocation was still being finalized.

The fair values of the assets and liabilities recognized from the acquisition Geronimo and Emerald, are set out below:

(in millions of dollars)	Geronimo and Emerald Acquisition
ASSETS:	
Cash and cash equivalents	$ 3
Restricted cash and special deposits	29
Accounts receivable	28
Other current assets	3
Equity method investments	115
Property, plant, and equipment, net	4
Goodwill	103
Total assets	285
LIABILITIES:	
Accounts payable	2
Other current liabilities	19
Other non-current liabilities	3
Total liabilities	24
Total consideration transferred	$ 261
Contingent consideration – Geronimo	$ 85
Cash consideration – Geronimo	61
Cash consideration – Emerald	115
Total	$ 261

Goodwill arising from the Geronimo and Emerald acquisition comprises the value associated with the potential future projects that will be developed by Geronimo as well as the expertise of the management team that have been acquired, neither of which qualify for recognition as tangible or intangible assets.

Subsequent to the acquisition date, the Company made an additional capital contribution of $61 million into Emerald.

Geronimo earns revenue from selling its development stage assets to Emerald and other third parties. Emerald generates revenue from the assets it purchases from Geronimo once they are operational and has no other business. Geronimo has generated revenue of $28 million and a loss after tax of $7 million since the acquisition. The Company's share of Emerald's loss for the period ending March 31, 2020 was $22 million after tax.

7. EQUITY METHOD INVESTMENTS

The following table presents the equity method investments recorded on the consolidated balance sheets:

	March 31,	
	2020	2019
	(in millions of dollars)	
Millennium Pipeline Company LLC	**$ 205**	$ 206
Sunrun Neptune Investor 2016 LLC	**133**	117
Emerald	**132**	-
Energy Impact Fund LP	**47**	28
National Grid Generation Ventures LLC	**39**	21
New York Transco LLC	**37**	32
Other	**3**	2
Total equity method investments	**$ 596**	$ 406

As of March 31, 2020, the Company has ownership interests of:

- 26.25% interest in Millennium Pipeline Company LLC, a company that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.
- 50% interest in San Francisco-based Sunrun Neptune Investor 2016 LLC ("Sunrun"), a leading U.S. provider of residential solar energy systems, to provide investment capital.
- 51% interest in Emerald, solar and wind generation joint venture with WSIB, operated by the Company.
- 9.4% interest in Energy Impact Fund LP, a strategic energy venture investment fund. During the year ended March 31, 2020, the Company sold its ownership interest in nine investments to the Parent. As this was a transaction between entities under common control, the Company's interest was transferred at net book value and no gain or loss was recognized in the consolidated statement of operations as a result of this transfer during the period ended March 31, 2020.
- a 50% interest in each of four individual LLCs (Island Park Energy Center LLC, LI Solar Generation LLC, LI Energy Storage System LLC, and Clean Energy Generation LLC) through its wholly-owned subsidiary, National Grid Generation Ventures LLC ("GenVen").
- 28.3% interest in New York Transco LLC, a limited liability company formed for the purpose of planning, construction, owning, operating, maintaining, and expanding transmission facilities in the state of New York.

Each of the LLCs owned through GenVen as described above are VIEs; however, the Company is not the primary beneficiary as it does not have the power to direct the most significant activities of the entities as under each LLC agreement, the Board of Managers is comprised of a number of representatives equal to two per Qualified Members (defined as Members with over a 25% interest): two representatives from GenVen and two representatives from a subsidiary of NextEra Energy, Inc., and there is no internal mechanism in place to resolve a board deadlock.

The Company's maximum exposure to loss related to the VIEs is $39 million at March 31, 2020. The maximum exposure to loss represents the carrying value of the Company's equity method investment as reported on the consolidated balance sheets.

The Company has elected to account for its investment in Sunrun at fair value with changes in fair value recorded in the consolidated statements of operations.

The Company accounts for its share of the earnings of the projects owned by Emerald using the HLBV method, with changes in the amount allocated to the Company after adjusting for distributions and contributions recorded as income or loss for that period in the consolidated statements of operations.

8. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment at cost and operating lease right-of-use assets, along with accumulated depreciation and amortization:

	March 31,	
	2020	2019
	(in millions of dollars)	
Plant and machinery	**$ 41,924**	$ 38,510
Assets in construction	**2,539**	2,707
Land and buildings	**2,259**	2,170
Software and other intangibles	**1,371**	1,225
Operating lease ROU assets	**894**	-
Total property, plant and equipment	**48,987**	44,612
Accumulated depreciation and amortization	**(10,973)**	(10,313)
Operating lease accumulated amortization	**(143)**	-
Property, plant and equipment, net	**$ 37,871**	$ 34,299

9. DERIVATIVE INSTRUMENTS AND HEDGING

The Company utilizes derivative instruments to manage commodity price, interest rate, and foreign currency rate risk associated with its natural gas and electricity purchases and its Euro commercial paper program. The Company's commodity risk management strategy is to reduce fluctuations in firm gas and electricity sales prices to its customers. The Company's interest rate risk management strategy is to minimize its cost of capital. The Company's currency rate risk management policy is to hedge the risk associated with its foreign currency borrowings by utilizing instruments to convert principal and interest payments into U.S. dollars.

The Company's financial exposures are monitored and managed as an integral part of the Company's overall financial risk management policy. The Company engages in risk management activities only in commodities and financial markets where it has an exposure, and only in terms and volumes consistent with its core business.

Notional Amounts

The notional contract amount represents the gross nominal value of the outstanding derivative contracts. The amounts of financing derivatives by type are as follows:

	March 31,	
	2020	2019
	(in millions of dollars)	
Cross currency interest rate swaps & interest rate swaps	**$ (3,131)**	$ (3,224)
Foreign exchange forward contracts	**(339)**	(963)
Equity Options	**(994)**	(1,041)

Volumes of outstanding commodity derivative instruments measured in dekatherms ("dths") and megawatts hour ("mwhs") are as follows:

	March 31,	
	2020	2019
	(in millions)	
Gas derivative contracts (dths)	**133**	163
Electric derivative contracts (mwhs)	**13**	14

Derivative Financial Instruments

The following tables reflect the gross and net amounts of the Company's derivative assets and liabilities as of March 31, 2020 and 2019:

	March 31, 2020 (in millions of dollars)				
	Gross amounts of recognized assets (liabilities)	Gross amounts offset on the Consolidated Balance Sheet	Net amount of assets (liabilities) presented on the Consolidated Balance Sheet	Gross amounts not offset on the Consolidated Balance Sheet	Net amount
	A	*B*	*C = A + B*	*D*	*E = C - D*
ASSETS:					
Current assets					
Gas contracts	$ 10	$ -	$ 10	$ 5	$ 5
Electric contracts	5	-	5	3	2
Equity option contracts	12	-	12	-	12
Other non-current assets					
Electric contracts	2	-	2	1	1
Cross-currency & interest rate swaps	22	-	22	21	1
Total	51	-	51	30	21
LIABILITIES:					
Current liabilities					
Gas contracts	(44)	-	(44)	(1)	(43)
Electric contracts	(63)	-	(63)	(3)	(60)
Equity option contracts	(12)	-	(12)	-	(12)
Foreign exchange forward contracts	(10)	-	(10)	(1)	(9)
Other non-current liabilities					
Gas contracts	(46)	-	(46)	-	(46)
Electric contracts	(40)	-	(40)	(10)	(30)
Cross-currency & interest rate swaps	(265)	-	(265)	(233)	(32)
Total	(480)	-	(480)	(248)	(232)
Net assets (liabilities)	$ (429)	$ -	$ (429)	$ (218)	$ (211)

	March 31, 2019 (in millions of dollars)				
	Gross amounts of recognized assets (liabilities)	Gross amounts offset on the Consolidated Balance Sheet 2	Net amount of assets (liabilities) presented on the Consolidated Balance Sheet	Gross amounts not offset on the Consolidated Balance Sheet	Net amount
	A	*B*	*C = A + B*	*D*	*E = C - D*
ASSETS:					
Current assets					
Gas contracts	$ 7	$ -	$ 7	$ 1	$ 6
Electric contracts	26	-	26	12	14
Other non-current assets					
Gas contracts	1	-	1	-	1
Electric contracts	12	-	12	2	10
Cross-currency & interest rate swaps	13	-	13	12	1
Equity option contracts	2	-	2	-	2
Total	61	-	61	27	34
LIABILITIES:					
Current liabilities					
Gas contracts	(20)	-	(20)	(1)	(19)
Electric contracts	(15)	-	(15)	(12)	(3)
Cross-currency & interest rate swaps	(20)	-	(20)	(20)	-
Foreign exchange forward contracts	(16)	-	(16)	-	(16)
Other non-current liabilities					
Gas contracts	(2)	-	(2)	-	(2)
Electric contracts	(10)	-	(10)	(2)	(8)
Cross-currency & interest rate swaps	(111)	-	(111)	(54)	(57)
Equity option contracts	(2)	-	(2)	-	(2)
Total	(196)	-	(196)	(89)	(107)
Net assets (liabilities)	$ (135)	$ -	$ (135)	$ (62)	$ (73)

The Company enters into enabling agreements that allow for payment netting with its counterparties, which reduces its exposure to counterparty risk by providing for the offset of amounts payable to the counterparty against amounts receivable from the counterparty.

Changes in fair value of the Company's rate recoverable contracts (commodity contracts only, hedge contracts are not rate recoverable) are offset by changes in regulatory assets and liabilities. As a result, changes in fair value of those contracts have no impact in the accompanying consolidated statements of operations and comprehensive income. The majority of the Company's derivative instruments are subject to rate recovery as of March 31, 2020 and 2019.

Credit and Collateral

The Company is exposed to credit risk related to transactions entered into for commodity price, interest rate and foreign currency rate risk management. Credit risk represents the risk of loss due to counterparty non-performance. Credit risk is managed by assessing each counterparty's credit profile and negotiating appropriate levels of collateral and credit support.

Commodity Transactions

The Company enters into commodity transactions on the NYMEX. The NYMEX clearing houses act as the counterparty to each trade. Transactions on the NYMEX must adhere to comprehensive collateral and margining requirements. As a result, transactions on the NYMEX are significantly collateralized and have limited counterparty credit risk.

The credit policy for commodity transactions is managed and monitored by the Finance Committee to the Parent's Board of Directors ("Finance Committee"), which is responsible for approving risk management policies and objectives for risk assessment, control and valuation, and the monitoring and reporting of risk exposures. NGUSA's Energy Procurement Risk Management Committee ("EPRMC") is responsible for approving transaction strategies, annual supply plans, and counterparty credit approval, as well as all valuation and control procedures. The EPRMC is chaired by the Vice President of U.S. Treasury and reports to both the NGUSA Board of Directors and the Finance Committee.

The EPRMC monitors counterparty credit exposure and appropriate measures are taken to bring such exposures below the limits, including, without limitation, netting agreements, and limitations on the type and tenor of trades. In instances where a counterparty's credit quality has declined, or credit exposure exceeds certain levels, the Company may limit its credit exposure by restricting new transactions with the counterparty, requiring additional collateral or credit support, and negotiating the early termination of certain agreements. Similarly, the Company may be required to post collateral to its counterparties.

The Company's credit exposure for all commodity derivative instruments and applicable payables and receivables, net of collateral, and instruments that are subject to master netting agreements, was a liability of $172 million and zero as of March 31, 2020 and 2019, respectively.

The aggregate fair value of the Company's commodity derivative instruments with credit-risk-related contingent features that were in a liability position as of March 31, 2020 and 2019 was $106 million and $6 million, respectively. The Company had $10 million and zero collateral posted for these instruments as of March 31, 2020 and 2019, respectively. At March 31, 2020, if the Company's credit rating were to be downgraded by one, two, or three levels, it would be required to post additional collateral to its counterparties of $9 million, $27 million, or $109 million, respectively. At March 31, 2019, if the Company's credit rating had been downgraded by one, two, or three levels, it would have been required to post additional collateral to its counterparties of zero, zero, or $7 million, respectively.

Financing Transactions

The credit policy for financing transactions is managed by a central treasury department under policies approved by the Finance Committee. In accordance with these treasury policies, counterparty credit exposure utilizations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilization adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties.

In relation to the Company's financial derivative instruments, the Company had $234 million and $75 million collateral posted for these instruments at March 31, 2020 and 2019, respectively. If the Company's credit rating were to be downgraded by one level it would not be required to post any additional collateral at March 31, 2020 and 2019, respectively. At March 31, 2020 and 2019, if the Company's credit rating were to be downgraded by two or three levels, it would be required to post additional collateral to its counterparties of $50 million and $30 million for each downgrade, respectively.

10. FAIR VALUE MEASUREMENTS

The following tables present assets and liabilities measured and recorded at fair value on the consolidated balance sheets on a recurring basis and their level within the fair value hierarchy as of March 31, 2020 and 2019:

	March 31, 2020			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	$ -	$ 9	$ 1	$ 10
Electric contracts	-	5	2	7
Cross-currency & interest rate swaps	-	22	-	22
Equity option contracts	-	-	12	12
Equity method investment	-	-	133	133
Financial instruments				
Securities	232	162	-	394
Other	-	-	27	27
Total	232	198	175	605
Liabilities:				
Derivative instruments				
Gas contracts	-	73	17	90
Electric contracts	-	102	1	103
Cross-currency & interest rate swaps	-	265	-	265
Foreign exchange forward contracts	-	10	-	10
Equity option contracts	-	-	12	12
Total	-	450	30	480
Net assets (liabilities)	$ 232	$ (252)	$ 145	$ 125

	March 31, 2019			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	$ -	$ 6	$ 2	$ 8
Electric contracts	-	38	-	38
Cross-currency & interest rate swaps	-	13	-	13
Equity option contracts	-	-	2	2
Financial instruments				
Securities	237	163	-	400
Other	-	-	72	72
Total	237	220	76	533
Liabilities:				
Derivative instruments				
Gas contracts	-	18	4	22
Electric contracts	-	25	-	25
Cross-currency & interest rate swaps	-	131	-	131
Foreign exchange forward contracts	-	16	-	16
Equity option contracts	-	-	2	2
Total	-	190	6	196
Net assets (liabilities)	$ 237	$ 30	$ 70	$ 337

Derivative instruments: The Company's Level 1 fair value derivative instruments primarily consist of quoted prices (unadjusted) in active markets for identical assets or liabilities that a company has the ability to access as of the reporting date. Derivative assets and liabilities utilizing Level 1 inputs include active exchange-based derivative instruments (e.g. natural gas futures traded on the NYMEX). The Company did not have any level 1 derivative instruments at either March 31, 2020 or March 31, 2019.

The Company's Level 2 fair value derivative instruments primarily consist of cross-currency, interest rate and foreign exchange derivatives, and gas swap contracts. The cross-currency, interest rate and foreign exchange derivatives are valued by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. The gas swap contracts pricing inputs are obtained from the NYMEX and the Intercontinental Exchange ("ICE"), except in cases where the ICE publishes seasonal averages or where there were no transactions within the last seven days. The Company may utilize discounting based on quoted interest rate curves, including consideration of non-performance risk, and may include a liquidity reserve calculated based on bid/ask spread for the Company's Level 2 derivative instruments. Substantially all of these price curves are observable in the marketplace throughout at least 95% of the remaining contractual quantity, or they could be constructed from market observable curves with correlation coefficients of 95% or higher.

The Company's Level 3 fair value derivative instruments primarily consist of OTC gas option contracts and gas purchase contracts, which are valued based on internally-developed models. The Company also has equity options, which are designated as Level 3 derivatives as they are traded on illiquid markets. Industry-standard valuation techniques, such as the Black-Scholes pricing model, Monte Carlo simulation, and Financial Engineering Associates libraries are used for valuing such instruments. A derivative is designated Level 3 when it is valued based on a forward curve that is internally developed, extrapolated, or derived from market observable curves with correlation coefficients less than 95%, where optionality is present, or if non-economic assumptions are made.

Securities: Securities are included in financial investments on the consolidated balance sheets and primarily include equity and debt investments based on quoted market prices (Level 1) and municipal and corporate bonds based on quoted prices of similar traded assets in open markets (Level 2).

The Company's Level 3 investments include investments in associates relating to Sunrun, accounted for at fair value (as discussed in Note 15, "Commitments and Contingencies" under "Financial Guarantees") and corporate venture capital investments held by NGP measured at fair value with changes in fair value recorded in the consolidated statements of operations. These equity holdings are part of the Company's corporate venture capital portfolio held by NGP and comprise a series of small minority interest unquoted investments where prices or valuation inputs are unobservable.

11. EMPLOYEE BENEFITS

The Company sponsors several qualified and non-qualified non-contributory defined benefit plans (the "Pension Plans") and PBOP plans (together with the Pension Plan (the "Plans")), covering substantially all employees.

All of the Company's regulated subsidiaries have regulatory recovery of these costs and therefore have recorded related regulatory assets (liabilities) on the consolidated balance sheets. The Company records amounts for its unregulated subsidiaries to AOCI on the consolidated balance sheets.

Pension Plans

The Pension Plans are defined benefit plans which provide union employees, as well as non-union employees hired before January 1, 2011, with a retirement benefit. Supplemental non-qualified, non-contributory executive retirement programs provide additional defined pension benefits for certain executives. During the years ended March 31, 2020 and 2019, the Company made contributions of approximately $173 million and $278 million, respectively, to the qualified pension plans. The Company expects to contribute $132 million to the qualified pension plans during the year ending March 31, 2021.

Benefit payments to pension plan participants for the years ended March 31, 2020 and 2019 were approximately $481 million and $520 million, respectively.

PBOP Plans

The PBOP plans provide health care and life insurance coverage to eligible retired employees. Eligibility is based on age and length of service requirements and, in most cases, retirees must contribute to the cost of their coverage. During the years ended March 31, 2020 and 2019, the Company made contributions of $7 million and zero, respectively, to the PBOP plans. The Company does not expect to contribute to the PBOP plans during the year ending March 31, 2021.

Benefit payments to PBOP plan participants for the years ended March 31, 2020 and 2019 were approximately $201 million and $184 million, respectively.

Components of Net Periodic Benefit Costs

	Pension Plans	**PBOP Plans**
	Year Ended March 31, 2020	
	(in millions)	
Service cost	**$ 119**	**$ 56**
Interest cost	**364**	**178**
Expected return on plan assets	**(541)**	**(237)**
Amortization of prior service cost (credit), net	**7**	**(5)**
Amortization of net actuarial loss	**188**	**15**
Total cost	**$ 137**	**$ 7**

Amounts Recognized in AOCI and Regulatory Assets/Liabilities

The following tables summarize other pre-tax changes in plan assets and benefit obligations recognized primarily in regulatory assets and AOCI for the years ended March 31, 2020 and 2019:

	Pension Plans		**PBOP Plans**	
	Years Ended March 31,		**Years Ended March 31,**	
	2020	2019	**2020**	2019
	(in millions of dollars)			
Net actuarial loss (gain)	**$ 700**	$ 131	**$ 337**	$ 22
Prior service cost	**-**	25	**-**	-
Amortization of net actuarial loss	**(188)**	(258)	**(15)**	(25)
Amortization of prior service (cost) credit, net	**(8)**	(7)	**4**	6
Total	**$ 504**	$ (109)	**$ 326**	$ 3
Including in regulatory assets	**$ 393**	$ (90)	**$ 263**	$ 2
Including in AOCI	**111**	(19)	**63**	1
Total	**$ 504**	$ (109)	**$ 326**	$ 3

The Company's regulated subsidiaries have regulatory recovery of these obligations and therefore amounts are included in regulatory assets on the consolidated balance sheets. Costs of non-regulated subsidiaries are recorded as part of AOCI on the consolidated balance sheets.

Amounts Recognized in AOCI and Regulatory Assets/Liabilities – not yet recognized as components of net actuarial loss

The following tables summarize the Company's amounts in regulatory assets and AOCI on the consolidated balance sheets that have not yet been recognized as components of net actuarial loss as of March 31, 2020 and 2019:

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2020	2019	**2020**	2019
	(in millions of dollars)			
Net actuarial loss	**$ 1,811**	$ 1,300	**$ 391**	$ 69
Prior service cost (credit)	**41**	48	**-**	(4)
Total	**$ 1,852**	$ 1,348	**$ 391**	$ 65
Including in regulatory assets	**$ 1,573**	$ 1,180	**$ 367**	$ 104
Including in AOCI	**279**	168	**24**	(39)
Total	**$ 1,852**	$ 1,348	**$ 391**	$ 65

The amount of net actuarial loss and prior service cost to be amortized from regulatory assets and AOCI during the year ending March 31, 2021 for the Pension Plans is $219 million and $6 million, respectively, and net actuarial loss to be amortized from regulatory assets and AOCI during the year ending March 31, 2021 for the PBOP Plans is $32 million.

Reconciliation of Funded Status to Amount Recognized

	Pension Plans	PBOP Plans
	Year Ended March 31, 2020	
	(in millions)	
Change in benefit obligation:		
Benefit obligation as of the beginning of the year	**$ (9,098)**	**$ (4,478)**
Service cost	**(119)**	**(55)**
Interest cost on projected benefit obligation	**(364)**	**(178)**
Net actuarial loss	**(452)**	**164**
Benefits paid	**481**	**201**
Other	**-**	**(28)**
Benefit obligation as of the end of the year	**$ (9,552)**	**$ (4,374)**
Change in plan assets:		
Fair value of plan assets as of the beginning of the year	**8,649**	**3,437**
Actual return on plan assets	**294**	**(264)**
Company contributions	**197**	**23**
Benefits paid	**(481)**	**(201)**
Fair value of plan assets as of the end of the year	**$ 8,659**	**$ 2,995**
Funded status	**$ (893)**	**$ (1,379)**

The benefit obligation shown above is the projected benefit obligation ("PBO") for the Pension Plans and the accumulated benefit obligation ("ABO") for the PBOP Plans. The Company is required to reflect the funded status of its Pension Plans above in terms of the PBO, which is higher than the ABO, because the PBO includes the impact of expected future compensation increases on the pension obligation. The Pension Plans had ABO balances that exceeded the fair value of plans assets as of March 31, 2020. The aggregate ABO balances for the Pension Plans were $9.2 billion as of March 31, 2020.

Amounts Recognized on the Accompanying Consolidated Balance Sheets

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2020	2019	**2020**	2019
	(in millions of dollars)			
Non-current assets	**$ 374**	$ 365	**$ 3**	$ 17
Current liabilities	**(25)**	(23)	**(9)**	(12)
Non-current liabilities	**(1,242)**	(791)	**(1,373)**	(1,046)
Total	**$ (893)**	$ (449)	**$ (1,379)**	$ (1,041)

Expected Benefit Payments

Based on current assumptions, the Company expects to make the following benefit payments subsequent to March 31, 2020:

(in millions of dollars) **Years Ended March 31,**	**Pension Plans**	**PBOP Plans**
2021	$ 549	$ 190
2022	539	198
2023	534	205
2024	541	211
2025	547	216
2026-2030	2,827	1,133
Total	$ 5,537	$ 2,153

Assumptions Used for Employee Benefits Accounting

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2020	2019	**2020**	2019
Benefit Obligations:				
Discount rate	**3.65%**	4.10%	**3.65%**	4.10%
Rate of compensation increase	**3.50%**	3.50%	**N/A**	N/A
Expected return on plan assets	**5.00% - 6.00%**	6.00% - 6.50%	**6.50% - 7.00%**	6.00% - 7.25%
Net Periodic Benefit Costs:				
Discount rate	**4.10%**	4.10% - 4.50%	**4.10%**	4.10%
Rate of compensation increase	**3.50%**	3.50%	**N/A**	N/A
Expected return on plan assets	**6.00% - 6.50%**	6.00% - 6.25%	**6.00% - 7.25%**	6.25% - 6.75%

The Company selects its discount rate assumption based upon rates of return on highly rated corporate bond yields in the marketplace as of each measurement date. Specifically, the Company uses the Hewitt AA Above Median Curve along with the expected future cash flows from the Company retirement plans to determine the weighted average discount rate assumption.

The expected rate of return for various passive asset classes is based both on analysis of historical rates of return and forward-looking analysis of risk premiums and yields. Current market conditions, such as inflation and interest rates, are evaluated in connection with the setting of the long-term assumptions. A small premium is added for active management of both equity and fixed income securities. The rates of return for each asset class are then weighted in accordance with the actual asset allocation, resulting in a long-term return on asset rate for each plan.

Assumed Health Cost Trend Rate

	Years Ended March 31,	
	2020	2019
Health care cost trend rate assumed for next year		
Pre 65	**7.00%**	7.25%
Post 65	**5.50%**	5.75%
Prescription	**8.00%**	9.75%
Rate to which the cost trend is assumed to decline (ultimate)	**4.50%**	4.50%
Year that rate reaches ultimate trend		
Pre 65	**2031+**	2028
Post 65	**2031+**	2026
Prescription	**2031+**	2027

Sensitivity to Changes in Assumed Health Care Cost Trend Rate

(in millions of dollars)	March 31, 2020
1% point increase	
Total of service cost plus interest cost	$ 43
Postretirement benefit obligation	652
1% point decrease	
Total of service cost plus interest cost	(35)
Postretirement benefit obligation	(551)

Plan Assets

The Pension Plan is a trusted non-contributory defined benefit plan covering all eligible represented employees of the Company and eligible non-represented employees of the participating National Grid companies. The PBOP Plans are both a contributory and non-contributory, trusteed, employee life insurance and medical benefit plan sponsored by the Company. Life insurance and medical benefits are provided for eligible retirees, dependents, and surviving spouses of the Company.

The Company manages the benefit plan investments for the exclusive purpose of providing retirement benefits to participants and beneficiaries and paying plan expenses. The benefit plans' named fiduciary is The Retirement Plans Committee ("RPC"). The RPC seeks to minimize the long-term cost of operating the Plans, with a reasonable level of risk. The investment objectives of the plans are to maintain a level and form of assets adequate to meet benefit obligations to participants, to achieve the expected long-term total return on the plans' assets within a prudent level of risk and maintain a level of volatility that is not expected to have a material impact on the company's expected contribution and expense or the company's ability to meet plan obligations.

The RPC has established and reviews at least annually the Investment Policy Statement ("IPS") which sets forth the guidelines for how plan assets are to be invested. The IPS contains a strategic asset allocation for each plan which is intended to meet the objectives of the pension plan by diversifying its funds across asset classes, investment styles and fund managers. An asset/liability study typically is conducted periodically to determine whether the current strategic asset allocation continues to represent the appropriate balance of expected risk and reward for the plan to meet expected liabilities. Each study considers the investment risk of the asset allocation and determines the optimal mix of assets for the plan. The target asset allocation for 2020 reflects the results of such a pension study conducted in 2019. As a result of that asset liability study the asset mix for the Niagara Mohawk Pension Plan was changed to further reduce investment risk given the overfunded nature and shorter duration of liabilities in that plan compared to the other pension plans. The PBOP Plan asset liability studies are expected to be run within the next 12-18 months.

Individual fund managers operate under written guidelines provided by the RPC, which cover such areas as investment objectives, performance measurement, permissible investments, investment restrictions, trading and execution, and communication and reporting requirements. National Grid management in conjunction with a third party investment advisor, regularly monitors, and reviews asset class performance, total fund performance, and compliance with asset allocation guidelines. This information is reported to the RPC at quarterly meetings. The RPC changes fund managers and rebalances the portfolio as appropriate.

Equity investments are broadly diversified across U.S. and non-U.S. stocks, as well as across growth, value, and small and large capitalization stocks. Likewise, the fixed income portfolio is broadly diversified across market segments and is mainly invested in investment grade securities. Where investments are made in non-investment grade assets the higher volatility is carefully judged and balanced against the expected higher returns. While the majority of plan assets are invested in equities and fixed income other asset classes are utilized to further diversify the investments. These asset classes include private equity, real estate, and diversified alternatives. The objective of these other investments are enhancing long-term returns while improving portfolio diversification. For the PBOP Plans, since the earnings on a portion of the assets are taxable, those investments are managed to maximize after tax returns consistent with the broad asset class parameters established by the asset liability study. Investment risk and return are reviewed by the plan investment advisors, National Grid management and the RPC on a regular basis. The assets of the plans have no significant concentration of risk in one country (other than the United States), industry or entity

The target asset allocations for the benefit plans as of March 31, 2020 and 2019 are as follows:

	Pension Plans March 31,		**Union PBOP Plans March 31,**		**Non-Union PBOP Plans March 31,**	
	2020	2019	**2020**	2019	**2020**	2019
Equity	**37%**	37%	**63%**	63%	**70%**	70%
Diversified alternatives	**10%**	10%	**17%**	17%	**0%**	0%
Fixed income securities	**40%**	40%	**20%**	20%	**30%**	30%
Private equity	**5%**	5%	**0%**	0%	**0%**	0%
Real estate	**5%**	5%	**0%**	0%	**0%**	0%
Infrastructure	**3%**	3%	**0%**	0%	**0%**	0%
	100%	100%	**100%**	100%	**100%**	100%

Fair Value Measurements

The following tables provide the fair value measurement amounts for the pension and PBOP assets:

	March 31, 2020				
	Level 1	Level 2	Level 3	Not categorized	Total
			(in millions of dollars)		
Pension assets:					
Investments					
Equity	$ 581	$ -	$ -	$ 2,026	$ 2,607
Diversified alternatives	201	-	-	575	776
Corporate bonds	-	1,986	-	639	2,625
Government securities	(17)	1,158	-	902	2,043
Private equity	-	-	-	489	489
Real estate	-	-	-	381	381
Infrastructure	-	-	-	173	173
Insurance contracts	-	-	-	4	4
Total assets	$ 765	$ 3,144	$ -	$ 5,189	$ 9,098
Pending Transactions					(439)
Total net assets					$ 8,659
PBOP assets:					
Investments					
Equity	$ 438	$ -	$ -	$ 1,287	$ 1,725
Diversified alternatives	201	-	-	199	400
Corporate bonds	-	18	-	-	18
Government securities	66	610	-	2	678
Private Equity	-	-	-	1	1
Insurance contracts	-	-	-	164	164
Total assets	$ 705	$ 628	$ -	$ 1,653	$ 2,986
Pending Transactions					9
Total net assets					$ 2,995

	March 31, 2019				
	Level 1	Level 2	Level 3	Not categorized	Total
	(in millions of dollars)				
Pension assets:					
Investments					
Equity	$ 670	$ -	$ -	$ 2,387	$ 3,057
Diversified alternatives	236	-	-	634	870
Corporate bonds	-	1,754	-	550	2,304
Government securities	3	829	-	818	1,650
Private equity	-	-	-	448	448
Real estate	-	-	-	412	412
Infrastructure	-	-	-	128	128
Insurance contracts	-	-	-	25	25
Accounts Receivable	252	-	-	-	252
Accounts Payable	(497)	-	-	-	(497)
Total	$ 664	$ 2,583	$ -	$ 5,402	$ 8,649

	Level 1	Level 2	Level 3	Not categorized	Total
PBOP assets:					
Investments					
Equity	$ 524	$ -	$ -	$ 1,540	$ 2,064
Diversified alternatives	229	-	-	216	445
Corporate bonds	-	21	-	-	21
Government securities	47	654	-	2	703
Private equity	-	-	-	1	1
Insurance contracts	-	-	-	194	194
Accounts Receivable	9	-	-	-	9
Total	$ 809	$ 675	$ -	$ 1,953	$ 3,437

The methods used to fair value pension and PBOP assets are described below:

Equity: Equity includes both actively- and passively-managed assets with investments in domestic equity index funds as well as international equities. Corporate Bonds consist of debt issued by various corporation and corporate money market funds. Corporate Bonds also includes small investments in preferred securities as these are used in the fixed income portfolios as yield producing investments.

Diversified Alternatives: Diversified Alternatives consist of holdings of global tactical assets allocation funds that seek to invest opportunistically in a range of asset classes and sectors globally.

Corporate Bonds: Corporate Bonds consist of debt issued by various corporations and corporate money market funds. Corporate Bonds also includes small investments in preferred securities as these are used in the fixed income portfolios as yield producing investments. In addition, certain fixed income derivatives are included in this category such as credit default swaps to assist in managing credit risk.

Government Securities: Government Securities includes US agency and treasury securities, as well as slate and local municipally bonds. The plans hold a small amount of Non-US government debt which is also captured here. US Government money market funds are also included. In addition, interest rate futures and swaps are included in this category as a tool to manage interest rate risk.

Private equity: Private equity consists of limited partnerships investments where all the underlying investments are privately held. This consists of primarily buy-out investments with smaller allocations to venture capital.

Real estate: Real estate consists of limited partnership investments primarily in US core open end real estate funds as well as some core plus closed end real estate funds.

Infrastructure: Infrastructure consists of limited partnerships investments that seek to invest in physical assets that are considered essential for a society to facilitate the orderly operation of its economy. Investments in infrastructure typically include transportation assets (such as airports and toll roads) and utility type assets. Investments in infrastructure funds are utilized as a diversifier to other asset classes within the pension portfolio. Infrastructure investments are also typically income producing assets.

Insurance contracts: Insurance contracts consists of Trust Owned Life Insurance.

Pending transactions/Receivables/Payables: Accounts receivable and accounts payable are short term cash transactions that are expected to settle within a few days of the measurement date.

Defined Contribution Plans

The Company has two defined contribution pension plans that cover substantially all employees. For the years ended March 31, 2020 and 2019, the Company recognized an expense in the accompanying consolidated statements of operations and comprehensive income of $79 million and $77 million, respectively.

12. CAPITALIZATION

The aggregate maturities of long-term debt for the years subsequent to March 31, 2020 are as follows:

(in millions of dollars) **March 31,**	**Maturities of Long-Term Debt**	
2021	$	1,041
2022		1,417
2023		855
2024		671
2025		1,261
Thereafter		12,528
Total	$	17,773

The Company's debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity and financial covenants such as restrictions on the level of indebtedness. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of the Company's debt and may restrict the Company's ability to draw upon its facilities or access the capital markets. The Company's subsidiaries also have restrictions on the payment of dividends which relate to their debt to equity ratios. As of March 31, 2020 and 2019, the Company was in compliance with all such covenants.

Significant Debt Facilities

European Medium Term Note Program

At March 31, 2020, the Company had a Euro Medium Term Note program (the "Program") under which it is able to issue debt instruments ("Instruments") up to a total of the equivalent of 8 billion Euros. Instruments issued under the Program are admitted to trading on the London Stock Exchange. The Program commenced in December 2007 and is renewed annually, with the latest renewal of the Program expiring in October 2020. If the Program was not renewed, it would have precluded the issuance of new notes under this Program, but it would not impact the outstanding debt balances and their maturity dates. Instruments carry certain affirmative and negative covenants, including a restriction on the Company's ability to mortgage, pledge, charge, or otherwise encumber its assets in order to secure, guarantee, or indemnify other listed or quoted debt obligations, as well as cross-acceleration in the event of breach by the Company or its principal subsidiaries of other listed or quoted debt obligations. At March 31, 2020 and 2019, the Company was in compliance with all covenants. At March 31, 2020 and 2019, $3.4 billion and $3.5 billion of these notes were issued and outstanding, respectively.

Convertible Bond and Export Credit Agreements

In September 2015, the Company issued a non-dilutive, cash-settled convertible bond which is valued, on a notional basis, at $497 million and $521 million at March 31, 2020 and 2019, respectively. At the same time, the Company purchased call options to offset the embedded option in the bond. The Company has Export Credit Agreements totaling $1,118 million, of which $816 million and $449 million were outstanding (drawn) as of March 31, 2020 and 2019, respectively. The Company has procured this financing in relation to its share of investment in the North Sea Link interconnector and Interconnexion France-Angleterre 2 interconnector. Subsequent to the year end, in relation to the Company's share of an investment in the Viking Interconnector link two new Export Credit Agreements totaling $743 million have been made available and have not been drawn as of the date these financial statements were issued.

Notes Payable

In July 2018, Narragansett issued $350 million of unsecured senior long-term debt at 3.92% with a maturity date of August 1, 2028. In December 2018, Niagara Mohawk issued $500 million of unsecured senior long-term debt at 4.28% with a maturity date of December 15, 2028. In March 2019, Brooklyn Union issued $550 million of unsecured long-term debt at 3.87% with a maturity date of March 4, 2029 and $450 million of unsecured long-term debt at 4.49% with a maturity date of March 4, 2049. In July 2019, Boston Gas issued $500 million of unsecured senior long-term debt at 3.00% with a maturity of August 1, 2029.

On April 7, 2020, Narraganset issued $600 million of senior unsecured debt at 3.395% due to mature on April 9, 2030. On June 15, 2020, Boston Gas received approval from the DPU for a one-year extension of the remaining $250 million of long-term debt authorization through June 29, 2021. On June 23, 2020, Niagara Mohawk issued $600 million of senior unsecured debt at 1.960% due to mature on June 27, 2030, and $500 million of senior unsecured debt at 3.025% due to mature on June 27, 2050.

The following table represents the Company's notes payable for the years ended March 31, 2020 and 2019:

			March 31,	
	Interest Rate	Maturity Date	**2020**	2019
			(in millions of dollars)	
Brooklyn Union Unsecured Notes:				
Senior Note	3.41%	March 10, 2026	**$ 500**	$ 500
Senior Note	3.87%	March 4, 2029	**550**	550
Senior Note	4.50%	March 10, 2046	**500**	500
Senior Note	4.27%	March 15, 2048	**650**	650
Senior Note	4.49%	March 4, 2049	**450**	450
Brooklyn Union Notes			**2,650**	2,650

KeySpan Gas East Unsecured Notes:				
Senior Note	5.82%	April 1, 2041	**500**	500
Senior Note	2.74%	August 15, 2026	**700**	700
KeySpan Gas East Notes			**1,200**	1,200
Boston Gas Unsecured Notes:				
Senior Note	3.30%	March 15, 2022	**25**	25
Senior Note	3.15%	August 1, 2027	**500**	500
Senior Note	3.13%	October 5, 2027	**150**	150
Senior Note	3.00%	August 1, 2029	**500**	-
Senior Note	4.49%	February 15, 2042	**500**	500
Senior Note	4.63%	March 15, 2042	**25**	25
Boston Gas Medium-Term Notes:				
MTN Series 1989 A	8.97%	December 15, 2019	**-**	7
MTN Series 1990 A	9.75%	December 1, 2020	**5**	5
MTN Series 1990 A	9.05%	September 1, 2021	**15**	15
MTN Series 1992 A	8.33%	July 5, 2022	**10**	10
MTN Series 1995 C	6.95%	December 1, 2023	**10**	10
MTN Series 1994 B	6.98%	January 15, 2024	**6**	6
MTN Series 1995 C	6.95%	December 1, 2024	**5**	5
MTN Series 1995 C	7.25%	October 1, 2025	**20**	20
MTN Series 1995 C	7.25%	October 1, 2025	**5**	5
Boston Gas Notes			**1,776**	1,283
National Grid USA MTM	8.00%	November 15, 2030	**250**	250
National Grid USA Unsecured Notes:				
Senior Note	5.80%	April 1, 2035	**307**	307
Senior Note	5.88%	April 1, 2033	**150**	150
KeySpan Corp Notes			**707**	707
Niagara Mohawk Unsecured Notes:				
Senior Note	4.88%	August 15, 2019	**-**	750
Senior Note	2.72%	November 28, 2022	**300**	300
Senior Note	3.51%	October 1, 2024	**500**	500
Senior Notes	4.28%	December 15, 2028	**500**	500
Senior Note	4.28%	October 1, 2034	**400**	400
Senior Note	4.12%	November 28, 2042	**400**	400
Niagara Mohawk Notes			**2,100**	2,850
Narragansett Electric Unsecured Notes:				
Senior Note	4.53%	March 15, 2020	**-**	250
Senior Note	3.92%	August 1, 2028	**350**	350
Senior Note	5.64%	March 15, 2040	**300**	300
Senior Note	4.17%	December 10, 2042	**250**	250
Narragansett Electric Notes			**900**	1,150
Massachusetts Electric Unsecured Notes:				
Senior Note	5.90%	November 15, 2039	**800**	800
Senior Note	4.00%	August 15, 2046	**500**	500
Massachusetts Electric Notes:			**1,300**	1,300
New England Power Unsecured Notes:				
Senior Notes	3.80%	December 5, 2047	**400**	400
Total			**$ 11,033**	$ 11,540

First Mortgage Bonds

The assets of Boston Gas and Narragansett are subject to liens and other charges and are provided as collateral over borrowings of $75 million and $29 million, respectively, of non-callable FMB at March 31, 2020. These FMB indentures include, among other provisions, limitations on the issuance of long-term debt.

State Authority Financing Bonds

At March 31, 2020, the Company had outstanding $834 million of State Authority Financing Bonds, of which, approximately $490 million were issued through the New York State Energy Research and Development Authority ("NYSERDA") and the remaining $344 million were issued through various other state agencies.

At March 31, 2018, Niagara Mohawk had approximately $429 million of tax-exempt revenue bonds in a variable interest rate mode ("TE Bonds") issued by the NYSERDA. Niagara Mohawk pledged to the NYSERDA collateral, in the form of first mortgage bonds ("Pledged Bonds"), to secure the repayment of the NYSERDA TE bonds. The Pledged Bonds were issued under its 1937 Mortgage Trust Indenture, as amended and supplemented from time to time, that established a blanket lien (the "Indenture") (i.e. mortgage lien) on substantially all of Niagara Mohawk's operating properties.

In September and October 2018, Niagara Mohawk requested and received approval from the NYSERDA to convert the TE Bonds into a fixed rate mode which was fully completed on October 11, 2018. In connection with the mode conversion Niagara Mohawk i) cancelled the Insurance Policy, ii) replaced the Pledge Bonds with an unsecured note which eliminated the Pledge Bonds and effectively discharged the mortgage lien under the Indenture, and iii) made other modifications to NYSERDA TE Bonds transactional documents. The TE bonds were converted from a variable interest rate mode into a fixed rate interest mode ranging from 3.23% to 3.48%. These conversions were accounted for as extinguishments in accordance with ASC 470, "Debt." Prior to the conversion the bonds bore interest at short-term interest rates ranging from 0.84% to 5.53% as of March 31, 2019.

Additionally, Genco has $41 million of 1999 Series A Pollution Control Revenue Bonds due October 1, 2028. The interest rate on the various variable rate series ranged from 0.85% to 10.44% during the year ended March 31, 2020 and 0.94% to 3.72% during the year ended March 31, 2019. Genco also has outstanding $25 million of variable rate 1997 Series A Electric Facilities Revenue Bonds due December 1, 2027 issued through the NYSERDA. The interest rate on the various variable rate series ranged from 0.90% to 5.15% during the year ended March 31, 2020 and 1.00% to 1.95% during the year ended March 31, 2019.

At March 31, 2020, NEP had outstanding $293 million of Pollution Control Revenue Bonds in tax-exempt commercial paper mode and Nantucket had $51 million of Electric Revenue Bonds in tax exempt commercial paper mode. The Electric Revenue Bonds were issued by the Massachusetts Development Finance Agency in connection with Nantucket's financing of its first and second underground and submarine cable projects.

Debt Authorizations

Niagara Mohawk

Niagara Mohawk has regulatory approval from the FERC to issue up to $1.0 billion of short-term debt internally or externally that expires on January 10, 2021. Niagara Mohawk had no external short-term debt as of March 31, 2020 and 2019.

The NYPSC authorized Niagara Mohawk to issue up to $2.1 billion of incremental long-term debt in one or more transactions through March 31, 2020. The authorization includes the option to issue up to $429.5 million of the total authorization for a refunding of Niagara Mohawk's existing debt.

Under the authorization, Niagara Mohawk converted $424.2 million of tax-exempt revenue bonds from a variable interest rate into a fixed rate and issued $500.0 million of unsecured long-term debt at 4.28%. Prior to the expiration, Niagara Mohawk filed and received approval from the NYPSC for a one-year extension of the remaining $1.1 billion of authorization through March 31, 2021.

In addition, Niagara Mohawk had unsecured long-term debt of $750.0 million at 4.88% which matured on August 15, 2019.

Brooklyn Union

On February 8, 2019 the NYPSC authorized Brooklyn Union to issue up to $1.4 billion of long-term debt in one or more transactions through March 31, 2022. Under the authorization, on February 27, 2019, Brooklyn Union issued $550 million of unsecured senior long-term debt at a fixed rate of 3.87% with a maturity date of March 4, 2029 and $450 million of unsecured senior long-term debt at a fixed rate of 4.49% with a maturity date of March 4, 2049. As of March 31, 2020, $400 million of debt authorization remains under the NYPSC order.

Under previous authorization, in March 2018, Brooklyn Union issued $650 million of unsecured debt at 4.27% with a maturity date of March 15, 2048.

Keyspan Gas East

On February 8, 2019 the NYPSC authorized KeySpan Gas East to issue up to $400 million of long-term debt in one or more transactions through March 31, 2022. KeySpan Gas East did not issue any debts under the authorization during the year ended March 31, 2020.

Massachusetts Electric

Massachusetts Electric has regulatory approval from the FERC to issue up to $750 million of short-term debt internally or externally that expires on January 10, 2021. Massachusetts Electric had no external short-term debt as of March 31, 2020 and 2019.

Nantucket

Nantucket has regulatory approval from the FERC to issue up to $15 million of short-term debt internally or externally, that expires on January 10, 2021. Nantucket had no external short-term debt as of March 31, 2020 and 2019.

NEP

NEP has regulatory approval from the FERC to issue up to $1.5 billion of short-term debt, including the intercompany money pool, that expires on October 14, 2020. NEP intends to seek FERC approval to renew the authorization for a period of two years prior to its expiration. NEP had no short-term debt outstanding as of March 31, 2020 and 2019.

NEP has approval from the Massachusetts Department of Public Utilities, New Hampshire Public Utilities Commission and Vermont Public Service Board authorizing NEP to issue up to $800 million of long-term debt in one or more transactions through May 23, 2020. On June 1, 2020 and June 12, 2020 NEP submitted financing applications to the aforementioned regulators requesting authorization to issue long-term debt in the aggregate amount not to exceed $1.1 billion for a period of three years.

On November 30, 2017, NEP issued $400 million of unsecured senior long-term debt with a maturity date of December 5, 2047. In addition, NEP entered into a bank term loan for $100 million on March 31, 2020 with a maturity date of March 31, 2022, interest will be calculated using 3-month LIBOR plus 0.55% in year one.

Narragansett

Narragansett has regulatory approval from the FERC to issue up to $400 million of short-term debt internally or externally that expires on January 10, 2021. Narragansett had no external short-term debt as of March 31, 2020 and 2019.

A new financing petition was filed with the RIPUC and approved on January 19, 2020 authorizing the issuance of up to $900 million of new long-term debt through March 31, 2023.

Genco

Since January 12, 2015, Genco has had regulatory approval from the FERC to issue up to $250 million of short-term debt. The authorization, which was renewed with an effective date of January 11, 2019, is effective for a period of two years and expires on January 10, 2021. Genco had no short-term debt outstanding to third-parties as of March 31, 2020 or 2019.

Intercompany Notes Payable

NGNA's intercompany debt is in the form of intercompany loans from the Parent and other non-consolidated affiliated entities obtained to fund the acquisition of various entities. The intercompany loans are paid back by NGNA from the dividends it receives from NGUSA.

NGNA has an intercompany note payable to one of the Parent's affiliates, due to mature in July 2027, with an interest rate of 0.92% to 1.08% over LIBOR. The intercompany note has a balance of $972 million and $1,172 million at March 31, 2020, and 2019, respectively, and the remaining balance is reported in Long-term debt on the consolidated balance sheets.

Standby Bond Purchase Agreement

NEP and Nantucket have a Standby Bond Purchase Agreement, which expires on June 14, 2023. This agreement provides liquidity support for the $344 million long-term bonds in tax-exempt commercial paper mode. The Company has classified the debt as long-term due to its intent and ability to refinance the debt on a long-term basis in the event of a failure to remarket the bonds.

Committed Facility Agreements

At March 31, 2020, the Company, NGUSA, and the Parent had committed revolving credit facilities of $3.4 billion, of which $0.9 billion was due to mature in June 2021, $1.9 billion matures in May 2022, and $0.6 billion matures in June 2024. The $0.9 billion of facilities due to mature in June 2021 were renegotiated in the period after March 31, 2020. A new maturity date that extended to June 2022 was negotiated for $0.4 billion of the facilities and a new maturity date that extended to June 2023 was negotiated for $0.5 billion of the facilities. Both the renegotiated facilities include further extension options to June 2024. These facilities have not been drawn against. The Company, NGUSA, and the Parent can all draw on these facilities in a variety of currencies as needed, but the aggregate borrowings across the group cannot exceed the $3.4 billion limit. The terms of the facilities restrict the borrowing of all U.S. subsidiaries of the Company to $25 billion excluding intercompany indebtedness. Additionally, these facilities have a number of non-financial covenants which the Company is obliged to meet. At March 31, 2020 and 2019, the Company, NGUSA, and the Parent were in compliance with all covenants.

Commercial Paper and Revolving Credit Agreements

At March 31, 2020, the Company had two commercial paper programs totaling $4 billion; a $2 billion U.S. commercial paper program and a $2 billion Euro commercial paper program. In support of these programs, the Company was a named borrower under the Parent's credit facilities with $3.4 billion available to the Company. These facilities support both the Parent's and the Company's commercial paper programs for ongoing working capital needs. At March 31, 2020 and 2019, there were $483 million and $200 million of borrowings outstanding on the U.S. commercial paper program and $328 million and $944 million outstanding on the Euro commercial paper program, respectively.

The credit facilities allow both the Parent and the Company to borrow in multi-currencies. The current annual commitment fees range from 0.09% to 0.28%. If for any reason the Company was not able to issue sufficient commercial paper or source funds from other sources, the facilities could be drawn upon to meet cash requirements. The facilities contain certain affirmative and negative operating covenants, including restrictions on the Company's utility subsidiaries' ability to mortgage, pledge, encumber, or otherwise subject their utility property to any lien, as well as financial covenants that require the Company and the Parent to limit the total indebtedness in U.S. and non-U.S. subsidiaries to pre-defined limits. Violation of these covenants could result in the termination of the facilities and the required repayment of amounts borrowed thereunder, as well as possible cross defaults under other debt agreements.

Other Redemptions

The following table indicates the Company's redemptions for the years ended March 31, 2020 and 2019:

	Interest Rate	Maturity Date	**Years Ended March 31,** **2020**	2019
			(in millions of dollars)	
Boston Gas MTN:				
MTN Series 1992 A	8.33%	July 10, 2018	**$ -**	$ 10
MTN Series 1994 B	6.93%	January 15, 2019	**-**	10
MTN Series 1989 A	8.97%	December 15, 2019	**7**	-
Narragansett Electric First Mortgage Bonds:				
FMB Series P&R	7.5% - 8.09%	September 30, 2022 - December 15, 2025	**1**	1
FMB Series S	6.82%	April 1, 2018	**-**	15
Narragansett Electric Unsecured Notes:				
Senior Note	4.53%	March 15, 2020	**250**	-
Niagara Mohawk State Authority Bonds:				
NMPC 1986 Series A	3.42%	December 1, 2026	**-**	5
Niagara Mohawk Unsecured Notes:				
Senior Note	4.88%	August 15, 2019	**750**	-
European Medium Term Note	Variable	August 20,2019 - June 15, 2028	**68**	1,916
Intercompany Notes Payable				
National Grid North Twenty Three Limited	Variable	July 2022 – July 2027	**-**	616
NatGrid TW1 Limited	0.92% to 1.08% over LIBOR	July 2019 – July 2027	**200**	-
Other	-	-	**16**	-
Total			**$ 1,292**	$ 2,573

13. INCOME TAXES

Components of Income Tax Expense

	Years Ended March 31, 2020	2019
	(in millions of dollars)	
Current tax expense (benefit):		
Federal	**$ (64)**	$ (21)
State	**17**	(27)
Total current tax expense (benefit)	**(47)**	(48)
Deferred tax expense:		
Federal	**233**	185
State	**95**	63
Total deferred tax expense	**328**	248
Amortized investment tax credits [1]	**(2)**	(2)
Total deferred tax expense	**326**	246
Total income tax expense	**$ 279**	$ 198

[1] Investment tax credits ("ITC") are accounted for using the deferral and gross up method of accounting and amortized over the depreciable life of the property giving rise to the credits.

Statutory Rate Reconciliation

The Company's effective tax rates for the years ended March 31, 2020 and 2019 are 21.7% and 23.0%, respectively. The following table presents a reconciliation of income tax expense (benefit) at the federal statutory tax rate of 21% to the actual tax expense:

	Years Ended March 31, 2020	2019
	(in millions of dollars)	
Computed tax	**$ 270**	$ 181
Change in computed taxes resulting from:		
State income tax, net of federal benefit	**89**	29
Amortization of regulatory tax liability - net	**(26)**	(20)
Tax rate change	**-**	23
Audit and reserve settlements	**(56)**	(7)
Other	**2**	(8)
Total changes	**9**	17
Total income tax expense	**$ 279**	**$ 198**

The Company files a consolidated federal income tax return and Massachusetts and New York unitary state income tax returns. The Company has joint and several liability for any potential assessments against the consolidated group.

Deferred Tax Components

	March 31,	
	2020	2019
	(in millions of dollars)	
Deferred tax assets:		
Environmental remediation costs	**677**	568
Reserves not currently deducted	**263**	88
Net operating losses	**665**	541
Postretirement benefits and other employee benefits	**796**	597
Regulatory liabilities	**1,446**	1,499
Other	**438**	355
Total deferred tax assets	**4,285**	3,648
Deferred tax liabilities:		
Property-related differences	**5,785**	5,197
Regulatory assets	**1,799**	1,441
Other	**370**	374
Total deferred tax liabilities	**7,954**	7,012
Net deferred income tax liabilities	**3,669**	3,364
Deferred investment tax credits	**36**	38
Deferred income tax liabilities, net	**$ 3,705**	$ 3,402

Net Operating Losses

The amounts and expiration dates of the Company's net operating loss carryforwards as of March 31, 2020 are as follows:

	Gross Carryforward Amount *(in millions of dollars)*	Expiration Period
Federal	$ 3,759	2033 – 2038
Federal – No Expiration	398	Indefinite
New York	2,211 [1]	2035 - 2040
New York City	358 [1]	2035 - 2040
Massachusetts	344	2035 - 2040

(1) The amount contains net operating losses that were incurred before the tax year ended March 31, 2015 that have been converted into a Prior Net Operating Loss Conversion subtraction that can be utilized beginning fiscal year 2017.

As a result of the accounting for uncertain tax positions, the amount of deferred tax assets reflected in the consolidated financial statements is less than the amount of the tax effect of the federal and state net operating loss carryforwards reflected on the income tax returns.

Federal and State Income Tax Audit Status

During the year ended March 31, 2020, the Company reached a settlement with the IRS for the tax years ended March 31, 2010, 2011 and 2012. As a result of the settlement, the Company released $83 million of tax and interest. The Company paid $35 million of tax and interest due to the federal and state tax consequences of the IRS settlement.

During the year ended March 31, 2020, the IRS began its examination of the next audit cycle which includes the income tax returns for the years ended March 31, 2013 through March 31, 2015. The examination was ongoing as of the end of the reporting period. Subsequent to the end of the reporting period, on June 30, 2020 the IRS issued a Form 4549 Income Tax Examination Changes commonly known as Revenue Agent's Report ("RAR"). The Company agreed with the IRS's findings and signed the RAR on July 24, 2020. The Company does not anticipate the agreement to have material impact on the Company's results of operations, financial position, or cash flows. The income tax returns for the years ended March 31, 2016 through March 31, 2019 remain subject to examination by the IRS.

The state of New York is in the process of examining the Company's New York State income tax returns. The following table presents the subsidiaries and years currently under examination. The income tax returns for the subsequent years through March 31, 2019 remain subject to examination by the state of New York.

The following table indicates the earliest tax year subject to examination for each major jurisdiction:

Companies	**Years Under Examination**
Niagara Mohawk	March 31, 2013 through March 31, 2015
KeySpan Gas East	March 31, 2009 through March 31, 2012
Brooklyn Union	March 31, 2009 through March 31, 2012
Keyspan Energy Corporation	March 31, 2008 through March 31, 2014

The city of New York is in the process of examining the Company's New York City income tax returns. The following table presents the subsidiaries and years currently under examination. The income tax returns for the subsequent years through March 31, 2019 remain subject to examination by the city of New York.

Companies	**Years Under Examination**
KeySpan Corporation and Subsidiaries	December 31, 2003 through March 31, 2009
National Grid Services Inc.	March 31, 2015

The state of Massachusetts is in the process of examining the Company's income tax returns for the years ended March 31, 2010 through March 31, 2012. The income tax returns for the years ended March 31, 2013 through March 31, 2019 remain subject to examination by the state of Massachusetts.

The following table indicates the earliest tax year subject to examination for each major jurisdiction:

Jurisdiction	**Tax Years**
Federal	March 31, 2013
Massachusetts	March 31, 2010
New York	March 31, 2008
New York City	December 31, 2003

Uncertain Tax Positions

As of March 31, 2020, the Company's unrecognized tax benefits totaled $600 million, of which $112 million would affect the effective tax rate, if recognized. The unrecognized tax benefits are included in other non-current liabilities in the accompanying consolidated balance sheets. The following table presents changes to the Company's unrecognized tax benefits:

(in millions of dollars)		Year Ended March 31, 2020
Balance as of the beginning of the year	$	553
Gross increases – tax positions in prior periods		45
Gross decreases – tax positions in prior periods		(80)
Gross increases – current period tax positions		82
Balance as of the end of the year	$	600

The Company recognizes interest related to unrecognized tax benefits in other interest, including affiliate interest and related penalties, if applicable, in other income, net, in the accompanying consolidated statements of operations and comprehensive income. As of March 31, 2020 and 2019, the Company has accrued for interest related to unrecognized tax benefits of $39 million and $72 million, respectively. During the years ended March 31, 2020 and 2019, the Company recorded an interest benefit of $37 million and $2 million, respectively. No tax penalties were recognized during the years ended March 31, 2020 and 2019.

Due to the conclusion of the IRS's examination of the Company's income tax returns for the years ended March 31, 2013 through March 31, 2015, the unrecognized tax benefits are expected to decrease in the next twelve months. The Company estimates the decrease to be $263 million.

It is reasonably possible that other events will occur during the next twelve months that would cause the total amount of unrecognized tax benefits to increase or decrease. However, the Company does not believe any such increases or decreases would be material to its results of operations, financial position, or cash flows.

14. ENVIRONMENTAL MATTERS

The normal ongoing operations and historic activities of the Company are subject to various federal, state, and local environmental laws and regulations. Under federal and state Superfund laws, potential liability for the historic contamination of property may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred.

Air

Genco's generating facilities are subject to increasingly stringent emissions limitations under current and anticipated future requirements of the United States Environmental Protection Agency ("EPA") and the NYS Department of Environmental Conservation ("DEC"). In addition to efforts to improve both ozone and particulate matter air quality, there has been an increased focus on greenhouse gas emissions in recent years. Genco's previous investments in low NOx boiler combustion modifications, the use of natural gas firing systems at its steam electric generating stations, and the compliance flexibility available under cap and trade programs have enabled Genco to achieve its prior emission reductions in a cost-effective manner. These investments include the installation of enhanced NOx controls and efficiency improvement projects at certain of Genco's Long Island based electric generating facilities. The total cost of these improvements was approximately $106 million, all of which have been placed in service as of the date of this report; a mechanism for recovery from LIPA of these investments has been established. Genco will continue to make investments for additional emissions reductions, as needed. Genco has developed a compliance strategy to address anticipated future requirements and is closely monitoring the regulatory developments to identify any necessary changes to its compliance strategy. At this time, Genco is unable to predict what effect, if any, these future requirements will have on its consolidated financial position, results of operations, and cash flows.

Water

Additional capital expenditures associated with the renewal of the surface water discharge permits for Genco's steam electric power plants have been required by the DEC pursuant to Section 316 of the Clean Water Act to mitigate the plants' alleged cooling water system impacts to aquatic organisms. Final permits have been issued for Port Jefferson and Northport. Capital improvements have been completed at Port Jefferson and are in the design, procurement, and construction phase for Northport. Genco continues to engage in discussions with the DEC regarding the nature of capital upgrades or other mitigation measures necessary to reduce any impacts at E.F. Barrett. Total capital costs for these improvements at Northport and E.F. Barrett are estimated to be approximately $75 million as of March 31, 2020. Costs associated with these capital improvements are reimbursable from LIPA under the PSA.

Land, Manufactured Gas Plants and Related Facilities

Federal and state environmental regulators, as well as private parties, have alleged that several of the Company's subsidiaries are potentially responsible parties under Superfund laws for the remediation of numerous contaminated sites in New York and New England. The Company's greatest potential Superfund liabilities relate to MGP facilities formerly owned or operated by its subsidiaries or their predecessors. MGP byproducts included fuel oils, hydrocarbons, coal tar, purifier waste, and other waste products which may pose a risk to human health and the environment.

Since July 12, 2006, several lawsuits have been filed which allege damages resulting from contamination associated with the historic operations of a former MGP located in Bay Shore, New York. The Company has been conducting remediation at this location pursuant to Administrative Order on Consent with the DEC. The Company intends to contest these proceedings vigorously.

During the year ended March 31, 2020, a regulated subsidiary of the Company received new information concerning the design and remediation work required at several sites in New York, which resulted in the Company increasing its estimate for environmental reserve. The estimated increases were the result of new information arising from notices received from environmental regulators and updated cost estimates prepared by third party engineers. Based on this, the Company's subsidiary has revised the total cost estimate accordingly and has increased its provision by approximately $463 million. After recording an offsetting increase in regulatory assets relating to environmental remediation, there was no impact to the net assets of the subsidiary of the Company.

At March 31, 2020 and 2019, the Company's total reserve for estimated MGP-related environmental matters is $2.4 billion and $2.0 billion, respectively. The Company had a current portion of environmental remediation costs of $216 million and $128 million included in other current liabilities on the consolidated balance sheets at March 31, 2020 and 2019, respectively. Management believes that obligations imposed on the Company because of the environmental laws will not have a material adverse effect on its operations, financial position, or cash flows. Through various rate orders issued by the NYPSC, DPU, and RIPUC, costs related to MGP environmental cleanup activities are recovered in rates charged to gas distribution customers. Accordingly, the Company has reflected a net regulatory asset of $2.5 billion and $2.1 billion on the consolidated balance sheets at March 31, 2020 and 2019, respectively. Expenditures incurred for the years ended March 31, 2020 and 2019 were approximately $103 million and $50 million, respectively. The Company is pursuing claims against other potentially responsible parties to recover investigation and remediation costs it believes are the obligations of those parties. The Company cannot predict the likelihood of success of such claims.

The Company believes that its ongoing operations, and its approach to addressing conditions at historic sites, are in substantial compliance with all applicable environmental laws, and that the obligations imposed on it because of the environmental laws will not have a material impact on its results of operations or financial position since, as noted above, environmental expenditures incurred by the Company are generally recoverable from customers.

15. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

The Company's electric subsidiaries have several long-term contracts for the purchase of electric power. Substantially all of these contracts require power to be delivered before the subsidiaries are obligated to make payment. Additionally, the Company's gas distribution subsidiaries have entered into various contracts for gas delivery, storage, and supply services. Certain of these contracts require payment of annual demand charges, which are recoverable from customers. The

Company's gas distribution subsidiaries are liable for these payments regardless of the level of service required from third-parties.

The Company's commitments under these long-term contracts for the years subsequent to March 31, 2020 are summarized in the table below:

(in millions of dollars) Years Ending March 31,	**Energy Purchases**
2021	$ 1,592
2022	1,014
2023	805
2024	611
2025	499
Thereafter	2,570
Total	$ 7,091

The Company's subsidiaries can purchase additional energy to meet load requirements from independent power producers, other utilities, energy merchants or on the open market through the NYISO or the ISO-NE at market prices.

Financial Guarantees

The Company has guaranteed the principal and interest payments on certain outstanding debt of its subsidiaries. Additionally, the Company has issued financial guarantees in the normal course of business, on behalf of its subsidiaries, to various third-party creditors. At March 31, 2020, the following amounts would have to be paid by the Company in the event of non-payment by the primary obligor at the time payment is due:

Guarantees for Subsidiaries:		Amount of Exposure *(in millions of dollars)*	Expiration Dates
KeySpan Ravenswood LLC Lease	(i)	$ 215	May 2040
Reservoir Woods	(ii)	124	October 2029
Surety Bonds	(iii)	203	Revolving
Commodity Guarantees and Other	(iv)	111	August 2025 - August 2042
Letters of Credit	(v)	379	August 2020 - December 2021
Grid NY, LLC	(vi)	341	None
Swan Lake North Holdings LLC	(vii)	12	None
NGV US Distributed Energy Inc	(viii)	5	None
Geronimo Energy, LLC	(ix)	35	None
Geronimo Energy, LLC	(x)	144	None
		$ 1,569	

The following is a description of the Company's outstanding subsidiary guarantees:

(i) The Company had guaranteed all payment and performance obligations of a former subsidiary (KeySpan Ravenswood LLC) associated with a merchant electric generating facility leased by that subsidiary under a sale/leaseback arrangement. The subsidiary and the facility were sold in 2008. However, the original lease remains in place and the Company will continue to make the required payments under the lease through 2040. The cash consideration from the buyer of the facility included the remaining lease payments on a net present value basis. At March 31, 2020, the Company's obligation related to the lease was $29 million and is reflected in other non-current liabilities on the consolidated balance sheets.

(ii) The Company has fully and unconditionally guaranteed $124 million in lease payments through 2029 related to the lease of office facilities by its service company at Reservoir Woods in Waltham, Massachusetts.

(iii) The Company has agreed to indemnify the issuers of various surety bonds associated with various construction requirements or projects of its subsidiaries. In the event that the Company or its subsidiaries fail to perform their obligations under contracts, the injured party may demand that the surety make payments or provide services under the bond. The Company would then be obligated to reimburse the surety for any expenses or cash outlays it incurs.

(iv) The Company has guaranteed commodity-related and operational payments for certain subsidiaries. These guarantees are provided to third-parties to facilitate physical and financial transactions supporting the purchase and transportation of natural gas, oil, and other petroleum products for gas and electric production and financing activities. The guarantees cover actual transactions by these subsidiaries that are still outstanding as of March 31, 2020.

(v) The Company has arranged for stand-by letters of credit to be issued to third-parties that have extended credit to certain subsidiaries. Certain vendors require the posting of letters of credit to guarantee subsidiary performance under the Company's contracts and to ensure payment to the Company's subsidiary subcontractors and vendors under those contracts. Certain of the Company's vendors also require letters of credit to ensure reimbursement for amounts they are disbursing on behalf of the Company's subsidiaries, such as to beneficiaries under the Company's self-funded insurance programs. Such letters of credit are generally issued by a bank or similar financial institution. The letters of credit commit the issuer to pay specified amounts to the holder of the letter of credit if the holder demonstrates that the Company has failed to perform specified actions. If this were to occur, the Company would be required to reimburse the issuer of the letter of credit.

(vi) The Company has entered into a Parent Guaranty (the "Guaranty") dated November 14, 2014 for the benefit of NY Transco LLC, which Guaranty irrevocably and unconditionally guarantees all of Grid NY LLC's payment obligations under the New York Transco Limited Liability Company Agreement ("NY Transco LLC Agreement") dated November 14, 2014 entered into by and among Consolidated Edison Transmission, LLC, Grid NY LLC, Iberdrola USA Networks, NY Transco, LLC and Central Hudson Electric Transmission LLC. Grid NY LLC's payment obligations relate to, but are not limited to, funding project development of the initial projects, obtaining initial regulatory approvals and making capital contributions as set forth in the NY Transco LLC Agreement.

(vii) The Company has entered into a Parent Guaranty dated February 23, 2017 under which the Company unconditionally and irrevocably guarantees to EDF Renewable Development, Inc., the timely payment of the purchase price related to the acquisition of the development rights for a 400 MW hydropower storage plant in accordance with and subject to the conditions and limitations set forth in the Purchase and Sale Agreement. The Company's aggregate liability with respect to such guaranteed obligations shall not exceed the purchase price which totals $12 million and is payable on certain milestones being achieved.

(viii) The Company entered into a guaranty as of December 22, 2016 in favor of Sunrun, unconditionally and irrevocably guaranteeing the timely payment when due of all of the Company's payment obligations to make "Capital Contributions" (as such term is defined in the LLC Agreement). The Company's aggregate liability with respect to such Guaranteed Obligations shall not exceed the Class A Capital Contribution Commitment (remaining commitment as of March 31, 2020 is $5 million).

(ix) The Company has provided a guaranty in support of letter of credit facility for Geronimo development projects.

(x) The Company has provided a parent guaranty for NGV's payment obligations under Professional Services Agreement with sellers of Geronimo: $44m in up-front purchase price holdbacks and $100m of potential earn-outs.

As of the date of this report, the Company has not had a claim made against it for any of the above guarantees and has no reason to believe that the Company's subsidiaries or former subsidiaries will default on their current obligations. However, the Company cannot predict when, or if, any defaults may take place or the impact any such defaults may have on its consolidated results of operations, financial position, or cash flows.

Long-term Contracts for Renewable Energy

Offshore Wind Energy Procurement

On December 6, 2018, Narragansett entered into a 20-year PPA with DWW Rev I, LLC ("Revolution Wind"), for the purchase of the electricity and renewable energy credits generated by the offshore windfarm proposed by Revolution Wind, that will have a capacity of up to 408 MW. The anticipated commercial operations date for the windfarm is in January 2024. On May 28, 2019, at an open meeting, the RIPUC approved the contract without remuneration. The written order approving the agreement and that Narragansett will be able to recover the cost incurred under the agreement was issued by the RIPUC on June 7, 2019.

On July 31, 2018, the Massachusetts Electric Companies entered into two separate 20-year PPAs with Vineyard Wind LLC ("Vineyard Wind") for the purchase of 46.16% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Vineyard Wind, with each individual windfarm having a capacity of up to 400 MW. The contracts with Vineyard Wind were entered into pursuant to Section 83C of the Green Communities Act. Based on the terms of the contract the commercial operations date for the first wind farm is in January 2022 with the second wind farm anticipated in May 2022. On January 13, 2020 Vineyard Wind exercised its first option to extend the critical milestones six months for the first wind farm including the commercial operation date. On April 12, 2019 the DPU approved the contracts and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made.

Clean Energy Procurement

On June 13, 2018, the Massachusetts Electric Companies entered into two separate agreements for the transportation and purchase of electricity and the related environmental attributes from hydroelectric facilities located in the Canadian Province of Québec. The two agreements were entered into pursuant to Section 83D of the Green Communities Act. The first agreement is a 20-year PPA with H.Q. Energy Services Inc., ("H.Q. Energy"). for the purchase of approximately 498 mwhs of electricity, and related environmental attributes from a portfolio of hydroelectric facilities owned and operated by affiliates of H.Q Energy. The second agreement is a 20-year transmission service agreement ("TSA") with Central Maine Power Company ("CMP"). The TSA agreement provides for the transmission of the electricity supplied by H.Q. Energy, on a proposed new transmission line, that will run from the U.S. border to Lewiston Maine, where it will interconnect with ISO-NE. Both the TSA with CMP and the PPA with H.Q. Energy are contingent on the successful development and construction of the underlying transmission line by CMP. The anticipated commercial operations date of the transmission line is in December 2022, based on the contractual terms. The Section 83D contracts were approved by the DPU on June 25, 2019, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. An appeal on the DPU approval was filed by Next Era on July 12, 2019 and is currently on-going.

Annual Solicitations

The 2009 Rhode Island law requires that, beginning on July 1, 2010, Narragansett conduct four annual solicitations for proposals from renewable energy developers and, provided commercially reasonable proposals have been received, enter into long-term contracts for the purchase of capacity, energy, and attributes from newly developed renewable energy resources. Narragansett's four solicitations have resulted in four PPAs that have been approved by the RIPUC:

- First Solicitation: On July 28, 2011, the RIPUC approved a 15-year PPA with Orbit Energy Rhode Island, LLC for a 3.2 MW anaerobic digester biogas project located in Johnston, Rhode Island. The facility reached commercial operation on August 24, 2017.
- Second Solicitation: On May 11, 2012, the RIPUC approved a 15-year PPA with Black Bear Development Holdings, LLC for a 3.9 MW run-of-river hydroelectric plant located in Orono, Maine. The facility reached commercial operation on November 22, 2013.
- Third Solicitation: On October 25, 2013, the RIPUC approved a 15-year PPA with Champlain Wind, LLC for a 48 MW land-based wind project located in Carroll Plantation and Kossuth Township, Maine. The PPA was terminated on January 23, 2017 because one of the required permits for the project was rejected. The impact of this termination is that Narragansett will need to backfill the MW capacity from that project to meet the 90 MW minimum long-term capacity requirements under the state statute, that it fulfilled in the fifth solicitation.
- Fourth Solicitation: On October 29, 2015, the RIPUC approved a 15-year PPA with Copenhagen Wind Farm, LLC for an 80 MW land-based wind project located in Denmark, New York. The facility reached commercial operation on December 27, 2018.

In 2014 the LTCS was amended to allow for additional solicitations until the 90 MW contracting capacity requirement was met.

- Fifth Solicitation: On May 11, 2020, the RIPUC approved a 20 year PPA with Gravel Pit Solar II, LLC for a 49.5 MW land based bifacial solar project located in East Windsor, CT. The anticipated commercial operation date is March 31, 2023.

As approved by the RIPUC, Narragansett is allowed to pass through commodity-related / purchased power costs to customers and collect remuneration equal to 2.75% on any contract capacity up to 90 MW.

Aquidneck Island

On January 21, 2019, Narragansett suspended gas service to approximately 7,500 gas customers on Aquidneck Island due to a gas transmission supply issue. The recovery effort was complete, with service restored to essentially all customers, by the morning of January 29, 2019. On February 28, 2019, the RIPUC opened an investigation into the causes of the outage to comport with the Rhode Island Senate's request to do so per Senate Resolution 188 passed on January 31, 2019. On October 30, 2019, the Division issued their Summary Investigation Report into the Aquidneck Island Gas Service Interruption of January 21, 2019. In the report, the Division identified the causes of the outages, which included multiple factors, some in which were outside the control of the Company. On December 13, 2019, Narragansett filed its Response to the Division's Report, which addressed certain aspects of the Report, but not all, and Division conclusions with which it did not agree, and included a status update on Narragansett's actions taken in response to the Report's recommendations up to that time. Also, on November 4, 2019, the Division issued a Notice of Probable Violation ("NOPV") and a fine totaling $39,000 to Narragansett alleging Narragansett failed "to provide a telephonic notification to the Division of the emergency shutdown of an LNG facility" on the morning of January 21, 2019. An Informal Conference took place on December 18, 2019 with the Division and National Grid representatives. On January 13, 2020, Narragansett paid the fine without admitting liability and intends to work with the Division to develop a mutually agreeable notification procedures for future circumstances at the LNG facility. On November 19, 2019 and November 22, 2019, Narragansett was first served with an amended class action complaint on behalf of business owners on Aquidneck and a separate class action on behalf of individuals in the affected areas, respectively. Further amendments to the complaints have subsequently been filed. Narragansett continues to meet with the Division to discuss winter gas reliability issues, which include Aquidneck Island.

Offshore Wind Energy Procurement: Round 2

On January 10, 2020, the Massachusetts Electric Companies entered into two separate 20-year power purchase agreements ("PPA") with Mayflower Wind Energy LLC ("Mayflower Wind") for the purchase of 45.41% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Mayflower Wind, with the first PPA having a capacity up to 408 MW and the second having a capacity of up to 396 MW. The contracts with Mayflower Wind were entered into pursuant to Section 83C of the Green Communities Act. Based on the terms of the contract the commercial operations date for the first wind farm is in September 2025 and the second wind farm anticipated in December 2025. These contracts were filed with the DPU on February 10, 2020 seeking approval of the PPAs so the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements and 2.75% remuneration on the annual payments made. This proceeding is currently on-going.

Legal Matters

The Company is subject to various legal proceedings arising out of the ordinary course of its business. During the year ended March 31, 2019, the Company recognized a benefit of $130 million, within operations and maintenance in the accompanying consolidated statements of operations and comprehensive income, related to legal settlements to recover costs associated with a U.S. systems implementation. Otherwise, the Company does not consider any of such proceedings to be material, individually or in the aggregate, to its business or likely to result in a material adverse effect on its results of operations, financial position, or cash flows.

FERC ROE Complaints

Four separate complaints have been filed at the FERC by combinations of New England state attorneys general, state regulatory commissions, consumer advocates, consumer groups, municipal parties and other parties (collectively the "Complainants"). In each of the first three complaints, filed on October 1, 2011, December 27, 2012, and July 31, 2014, respectively, the Complainants challenged the NETO base ROE of 11.14% that had been utilized since 2005 and sought an order to reduce it prospectively from the date of the final FERC order and for the separate 15-month complaint periods. In the fourth complaint, filed April 29, 2016, the Complainants challenged the NETOs' base ROE of 10.57% and the maximum ROE for transmission incentive ("incentive cap") of 11.74%, asserting that these ROEs were unjust and unreasonable. NEP recorded a liability of $32 million and 30 million included in other current liabilities on the consolidated balance sheets as of March 31, 2020 and 2019 for the potential refund as a result of reduction of the base ROE.

With the exception of the FERC order issued on October 16, 2018 (refer to "Transmission Return on Equity" section in Note 5, "Rate Matters"), where the FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable and, if so, how to calculate a replacement ROE, the FERC has not issued a final order on NEP's ROE complaints nor the applicability of the FERC orders on the MISO ROE complaint proceedings on other transmission owners.

Given the significant uncertainty relating to the October 2018 FERC order and the subsequent orders issued on the MISO ROE complaint proceedings NEP is unable to predict their potential effect on the four complaints and concluded that there is no reasonable basis for a change to the reserve or recognized ROEs for any of the complaint periods at this time. Further, NEP cannot reasonably estimate a range of gain or loss for any of the four complaint proceedings.

FERC 206 Proceeding on Rate Transparency

On December 28, 2015, the FERC initiated a proceeding under Section 206 of the FPA. The FERC found that the ISO-NE Transmission, Markets, and Services Tariff is unjust, unreasonable, and unduly discriminatory or preferential. The FERC found that the ISO-NE's Tariff lacks adequate transparency and challenge procedures with regard to the formula rates for ISO-NE Participating Transmission Owners ("PTOs"). In addition, the FERC found that the ISO-NE PTOs', including NEP's, current RNS and LNS formula rates appear to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. The FERC explained that the formula rates appear to lack sufficient detail in order to determine how certain costs are derived and recovered in the formula rates. Accordingly, the FERC established hearing and settlement judge procedures to develop just and reasonable formula rate protocols to be included in the ISO-NE Tariff and to examine the justness and reasonableness of the RNS and LNS rates. On August 17, 2018, the parties filed a settlement package with a FERC judge that is close to revenue neutral. A small group of municipals and FERC Trial Staff submitted comments opposing the filed settlement. The settling parties filed an answer to the opposition in late September asking the FERC to approve the settlement as is, despite the protests. On May 22, 2019, the FERC rejected the Formula Rate 206 settlement in its entirely. Accordingly, the FERC remanded the matter to the Chief Administrative Law Judge ("ALJ") for hearing procedures. The Chief ALJ established Track III procedural time standards for this hearing, which require that the hearing be convened within 42 weeks and the initial decision issued within 63 weeks. The Chief ALJ also designated a dispute resolution specialist to serve as settlement facilitator in the proceeding but any settlement discussions will have to proceed in parallel with hearing procedures. The parties have continued settlement negotiations and have been granted a suspension of the procedural schedule to attempt to finalize settlement. The parties have since arrived at an agreement to resolve the issues in this proceeding and submitted a revised settlement agreement to FERC on June 15, 2020. The Company has requested the FERC to issue an order approving the settlement by November 1, 2020 to assure the appropriate time needed to implement the new formula rate provided for in the settlement on January 1, 2021.

Electric Services and LIPA Agreements

Effective May 28, 2013 (and most recently amended on April 1, 2018), Genco provides services to LIPA under an A&R PSA. Under the A&R PSA, Genco has a ROE of 9.75% and a capital structure of 50% debt and 50% equity. Genco's annual revenue requirement for the year ended March 31, 2020 was $454 million.

The A&R PSA has a term of fifteen years, provided LIPA has the option to terminate the agreement as early as April 2025 on two years advance notice. GENCO accounts for the A&R PSA as an operating lease under ASC 842. In addition, LIPA has options to ramp down blocks of capacity on two years advance notice for steam generating units and one year advance notice for other generating units covered by the A&R PSA. The earliest effective ramp down date for GENCO's Northport steam generating units is May 2021; ramp downs for all other units could be effective at any time after consideration of the notice periods. Should any ramp downs be exercised, GENCO is entitled to a ramp down payment plus operating and maintenance expenses for 18 months for steam generating units and 12 months for all other generating units. The ramp down payment is equivalent to the net book value of the generating unit, less a discount factor. This discount factor ranges from 50% of the unit's net book value if retired with an effective date in 2022 up to 62.5% of the unit's net book value if retired with an effective date thereafter.

LIPA provided advance notice for one non-steam generating unit ramp down in December 2019, with an effective date in December 2020. As this unit is fully depreciated, there is no significant financial impact from the ramp down provision included within the A&R PSA associated with this notice through the effective ramp down date.

In February 2020, LIPA provided advance notice for one non-steam generating unit ramp down with an effective date in February 2021. The financial impact of receiving the advance notice was not material to the consolidated financial statements.

The A&R PSA provides potential penalties to GENCO if it does not maintain the output capability of the generating facilities, as measured by annual industry-standard tests of operating capability, plant availability, and efficiency. These penalties may total $4 million annually. Although the A&R PSA provides LIPA with all of the capacity from the generating facilities, LIPA has no obligation to purchase energy from the generating facilities and can purchase energy on a least-cost basis from all available sources consistent with existing transmission interconnection limitations of the transmission and distribution system. GENCO must, therefore, operate its generating facilities in a manner such that GENCO can remain competitive with other producers of energy. To date, GENCO has dispatched to LIPA and LIPA has accepted the level of energy generated at the agreed to price per megawatt hour. Under the terms of the A&R PSA, LIPA is obligated to pay for capacity at rates that reflect recovery of an agreed level of the overall cost of maintaining and operating the generating facilities, including recovery of depreciation and return on its investment in plant. The capacity charge is approximately 95% of the annual revenue requirement and is adjusted each year using cost escalation and inflation factors applied to the prior year's capacity charge. A monthly variable maintenance charge is billed for each unit of energy actually acquired from the generating facilities. The billings to LIPA under the A&R PSA do not include a provision for fuel costs, as such fuel is owned by LIPA.

Decommissioning Nuclear Units

As of March 31, 2020 and 2019, Niagara Mohawk had a liability of $178 million and $174 million, respectively, recorded in other non-current liabilities on the consolidated balance sheets, for the disposal of nuclear fuel irradiated prior to 1983. The Nuclear Waste Policy Act of 1982 provides three payment options for liquidating such liability and Niagara Mohawk has elected to delay payment, with interest, until the year in which Constellation Energy Group Inc., which purchased Niagara Mohawk's nuclear assets, initially plans to ship irradiated fuel to an approved Department of Energy ("DOE") disposal facility.

The 2010 Federal budget (which became effective October 1, 2009) eliminated almost all funding for the creation of the Yucca Mountain repository. A Blue Ribbon Commission ("BRC") on America's Nuclear Future, appointed by the U.S. Energy Secretary, released a report on January 26, 2012, detailing comprehensive recommendations for creating a safe, long-term solution for managing and disposing of the nation's spent nuclear fuel and high-level radioactive waste.

In early 2013, the DOE issued an updated "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste" in response to the BRC recommendations. This strategy included a consolidated interim storage facility that was planned to be operational in 2025. However, due to continued delays on the part of the DOE, and the amount of time required for DOE to select a site location and develop the necessary infrastructure for long-term spent nuclear fuel storage, the Company cannot predict the date at which the DOE will begin accepting spent nuclear fuel.

Despite insufficient funding and actions of the DOE to block its construction, the U.S. Court of Appeals for the D.C. Circuit directed the Nuclear Regulatory Commission ("NRC") to resume the Yucca Mountain licensing process. On November 18, 2013, the NRC ordered its staff to resume work on its Yucca Mountain safety report but scarce funding has precluded progress in the licensing process. On January 26, 2012 the BRC, which was charged with advising the DOE regarding alternatives to disposal at Yucca Mountain, issued a final report recommending that priority be given to removal of spent fuel from shutdown reactor sites. Private entities have initiated proposals, and submitted license applications to the NRC, to site consolidated interim storage facilities at two locations in the southwestern United States. It is impossible to predict when the DOE will fulfill its obligation to take possession of the Yankees' spent fuel. The decommissioning costs that are actually incurred by the Yankees may substantially exceed the estimated amounts.

Other Contingencies

At March 31, 2020 and 2019, the Company had accrued workers compensation, auto, and general insurance claims which have been incurred but not yet reported ("IBNR") of $80 million and $82 million, respectively. IBNR reserves have been established for claims and/or events that have occurred, but have not yet been reported to the Company for payment.

16. LEASES

The Company has elected the practical expedient "package" under Topic 842 in which any expired contracts need not be reassessed to determine whether they are or contain leases; classification of leases that commenced prior to the adoption of this standard will not be reassessed; and any initial direct costs for existing leases need not be reassessed. The Company elected the practical expedient not to reassess existing easements that were not previously accounted for as leases under Topic 840. Additionally, the Company elected the practical expedient not to evaluate whether sales tax and other similar taxes are lessor and lessee costs. Instead, such costs are deemed lessee costs. The Company elected not to take the "hindsight" practical expedient nor other specific practical expedients to combine lease and non-lease components for contracts in which the Company is the lessee or the lessor. The Company does not reflect short-term leases on the balance sheets. The expense related to short-term leases was not material for the year ended March 31, 2020. The Company, as a regulated entity, will continue to recognize lease expense based on a pattern that conforms to the regulatory ratemaking treatment.

The Company has various operating leases, primarily related to a transmission line, buildings, land, real estate, and fleet vehicles used to support the electric and gas operations, with lease terms ranging between 3 and 70 years. The expense related to operating leases was $150 million for the year ended March 31, 2020. Rent expense for operating leases was $89 million for the year ended March 31, 2019. As of March 31, 2020, the Company had one finance lease with a lease liability of less than $1 million.

Certain building leases provide the Company with an option to extend the lease term. The Company has included the periods covered by the extension options in its determination of the lease term as management believes it is reasonably certain the Company will exercise its option.

In measuring lease liabilities, the Company excludes variable lease payments, other than those that depend on an index or a rate, or are in substance fixed payments, and includes lease payments made at or before the commencement date. The variable lease payments were not material for the year ended March 31, 2020.

Lease liabilities are recognized based on the present value of the lease payments over the lease term at the commencement date. For any leases that do not provide an implicit rate, the Company uses an estimate of its collateralized incremental borrowing rate based on the information available at the commencement date to determine the present value of future payments. Operating lease ROU assets are included in property, plant and equipment, net, and operating lease liabilities are included in other current liabilities and other noncurrent liabilities on the balance sheet.

As of March 31, 2020, the Company's operating leases had a weighted average discount rate of 3.33% and a weighted average remaining lease term of 15 years.

In January 2020, the Company entered into a corporate real-estate lease agreement that will be accounted for as an operating lease. The Company did not report a lease liability or ROU asset for this agreement on the March 31, 2020 balance sheet as the landlord had not made the property available for use by the Company. The Company expects to record a lease liability and ROU asset for this agreement during the year-ended March 31, 2021. The Company does not have any other material rights or obligations under operating leases that have not yet commenced at March 31, 2020.

The following table presents the components of cash flows arising from lease transactions:

	Year ended March 31, 2020
	(in millions of dollars)
Cash paid for amounts included in lease liabilities	
Operating cash flows from operating leases	**$ 150**
Financing cash flows from finance leases	**1**
ROU assets obtained in exchange for operating lease liabilities	**$ 876**

The following contains the Company's maturity analysis of its operating lease liabilities as of March 31, 2020, showing the undiscounted cash flows on an annual basis reconciled to the undiscounted cash flows of the operating lease liabilities recognized in the comparative balance sheet:

	Operating Leases (in millions of dollars)
Year Ending March 31,	
2021	**$ 133**
2022	**116**
2023	**100**
2024	**82**
2025	**63**
Thereafter	**512**
Total future minimum lease payments	**1,006**
Less: imputed interest	**236**
Total	**$ 770**
Reported as of March 31, 2020:	
Current lease liability	**$ 110**
Non-current lease liability	**660**
Total	**$ 770**

The future minimum lease commitments as of March 31, 2019 under Topic 840:

	Operating Leases (in millions of dollars)
Year Ending March 31,	
2020	$ 133
2021	120
2022	103
2023	88
2024	70
Thereafter	191
Total future minimum lease payments	$ 705

There are certain leases in which the Company is the lessor. Revenue under such leases was immaterial for the year ended March 31, 2020.

17. RELATED PARTY TRANSACTIONS

Accounts Receivable from and Accounts Payable to Affiliates

The Company engages in various transactions with the Parent and its subsidiaries. Certain activities and costs, primarily executive and administrative and some human resources, legal, and strategic planning, are shared between the Company and its affiliates.

The Company records short-term receivables from, and payables to, certain of its affiliates in the ordinary course of business. The amounts receivable from, and payable to, its affiliates do not bear interest and are settled through the intercompany money pool. A summary of net outstanding accounts receivable from affiliates and accounts payable to affiliates is as follows:

	Accounts Receivable from Affiliates		Accounts Payable to Affiliates	
	March 31,		March 31,	
	2020	2019	**2020**	2019
	(in millions of dollars)			
National Grid plc	**$ 15**	$ 8	**$ -**	$ 25
National Grid Holding One plc [1]	**-**	-	**8**	8
Other	**-**	-	**1**	2
Total	**$ 15**	$ 8	**$ 9**	$ 35

[1] National Grid Holding One plc is a subsidiary of National Grid plc.

The above accounts receivable from affiliate balances of $15 million and $8 million are included in other assets as of March 31, 2020 and 2019, respectively.

Equity infusion from Parent

In August 2019, the Company received a capital contribution of $2,525 million in the form of equity infusion from the Parent.

Advance from Affiliate

In August 2009, the Company entered into an agreement with the Parent, whereby either party can collectively borrow up to $3 billion from time to time for working capital needs. These advances currently bear interest rates of London Interbank Offered Rate plus a margin set to reflect the cost of short-term borrowing rates for the Parent at the time of the borrowing. At March 31, 2020 and 2019, the Company had $300 million and zero advances under this agreement.

Intercompany Note Payable

NGNA's intercompany debt is in the form of intercompany loans from the Parent and other affiliated entities obtained to fund the acquisition of various entities. The intercompany loans are paid back by NGNA from the dividends it receives from NGUSA.

NGNA has an intercompany note payable to one of the Parent's affiliates, due to mature in July 2027, with an interest rate of 0.92% to 1.08% over LIBOR. The intercompany note has a balance of $972 million and $1,172 million at March 31, 2020, and 2019, respectively. This balance is reported in Long-term debt on the consolidated balance sheets.

Holding Company Charges

The Company receives charges from National Grid Commercial Holdings Limited (an affiliated company in the United Kingdom) for certain corporate and administrative services provided by the corporate functions of the Parent to its U.S. subsidiaries. For the years ended March 31, 2020 and 2019, the effect on income before income taxes was $30 million and $48 million, respectively.

18. PREFERRED STOCK

Preferred stock of NGNA subsidiaries

The Company's subsidiaries have certain issues of non-participating cumulative preferred stock outstanding where the security is guaranteed by the Parent and can be redeemed only at the option of the Company's subsidiaries. There are no mandatory redemption provisions on the cumulative preferred stock and no conversion options. A summary of the cumulative preferred stock of the Company's subsidiaries at March 31, 2020 and 2019 is presented in the table below. The preferred stock is reported as a non-controlling interest as of March 31, 2020.

		Shares Outstanding		**Amount**		
		March 31,		**March 31,**		Call
Series		**2020**	2019	**2020**	2019	Price
		(in millions of dollars, except per share and number of shares data)				
$100 par value -						
3.40% Series	Niagara Mohawk	**57,524**	57,524	**$ 6**	$ 6	$ 103.500
3.60% Series	Niagara Mohawk	**137,152**	137,152	**14**	14	104.850
3.90% Series	Niagara Mohawk	**95,171**	95,171	**9**	9	106.000
4.44% Series	Massachusetts Electric	**22,585**	22,585	**2**	2	104.068
6.00% Series	NEP	**11,117**	11,117	**1**	1	Non-callable
$50 par value -						
4.50% Series	Narragansett	**49,089**	49,089	**3**	3	55.000
Golden Shares -	Niagara Mohawk and the New York Gas Companies	**3**	3	**-**	-	Non-callable
Total		**372,641**	372,641	**$ 35**	$ 35	

In connection with the acquisition of KeySpan by NGUSA, each of the Company's New York subsidiaries became subject to a requirement to issue a class of preferred stock, having one share (the "Golden Share"), subordinate to any existing preferred stock. The holder of the Golden Share would have voting rights that limit the Company's right to commence any voluntary bankruptcy, liquidation, receivership, or similar proceeding without the consent of the holder of the Golden Share. The NYPSC subsequently authorized the issuance of the Golden Share to a trustee, GSS Holdings, Inc. ("GSS"), who will hold the Golden Share subject to a Services and Indemnity Agreement requiring GSS to vote the Golden Share in the best interests of NYS. On July 8, 2011, the Company issued a total of 3 Golden Shares pertaining to Niagara Mohawk and the New York Gas Companies each with a par value of $1.

The Company's subsidiaries did not redeem any preferred stock as of March 31, 2020, or 2019. The annual dividend requirement for cumulative preferred stock was $1.3 million as of March 31, 2020, and 2019.

7-26 Consolidated Financial Statement 2020/21 National Grid North America Inc

National Grid North America Inc. and Subsidiaries

Consolidated Financial Statements

For the years ended March 31, 2021 and 2020

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES

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The accompanying notes are an integral part of these consolidated financial statements.

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
National Grid North America Inc. and Subsidiaries

We have audited the accompanying consolidated financial statements of National Grid North America Inc. and Subsidiaries (the "Company"), which comprise the consolidated balance sheets and statements of capitalization as of March 31, 2021 and 2020, and the related consolidated statements of operations and comprehensive income, cash flows, and changes in shareholders' equity for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of National Grid North America Inc. and Subsidiaries as of March 31, 2021 and 2020, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 and Note 19 to the consolidated financial statements, the Company signed an agreement to sell its 100% indirect ownership interest in The Narragansett Electric Company. Therefore, the associated assets and liabilities that will form part of the sale have been presented as held for sale in the consolidated balance sheets as of March 31, 2021. Our opinion is not modified with respect to this matter.

Deloitte & Touche LLP

September 28, 2021

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(in millions of dollars)

	Years Ended March 31,	
	2021	2020
Operating revenues	**$ 12,398**	$ 12,259
Operating expenses:		
Purchased electricity	**1,547**	1,713
Purchased gas	**1,582**	1,662
Operations and maintenance	**4,878**	4,451
Depreciation and amortization	**1,343**	1,231
Other taxes	**1,355**	1,309
Total operating expenses	**10,705**	10,366
Operating income	**1,693**	1,893
Other income (deductions):		
Interest on long-term debt, net	**(649)**	(625)
Other interest, including affiliate interest, net	**(164)**	(127)
Income from equity method investments	**40**	42
Other income, net	**180**	103
Total other income (deductions)	**(593)**	(607)
Income before income taxes	**1,100**	1,286
Income tax expense	**261**	279
Net income	**839**	1,007
Net income attributed to non-controlling interests	**(3)**	(3)
Net income attributed to common shareholders	**$ 836**	$ 1,004
Other comprehensive income, net of taxes:		
Unrealized gains on securities, net of tax expense (benefit) of $1 and $3 in 2021 and 2020, respectively	**1**	8
Change in pension and other postretirement obligations, net of tax expense (benefit) of $82 and ($46) in 2021 and 2020, respectively	**229**	(133)
Unrealized losses on hedges, net of tax expense (benefit) of $3 and ($20) in 2021 and 2020, respectively	**9**	(56)
Total other comprehensive income	**239**	(181)
Comprehensive income	**$ 1,078**	$ 826
Less: Comprehensive income attributed to non-controlling interest	**(3)**	(3)
Comprehensive income attributed to common shareholders	**$ 1,075**	$ 823

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions of dollars)

	Years Ended March 31,	
	2021	2020
Operating activities:		
Net income	**$ 839**	$ 1,007
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**1,343**	1,231
Deferred income tax expense and amortization of investment tax credits	**276**	326
Bad debt expense	**412**	279
Losses (gains) from financial investments	**(183)**	41
Income from equity method investments	**(40)**	(42)
Allowance for equity funds used during construction	**(74)**	(52)
Net pension and postretirement benefit expense	**152**	138
Other, net	**95**	73
Dividends from equity method investments and other financial investments	**56**	67
Pension and postretirement benefits contributions, net	**(149)**	(192)
Environmental remediation payments	**(179)**	(103)
Changes in operating assets and liabilities:		
Accounts receivable and unbilled revenues, net	**(770)**	99
Accounts receivable from/payable to affiliates, net	**40**	(33)
Inventory	**18**	(146)
Regulatory assets and liabilities, net	**28**	(446)
Derivative instruments	**(174)**	138
Prepaid and accrued taxes, net	**42**	100
Accounts payable and other liabilities	**523**	49
Other assets and liabilities, net	**43**	(104)
Net cash provided by operating activities	**2,298**	2,430
Investing activities:		
Capital expenditures	**(3,788)**	(3,830)
Cost of removal	**(260)**	(287)
Proceeds from sales of property, plant and equipment	**42**	61
Contributions to equity method investments	**(106)**	(100)
Acquisition of NGRD and Emerald	**(36)**	(173)
Purchases of financial investments	**(111)**	(73)
Proceeds from sales of financial investments	**106**	120
Other, net	**1**	(6)
Net cash used in investing activities	**(4,152)**	(4,288)
Financing activities:		
Payments on long-term debt	**(2,130)**	(1,292)
Proceeds from long-term debt	**2,974**	953
Payment of debt issuance costs	**(32)**	(16)
Commercial paper issued	**3,369**	5,911
Commercial paper paid	**(3,688)**	(6,255)
Advance from affiliate, net	**(300)**	300
Equity infusion from Parent	**2,000**	2,525
Net cash provided by financing activities	**2,193**	2,126
Net increase in cash, cash equivalents, restricted cash and special deposits, including cash classified within assets held for sale	**339**	268
Less: Net decrease in cash classified within assets held for sale	**(6)**	-
Net increase in cash, cash equivalents, restricted cash and special deposits	**333**	268
Cash, cash equivalents, restricted cash and special deposits, beginning of year	**933**	665
Cash, cash equivalents, restricted cash and special deposits, end of year	**$ 1,266**	$ 933
Supplemental disclosures:		
Interest paid	**$ (789)**	$ (638)
Income taxes refunded	**3**	140
Significant non-cash items:		
Capital-related accruals included in accounts payable	**265**	217
ROU assets obtained in exchange for operating lease liabilities	**136**	876

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31, 2021	March 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 1,164**	$ 617
Restricted cash and special deposits	**102**	316
Accounts receivable	**2,692**	2,299
Allowance for doubtful accounts	**(842)**	(551)
Unbilled revenues	**447**	491
Inventory	**521**	590
Regulatory assets	**492**	607
Derivative instruments	**28**	29
Prepaid taxes	**291**	244
Other	**140**	168
Assets held for sale	**5,436**	-
Total current assets	**10,471**	4,810
Equity method investments	**656**	596
Property, plant and equipment, net	**37,010**	37,871
Non-current assets:		
Regulatory assets	**4,969**	6,254
Goodwill	**6,457**	7,232
Derivative instruments	**51**	22
Postretirement benefits	**973**	377
Financial investments	**894**	695
Other	**111**	188
Total non-current assets	**13,455**	14,768
Total assets	**$ 61,592**	$ 58,045

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31, 2021	March 31, 2020
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	**$ 1,601**	$ 1,598
Accounts payable to affiliates	**43**	9
Advance from affiliate	**-**	300
Commercial paper	**500**	811
Current portion of long-term debt	**1,061**	1,041
Taxes accrued	**102**	124
Customer deposits	**79**	102
Interest accrued	**196**	184
Regulatory liabilities	**670**	868
Derivative instruments	**45**	243
Renewable energy certificate obligations	**246**	264
Payroll and benefits accruals	**402**	332
Other	**805**	708
Liabilities held for sale	**2,707**	-
Total current liabilities	**8,457**	6,584
Non-current liabilities:		
Regulatory liabilities	**6,668**	6,226
Asset retirement obligations	**100**	105
Deferred income tax liabilities, net	**4,061**	3,705
Postretirement benefits	**1,242**	2,615
Environmental remediation obligations	**2,017**	2,222
Derivative instruments	**82**	237
Operating lease liabilities	**682**	660
Other	**727**	731
Total non-current liabilities	**15,579**	16,501
Commitments and contingencies (Note 15)		
Long-term debt	**16,140**	16,639
Equity:		
Common stock and additional paid-in capital	**14,133**	12,116
Retained earnings	**7,373**	6,537
Accumulated other comprehensive loss	**(156)**	(395)
Common shareholders' equity	**21,350**	18,258
Non-controlling interests	**66**	63
Total equity	**21,416**	18,321
Total liabilities and equity	**$ 61,592**	$ 58,045

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CAPITALIZATION
(in millions of dollars)

			March 31,	
			2021	2020
Common shareholders' equity			**$ 21,350**	$ 18,258
Non-controlling interests			**66**	63
Long-term debt [1]:	Interest Rate	Maturity Date		
European Medium-Term Note	Variable	August 2020 – June 2028	**3,237**	3,417
Convertible Bond	Variable	November 2020	**-**	497
Export Credit Agreements	Variable	December 2025 – December 2028	**1,218**	816
Notes Payable	1.73% - 9.05%	September 2021 – October 2050	**12,128**	11,033
First Mortgage Bonds	6.90% - 8.80%	July 2022 – April 2028	**75**	104
State Authority Financing Bonds	3.23% - 3.48%	December 2023 – July 2029	**424**	424
State Authority Financing Bonds	Variable	October 2022 – August 2042	**223**	410
Term Loan[2]	Variable	March 2022	**-**	100
Intercompany Note[3]	Variable	July 2022 – July 2027	**-**	972
Total debt			**17,305**	17,773
Unamortized debt discount			**(45)**	(39)
Unamortized debt issuance costs			**(59)**	(54)
Current portion of long-term debt			**(1,061)**	(1,041)
Total long-term debt			**16,140**	16,639
Long-term debt classified as held-for-sale[4]			**1,510**	
Total capitalization			**$ 39,066**	$ 34,960

[1] See Note 12, "Capitalization" for additional details.
[2] Prepaid in October 2020, see Note 12, "Capitalization".
[3] See Note 17, "Related Party Transactions" for additional details.
[4] See Note 19, “Held for sale”.

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in millions of dollars)

				Accumulated Other Comprehensive Income (Loss)							
	Common Stock [1]	Cumulative Preferred Stock	Additional Paid-in Capital	Unrealized Gain (Loss) on Securities	Pension and Other Postretirement Benefits	Hedging Activity	Foreign Currency translation	Total Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non-Controlling Interests [2]	Total
Balance as of March 31, 2019	**$ -**	**$ 35**	**$ 9,581**	**$ 7**	**$ (2)**	**$ 2**	**$ (139)**	**$ (132)**	**$ 5,451**	**$ 25**	**$ 14,960**
Net income	-	-	-	-	-	-	-	-	1,004	3	1,007
Other comprehensive income (loss):											
Unrealized gains on securities, net of $3 tax expense	-	-	-	8	-	-	-	8	-	-	8
Change in pension and other postretirement obligations, net of ($46) tax expense (benefit)	-	-	-	-	(133)	-	-	(133)	-	-	(133)
Unrealized losses on hedges, net of ($20) tax expense (benefit)	-	-	-	-	-	(56)	-	(56)	-	-	(56)
Total comprehensive income											826
Equity infusion from Parent	-	-	2,525	-	-	-	-	-	-	-	2,525
Other transfer		(35)								35	-
Impact of adoption of reclassification of certain tax effects from accumulated other comprehensive income standard	-	-	-	(2)	(85)	5	-	(82)	82	-	-
Reclassification of accumulated other comprehensive income components	-	-	-	(12)	(2)	14	-	-	-	-	-
Stock-based compensation	-	-	10	-	-	-	-	-	-	-	10
Balance as of March 31, 2020	**$ -**	**$ -**	**$ 12,116**	**$ 1**	**$ (222)**	**$ (35)**	**$ (139)**	**$ (395)**	**$ 6,537**	**$ 63**	**$ 18,321**
Net income	-	-	-	-	-	-	-	-	836	3	839
Other comprehensive income (loss):											
Unrealized gains on securities, net of $1 tax expense	-	-	-	1	-	-	-	1	-	-	1
Change in pension and other postretirement obligations, net of $82 tax expense (benefit)	-	-	-	-	229	-	-	229	-	-	229
Unrealized losses on hedges, net of $3 tax expense (benefit)	-	-	-	-	-	9	-	9	-	-	9
Total comprehensive income											1,078
Equity infusion from Parent	-	-	2,000	-	-	-	-	-	-	-	2,000
Stock-based compensation	-	-	17	-	-	-	-	-	-	-	17
Balance as of March 31, 2021	**$ -**	**$ -**	**$ 14,133**	**$ 2**	**$ 7**	**$ (26)**	**$ (139)**	**$ (156)**	**$ 7,373**	**$ 66**	**$ 21,416**

(1) The Company had 255 and 230 shares of common stock authorized, issued and outstanding, with a par value of $0.10 per share at March 31, 2021 and 2020.

(2) NGUSA subsidiaries had 372,641 shares of cumulative preferred stock authorized, issued and outstanding, with par values of either $100 or $50 per share at March 31, 2021 and 2020. See Note 18, “Preferred Stock”.

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

National Grid North America Inc. ("NGNA" or "the Company") is a Delaware corporation that was created in the United States ("U.S.") as an indirect wholly-owned subsidiary of National Grid plc (the "Parent"), a public limited company incorporated under the laws of England and Wales. It is the intermediate holding company of National Grid USA ("NGUSA") and acts as a funding company on behalf of the Parent for certain subsidiaries' borrowings.

NGUSA has two major lines of business, "Gas Distribution" and "Electric Services," and operates various energy services and investment companies. The Company's Gas Distribution business consists of five gas distribution subsidiaries which provide gas distribution services to customers in the areas of central, northern, and eastern New York, the New York City boroughs of Brooklyn, Queens, and Staten Island, and the Long Island Counties of Nassau and Suffolk, as well as the states of Massachusetts and Rhode Island. The Company's Electric Services business primarily consists of five electric distribution subsidiaries which provide electric services to customers in the areas of eastern, central, northern, and western New York, as well as the states of Massachusetts and Rhode Island. The Company also operates electric transmission facilities in Massachusetts, New Hampshire, Rhode Island, Maine, and Vermont, and provides energy services, supplies capacity, and produces energy for the use of customers of the Long Island Power Authority ("LIPA") on Long Island, New York. The services provided to LIPA through a power supply agreement provide LIPA with electric generating capacity, energy conversion, and ancillary services from the Company's Long Island generating units.

The Company's wholly-owned New England subsidiaries include: New England Power Company ("NEP"), The Narragansett Electric Company ("Narragansett"), Massachusetts Electric Company ("Massachusetts Electric"), Nantucket Electric Company ("Nantucket"), and Boston Gas Company ("Boston Gas"). The Company's wholly-owned New York subsidiaries include: Niagara Mohawk Power Corporation ("Niagara Mohawk"), National Grid Generation, LLC ("Genco"), The Brooklyn Union Gas Company ("Brooklyn Union"), and KeySpan Gas East Corporation ("KeySpan Gas East"). Certain of the Company's subsidiaries are subject to regulation by state and federal regulatory authorities (see Note 2, "Summary of Significant Accounting Policies" for additional details).

The Company also has a wholly-owned subsidiary, National Grid LNG LLC, which is engaged in the business of receiving, storing, and redelivering liquefied natural gas ("LNG") in liquid and gaseous states, through facilities located in Providence, Rhode Island, as well as a 53.7% interest in two hydro-transmission electric companies which are consolidated into these financial statements. The investments in LNG and the hydro-transmission electric companies are not material to the Company's consolidated financial statements.

The Company's unregulated energy investments business consists of development investments such as natural gas pipelines, as well as certain other domestic energy-related investments.

NGV US LLC ("NGV") operates in competitive markets and includes the Company's investments in National Grid Renewables Development LLC ("NGRD"), formerly known as Geronimo Energy LLC. and Emerald Energy Venture LLC ("Emerald") (see Note 6, "Acquisition of NGRD and Emerald" for additional details). National Grid Partners LLC ("NGP") holds a portfolio of corporate venture capital investments in technology and innovation companies.

The Company uses the equity method of accounting for its investments in affiliates when it has the ability to exercise significant influence over operating and financial policies but does not control the affiliates. The Company's share of the earnings or losses of such affiliates is reported through the line item Income from equity method investments in the accompanying consolidated statements of operations and comprehensive income (see Note 7, "Equity Method Investments" for additional details).

The Company's unregulated operations are not material to report as a separate business segment.

On March 17, 2021, NGUSA announced the sale of its Rhode Island business (Narragansett) to PPL Energy Holdings, LLC. for $3.8 billion (excluding long-term debt). As the sale of Narragansett is considered probable and is expected to complete within a year, once all regulatory approvals have been obtained, the associated assets and liabilities that will form part of the sale have been presented as Held for sale in the consolidated balance sheets as of March 31, 2021. The assets and liabilities of Narragansett are not classified as held for sale for the comparative period dated March 31, 2020. See Note 19, "Held for Sale" for additional details.

The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), including the accounting principles for rate-regulated entities, as applicable. The consolidated financial statements reflect the ratemaking practices of the applicable regulatory authorities.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Certain of the Company's wholly-owned non-operating subsidiaries have a functional currency other than the U.S. Dollar (USD). Cumulative translation adjustments arising from translation of the subsidiaries' financial information into USD are reported in accumulated other comprehensive income. The impact of translation was not material for the years ended March 31, 2021 and 2020. Non-controlling interests of the Company's majority-owned subsidiaries are calculated based upon the respective non-controlling interest ownership percentages. All intercompany transactions with consolidated subsidiaries have been eliminated in consolidation.

Certain reclassifications have been made to the consolidated financial statements to conform the prior period's balances to the current period's presentation. These reclassifications had no effect on reported income, total assets, or stockholders' equity as previously reported.

Under its holding company structure, the Company does not have significant independent operations or sources of income of its own and conducts most of its operations through its subsidiaries. As a result, the Company depends on the earnings and cash flow of, and dividends or distributions from, its subsidiaries to provide the funds necessary to meet its debt and contractual obligations. Furthermore, a substantial portion of the Company's consolidated assets, earnings, and cash flow is derived from the operations of its regulated utility subsidiaries, whose legal authority to pay dividends or make other distributions to the Company is subject to regulation by state regulatory authorities.

The novel coronavirus ("COVID-19") pandemic has disrupted the U.S. and global economies and continues to have a significant impact on global health. Due to this continued uncertainty, the valuations of certain assets and liabilities are necessarily more subjective. In particular, we identified the recoverability of customer receivables in relation to retail customers, in consideration of the suspension of certain debt collection and customer termination activities as an area of estimation uncertainty at both March 31, 2021 and March 31, 2020. In March 2020, the Company ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimize risk to employees. The Company also ceased customer termination activities as requested by relevant local authorities.

The Company has seen adverse impacts from COVID-19 on earnings and cash flow. Earnings are impacted by increased incremental operating costs, increased bad debt expense, and reduced late payment revenues, slightly offset by reduced costs and other mitigation efforts by the Company. Cash flow is negatively impacted by the higher level of operating costs and lower cash collections. As of March 31, 2021, the Company recorded additional reserves for uncollectible accounts related to the COVID-19 impact for the gas businesses.

The Company has evaluated subsequent events and transactions through September 28, 2021, the date of issuance of these consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

In preparing consolidated financial statements that conform to U.S. GAAP, the Company must make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and the disclosure of contingent assets and liabilities included in the consolidated financial statements. Such estimates and assumptions include the impact of the ongoing COVID-19 pandemic and are reflected in the accompanying financial statements. Actual results could differ from those estimates.

Regulatory Accounting

The Federal Energy Regulatory Commission ("FERC"), the New York Public Service Commission ("NYPSC"), the Massachusetts Department of Public Utilities ("DPU"), and the Rhode Island Public Utilities Commission ("RIPUC") regulate the rates the Company's regulated subsidiaries charge their customers in the applicable states. In certain cases, the rate actions of the FERC, NYPSC, DPU and RIPUC can result in accounting that differs from non-regulated companies. In these cases, the subsidiaries defer costs (as regulatory assets) or recognize obligations (as regulatory liabilities) if it is probable that such amounts will be recovered from, or refunded to, customers through future rates. In accordance with Accounting Standards Codification ("ASC") 980, "Regulated Operations," regulatory assets and liabilities are reflected on the consolidated balance sheets consistent with the treatment of the related costs in the ratemaking process.

Revenue Recognition

Revenues are recognized by regulated subsidiaries for energy services billed on a monthly cycle basis, together with unbilled revenues for the estimated amount of services rendered from the time meters were last read to the end of the accounting period (see Note 3, "Revenue" for additional details). The Company recognizes revenues from the sale of capacity and energy to LIPA under terms of the amended and restated Power Supply Agreement ("A&R PSA"), with rates approved by the FERC. The A&R PSA is accounted for as an operating lease (see Note 16, "Leases" for additional details).

Income Taxes

Federal and state income taxes have been computed utilizing the asset and liability approach that requires the recognition of deferred tax assets and liabilities for the tax consequences of temporary differences by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. Deferred income taxes also reflect the tax effect of net operating losses, capital losses, and general business credit carryforwards. The Company assesses the available positive and negative evidence to estimate whether sufficient future taxable income of the appropriate tax character will be generated to realize the benefits of existing deferred tax assets. When the evaluation of the evidence indicates that the Company will not be able to realize the benefits of existing deferred tax assets, a valuation allowance is recorded to reduce existing deferred tax assets to the net realizable amount.

The effects of tax positions are recognized in the consolidated financial statements when it is more likely than not that the position taken, or expected to be taken, in a tax return will be sustained upon examination by taxing authorities based on the technical merits of the position. The financial effect of changes in tax laws or rates is accounted for in the period of enactment. Deferred investment tax credits are amortized over the useful life of the underlying property.

NGNA files consolidated federal tax returns including all of the activities of its subsidiaries. Each subsidiary determines its tax provision based on the separate return method, modified by a benefits-for-loss allocation pursuant to a tax sharing agreement between NGNA and its subsidiaries. The benefit of consolidated tax losses and credits are allocated to the NGNA subsidiaries giving rise to such benefits in determining each subsidiary's tax expense in the year that the loss or credit arises. In a year that a consolidated loss or credit carryforward is utilized, the tax benefit utilized in consolidation is paid proportionately to the subsidiaries that gave rise to the benefit regardless of whether that subsidiary would have utilized the benefit. The tax sharing agreement also requires NGNA to allocate its parent tax losses, excluding deductions from acquisition indebtedness, to each subsidiary in the consolidated federal tax return with taxable income. The allocation of NGNA's parent tax losses to its subsidiaries is accounted for as a capital contribution and is performed in conjunction with the annual intercompany cash settlement process following the filing of the federal tax return.

Other Taxes

The Company's subsidiaries collect taxes and fees from customers such as sales taxes, other taxes, surcharges, and fees that are levied by state or local governments on the sale or distribution of gas and electricity. The Company accounts for taxes that are imposed on customers (such as sales taxes) on a net basis (excluded from revenues), while taxes imposed on the Company, such as excise taxes, are recognized on a gross basis. Excise taxes collected and expected to be paid for the years ended March 31, 2021 and 2020, were $179 million and $170 million, respectively.

Cash and Cash Equivalents

Cash equivalents consist of short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalents are carried at cost, which approximates fair value.

Restricted Cash and Special Deposits

Restricted cash consists of margin calls to the New York Mercantile Exchange ("NYMEX") and collateral paid to the Company's counterparties for outstanding commodity and financial derivative instruments. Special deposits primarily consist of health care deposits, a release of property account for mortgaged property under a mortgage trust indenture, interconnection deposits, and amounts reserved for potential environmental violations. The Company had restricted cash of $18 million and $244 million and special deposits of $84 million and $72 million as of March 31, 2021 and 2020, respectively.

Accounts Receivable and Allowance for Doubtful Accounts

The Company recognizes an allowance for doubtful accounts to record accounts receivable at estimated net realizable value. The allowance is determined based on a variety of factors including, for each type of receivable, applying an estimated reserve percentage to each aging category, taking into account historical collection and write-off experience, and management's assessment of collectability from individual customers, as appropriate. The collectability of receivables is continuously assessed and, if circumstances change, the allowance is adjusted accordingly. Receivable balances are written off against the allowance for doubtful accounts when the accounts are disconnected and/or terminated and the balances are deemed to be uncollectible. The Company recorded bad debt expense of $412 million and $279 million for the years ended March 31, 2021 and 2020, respectively, within operations and maintenance in the accompanying consolidated statements of operations and comprehensive income. For the years ended March 31, 2021 and 2020, the bad debt expense is reflective of an additional provision in relation to the impact of COVID-19.

Inventory

Inventory is composed of materials and supplies, gas in storage, purchased Renewable energy certificates ("RECs"), and emission credits.

Materials and supplies are stated at weighted average cost, which represents net realizable value, and are expensed or capitalized into property, plant and equipment as used. There were no significant write-offs of obsolete inventory for the years ended March 31, 2021 or 2020.

Gas in storage is stated at weighted average cost and the related cost is recognized when delivered to customers. Existing rate orders allow the Company to pass directly through to customers the cost of purchased gas, along with any applicable authorized delivery surcharge adjustments. Gas costs passed through to customers are subject to regulatory approvals and are reported periodically to the applicable state regulators.

RECs are stated at cost and used to measure compliance with renewable energy standards. RECs are held primarily for consumption. Emission credits are comprised of sulfur dioxide, nitrogen oxide ("NOx"), and carbon dioxide credits. Emission credits are valued at the lower of weighted average cost or net realizable value and are held primarily for consumption or may be sold to third-party purchasers.

The following table summarizes inventory recorded on the consolidated balance sheets:

	March 31,	
	2021	2020
	(in millions of dollars)	
Materials and supplies	**$ 285**	$ 247
Gas in storage	**123**	182
Purchased RECs	**102**	143
Emission credits	**11**	18
Total inventory	**$ 521**	$ 590

Derivative Instruments

The Company uses derivative instruments to manage commodity price, interest rate, and foreign currency rate risk. All derivative instruments, except commodity contracts that qualify for the normal purchase normal sale exception, are reported at fair value on the consolidated balance sheets.

All commodity costs, including the impact of derivative instruments, are passed on to customers through the Company's commodity rate adjustment mechanisms. Regulatory assets or regulatory liabilities are recorded to defer the recognition of unrealized losses or gains on derivative instruments, respectively.

Qualifying derivative instruments are designated as fair value or cash flow hedges. Changes in the fair value of the derivative designated in a cash flow hedge are initially recognized in accumulated other comprehensive income ("AOCI"), net of related tax effects. In a fair value hedge, changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the statements of operations and comprehensive income, with the residual difference remaining as ineffectiveness. For both types of hedges, qualifying derivative gains and losses related to the value of currency basis are treated separately as "costs of hedging" and are deferred in a separate component of AOCI.

Amounts accumulated in AOCI are reclassified to the statements of operations and comprehensive income on a systematic basis as the hedged income or expense is recognized. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the consolidated statements of operations and comprehensive income to match the timing of the hedged income or expense. When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the statement of operations and comprehensive income to match the impact of outstanding hedged items. If a forecast transaction becomes no longer probable, the cumulative gain or loss previously reported in equity would be transferred to the statement of operations and comprehensive income. This has not occurred during the years ended March 31, 2021 or 2020.

The Company has certain non-trading instruments for the physical purchase of electricity that qualify for the normal purchase normal sale exception and are accounted for upon settlement. If the Company was to determine that a contract no longer qualifies for the normal purchase normal sale exception, the Company would recognize the fair value of the contract and, if applicable, account for the gains and losses using the regulatory accounting described above. This has not occurred during the years ended March 31, 2021 or 2020.

The Company's accounting policy is to not offset fair value amounts recognized for derivative instruments and related cash collateral receivable or payable with the same counterparty under a master netting agreement, but rather to record and present the fair value of the derivative instrument on a gross basis, with related cash collateral receivable and payable recorded within restricted cash and special deposits, and in other current liabilities, respectively, on the consolidated balance sheets.

Variable Interest Entities

A variable interest entity ("VIE") is an entity that does not have sufficient equity at risk to permit it to finance its activities without additional subordinated financial support, or whose equity investors lack the obligation to absorb losses, the right to receive residual returns, or the right to make decisions about the activities that most significantly impact the entity's economic performance. The primary beneficiary is the enterprise that has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and the obligation to absorb losses or right to receive benefits that could be significant to the VIE. The primary beneficiary holds a controlling financial interest in the entity and is required to consolidate the VIE.

The Company determines whether it is the primary beneficiary of a VIE by evaluating the purpose and design of the entity, the nature of the VIE's and the variability created by those risk, who has the power to direct the activities of the VIE that most significantly impact the economic performance of the VIE, and who has the obligation to absorb losses or receive benefits that could be significant to the VIE.

The Company holds interests in five VIEs, comprising a 50% interest in four individual LLCs (Island Park Energy Center LLC, LI Solar Generation LLC, LI Energy Storage System LLC, and Clean Energy Generation LLC), and a 51% interest in Emerald. The Company is not the primary beneficiary as it does not have the power to direct the most significant activities of each entity. The Company accounts for its ownership interest in each entity using the equity method of accounting. See Note 7, "Equity Method Investments" for additional details. Additionally, see Note 15, "Commitments and Contingencies" for details on NGRD guarantee relating to Emerald's project companies.

Power Purchase Agreements

Certain of the Company's subsidiaries enter into power purchase agreements ("PPAs") to procure electricity to serve their electric service customers. The Company first evaluates whether such agreements contain a lease. In performing this evaluation, the Company considers whether the terms of the PPA provide the Company with the right to direct use of the generating facility and if the Company has the right to obtain substantially all of the economic benefits derived from use of the facility. In determining whether the Company has the right to direct use of the facility, the Company will consider which rights have the most significant impact on the economic benefits to be derived from the asset; for example, dispatch rights or the right to be involved in the facility's design. If the PPA is determined to contain a lease, the Company assesses whether it should be classified as a finance lease or an operating lease.

If the PPA does not contain a lease, the Company next assesses whether the contract is a derivative or includes one or more embedded derivatives. In making this determination, the Company assesses whether the PPA includes a notional amount or payment provision through the contract's delivery requirements or terms of default. If the PPA is a derivative or contains one or more embedded derivatives, the Company will assess whether the requirements for election of the normal purchases and normal sales scope exception are met. If the requirements for the election are not met or the election is not made, the Company reports the derivative at fair value on the consolidated balance sheet. If the election is made, the Company accounts for the PPA as an executory contract whereby costs are recognized as electricity is purchased. If the contract does not contain a lease and is not a derivative, the Company accounts for the PPA as an executory contract.

The Company also assesses whether the PPA is a variable interest in a VIE. In determining whether the PPA is a variable interest, the Company assesses whether the contract absorbs certain risks, such as commodity price risk, that the VIE was designed to pass on to its interest holders. If the PPA is determined to be a variable interest in a VIE, the Company determines whether it is the primary beneficiary.

Natural Gas Long-Term Arrangements

Certain of the Company's subsidiaries enter into long-term gas contracts to procure gas to serve their gas customers. Those contracts include Asset Management Agreements, Baseload, and Peaking gas contracts. Similar to the PPAs noted above, the Company evaluates whether such agreements are leases, derivative instruments, or executory contracts and performs an assessment under the guidance for VIEs.

Fair Value Measurements

The Company measures derivative instruments, securities, pension and postretirement benefit other than pension plan ("PBOP") assets, and financial investments for which it has elected the fair value option at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following is the fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity has the ability to access as of the reporting date;
- Level 2: inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data;
- Level 3: unobservable inputs, such as internally-developed forward curves and pricing models for the asset or liability due to little or no market activity for the asset or liability with low correlation to observable market inputs; and
- Not categorized: Investments in certain funds, that meet certain conditions of ASC 820, are not required to be categorized within the fair value hierarchy. These investments are typically in commingled funds or limited partnerships that are not publicly traded and have ongoing subscription and redemption activity. As a practical expedient, the fair value of these investments is the Net Asset Value ("NAV") per fund share.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The Company uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs.

Hypothetical Liquidation at Book Value

The Company accounts for its share of the earnings of the projects owned by Emerald using the equity method of accounting under the hypothetical liquidation at book value ("HLBV"). Under this method, the Company calculates the amount each owner would receive if the partnership were liquidated at book value at the end of each measurement period based on the contractual liquidation provisions in the applicable partnership agreements. The change in amount allocated to each partner after adjusting for distributions and contributions is recorded as income or loss for that period in the consolidated statements of operations and comprehensive income.

Property, Plant and Equipment

Property, plant and equipment is stated at cost. The capitalized cost of additions to property, plant and equipment includes costs such as direct material, labor and benefits, and an allowance for funds used during construction ("AFUDC"). The cost of repairs and maintenance is charged to expense and the cost of renewals and betterments that extend the useful life of property, plant and equipment is capitalized.

Depreciation is computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update the composite rates and are approved by the state authorities. The average composite rates for the years ended March 31, 2021 and 2020 are as follows:

	Composite Rates	
	Years Ended March 31,	
	2021	2020
Electric	**2.7%**	2.7%
Gas	**2.6%**	2.6%
Common	**11.0%**	9.2%

Depreciation expense, for regulated subsidiaries, includes a component for the estimated cost of removal, which is recovered through rates charged to customers. Any difference in cumulative costs recovered and costs incurred is deferred as a regulatory liability or regulatory asset, as appropriate. When property, plant and equipment is retired, the original cost, less salvage, is charged to accumulated depreciation, and the related cost of removal is removed from the associated regulatory liability or regulatory asset. The Company recognized a regulatory liability for the amount that was in excess of costs incurred of $1.5 billion and $1.7 billion at March 31, 2021 and 2020, respectively, and a regulatory asset for the excess of costs incurred over amounts collected in rates of $97 million and $51 million at March 31, 2021 and 2020, respectively.

Allowance for Funds Used During Construction

The Company records AFUDC, which represents the debt and equity costs of financing the construction of new property, plant and equipment. The equity component of AFUDC is reported in other income, net within the accompanying consolidated statements of operations and comprehensive income. The debt component of AFUDC is reported as an offset to other interest, including affiliate interest, net. After construction is completed, the Company is permitted to recover these costs through their inclusion in rate base. The Company recorded AFUDC related to equity of $74 million and $52 million and AFUDC related to debt of $28 million and $39 million for the years ended March 31, 2021 and 2020, respectively. The average AFUDC rates for the years ended March 31, 2021 and 2020 were 5.2% and 5.7%, respectively.

Impairment of Long-Lived Assets

The Company tests long-lived assets for impairment when events or changes in circumstances indicate that the carrying amount of the asset (or asset group) may not be recoverable. If such an event is identified, the recoverability of an asset group is determined by comparing its carrying value to the estimated undiscounted cash flows the asset group is expected to generate. If the comparison indicates that the carrying value is not recoverable, an impairment loss is recognized for the excess of carrying value over the estimated fair value. For the years ended March 31, 2021 and 2020, there were $0.2 million and zero of impairment losses recognized for long-lived assets at Genco, respectively.

Goodwill

The Company tests goodwill for impairment annually on January 1, or more frequently if events occur or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is below its carrying amount. The Company tests goodwill residing at NGUSA based upon four identified reporting units, aligned with its jurisdictional operational model. The Company has the following reporting units for consolidated reporting at NGUSA: New York, Massachusetts, Rhode Island, and FERC. Goodwill generated through the acquisition of NGRD and Emerald in July 2019 was allocated to a separate reporting unit at NGV. There were no changes in the Company's reporting units during the year-ended March 31, 2021.

The Company has adopted Accounting Standards Update ("ASU") No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which eliminates step two from the two-step goodwill impairment test previously required under the former standard. The goodwill impairment test requires a recoverability test based on the comparison of the Company's estimated fair value for each reporting unit with the reporting unit's carrying value, including goodwill. If the estimated fair value exceeds the carrying value, then goodwill is not considered impaired. If the carrying value exceeds the estimated fair value, the Company is required to recognize an impairment charge for such excess, limited to the allocated carrying amount of goodwill.

For the New York reporting unit, the Company uses a variety of valuation methodologies to estimate a reporting unit's fair value, principally discounted projected future net cash flows and market-based multiples, commonly referred to as the income approach and market approach. Key assumptions include, but are not limited to, the use of estimated future cash flows; multiples of earnings; and an appropriate discount rate. In estimating future cash flows, the Company incorporates current market information, as well as historical factors. As such, the determination of fair value incorporates significant unobservable inputs and the assumptions require the Company to make significant judgements, whereby actual results may differ from assumed and estimated amounts. The Company uses a balanced 50/50 weighting for each valuation methodology, as it believes that each approach provides equally valuable and reliable information regarding the New York reporting unit's estimated fair value.

In March 2021, the Company announced that it was selling its investment in Narragansett to PPL for an equity value of $3.8 billion as part of the transaction involving the Parent's acquisition of Western Power Distribution from PPL. The Narragansett sale represents a triggering event and, as such, the Company performed a separate quantitative analysis to determine whether a goodwill impairment exists in connection with the reclassification of Narragansett's assets into the held-for-sale disposal group. The Company determined that no impairment existed as of March 31, 2021.

The Company elected to perform a qualitative assessment for the Massachusetts and FERC reporting units to determine whether it is more likely than not that the fair value of the reporting unit is below its carrying value and an impairment exists. The qualitative assessment is commonly referred to as the "Step 0" test and requires the Company to evaluate relevant events and circumstances including, but not limited to, macroeconomic conditions, industry and market considerations, cost factors, and other relevant entity-specific events that may indicate the existence of a decline in fair value that is other than temporary. The qualitative assessment indicated that it was not more likely than not that the fair value of the reporting unit is below its carrying value and, as such, no impairment loss exists for the year ended March 31, 2021.

For goodwill at NGV, the Company estimated fair value of the reporting unit using the income approach. The Company believes that this approach provides the most reliable information about estimated fair value.

Based on the resulting fair values from the annual assessment, either from a Step 0 or a Step 1 assessment as stated above, the Company did not record any goodwill impairment during the years ended March 31, 2021 and 2020.

Financial Investments

The Company holds a range of financial investments, including short-term money funds, equity securities and available-for-sale debt securities.

Corporate owned life insurance policies ("COLI") and Trust owned life insurance policies ("TOLI") are measured at cash surrender value with increases and decreases in the value of these assets recorded in earnings.

Available-for-sale debt securities are measured at fair value with changes in fair value recorded in other comprehensive income. Investments in available-for-sale debt securities are monitored for other than temporary impairment by comparing fair value against amortized cost.

Equity securities consist of shares held as part of a portfolio of financial instruments, such as corporate stocks and mutual funds, and are measured at fair value with changes in fair value recorded in earnings.

The Company has mutual funds and money market funds representing funds designated for Supplemental Executive Retirement Plans ("SERPs"). These investments are measured at fair value with changes in fair value recorded in earnings.

Other financial investments are primarily comprised of corporate venture capital investments held by NGP and are measured at fair value with changes in fair value recorded in earnings.

The following table presents the financial investments recorded on the consolidated balance sheets:

	March 31,	
	2021	2020
	(in millions of dollars)	
COLI/TOLI	**$ 389**	$ 273
Debt securities [1]	**184**	162
Equity securities [1]	**248**	199
SERPs [1]	**39**	34
Other [1]	**34**	27
Total financial investments	**$ 894**	$ 695

[1] See Note 10, "Fair Value Measurements" for additional details.

Asset Retirement Obligations

Asset retirement obligations are recognized for legal obligations associated with the retirement of property, plant and equipment, primarily associated with the Company's gas distribution and electric generation facilities. Asset retirement obligations are recorded at fair value in the period in which the obligation is incurred, provided fair value can be reasonably estimated. In the period in which new asset retirement obligations, or changes to the timing or amount of existing retirement obligations are recorded, the associated asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset. In each subsequent period the asset retirement obligation is accreted to its present value. The Company applies regulatory accounting guidance, whereby accretion costs associated with asset retirement obligations are recorded as increases to regulatory assets on the consolidated balance sheets. These regulatory assets represent timing differences between the recognition of costs in accordance with U.S. GAAP and costs recovered through the ratemaking process.

During the year ended March 31, 2021, the Company performed a new study of its asset retirement obligations. The study did not result in a material change to the Company's asset retirement obligations.

Employee Benefits

The Company has defined benefit pension plans and postretirement benefit other than pension plans for its employees. The Company recognizes all pension and PBOP plans' funded status on the consolidated balance sheets as a net liability or asset with an offsetting adjustment to AOCI in shareholders' equity. If the cost of providing these plans is recovered in rates through the Company's regulated subsidiaries, the net funded status is offset by a regulatory asset or liability. The Company measures and records its pension and PBOP funded status at each year-end. Pension and PBOP plan assets are measured at fair value.

Reference Rate

The benchmark interest rates hedged are currently based on US London Interbank Offered Rate ("LIBOR"). LIBOR is being replaced as an interest rate benchmark by alternative reference rates ("ARRs") in certain currencies including USD, and foreign currencies in which the Company operates. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which can impact valuations. The Company is managing the risk by planning to replace US LIBOR cash flows with ARRs mainly Sterling Overnight Interbank Average Rate ("SONIA"), on our affected contracts. The Company has not amended any of its current agreements that have LIBOR as a reference rate during the years ended March 31, 2021 and 2020.

Leases

The Company adopted Topic 842 during the year-end ended March 31, 2020. The Company elected the practical expedient "package" in which any expired contracts were not reassessed to determine whether they met the definition of a lease; classification of leases that commenced prior to the adoption of this standard was not reassessed; and any initial direct costs for existing leases were not reassessed. Additionally, the Company elected the practical expedient to not reassess existing easements that were not previously accounted for as leases under Topic 840.

The Company elected to not evaluate whether sales tax and other similar taxes are lessor and lessee costs. Instead, such costs are deemed lessee costs. The Company does not combine lease and non-lease components for contracts in which the Company is the lessee or the lessor.

Certain building leases provide the Company with an option to extend the lease term. The Company has included the periods covered by an extension options in its determination of the lease term when management believes it is reasonably certain the Company will exercise its option.

Lease liabilities are recognized based on the present value of the lease payments over the lease term at the commencement date. For any leases that do not provide an implicit rate, the Company uses an estimate of its collateralized incremental borrowing rate based on the information available at the commencement date to determine the present value of future payments. In measuring lease liabilities, the Company excludes variable lease payments, other than those that depend on an index or a rate, or are in substance fixed payments, and includes lease payments made at or before the commencement date. Variable lease payments were not material for the years ended March 31, 2021 and 2020. The Company does not reflect short-term leases on the consolidated balance sheets. Expense related to short-term leases was not material for the years ended March 31, 2021 and 2020.

Right-of-use assets consist of the lease liability, together with any payments made to the lessor prior to commencement of the lease (less any lease incentives) and any initial direct costs. Right-of-use assets are amortized over the lease term.

The Company's regulated subsidiaries recognize lease expense based on a pattern that conforms to the regulatory ratemaking treatment.

New and Recent Accounting Guidance

Accounting Guidance Recently Adopted

Fair Value

In August 2018, the FASB issued ASU No. 2018-13 "Fair Value Measurement (Topic 820), Disclosure Framework–Changes to the Disclosure Requirements for Fair Value Measurement" which modifies certain disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement, including certain disclosure requirements relating to Level 3 fair value measurements, and eliminates disclosure requirements for transfers between Level 1 and Level 2 fair value measurements. The standard also added certain other disclosure requirements for Level 3 fair value measurements. The Company adopted the new guidance on April 1, 2020 requiring certain revisions to disclosures related to recurring fair value measurements in Note 10, "Fair Value Measurements". Upon adoption, the amendments in the standard were applied retrospectively to all periods presented, except the amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty, which were applied prospectively for only the most recent annual period presented. The amendments did not materially affect the Company's disclosures and did not affect the Company's financial position, results of operations, or cash flows.

Pension and Postretirement Benefits

In August 2018, the FASB issued ASU No. 2018-14 “Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans,” which modifies the disclosure requirements for employers that sponsor define benefit pension or other postretirement plans, including elimination of certain current disclosure requirements. The Company adopted this new guidance on April 1, 2020 using a retrospective basis to all periods presented, resulting in certain revisions to disclosures related to the Company’s defined benefit plans in Note 11, “Employee Benefits”. The amendments did not materially affect the Company’s disclosures related to its defined benefit postretirement benefit plans and did not affect the Company’s financial position, results of operations, or cash flows.

Internal-Use Software

In August 2018, the FASB issued ASU No. 2018-15 “Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40), Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract” to help entities evaluate the accounting for fees paid by a customer under a cloud computing arrangement that is a service contract. The amendment aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. Under this standard, the Company applies Subtopic 350-40 to determine which implementation costs related to a hosting arrangement should be capitalized or expensed. The Company expenses the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the arrangement. The Company adopted this new guidance prospectively on April 1, 2020. The amendments did not materially impact the Company’s financial position, results of operations, or cash flows.

Reference Rate

In January 2021, the FASB issued ASU No. 2021-01 “Reference Rate Reform (Topic 848): Scope” clarifying the application of the optional relief and practical expedients for certain transactions, including contract modifications and hedging relationships affected by reference rate reform, as well as those that do not directly reference LIBOR or any other reference rate expected to be discontinued. The standard applies to all entities that elect to apply the optional guidance in Topic 848 and is effective immediately for all entities. No elections to apply the amendments have been made at March 31, 2021. The Company is still assessing the potential impact related to replacing LIBOR ARRs.

As the Company has not amended any of its current agreements that have LIBOR as a reference rate between the March 12, 2020 effective date and March 31, 2021, this accounting standard update did not impact the Company’s financial position, results of operations, nor its cash flows for the year ended March 31, 2021.

Accounting Guidance Not Yet Adopted

Income Taxes

In December 2019, the FASB issued ASU No. 2019-12 “Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes” which simplifies various aspects of the accounting for income taxes by eliminating certain exceptions to current requirements. The standard also enhances and simplifies other requirements, including tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. For public business entities, the standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company will adopt this standard on April 1, 2021, and interim periods within. The Company does not expect the adoption to have a material impact on its financial statements.

Investments – Equity Securities

In January 2020, the FASB issued ASU No. 2020-01 “Investments—Equity Securities (Topic 321), Investments—Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815): Clarifying the Interactions between Topic 321, Topic

323, and Topic 815 (a consensus of the FASB Emerging Issues Task Force)" which clarifies that an entity should consider transaction prices for purposes of measuring the fair value of certain equity securities immediately before applying or upon discontinuing the equity method. This accounting standard also clarifies that when accounting for contracts entered into to purchase equity securities, an entity should not consider whether, upon the settlement of the forward contract or exercise of the purchased option, the underlying securities would be accounted for under the equity method or the fair value option. For public business entities, the standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company will adopt this standard on April 1, 2021, and interim periods within. The Company does not expect the adoption to have a material impact on its financial statements.

Callable Debt Securities

In October 2020, the FASB issued ASU No. 2020-08 "Codification Improvements to Subtopic 310-20, Receivables – Nonrefundable Fees and Other Costs" to clarify that an entity should reevaluate whether a callable debt security that has multiple call dates is within the scope of paragraph ASC 310-20-35-33 for each reporting period, such that the premium should be amortized over the period ending at the earliest call date . For public business entities, the standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early application is not permitted for public business entities. The Company will adopt this standard on a prospective basis on April 1, 2021, and interim periods within. The Company does not expect the adoption to have a material impact on its financial statements.

Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU No. 2016-13 "Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements", which requires a financial asset (or a group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The accounting standards provide a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses that replaces the incurred loss impairment methodology of delayed recognition of credit losses. A broader range of reasonable and supportable information must be considered in developing the credit loss estimates. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. In May 2019, the FASB issued ASU 2019-05, "Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief", permitting entities to irrevocably elect the fair value option for financial instruments that were previously recorded at amortized cost basis within the scope of Topic 326, except for held-to-maturity debt securities. For the Company, the requirements in these updates, as amended in November 2019 by ASU 2019-10 "Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates", will be effective for the fiscal year beginning after December 15, 2022 (beginning April 1, 2023 for the Company), including interim periods within those fiscal years. The Company is currently assessing the application of this standard to determine if it will have a material impact on the presentation, results of operations, cash flows, and financial position of the Company.

3. REVENUE

The following table presents, for the years ended March 31, 2021 and 2020, revenue from contracts with customers, as well as additional revenue from sources other than contracts with customers, disaggregated by major source:

	Years ended March 31	
	2021	2020
	(in millions of dollars)	
Revenue from contracts with customers:		
Electric services	**$ 6,313**	$ 5,935
Gas distribution	**5,263**	5,201
Off system sales	**164**	146
Other	**87**	48
Total revenue from contracts with customers	**11,827**	11,330
Revenue from regulatory mechanisms	**6**	413
Other revenue	**565**	516
Total operating revenues	**$ 12,398**	$ 12,259

Electric Services and Gas Distribution: Revenue from contracts with customers, includes electric services and gas distribution. Electric services are comprised of electric distribution and transmission services.

The Company's subsidiaries own and maintain electric and natural gas distribution networks. Distribution revenues are primarily from the sale of electricity, gas, and related services to retail customers. Distribution sales are regulated by the applicable state agencies, which are responsible for determining the prices and other terms of services as part of the ratemaking process. The arrangement where a utility provides a service to a customer in exchange for a price approved by a regulator is referred to as a tariff sales contract. Gas and electric distribution revenues are derived from the regulated sale and distribution of electricity and natural gas to residential, commercial, and industrial customers within the Company's service territory under the tariff rates. The tariff rates approved by the regulator are designed to recover the costs incurred by the Company for products and services provided along with a return on investment.

The performance obligation related to these sales is to provide electricity or natural gas to customers on demand. The electricity or natural gas supplied under the tariff represents a single performance obligation as it is a series of distinct goods or services that are substantially the same. The performance obligation is satisfied over time because the customer simultaneously receives and consumes the electricity or natural gas as the Company provides these services. The Company records revenues related to distribution sales based upon the approved tariff rate and the volume delivered to the customers, which corresponds with the amount the Company has the right to invoice.

Distribution revenue also includes estimated unbilled amounts, which represent the estimated amounts due from retail customers for electricity and natural gas provided to customers by the Company, but not yet billed. Unbilled revenues are determined based on estimated unbilled sales volumes for the respective customer classes and then applying the applicable tariff rate to those volumes. Actual amounts billed to customers when the meter readings occur, may be different from the estimated amounts.

Certain customers have the option to obtain electricity or natural gas from other suppliers. In those circumstances revenue is only recognized for providing delivery of the commodity to the customer.

Transmission services are provided as demanded by customers and represents a single performance obligation. The price for the services provided are based on the underlying tariff rates established by FERC related to both Niagara Mohawk and New York Independent System Operator ("NYISO"). The performance obligation is satisfied over time as the transmission services are provided by Niagara Mohawk. Niagara Mohawk records revenue related to transmission services based on the volumes delivered and the approved tariff rates, which corresponds with the amount Niagara Mohawk has the right to invoice, as it is entitled to compensation for the performance completed to date.

Generation revenue is derived from billings to LIPA for the electric generation capacity and, to the extent requested, energy from the Company's existing oil and gas-fired generating plants.

Off system sales: Represents direct sales of gas to participants in the wholesale natural gas marketplace, which occur after customers' demands are satisfied.

Other revenues from contracts with customers: Primarily relates to revenues at NGRD from the sale of renewable projects. NGRD recognizes revenue for projects sold when all performance obligations have been fulfilled and it is probable that a significant reversal in the amount of revenue recognized will not occur.

Revenue from regulatory mechanisms: The Company's regulated subsidiaries record revenues in accordance with accounting principles for rate-regulated operations for arrangements between the regulated subsidiaries and their respective regulators, which are not accounted for as contracts with customers. These include various deferral mechanisms such as capital trackers, energy efficiency programs, storm deferral, and other programs that also qualify as Alternative Revenue Programs ("ARPs"). ARPs enable the regulated subsidiaries to adjust rates in the future in response to past activities or completed events. The regulated subsidiaries' electric and gas distribution rates have revenue decoupling mechanisms ("RDM"), which allow for periodic adjustments to delivery rates as a result of the reconciliation between allowed revenue and billed revenue. The regulated subsidiaries also have other ARPs related to the achievement of certain objectives, demand side management initiatives, and certain other ratemaking mechanisms. Revenues from ARPs are recognized with a corresponding offset to a regulatory asset or liability account when the regulatory-specified events or conditions have been met, the amounts are determinable and probable of recovery (or payment) through future rate adjustments within 24-months from the end of the annual reporting period.

Other Revenue: Includes lease income and other transactions that are not considered contracts with customers. Lease income primarily includes electric generation revenue, which is derived from billings to LIPA for electric generation capacity and, to the extent requested, energy from the Company's existing oil and gas-fired generating plants.

4. REGULATORY ASSETS AND LIABILITIES

The Company records regulatory assets and liabilities that result from the ratemaking process. Regulatory deferrals are recorded by each legal entity as right of offset does not exist across the Company's regulated subsidiaries. The following table presents the regulatory assets and regulatory liabilities recorded on the consolidated balance sheets:

	March 31,	
	2021	2020
	(in millions of dollars)	
Regulatory assets		
Current:		
Derivative instruments	**$ 95**	$ 177
Gas cost adjustment mechanism	**130**	77
Rate adjustment mechanisms	**101**	155
Renewable energy certificates	**87**	72
Revenue decoupling mechanism	**45**	93
Other	**34**	33
Total	**492**	607
Non-current:		
Cost of removal	**97**	51
Environmental response costs	**2,428**	2,618
Net metering deferral	**191**	220
Postretirement benefits	**883**	2,004
Property taxes	**173**	130
Recovery of acquisition premium	**151**	159
Storm costs	**292**	334
Temperature control/interruptible sharing	**152**	152
Other	**602**	586
Total	**4,969**	6,254
Regulatory liabilities		
Current:		
Energy efficiency	**346**	410
Gas cost adjustment mechanism	**89**	110
Rate adjustment mechanisms	**20**	68
Revenue decoupling mechanism	**153**	178
Transmission service	**18**	62
Other	**44**	40
Total	**670**	868
Non-current:		
Carrying charges	**346**	292
Cost of removal	**1,512**	1,670
Environmental response costs	**139**	150
Postretirement benefits	**845**	144
Regulatory tax liability	**2,542**	2,795
Other	**1,284**	1,175
Total	**6,668**	6,226

As of March 31, 2021, other than $316 million of the regulatory assets summarized above ($232 million of Postretirement benefits, $54 million of Environmental response costs, and $30 million of Other costs), all regulatory assets earn a rate of return.

As of March 31, 2021, $223 million of allowances for earnings on shareholders' investment were capitalized for rate-making purposes, but not for US GAAP.

Carrying charges: The Company records carrying charges on regulatory balances for which cash expenditures have been made and are subject to recovery, or for which cash has been collected and is subject to refund. Carrying charges are not recorded on items for which expenditures have not yet been made.

Cost of removal: The regulatory asset represents cumulative removal amounts spent, but not yet collected, to dispose of property, plant and equipment, while the regulatory liability represents cumulative removal amounts collected but not yet spent. This liability is discharged as removal costs are incurred.

Derivative instruments: The Company evaluates open commodity derivative instruments for regulatory deferral by determining if they are probable of recovery from, or refund to, customers through future rates. Derivative instruments that qualify for recovery are recorded at fair value, with changes in fair value recorded as regulatory assets or regulatory liabilities in the period in which the change occurs.

Energy efficiency: Represents the difference between revenue billed to customers through the Company's energy efficiency charge and the costs of the Company's energy efficiency programs as approved by the state authorities.

Environmental response costs: The regulatory asset represents deferred costs associated with the Company's share of the estimated costs to investigate and perform certain remediation activities at former manufactured gas plant ("MGP") sites and related facilities. The Company believes future costs, beyond the expiration of current rate plans, will continue to be recovered through rates. The regulatory liability represents the excess of amounts received in rates over the Company's actual site investigation and remediation ("SIR") costs.

Gas costs adjustment: The Company is subject to rate adjustment mechanisms for commodity costs, whereby an asset or liability is recognized resulting from differences between billed revenues and the underlying cost of supply. These amounts will be refunded to, or recovered from, customers over the next year.

Net metering deferral: Net metering deferral reflects the recovery mechanism for costs associated with customer installed on-site generation facilities, including the costs of renewable generation credits. This surcharge provides the Company with a mechanism to recover such amounts.

Postretirement benefits: The regulatory asset balance represents the Company's unamortized, non-cash accrual of net pension actuarial gains and losses in addition to actual costs associated with the Company's pension plans in excess of amounts received in rates that are to be collected in future periods. The regulatory liability represents the Company's, unamortized, non-cash accrual of net PBOP actuarial gains and losses in addition to excess amounts received in rates over actual costs of the Company's PBOP plans that are to be recovered from or passed back to customers in future periods.

Property taxes: The property tax regulatory asset represents 85% of actual property and special franchise tax expenses above the rate allowance for future collection from the Brooklyn Union Gas Company and KeySpan Gas East Corporation ("New York Gas Companies") customers. The property tax regulatory liability (reported within 'Other non-current regulatory liabilities') represents the balance of property tax refunds received by the New York Gas Companies due to be refunded to customers.

Rate adjustment mechanisms: In addition to commodity costs, the Company is subject to a number of additional rate adjustment mechanisms whereby an asset or liability is recognized resulting from differences between actual revenues and the underlying cost being recovered or differences between actual revenues and targeted amounts as approved by the applicable state regulatory bodies.

Recovery of acquisition premium: Represents the unrecovered amount (plus related taxes) by which the purchase price paid exceeded net book value in the 1998 acquisition of Colonial Gas Company by Eastern Enterprises, Inc. Eastern Enterprises, Inc. was owned by KeySpan Corporation ("KeySpan") at the time of NGUSA's acquisition of KeySpan in 2007. In exchange for certain rate concessions and the achievement of certain merger savings targets, the DPU has allowed Boston Gas (as the sole surviving entity from the legal consolidation of Boston Gas and Colonial Gas Company during the year-ended March 31, 2020) to recover the acquisition premium in rates through August 2039.

Regulatory tax liability: Represents over-recovered federal and state deferred taxes of the Company primarily as a result of regulatory flow through accounting treatment, state income tax rate changes and excess federal deferred taxes as a result of the Tax Act.

Renewable energy certificates: Represents deferred costs associated with the Company's compliance obligations with Renewable Portfolio Standards ("RPS") in Rhode Island and Massachusetts. The RPS is legislation established to foster the development of new renewable energy sources. The regulatory asset will be recovered over the next year.

Revenue decoupling mechanism ("RDM"): As approved by the applicable state regulatory bodies, the Company has electric and gas RDMs which allow for an annual adjustment to the Company's delivery rates as a result of the reconciliation between allowed and billed revenues. Any difference is recorded as a regulatory asset or regulatory liability.

Storm costs: The Company is allowed to recover storm costs from retail delivery service customers. This balance reflects costs yet to be recovered. See Note 5, "Rate Matters," for additional information regarding the recovery of storm costs.

Temperature control/interruptible ("TC/IT") sharing: Under a previous rate agreement, the New York Gas Companies were subject to an annual price cap on interruptible and temperature control customers and was allowed to defer related amounts, subject to sharing with customers – 90% to customers and 10% to shareholders. This mechanism was discontinued under the current rate agreement. In conjunction with its 2019 rate case filing (see Note 5, "Rate Matters", for additional details), the New York Gas Companies proposed to combine this and other regulatory assets and liabilities into a single net deferral liability to offset the revenue requirement in the pending rate case to mitigate rate increases over the term of the rate plan.

Transmission service: Massachusetts Electric and Nantucket (the "Massachusetts Electric Companies") arrange transmission service on behalf of their customers and bill the costs of those services to customers, pursuant to the transmission service cost adjustment provision. Any over or under recoveries of these costs are passed on to customers receiving transmission service over the subsequent year.

5. RATE MATTERS

Niagara Mohawk

Electric and Gas Filing

On March 15, 2018, the NYPSC issued a final order approving the Joint Proposal ("NIMO-JP1") for a three-year rate for the period ending March 31, 2021. The NIMO-JP1 reflected the new federal tax law changes and provided a cumulative revenue requirement increase of $241 million and $61 million for the electric and gas business, respectively, based on a 9.0% return on equity and 48% common equity ratio. To promote rate stability and mitigate bill impacts to customers, the NIMO-JP1 provided a gradual transition to full cost-of-service rates by phasing in the delivery rate increases over the time of the rate plan.

As of March 31, 2018, resulting from the order, a new electric rate plan settlement credit of $45 million and a new gas rate plan settlement credit of $28 million were established. Niagara Mohawk applied $38 million of existing regulatory liabilities towards the creation of these credits.

Due to the impacts of COVID-19, Niagara Mohawk filed petitions to postpone for four months the electric and gas delivery rate increases that were scheduled to go into effect on April 1, 2020 and recover the annual authorized rate increase over the eight-month period August 1, 2020 through March 31, 2021. The petitions were approved by NYPSC on an emergency basis.

On July 31, 2020, Niagara Mohawk filed a rate case to increase its base electric and gas delivery revenues by $100 million and $42 million per year, respectively, beginning with the twelve-month period July 1, 2021 through June 30, 2022 (“Rate Year”). To facilitate a potential multi-year settlement, Niagara Mohawk submitted comprehensive financial information for two additional Data Years ending June 30, 2023 and June 30, 2024. The filings propose to invest approximately $3.5 billion across the Rate Year and Data Years and present a comprehensive framework to advance New York State’s energy goals outlined in the Climate Leadership and Community Protection Act. Niagara Mohawk filed Corrections and Updates on October 14, 2020, which requested rate increases of $103 million for electric delivery and $37 million for gas delivery. To facilitate settlement discussions by the parties, the NYPSC approved Niagara Mohawk’s extension of the suspension period in these proceedings, such that new rates would become effective March 1, 2022. This extension is subject to a make whole provision that would assure that Niagara Mohawk is restored to the same financial position it would have been in had there been no extension and new rates went into effect on July 1, 2021.

Outside of the rate filing on September 29, 2020, Niagara Mohawk filed a petition for approval to implement a COVID-19 Customer Assistance Program which deploys up to $50 million of deferred economic development and low-income funds to provide immediate COVID-19 relief to support our most economically vulnerable residential customers, as well as businesses that are struggling because of COVID-19 in Niagara Mohawk’s upstate NY territory. Niagara Mohawk anticipates NYPSC consideration of its proposal in the later part of fiscal year 2022 as part of the NYPSC’s Affordability and COVID-19 proceeding.

On November 20, 2020, the NYPSC approved Niagara Mohawk’s proposal for the deployment of Advanced Metering Infrastructure (“AMI”), also referred to as smart meters. The upstate NY Smart Meter program will provide our customers with real-time energy consumption data and tools to make clean energy choices and reduce costs. The approval assumes a six-year project deployment schedule (two years of back-office systems followed by four years of meter deployment) to begin in the second quarter of 2021.

On September 27, 2021, Niagara Mohawk, DPS Staff and other settlement parties filed a Joint Proposal (“NIMO-JP2”) for a three-year rate plan for Niagara Mohawk’s electric and gas businesses beginning July 1, 2021 and ending June 30, 2024. The highlights of the rate plan include: enhanced energy affordability programs and services for low and moderate income customers; initiatives to reduce methane emissions and deploy clean energy solutions, including electric vehicles, battery storage and energy efficiency and demand response programs, in support of New York’s Climate Leadership and Community Protection Act (“CLCPA”); support for deploying Advanced Metering Infrastructure; and funding for $3.3 billion in capital projects to improve safety, resiliency and reliability of our energy networks. If approved by the NYPSC, the proposed revenue increases would be 1.4% for electric operations and 1.8% for gas operations in Rate Year One and 1.9% for both electric and gas operations in Rate Year Two and Rate Year Three. In addition, the NIMO-JP2 also includes mechanisms that would allow Niagara Mohawk to extend the rate plan by nine months (“Stayout Period”), such that new rates would become effective April 1, 2025. To mitigate the potential bill impacts on customers, the settlement applies existing deferral credits of $146 million and $53 million for electric and gas customers, respectively over the term of the rate plan and Stayout Period. The settlement is based upon a 9% return on equity and a ratemaking capital structure reflecting a common equity component of 48%. The NIMO-JP2 includes earnings sharing mechanisms by which customers will share annual earnings in excess of a 9.5% calculated return on equity (“ROE”).

COVID-19 Affordability Programs

On June 11, 2020, the NYPSC opened a proceeding to investigate the impacts of COVID-19 on utilities’ customers, operations, finances and ability to provide safe and reliable service at just and reasonable rates. Niagara Mohawk along with the other New York State utilities are working closely with our regulators to develop approaches that support residential and commercial customers, utilities, clean energy developers, and other stakeholders, all of whom contribute to the State’s economic health. On January 20, 2021, the Department of Public Service (“DPS”) Staff issued a guidance letter regarding deferral treatment of incremental COVID-19 costs. The letter articulated two scenarios under which utilities could seek deferral of such costs – through change in law provisions contained in utilities’ existing rate plans or through a separate deferral petition. On February 4, 2021, the DPS issued a Whitepaper providing recommendations in both the proceeding for Energy Affordability for Low Income utility customers and the proceeding on the effects of COVID-19 on utility service.

On August 12, 2021 the NYPSC issued an order to adopt recommendations that aim to provide uniformity of energy affordability programs statewide via standardized practices and facilitate the ease of enrollment and customer participation. These modifications address; the identification of low-income customers through data sharing and file matching between utilities and the New York State Office of Temporary and Disability Assistance ("OTDA") and a customer self-certification mechanism; the stratification of low-income customers into additional tiers or usage groups to enhance bill discount targets; and, the identification of highest usage low-income customers for participation in energy efficiency programs. The NYPSC also adopted modifications to the bill discount calculation methodology to move further toward achieving the NYPSC's six percent energy burden goal. In the order, the NYPSC directs the joint utilities to update their respective Energy Affordability program bill discounts and file tariff modifications to become effective on a temporary basis, on September 1, 2021 to quickly provide relief to low income customers. Niagara Mohawk along with the other New York State utilities continue to evaluate the ongoing impact of COVID-19 on both customers and financial performance, and will continue to work with regulators to adjust the its affordability programs and implement the new protections for NY customers impacted by COVID-19.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient Accumulated Deferred Income Taxes ("ADIT"), related to the Tax Act. The order applies to public utility transmission providers with formula rates and stated rates and provides that public utilities with formula rates submit a compliance filing within 30 days of the effective date of the final rule or in the public utilities next annual informational filing following the issuance of the final rule. The compliance filing must demonstrate how the public utilities formula rate adjusts rate base via a Rate Adjustment mechanism, returns or recovers excess or deficient ADIT via an Income Tax Allowance Mechanism and must include an ADIT worksheet to support the excess or deficient ADIT calculation and amortization. The ADIT worksheet must be populated and will be a new and permanent worksheet. The mechanisms and worksheet must remain applicable to any future changes to tax rates that give rise to excess or deficient ADIT, including changes to state and local tax rates. Excess or deficient ADIT associated with future tax rate changes will automatically be included in a public utility's formula rate without the need for a Section 205 filing. The order does not prescribe a recovery/refund period for deficient/excess ADIT for unprotected excess/deficient ADIT that it not subject to the normalization requirements. FERC will evaluate proposed amortization periods on a case by case basis. Niagara Mohawk submitted a compliance filing with the June 15, 2020 annual informational filing proposing adjustments to the formula rate for the inclusion of the Rate Adjustment and Income Tax Allowance Mechanisms. The filing also included a populated and unpopulated proposed permanent ADIT worksheet. Niagara Mohawk requested leave to submit the proposed amortization period to be used in the Transmission Services Charge ("TSC") for unprotected excess or deficient ADIT associated with the Tax Act to the FERC in a subsequent compliance filing after the NYPSC approves an amortization period for unprotected excess or deficient ADIT in Niagara Mohawk's upcoming retail rate case.

On July 24, 2020, Niagara Mohawk filed an amended compliance filing including a proposed amortization period of 10 years for unprotected non-plant based deficient ADIT and the use of Average Rate Assumption Method ("ARAM") for protected and unprotected plant based excess ADIT. Niagara Mohawk estimates that approximately 9% of the transmission related portion of Niagara Mohawk's $704 million net electric excess ADIT balance will be returned to TSC wholesale customers. Niagara Mohawk received a deficiency letter in May 2021 in response to its amended compliance filing. On July 1, 2021, Niagara Mohawk made a filing at FERC addressing the issues from the FERC's deficiency letter, and is currently awaiting a response from the FERC. Niagara Mohawk does not anticipate the resolution of the compliance filing will have a material impact on Niagara Mohawk's results of operations, financial position, or cash flows.

New York Management Audit

Under the New York Public Service Law, the NYPSC is required to conduct periodic audits of various aspects of public utility activities. In 2018 the NYPSC initiated a comprehensive management and operations audit of our three New York regulated businesses. New York law requires periodic management audits of all utilities at least once every five years. National Grid's New York regulated business last underwent a New York management audit in 2014 and 2015, when the NYPSC audited our New York gas business.

In September 2018, the NYPSC selected Saleeby Consulting Group as the independent auditor to perform the audit. Niagara Mohawk was fully committed to the audit with the goal of demonstrating its full capabilities and receiving meaningful feedback that would drive useful recommendations to improve Niagara Mohawk's electric and gas operations for the benefit of its customers. The audit began in November 2018 and ran until August 2019, with a final report due in September 2019. Unexpectedly, in October 2019, the NYPSC employees advised us that they were terminating the contract with the auditors, effective immediately, because of concerns with the quality of the draft audit report by the auditor, with no fault whatsoever on the part of Niagara Mohawk. NYPSC staff completed the audit using their own internal staff and a final report was approved by the NYPSC and released to the public on November 19, 2020. Niagara Mohawk filed the required Management Audit Implementation Plan on December 21, 2020 and the Plan was subsequently approved by the NYPSC on May 13, 2021. Niagara Mohawk is required to implement the plan and file quarterly updates, with the first report due to the NYPSC on October 31, 2021.

The New York Gas Companies

Rate Case Filing

On April 30, 2019, the New York Gas Companies filed to increase revenues for the twelve-month ending March 31, 2021 ("Rate Year"). The New York Gas Companies filed Corrections and Updates to their original April 30, 2019 filing on July 3, 2019, which requested rate increases of $195 million for the Brooklyn Union Gas Company and $61 million for KeySpan Gas East Corporation. The filings propose to invest over $1.5 billion in the Rate Year to modernize the New York Gas Companies' gas infrastructure by replacing aging pipelines, implementing safety improvements, enhancing storm hardening and resiliency, and reducing methane emissions. The filings also include proposals to enhance gas safety and promote a sustainable and affordable path toward a low-carbon energy future. After a series of litigation hearings held February 10, 2020 through February 25, 2020 before administrative law judges, on June 5, 2020 the New York Gas Companies informed the NYPSC and the administrative law judges of the intention to resume settlement discussions. Settlement discussions resumed on June 15, 2020. To facilitate those discussions, the New York Gas Companies further requested an extension of the suspension period, such that new rates would now become effective September 1, 2021. Pursuant to the terms of the latest rate case, during the period following the expiration of the New York Gas Companies' rate plans, the New York Gas Companies are required to continue all the provisions of the DSNY-JP1, except as expressly stated otherwise, until changed by order of the NYPSC. The final approved rate order will include a make-whole provision that will assure the New York Gas Companies are restored to the same financial position they would have been in had new rates gone into effect on April 1, 2020.

On May 14, 2021, the Department of Public Service ("DPS") Staff and the New York Gas Companies filed a Joint Proposal ("DSNY-JP2") for a three-year rate plan beginning April 1, 2020 and ending March 31, 2023. The total revenue increase for Brooklyn Union Gas Company is: 0% in rate year one and 2% in rate years two and three. The revenue increase for KeySpan Gas East Corporation is: 0% in rate year one and 1.8% in rate years two and three. To mitigate the potential bill impacts on customers, the settlement applies nearly $100 million of credits over the three years of the rate plan. The revenue requirement under the DSNY-JP2 provides immediate benefit to ratepayers who would otherwise experience higher rates at a time when the economy is still in recovery from the COVID-19 pandemic. The DSNY-JP2 also addresses the goals of the CLCPA and includes provisions that promote energy efficiency, demand response, geothermal, and electrification options to meet customers' energy needs while minimizing the need for additional gas infrastructure. The settlement is based upon an 8.8% ROE and 48% common equity ratio and includes earnings sharing mechanism providing that customers will share earnings when the New York Gas Companies' ROE is in excess of 9.3%.

On August 12, 2021, the NYPSC approved and adopted the DSNY-JP2 and supporting schedules with limited additional requirements. The NYPSC stated in its approval that the agreed upon rate plans will result in sufficient mitigation of rate impacts on customers while preserving the New York Gas Companies' operational and financial stability; are consistent with the environmental, social and economic policies of the NYPSC and the State of New York; and fall within the range of potential litigated outcomes or otherwise provide benefits to ratepayers that could not have been achieved in a fully-litigated proceeding. The DSNY-JP2 contains a Make Whole Provision which is designed to ensure the New York Gas Companies are restored to the same financial position they would have been in had rates gone into effect on April 1, 2020. Based on our analysis, the impact of this provision for Rate Year One did not result in a material impact on the New York Gas Companies' financial position, results of operations or cash flows. The Company estimates the impact of DSNY-JP2 to result in a reduction of regulatory assets and liabilities of approximately $445 million and $453 million, respectively, and an increase in earnings of approximately $8 million.

Downstate Gas Moratorium

On May 15, 2019, the New York Gas Companies stopped fulfilling applications for new firm service connections, or requests for additional firm load from existing customers, in the affected areas of its service territory because the available firm gas supplies are insufficient to keep pace with forecast demand. On October 11, 2019, the NYPSC issued an "Order Instituting Proceeding and to Show Cause" that directed the New York Gas Companies to provide gas service to a subset of previously denied applicants and show cause why the New York Gas Companies should not be subject to financial penalties.

On November 24, 2019, the New York Gas Companies reached settlements resolving the Order to Show Cause relating to the downstate gas moratorium (the "Settlement Agreement"). The settlement was approved November 26, 2019 in a one Commissioner Order by the NYPSC. Specifically, the New York Gas Companies are lifting the moratorium for approximately two years and implementing $35 million in customer assistance, demand response, energy efficiency and other shareholder funded programs. The settlement also provides for the appointment of a monitor to oversee gas supply operations and compliance with the settlement.

On February 25, 2021, the DPS Staff and the New York Gas Companies entered into the Second Amendment to the Settlement Agreement. The purpose of the Second Amendment, approved by the NYPSC on April 15, 2021, is to repurpose the $20 million of shareholder funding designated to support clean energy projects under the original Settlement Agreement. This will be accomplished through the establishment of a deferral for the benefit of customers to offset the costs of the New York Gas Companies' NYPSC approved energy efficiency and demand response programs. On August 12, 2021, the NYPSC approved the New York Gas Companies' rate case which authorizes to use the $20 million settlement amount to offset costs of the New York Gas Companies' approved energy efficiency and demand response programs in the current rate plan.

The New York Gas Companies also agreed to develop a range of options to address the natural gas constraints facing the region, which were presented at a series of public meetings in the downstate New York service territory. These meetings were designed to facilitate a dialogue with customers, residents, advocates, business leaders and local elected officials on potential solutions. Following the public meetings, the New York Gas Companies published a report that summarized the public feedback and provided additional information and analysis on the various long-term natural gas supply options. The New York Gas Companies are now working with regulators, stakeholders, and customers to find long-term solutions to the gas supply constraints in the region.

Downstate Order to Show Cause

On November 15, 2018, the NYPSC issued an Order to Show Cause against the New York Gas Companies for violations of gas safety regulations designed to ensure underground gas pipelines are protected from corrosion. The New York Gas Companies filed a response to the allegations.

On July 12, 2019, the NYPSC initiated a proceeding requiring the New York Gas Companies to demonstrate why a penalty action should not be commenced for more than 1,600 alleged gas safety violations. The alleged violations concern the NYPSC's investigation of improper operator qualification and related issues following a 2016 anonymous letter alleging a contractor had facilitated employees cheating on operator qualification exams. The NYPSC also alleges violations for the New York Gas Companies' employees and other contractors' workers whose qualifications had lapsed.

On February 25, 2021, the DPS Staff and the New York Gas Companies entered into a settlement agreement resolving all issues arising out of the "Orders Instituting Proceeding and to Show Cause" dated July 2019 and November 2018 for alleged gas safety violations. The settlement agreement authorizes the New York Gas Companies to establish a deferral at shareholder expense for its portion of the settlement of $15 million and $6 million for the benefit of customers to offset the costs of Brooklyn Union Gas Company and KeySpan Gas East Corporation's approved energy efficiency and demand response programs respectively. The use of the settlement funds will be subject to separate approval by the NYPSC in the ongoing rate case filed by the New York Gas Companies. On March 18, 2021, the NYPSC approved the settlement agreement. On August 12, 2021, the NYPSC approved the New York Gas Companies' rate case which authorizes the New York Gas Companies to use the $15 million and $6 million settlement amount to offset costs of Brooklyn Union Gas Company and KeySpan Gas East Corporation's approved energy efficiency and demand response programs in the current rate plan respectively.

Tax Act

In response to the Tax Act, the NYPSC issued an order instituting proceeding under Case 17-M-0815 - proceeding on motion of the NYPSC on changes in law that may affect rates. This proceeding was instituted to solicit comments on the Tax Act's implications and places the utilities on notice of the NYPSC's intent to protect ratepayers' interest and to ensure that any cost reductions from the changes in federal income taxes are deferred for future ratepayer benefit. On August 9, 2018, the NYPSC issued an order in its generic proceeding considering the impacts of federal tax reform. NYPSC Staff had advocated that all New York utilities implement a sur-credit by October 1, 2018 that would reflect the immediate effects of the Tax Act and also return any deferred benefits to customers. In response, the New York Gas Companies filed a proposal to (i) delay any sur-credit to January 1 to offset scheduled rate increases and (ii) retain any deferred benefits, including accumulated deferred federal income taxes ("ADFIT"), for future rate moderation.

The NYPSC's order effectively approved all aspects of the New York Gas Companies' proposal. The NYPSC agreed that the New York Gas Companies should be allowed to defer both the pass back of calendar year 2018 tax savings and the amortization of excess ADFIT balances and use the benefits as a rate moderator when base rates are next revised in 2020/2021. Specifically, the NYPSC approved the New York Gas Companies' proposal to implement a sur-credit to reflect the lower tax rate effective January 1, 2019 to offset planned rate increases and retain the calendar year 2018 deferred amounts for future rate mitigation and/or to offset investments. Deferring the tax benefits until January 1, 2019 results in a deferred balance of $40 million and $31 million for Brooklyn Union Gas Company and KeySpan Gas East Corporation respectively.

New York Management Audit

Refer to "New York Management Audit" section under Niagara Mohawk.

COVID-19 Affordability Programs

Refer to "COVID-19 Affordability Programs" section under Niagara Mohawk.

NYPSC Investigation

On June 17, 2021, five former National Grid employees in the downstate New York facilities department were arrested on federal charges alleging fraud and bribery. It is National Grid's understanding that the investigation by the US Attorney's Office and FBI remains ongoing; National Grid is a victim of the alleged crimes and will continue to comply with the government's investigation. On June 23, 2021, based on the US Attorney's announcement, the NYPSC issued an order commencing a proceeding to examine certain programs and related capital and operations and maintenance ("O&M") expenditures of NGUSA and the New York Gas Companies. In compliance with the Order, National Grid submitted an initial report that includes, among other items, a description of all controls related to the capital and O&M contracting process and a listing of all contractor costs and open contract costs incurred by or on behalf of the facilities department for the period from 2013 through 2020. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, National Grid does not expect this matter will have a materially adverse effect on its results of operations, financial position or cash flows.

The Massachusetts Electric Companies

General Rate Case

On November 15, 2018, the Massachusetts Electric Company and its affiliate, Nantucket Electric, filed an application for new base distribution rates that became effective October 1, 2019. On September 30, 2019, and updated on October 11, 2019, the DPU approved for the Massachusetts Electric Company and Nantucket Electric an overall net increase in base distribution revenue of approximately $40 million based upon a 9.6% ROE, with a 53.49% equity, 46.43% long-term debt, and 0.08% preferred stock capital structure. The DPU approved a five-year performance-based ratemaking ("PBR") plan, which adjusts base distribution revenue annually based on a pre-determined formula. With the approval of the PBR plan, Massachusetts Electric Company and Nantucket Electric agreed not to file for an effective change in base distribution rates outside of the operation of the PBR plan for five years, and the Capital Investment Recovery Mechanism ("CIRM") will be discontinued after a transition period that concludes with nine months of recovery of vintage year 2019 investments through September 30, 2021, at which point the recovery of capital investments will fully transition to the PBR plan. The approved net increase includes an increase in annual funding of the storm fund from $11 million to $16 million per year and an extension of the storm fund replenishment factor through November 2023.

PBR Plan Filing

On June 15, 2020, the Massachusetts Electric Company and Nantucket Electric filed the first annual PBR plan filing for rates effective October 1, 2020. The PBR plan filing adjusts base distribution rates pursuant to a revenue cap formula, provides a credit to customers for any customer share of excess earnings pursuant to the earnings sharing mechanism, and recovers from or credits customers for the impact of costs in excess of a threshold associated with exogenous events, including storms having incremental costs in excess of $30 million. The result of the revenue cap formula was a proposed increase to base distribution revenue of 3.237%, or $26 million. On September 23, 2020, the DPU approved the Massachusetts Electric Company and Nantucket Electric's proposed PBR and Capital Expenditure Adjustment filing, effective October 1, 2020, subject to further investigation and reconciliation in the second phase of the proceeding. On February 25, 2021, the DPU provided its final approval of the Massachusetts Electric Company and Nantucket Electric's proposed PBR and Capital Expenditure Adjustment filing.

On June 15, 2021, the Massachusetts Electric Company and Nantucket Electric filed the next annual PBR plan filing for rates effective October 1, 2021. The result of the revenue cap formula is a proposed increase to base distribution revenue of 2.71%, or $23 million. The Massachusetts Electric Company and Nantucket Electric cannot predict the outcome of this request.

Recovery of Transmission Costs

The Massachusetts Electric Company's transmission facilities are operated in combination with the transmission facilities of its New England affiliates, Narragansett and NEP, as a single integrated system, with NEP designated as the combined operator. NEP collects the costs of the combined transmission asset pool, including a return on those facilities, under NEP's Tariff No. 1 from the Independent System Operator – New England ("ISO-NE"). The ISO-NE allocates these costs among transmission customers in New England, in accordance with the ISO-NE Open Access Transmission Tariff ("ISO-NE OATT").

According to the FERC's orders, the Massachusetts Electric Company is compensated for its actual monthly transmission costs, with its authorized maximum ROE of 11.74% on its transmission assets. The amounts remitted by NEP to the Massachusetts Electric Company for the years ended March 31, 2021 and 2020 were $23 million and $20 million, respectively, which are reflected as credits within operations and maintenance expenses in the consolidated statements of operations and comprehensive income.

In November 2019, the FERC issued an order in the Midcontinent Independent System Operator ("MISO") ROE complaint dockets, changing the way it arrives at a just and reasonable ROE. The effects of these changes resulted in drastically reduced base ROEs in the MISO region. In the MISO order, the FERC made statements that it is setting new ROE policy nationwide. In December 2019, the New England Transmission Owners ("NETO") filed a supplemental brief in the New England ROE complaint dockets, showing the FERC the detrimental effects on New England if the MISO order was applied to New England.

In the brief, the NETOs asked the FERC to reopen the record in New England so that the NETOs can submit more testimony. Other stakeholders had an opportunity to reply to the NETOs' supplemental brief by January 21, 2020 and did so, arguing that the NETOs' request should be denied, and that the record in New England should not be reopened.

On January 21, 2020, the FERC issued an order granting a rehearing for further consideration to give the FERC more time to act on the substantive issues of the MISO ROE proceedings. On May 21, 2020, the FERC revised its methodology to determine MISO transmission owner ROEs. The FERC's November 2019 order proposed to create "zones of reasonableness" based on averages of two (rather than four) models to judge whether ROEs are just and reasonable. ROEs were reduced from 10.32% to 9.88% when the FERC applied the revised methodology in two MISO ROE complaints. The May 2020 order relies on three models to estimate ROEs. The application of this new methodology increased ROEs in the MISO complaints from 9.88% to 10.02%. The Massachusetts Electric Company does not believe the outcomes of these complaints will have a material impact on the Massachusetts Electric Company's financial condition, results of operations, or cash flows.

Tax Act

In February 2018, the DPU opened an investigation to examine the effect of the Tax Act on the rates of the investor-owned utilities in Massachusetts as of January 1, 2018 and directed the utilities to account for any revenues associated with the difference between the previous and current corporate income tax rates and establish a regulatory liability for excess recovery in rates of ADIT. On December 21, 2018, the DPU issued an order requiring all utilities to begin crediting in rates the amortization of excess deferred federal income taxes, to the extent such amortization was not already included in base distribution rates, through the combination of factors associated with certain reconciling mechanisms and a separate factor for the amortization of the remaining amounts.

In February 2019, the DPU issued an order finding that the Massachusetts utilities were not required to refund tax savings previously accrued from January 1, 2018 through June 30, 2018, as a result of the federal income tax rate reduction.

On March 7, 2019, the Massachusetts Attorney General's ("AG") Office filed a motion for clarification and reconsideration, requesting that the DPU provide additional clarity regarding its February 2019 ruling, and reconsider its determination to allow utilities to keep the federal tax savings accrued from January 1, 2018 through June 30, 2018. To date, the DPU has not acted on or given any indication that it intends to act on the AG's motion.

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act. On June 29, 2020, NEP, on behalf of the Massachusetts Electric Company and Nantucket Electric, submitted a compliance filing to address the application of Order 864 in NEP's Tariff No. 1. The filing proposes changes to various revenue requirement calculations in the tariff for the inclusion of the Rate Adjustment and Income Tax Allowance mechanisms. The filing also includes the populated permanent ADIT worksheet, which will be provided with the issuance of final bills pursuant to the provisions of the tariff. NEP has proposed for the Massachusetts Electric Company and Nantucket Electric to amortize transmission-related, protected property-related excess or deficient ADIT associated with the 2017 Tax Act using the ARAM, and a 21-year amortization period for unprotected property-related excess or deficient balances. Other unprotected excess or deficient ADIT is proposed to be amortized over five years, consistent with the time period approved in the DPU docket addressing the Tax Act.

Grid Modernization Plan

On August 19, 2015, the Massachusetts Electric Company, together with Nantucket Electric, filed their first proposed grid modernization plan ("GMP") with the DPU, with four different proposed investment scenarios. On May 10, 2018, the DPU issued an order in this proceeding. The order approved $82 million in grid-facing investments over three years in: (1) conservation voltage reduction and volt/volt-amps reactive optimization; (2) advanced distribution automation; (3) feeder monitors; (4) communications and information / operational technologies; and (5) advanced distribution management / distribution supervisory control and data acquisition. The DPU allowed recovery of both operation and maintenance expenses and capital costs through a reconciling mechanism, and in the future will consider GMPs in separate dockets (i.e., not through rate cases). The DPU did not approve any customer-facing (i.e., advanced metering infrastructure) investments; the DPU will address these in a further investigation to see if there are ways to achieve cost-effective deployment of advanced metering functionality ("AMF"). The DPU found there needs to be widespread adoption of dynamic pricing for AMF to be successful, and the DPU needs to address how to facilitate this first. The DPU also refined its grid modernization objectives to place additional focus on improved access to the distribution system planning process. The Massachusetts Electric Company, together with Nantucket Electric have filed annual reports and cost recovery filings with the DPU for its GMP in 2019 and 2020. The Massachusetts Electric Company, together with Nantucket Electric filed its next proposed four-year GMP (for calendar years 2022–2025) on July 1, 2021. Additionally, on July 2, 2020, the DPU opened the next phase of its grid modernization investigation, in which it is investigating the potential deployment of AMF for electric vehicle ("EV") customers. So far, as part of this investigation, the DPU has received initial comments and held four technical sessions.

Operational and Management Audit

On September 30, 2019, in its decision regarding the Massachusetts Electric Company and Nantucket Electric's most recent request for a change in base distribution rates, the DPU stated that pursuant to its supervisory authority, it would require a comprehensive independent management audit of the Massachusetts Electric Company and Nantucket Electric, including a review of its relationship with National Grid USA Service Company. On November 25, 2019, the DPU formally opened the investigation to undertake an independent audit. The draft audit report was provided to the Massachusetts Electric Company and Nantucket Electric on March 1, 2021 for review and factual corrections, and the final report was submitted to the DPU on March 29, 2021. On April 30, 2021, the Massachusetts Electric Company and Nantucket Electric filed a comprehensive response to the audit report, formally adopting the findings and recommendations, with certain modifications, for the DPU's consideration. On June 30, 2021, the AG's office filed written comments in response to the final audit report. The Massachusetts Electric Company and Nantucket Electric and the independent auditor filed reply comments to the AG on July 21, 2021. This matter is currently pending before the DPU.

COVID-19 Moratorium on Utility Shut Offs

Starting with the first set of orders dated March 24, 2020, the Chairman of the DPU issued a series of orders in response to the Massachusetts Governor's declaration of a state of emergency due to the COVID-19 pandemic. In the first set of orders, the DPU prohibited the Massachusetts utilities from terminating service to any customer, including residential and commercial and industrial ("C&I") customers, for non-payment of utility bills until the state-of-emergency is lifted. Since that time, the state-of-emergency has been extended several times. On July 29, 2020, the DPU issued an order lifting the moratorium for C&I customers effective September 1, 2020. On September 10, 2020 (and renewed on October 23, 2020), the DPU extended the shut-off moratorium for residential customers until November 16, 2020 and prohibited utility companies from issuing communications prior to October 15, 2020 to any residential customers threatening the shut-off of utility service for failure to pay their bills. On November 18, 2020, the shut-off moratorium for residential customers was extended through April 1, 2021, and it was further extended under the eighth set of orders until July 1, 2021. Effective July 1, 2021, the Massachusetts Electric Company has recommenced normal collections activities, which includes issuing notices of amounts in arrears and alerting customers that their service is subject to disconnection for non-payment.

On May 11, 2020, the DPU opened an inquiry into establishing policies and practices regarding customer assistance and ratemaking measures for electric and gas companies in response to the effects of the COVID-19 pandemic, and established a Customer Assistance and Ratemaking Working Group ("the Working Group") to develop appropriate policies and practices for the resumption of collections activities and to address ratemaking issues facing utilities. The Working Group's first report on customer assistance issues contained a four-phased plan for customer communications and outreach, which was approved by the DPU on June 26, 2020. The highlights of the Customer Assistance Report of the Working Group filed on May 29, 2020 and approved on July 31, 2020 are as follows:

- Extended deferred payment arrangements - up to 12 months for residential and small C&I customers, with the ability to extend to 18 months for unique circumstances; up to six months for large C&I customers, with the terms to be determined on a case-by-case basis.

- Waiver of late fees for C&I customers (not applicable to residential customers).

- Revisions to existing residential Arrearage Management Plans ("AMPs") (to provide more flexible enrollment terms and an increase in arrearages forgiven from $4,000 to $12,000 on a temporary basis related to COVID-19). In the Massachusetts distribution companies' 2021 AMP filings, submitted on February 26, 2021, the distribution companies extended the terms of the COVID-19 AMP for the 2021 program year, but reserved the right to revert to the terms of their pre-COVID AMPs (e.g. lower arrearage forgiveness amounts) if financial circumstances for customers improved.

- Established a COVID-19 small C&I Arrearage Forgiveness Program ("AFP") to be in place through December 31, 2020. The small C&I AFP has since been extended through September 30, 2021.

Consistent with the approved customer outreach plan, the Massachusetts Electric Company and Nantucket Electric began notifying affected C&I customers of the resumption of collections and shutoff activities in August 2020, with terminations commencing during Fall 2020, and, as noted above, with the end of the residential moratorium on July 1, 2021, notifications to residential customers related to the possibility of terminations have resumed. The Massachusetts Electric Company and Nantucket Electric still continue to work collaboratively with the DPU and other Massachusetts local distribution companies through the Working Group process to address COVID-19 related customer outreach issues.

On December 31, 2020, the DPU approved the following implementation items related to the ratemaking treatment of the COVID-19 customer assistance programs on which the parties had reached consensus: (1) the distribution companies should be allowed to record, defer and track their bad debt and other COVID related expenses; (2) cost recovery should be limited to the incremental costs incurred; and (3) certain costs must be extraordinary to qualify for recovery. However, the DPU decided that the contested issues, including the extent to which the distribution companies will be allowed to recover their COVID-19 costs, should be fully adjudicated in a new docket, D.P.U. 20-91. On March 1, 2021, the distribution companies filed their initial testimony in D.P.U. 20-91, which was further supplemented on April 30, 2021, on the following contested issues: (1) whether the distribution companies with PBR plans, including the Massachusetts Electric Company and Nantucket Electric, should be permitted to recover incremental bad debt costs and COVID-19 expenses; and (2) whether the distribution companies and their shareholders should absorb some losses associated with the pandemic and resulting economic downturn (the AG's position is that the distribution companies should only recover 50% of their COVID-19 costs). On March 8, 2021, the Massachusetts Electric Company and Nantucket Electric also submitted a proposal in D.P.U. 20-91 to offer residential customers a fee-free credit/debit card payment option that will allow customers to pay their bills electronically without an upfront transaction fee. Discovery in the proceeding is ongoing.

Massachusetts Petition for Waiver of Jurisdiction Regarding the Rhode Island Sale

On March 17, 2021, NGUSA announced the sale of its Rhode Island business to PPL Energy Holdings, LLC. On May 3, 2021, PPL Energy Holdings, LLC assigned its right to acquire Narragansett to its wholly owned subsidiary, PPL Rhode Island Holdings, LLC ("PPL Rhode Island"), such that upon closing, PPL Rhode Island will own 100 percent of the outstanding shares of common stock in Narragansett. On May 4, 2021, NGUSA filed a petition with the DPU for a waiver of jurisdiction under G.L. c. 164, § 96(c), based on a finding that the sale of Narragansett will have no adverse impacts on any electric or gas distribution company held by NGUSA that is subject to the DPU's jurisdiction, as applicable, or the customers of any such electric or gas company. On July 16, 2021, the DPU issued an order approving NGUSA's request for a waiver of Section 96 regarding the sale of Narragansett.

The Boston Gas Company

General Rate Case

On November 13, 2020, the Boston Gas Company filed a rate case with the DPU, including a request for approval of a PBR Plan and related proposals. The Boston Gas Company requested that the DPU approve new distribution rates to increase distribution revenues by $221 million, including the transfer of $82 million of recovery of the Boston Gas Company's Gas System Enhancement Program ("GSEP") investments completed through March 31, 2020, from the GSEP factors to base distribution rates, with new rates to be effective October 1, 2021. The actual net revenue deficiency calculated by the Boston Gas Company for distribution rates is $139 million, or an incremental increase in distribution revenue of 18.1%. The Boston Gas Company's last rate case was filed in 2017.

On July 16, 2021, in response to allegations that five former New York-based National Grid employees accepted bribes and kickbacks from contractors, the DPU issued an interlocutory order to reopen the rate case record. This allowed the Massachusetts Attorney General to submit an additional discovery question related to these allegations. The Boston Gas Company responded to this discovery on July 30, 2021, with supplemental briefs by both the Massachusetts Attorney General and the Boston Gas Company filed on August 6, 2021. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, National Grid does not expect this matter will have a materially adverse effect on its results of operations, financial position or cash flows.

Tax Act

Refer to “Tax Act” section under The Massachusetts Electric Companies.

COVID-19 Moratorium on Utility Shut Offs

Starting with the first set of orders dated March 24, 2020, the Chairman of the DPU issued a series of orders in response to the Massachusetts Governor’s declaration of a state of emergency due to COVID-19 pandemic (refer to “COVID-19 Moratorium on Utility Shut Offs” section under The Massachusetts Electric Companies).

Gas System Enhancement Plan (GSEP)

On April 30, 2020, the DPU approved recovery of approximately $85 million in revenue requirements, related to approximately $283 million of anticipated investments in 2020 under an accelerated pipe replacement program, through GSEP. The rates effective from May 2020 to April 2021. The DPU also approved the Boston Gas Company’s request to extend the timeline for replacement of leak-prone pipe in the former Colonial Gas Company service territory by nine years, moving the end date of the program from the year 2025 to 2034. The DPU also allowed for recovery of incremental costs of the repair of Grade 3 Significant Environmental Impact (“G3SEI”) leaks, based on new requirements for the repair of G3SEI leaks.

Investigation into the Future of Natural Gas

On October 29, 2020, the DPU opened an investigation into the role of local gas distribution companies (“LDCs”) in achieving the Commonwealth's 2050 climate goals. The investigation will explore strategies to meet the Commonwealth's greenhouse gas emissions reductions targets while ensuring safe, reliable, and cost-effective natural gas service, and potentially recasting the role of gas companies in the Commonwealth. The LDCs are required to jointly engage an independent consultant to review the Commonwealth’s recently released 2050 Decarbonization Roadmap Study and Interim Clean Energy Climate Plan identifying potential pathways to achieve the state’s objectives, identify any additional pathways and prepare LDC-specific proposals for achieving the state’s objectives. The report and LDC-specific proposals are due to the DPU on March 1, 2022, with a status update filed on September 1, 2021.

Massachusetts Petition for Waiver of Jurisdiction Regarding the Rhode Island Sale

Refer to “Massachusetts Petition for Waiver of Jurisdiction Regarding the Rhode Island Sale” section under The Massachusetts Electric Companies.

NEP

Stranded Cost Recovery

Under the settlement agreements approved by state commissions and the FERC, NEP is permitted to recover stranded costs (those costs associated with its former generating investments (nuclear and non-nuclear) and related contractual commitments that were not recovered through the sale of those investments). NEP earns a ROE related to stranded cost recovery consisting of nuclear-related investments. In Massachusetts and Rhode Island, the current ROEs are 9.2% and

10.46%, respectively. NEP will recover its remaining non-nuclear stranded costs until the costs associated with its decommissioned nuclear units cease.

Recovery of Transmission Costs

Transmission revenues are based on a formula rate that recovers NEP's actual costs plus a return on investment. Approximately 74% of NEP's transmission facilities are included under regional network service ("RNS") rates. NEP earns an additional 0.5% ROE incentive adder on RNS-related transmission facilities approved under the Regional Transmission Organization's ("RTO") Regional System Plan and placed in service on or before December 31, 2008. It also earns a 1.25% ROE incentive on its portion of New England East-West Solution ("NEEWS") (see the "New England East-West Solution" section).

NEP's transmission rates applicable to transmission service through October 15, 2014 reflected a base ROE of 11.14% applicable to NEP's transmission facilities, plus an additional 0.5% RTO participation adder applicable to transmission facilities included under the RNS rate. On October 16, 2014, the FERC issued an order, Opinion No. 531-A, reducing the base ROE applicable to transmission assets from 11.14% to 10.57% effective as of the date of the order and establishing a maximum ROE of 11.74%. On March 3, 2015, the FERC issued an Order on Rehearing, Opinion No. 531-B, affirming the 10.57% base ROE and clarifying that the 11.74% maximum ROE applies to all individual transmission projects with ROE incentives previously granted by the FERC. On April 14, 2017, the U.S. Court of Appeals for the D.C. Circuit (Court of Appeals) vacated and remanded FERC's Opinion No. 531 (and successor orders), through which the FERC had lowered the NETOs return on equity from 11.14% to 10.57% and capped the total incentives at 11.74%.

On October 16, 2018, the FERC issued an order on all four of NEP's ROE complaints (see the "FERC ROE Complaints" section in Note 15, "Commitments and Contingencies") describing how it intends to address the issues that were remanded by the Court. The FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable and, if so, how to calculate a replacement ROE. The FERC stated that these calculations were merely preliminary and asked the parties to the NE Complaint cases to brief FERC and check the numbers. NEP along with other NETOs filed a brief supporting FERC's new methodology and confirming the illustrative numbers that FERC arrived at in the October 2018 order containing a 10.41% base ROE. FERC has not issued a final order on the briefs submitted by NEP and the base ROE in NE remains at a 10.57%.

On November 21, 2019, the FERC issued an order on the Midcontinent ISO transmission owners ("MISO") ROE complaint docket addressing transmission ROEs. In that order, the FERC adopted a new methodology for determining base ROEs for the MISO and expressed that it was setting new ROE policies nationwide, which differed significantly from the methodology and framework set forth in its October 16, 2018 FERC order on the NETOs' ROE dockets. On December 23, 2019, the NETOs filed a Supplemental Paper Hearing Brief and a Motion to supplement the record in the NETO ROE dockets to respond to the new methodology proposed in the MISO order. There is uncertainty to whether the order is applicable to the NETOs' cases and if so, would have a negative effect on NEP's base ROE. On January 21, 2020, the FERC issued an order granting rehearing for further consideration to give the FERC more time to act on the substantive issues of the MISO ROE proceedings.

On May 21, 2020, the FERC issued a revised order on the MISO ROE complaint docket addressing the substantive issues identified with the November 21, 2019 order. The November 19, 2019 order proposed the application of the average of two models to judge whether ROEs are just and reasonable which resulted in a reduced ROE of 9.88%, from 10.32%, when the proposed methodology is applied to the two MISO ROE complaints. The May 2020 order proposes the average of three models to judge whether ROEs are just and reasonable. When applied to the two MISO ROE complaints the revised methodology using the average of three models resulted in a base ROE of 10.02%, an increase from the methodology proposed in the November 19, 2019 order. In November 2020, FERC issued an order largely affirming the May 21, 2020 order and dismissing rehearings.

The FERC orders on the MISO ROE complaint proceedings, and the proposed revised ROE methodology, are specific to MISO however the FERC could order the revised methodology be applied to all transmission companies including our own ROE complaint proceedings. On May 12, 2020, NEP filed jointly with other NETOs supplemental arguments in the ROE Notice of Inquiry ("NOI") docket, which was commenced on March 21, 2019 and to which NEP previously responded, addressing concerns with ROE policy making and the methodologies proposed by the FERC in the MISO ROE compliant proceedings.

From NEP's perspective, the May 21, 2020 FERC order on the MISO ROE complaint proceedings represents an improvement from the November 19, 2019 order but it does not address all the arguments filed jointly by NEP and the NETOs.

As of January 2021, the FERC has a full complement of commissioners and has the ability to apply the MISO orders to the NE Complaint proceedings at any time but has not done so as of the date of these financial statements. Until the FERC issues a final decision on NEP's own ROE complaints or an order applying the revised ROE methodology proposed in the MISO orders to all transmission companies, there is significant uncertainty, and, at this time, NEP does not know the impact to its current base ROE.

Transmission Incentive Policy Inquiry

On March 21, 2019, the FERC announced a NOI seeking comments on possible improvements to its electric transmission incentives policy to ensure that it appropriately encourages the development of the infrastructure needed to ensure grid reliability and reduce congestion to reduce the cost of power for consumers. NEP filed comments in the NOI docket on June 26, 2019 and filed reply comments on August 26, 2019.

On March 19, 2020, the FERC issued a Notice of Proposed Rulemaking ("NOPR"). In the NOPR, the FERC proposes to shift the test for transmission incentives from risks and challenges to an approach based on benefits to customers. The NOPR also proposes to: 1) Increase the incentives for joining and remaining a member of a Regional Transmission Organization, an Independent System Operator or other FERC-approved transmission organization from 50 basis points to 100 basis points; 2) Provide 50 basis point to transmission projects that meet a pre-construction benefit-to-cost ratio in the top 25% of projects examined over a sample period and an additional 50 basis points for projects that meet a post-construction benefit-to-cost ratio in the top 10% percent of projects over the same sample period; 3) Provide 50 basis points for projects that demonstrate reliability benefits by providing quantitative analysis and 4) Offer a 100 basis point incentive for transmission technologies that enhance reliability, efficiency, and capacity as well as improve the operation of new or existing transmission facilities. The NOPR also proposes a 250 basis point cap on total ROE incentives rather than limitation to the zone of reasonableness. Comments are requested within 90 days of publication in the Federal Register after which, at some point, the FERC will issue a final rule. NEP filed comments in response to the NOPR on July 1, 2020.

On April 15, 2021, the FERC issued a Supplemental Notice of Proposed Rulemaking (the "Supplemental NOPR") reversing its proposal in the March 19, 2020 NOPR to increase the incentives for joining and remaining a member of a Regional Transmission Organization, an Independent System Operator or other FERC-approved transmission organization from 50 basis points to 100 basis points. In the Supplemental NOPR, the FERC proposed that the incentive remain at 50 basis points and that the 50-basis-point increase in ROE be available for only the first three years after the transmitting utility transfers operational control of its facilities to an RTO/ISO. The FERC also stated that the statutory language actually only requires incentives to a utility that joins an RTO/ISO but not for remaining in an RTO/ISO in perpetuity. Comments on the Supplemental NOPR are currently due on May 26, 2021 but parties have asked for a 30-day extension to June 25, 2021. The FERC has granted the extension request. NEP filed joint comments on June 25, 2021 with other NETOs opposing the Supplemental NOPR.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act (refer to "Tax Act" section under Niagara Mohawk). FERC will evaluate proposed amortization periods on a case by case basis.

On July 30, 2020, NEP, along with the NETOs, submitted a compliance filing to address the application of Order 864 in RNS and local network service ("LNS") rates. In the compliance filing, NEP has proposed to amortize protected and unprotected property related excess ADIT associated with the 2017 Tax Act using the ARAM and a 10-year amortization period on unprotected other excess or deficient balances. An effective date of January 1, 2021 was requested in order to align with the effective date that the NETOs had proposed for the new formula rate templates associated with the settlement filing in the FERC 206 Proceeding on Rate Transparency ("Settled Formula Rate").

On December 28, 2020, the FERC issued the settlement agreement order approving the settlement filing in the FERC 206 Proceeding on Rate Transparency. The FERC's approval order was issued after November 1, 2020, and under the terms of the settlement agreement, the effective date of the new formula rate templates will be January 1, 2022.Given that the Settled Formula Rate will become effective January 1, 2022, the NETOs submitted a supplemental compliance filing on February 12, 2021 to propose tariff changes to the currently effective version of Attachment F to the ISO-NE OATT in order to comply with Order No. 864 for the period January 1, 2020 through December 31, 2021.

On March 1, 2021, ISO-NE, on behalf of NEP, submitted a supplemental compliance filing to supplement the July 30 compliance filing with respect to LNS under Schedule 21-NEP to the ISO-NE OATT. As with the RNS filing, NEP proposed that the compliance revisions to Schedule 21-NEP submitted in the LNS filing be in effect for an interim period from January 1, 2020, through December 31, 2021. For the period commencing January 1, 2022, compliance with Order No. 864 for LNS provided by NEP will be governed by the compliance revisions to the ISO-NE OATT submitted by NEP and the other NETOs in the FERC 206 Proceeding on Rate Transparency. NEP has proposed the same amortization method and periods for protected and unprotected balances as proposed in the initial filing.

In compliance with Order 864, NEP has also submitted additional compliance filings to amend various service agreements and contracts to include the Rate Adjustment and Income Tax Allowance mechanisms as well as the new permanent ADIT worksheet. The FERC has not yet acted on any of these compliance filings.

NEP estimates that the net excess ADIT balance associated with the TCJA of $295 million will result in an annual reduction in revenue requirement of $1 million.

New England East-West Solution ("NEEWS") Project

In September 2008, NEP, its affiliate Narragansett, and Northeast Utilities jointly filed an application with the FERC to recover financial incentives for the NEEWS project, pursuant to the FERC's Transmission Pricing Policy Order No. 679. NEEWS consists of a series of inter-related transmission upgrades identified in the New England Regional System Plan and is being undertaken to address a number of reliability problems in Connecticut, Massachusetts, and Rhode Island. Effective November 18, 2008, the FERC granted (1) an incentive ROE of 12.89% (125 basis points above the approved base ROE of 11.64% including the RTO participation adder), (2) 100% construction work in progress in rate base, and (3) recovery of plant abandoned for reasons beyond the companies' control. As discussed in the preceding section, effective October 16, 2014, the FERC issued a series of orders establishing a maximum ROE of 11.74% that effectively caps the NEEWS incentive ROE at that level. The NEEWS upgrades were placed in service in December 2015.

Narragansett

General Rate Case

On August 24, 2018 and pursuant to Report and Order No. 23823 issued May 5, 2020, the Rhode Island Public Utilities Commission ("RIPUC") approved the terms of an Amended Settlement Agreement ("ASA"). The ASA reflects an allowed ROE rate of 9.275% based on a common equity ratio of approximately 51%. We are currently in year three of the multi-year rate plan. On June 30, 2021, the Rhode Island Division of Public Utilities and Carriers ("Division") consented to an extension of the term of the Rate Plan such that Narragansett is not required to file the next rate case so that new rates take effect no later than September 1, 2022. The ASA will remain in effect and Narragansett will continue to operate under the current Rate Plan until a new Rate Plan is approved by the RIPUC. Narragansett filed a copy of the Division consent letter with the RIPUC on July 15, 2021. Base distribution rates will remain at the existing Rate Year 3 levels until the next base rate case.

The ASA includes an Electric Transportation Initiative (the ET Initiative or Program) to facilitate the growth of EV adoption and scaling of the market for EV charging equipment to advance Rhode Island's zero emission vehicles and greenhouse gas emissions policy goals. The ET Initiative includes the following five components: (i) Off-Peak Charging Rebate Pilot, (ii) Charging Station Demonstration Program, (iii) Discount Pilot for Direct Current Fast Charging ("DCFC") Station Accounts, (iv) Fleet Advisory Services, and (v) Electric Transportation Initiative Evaluation. As of the end of Rate Year 2, the Charging Station Demonstration Program achieved 72% of ET Initiative targets for Level 2 ports and 7% of the target for DCFC ports. The ASA

also includes two energy storage demonstration projects because storage is critical for achieving Rhode Island's clean energy future as it provides the ability to optimize system performance over time and allows intermittent renewable resources to make a larger contribution to overall generation; both projects are on track for timely completion.
The ASA also introduces a new incentive-only performance incentive for System Efficiency: Annual Megawatt ("MW") Capacity Savings, with maximum earnings ranging from approximately $0.4 million in 2019 to $0.9 million in 2021. In addition, the ASA identifies several additional metrics for tracking and reporting purposes only.

Recovery of Transmission Costs

Narragansett's transmission facilities are operated in combination with the transmission facilities of its New England affiliates, Massachusetts Electric Company and Nantucket Electric and NEP, as a single integrated system with NEP designated as the combined operator (refer to "Recovery of Transmission Costs" section under The Massachusetts Electric Companies). The amounts remitted by NEP to Narragansett Electric Company for the years ended March 31, 2021 and 2020 were $160 million and $142 million, respectively, which are eliminated as operating revenues and operations and maintenance expenses within the consolidated statement of operations and comprehensive income.

On October 16, 2014, the FERC issued an order, Opinion No. 531-A, resetting the base ROE applicable to transmission assets under the ISO-NE OATT (refer to "Recovery of Transmission Costs" section under NEP).

On October 16, 2018, the FERC issued an order on all four complaints describing how it intends to address the issues that were remanded by the Court (refer to "Recovery of Transmission Costs" section under NEP). FERC has not issued a final order on our briefs and the base ROE in NE remains at a 10.57%. In November 2019, FERC issued an order in the Midcontinent Independent System Operator ("MISO") ROE complaint dockets changing the way it arrives at a just and reasonable ROE. The effects of these changes result in drastically reduced base ROEs in the MISO region. In that MISO order, FERC made statements that it is setting new ROE policy nationwide. In December 2019, the NETOs filed a supplemental brief in the NE ROE complaint dockets showing FERC the detrimental effects on NE if the MISO order were applied to NE. In that brief, the NETOs ask FERC to reopen the record in NE so that we can submit more testimony. Other stakeholders had an opportunity to reply to our supplemental brief by January 21, 2021 and did so, arguing that our request should be denied, and that the record in NE should not be reopened.

On January 21, 2020, the FERC issued an order granting rehearing for further consideration to give the FERC more time to act on the substantive issues of the MISO ROE proceedings. On May 21, 2020, FERC revised the methodology to determine MISO transmission owner ROEs. FERC's November order proposed to create "zones of reasonableness" based on averages of two (rather than four) models to judge whether ROEs are just and reasonable. ROEs were reduced from 10.32% to 9.88% when FERC applied the revised methodology in two MISO ROE complaints. The May order relies on three models to estimate ROEs. The application of this new methodology increased ROEs in the MISO complaints from 9.88% to 10.02%. Narragansett does not believe the outcomes of these complaints will have a material impact on Narragansett's financial condition, results of operations or cash flows.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act (refer to "Tax Act" under Niagara Mohawk). On April 16, 2020, the FERC issued Order No. 864-A addressing requests for clarification, or in the alternative, rehearing, submitted in the proceeding. FERC will evaluate proposed amortization periods on a case by case basis.

On June 29, 2020, NEP, on behalf of Narragansett, submitted a compliance filing to address the application of Order 864 in NEP Tariff No. 1 (refer to "Tax Act" under The Massachusetts Electric Companies). Narragansett's transmission related net excess ADIT balance associated with the Tax Act is $100 million.

New England East-West Solution ("NEEWS") Project

Refer to "New England East-West Solution ("NEEWS") Project" section under NEP.

Suspension of Service Terminations and Certain Collections Activities

At an open meeting on March 16, 2020, the RIPUC issued an order prohibiting all electric, natural gas, water, and sewer utilities from engaging in certain collections activities, including termination of residential and non-residential service for nonpayment (the "Order"). This moratorium expired on July 18, 2020 for commercial and industrial customers, on September 30 for residential customers, and on November 1, 2020 for customers eligible for the low-income rate. On July 25, 2021, the RIPUC's extension of the moratorium on service disconnections for National Grid's protected status customers, including those on National Grid's low-income rate, expired. Per the RIPUC's June 25, 2021 order extending the moratorium to July 25, 2021, there will be no further extensions, unless there is substantial evidence of a major resurgence of the COVID-19 pandemic. To date, the RIPUC has not ordered any additional extensions of the moratorium so the moratorium is no longer in effect. The RIPUC's order directing Narragansett to temporarily suspend late fees, interest charges, credit card fees, debit card fees and ACH fees remains in effect, and Narragansett continues to track these costs for later review by the RIPUC. The RIPUC will review these costs in Narragansett's cost recovery filing in a separate docket (RIPUC Docket No. 5154). Narragansett continues to offer the 18-24-36 month payment plans per the RIPUC's order.

On May 15, 2020, pursuant to the RIPUC's directive, Narragansett filed a plan with the RIPUC and the Division that details Narragansett's plans for recommencing collection activities when the RIPUC lifts the moratorium on utility terminations (the "Plan"). The Plan consists of a four-phase approach, including initial efforts primarily focused on "bill health" messaging and assuring that customers are aware of the programs and services available to assist them with managing and paying their bills. Narragansett continues to progress through the phases of the Plan and submit arrearage data to the RIPUC and the Division on a weekly and monthly basis, respectively. On September 2, 2021, Narragansett filed its responses to the RIPUC's data requests regarding waived fees.

Advanced Metering Functionality and Grid Modernization

On January 21, 2021, Narragansett filed its updated AMF Business Case and GMP with the RIPUC in accordance with the rate case settlement. The updated AMF Business Case - a foundational component of the GMP – seeks approval to deploy smart meters throughout the service territory. The updated AMF Business Case includes approximately $224 million (20-year net present value)/$344 million (20-year nominal) of investment in smart meters and the associated communications infrastructure, as well as customer education and engagement based on a joint deployment scenario with New York. The GMP consists of a five-year implementation plan and ten-year roadmap that serve as a guide for addressing anticipated distribution system needs. Although Narragansett is not seeking cost recovery for any specific GMP investment at this time, Narragansett is seeking approval of the GMP business case and benefit-cost analysis, which will provide regulatory clarity when seeking to implement such projects and pursue cost recovery as part of the Infrastructure, Safety and Reliability Plan or a future rate case. Pursuant to written order issued on July 14, 2021, the RIPUC stayed the AMF and GMP proceedings pending further consideration following the issuance of a final Order by the Division on the PPL Transaction. The RIPUC did not rule on whether or not to consolidate the matters.

COVID-19 Deferral Filing

On April 30, 2021, Narragansett filed a petition for approval to recognize regulatory assets related to COVID-19 impacts (RIPUC Docket No. 5154). In its Petition, Narragansett seeks the RIPUC's authorization to recognize regulatory assets and consideration of future cost recovery for the following COVID-19 Costs: (1) the increased cost of customer accounts receivable that Narragansett will be unable to collect as a result of the COVID-19 pandemic, and the executive orders and RIPUC orders restricting Narragansett's collection activities as a result of the pandemic, which will result in increased net charge-offs; (2) lost revenue from unassessed late payment charges; and (3) charges to Narragansett for other fees that Narragansett has waived pursuant to the RIPUC's orders in RIPUC Docket No. 5022. Narragansett will continue to monitor the proceeding, pending any updates or new directive issued by the RIPUC.

PPL Transaction

Pursuant to a Share Purchase Agreement dated March 17, 2021, by and among PPL Energy Holdings, LLC, PPL Corporation ("PPL"), and National Grid USA (the "Transaction"), National Grid USA has agreed to sell 100 percent of the outstanding shares of common stock in Narragansett to PPL Rhode Island Holdings, LLC (“PPL Rhode Island”), a wholly owned indirect subsidiary of PPL. On May 4, 2021, PPL, PPL Rhode Island, National Grid USA, and Narragansett filed a joint petition with the Division seeking the Division’s consent and approval of the Transaction, which is currently pending in Docket No. D-21-09.

6. ACQUISITION OF NGRD AND EMERALD

On July 11, 2019, National Grid Ventures acquired 100% of the share capital of NGRD and 51% of Emerald, which is controlled by the Company and Washington State Investment Board (“WSIB”). The acquisition resulted in the Company’s first ownership stake in wind generation and an expansion of solar generation activities. Whereas NGRD develops the assets, Emerald has a right of first refusal to buy, build and operate those assets.

The total consideration for acquisition of NGRD and Emerald was $261 million, satisfied by a combination of cash and contingent consideration. The fair value of contingent consideration is determined as the present value of our best estimate of the value that we will be required to pay, taking into consideration management’s estimates of the volume and timing of successful development activity by NGRD over the relevant period. The development activity is considered successful if projects reach to either “commercial operation date” (COD) or "notice to proceed” (NTP), or are sold to third parties. The Company finalized the purchase price allocation for the acquisition of NGRD and Emerald during the year ended March 31, 2021.

The final fair values of the assets and liabilities recognized from the acquisition of NGRD and Emerald, are set out below:

(in millions of dollars)	**NGRD and Emerald Acquisition**
ASSETS:	
Cash and cash equivalents	$ 3
Restricted cash and special deposits	29
Accounts receivable	28
Other current assets	3
Equity method investments	115
Property, plant, and equipment, net	4
Goodwill	107
Total assets	289
LIABILITIES:	
Accounts payable	2
Other current liabilities	19
Other non-current liabilities	3
Total liabilities	24
Total consideration transferred	$ 265
Contingent consideration – NGRD	$ 89
Cash consideration – NGRD	61
Cash consideration – Emerald	115
Total	$ 265

Goodwill arising from the NGRD and Emerald acquisition comprises the value associated with the potential future projects that will be developed by NGRD as well as the expertise of the management team that has been acquired, neither of which qualify for recognition as tangible or intangible assets.

NGRD earns revenue from selling its development stage assets to Emerald and other third parties. Emerald generates revenue from the assets it purchases from NGRD once they are operational and has no other business. Subsequent to the acquisition date, the Company made an additional capital contribution of $97 million and $61 million into Emerald during the years ended March 31, 2021 and 2020, respectively. NGRD's results of operations since the acquisition date have been included within the consolidated statements of operations. Standalone results of operations have not been presented because they were not material to the consolidated financial statements. Emerald is accounted for under the equity method of accounting (see Note 7, "Equity Method Investments" for additional details).

7. EQUITY METHOD INVESTMENTS

The following table presents the equity method investments recorded on the consolidated balance sheets:

	March 31,	
	2021	2020
	(in millions of dollars)	
Millennium Pipeline Company LLC	**$ 206**	$ 205
Sunrun Neptune Investor 2016 LLC	**138**	133
Emerald	**179**	132
Energy Impact Fund LP	**59**	47
National Grid Generation Ventures LLC	**25**	39
New York Transco LLC	**46**	37
Other	**3**	3
Total equity method investments	**$ 656**	$ 596

As of March 31, 2021, the Company has ownership interests of:

- 26.25% interest in Millennium Pipeline Company LLC, a company that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.
- 100% of the Class A shares in San Francisco-based Sunrun Neptune Investor 2016 LLC ("Sunrun"), a leading U.S. provider of residential solar energy systems, to provide investment capital.
- 51% interest in Emerald, a solar and wind generation investment. NGRD provides accounting, asset and construction management, and back-office support services to Emerald.
- 9.4% interest in Energy Impact Fund LP, a strategic energy venture investment fund. During the year ended March 31, 2020, the Company sold its ownership interest in nine investments to the Parent. As this was a transaction between entities under common control, the Company's interest was transferred at net book value and no gain or loss was recognized in the consolidated statement of operations as a result of this transfer during the period ended March 31, 2020.
- 50% interest in each of four individual LLCs (Island Park Energy Center LLC, LI Solar Generation LLC, LI Energy Storage System LLC, and Clean Energy Generation LLC) through its wholly-owned subsidiary, National Grid Generation Ventures LLC ("GenVen").
- 28.3% interest in New York Transco LLC, a company formed for the purpose of planning, construction, owning, operating, maintaining, and expanding transmission facilities in the state of New York.

The Company has elected to account for its investment in Sunrun, which would otherwise be accounted for under the equity method of accounting, at fair value with changes in fair value reported as part of 'Income from equity method investments' in the consolidated statements of operations and comprehensive income.

The Company accounts for its share of the earnings of the projects owned by Emerald using the HLBV method, with changes in the amount allocated to the Company after adjusting for distributions and contributions recorded as income or loss for that period in Income from equity method investments in the consolidated statements of operations and comprehensive income.

Unconsolidated VIEs

Each of the LLCs owned through GenVen as described above are VIEs. The Company is not the primary beneficiary as it does not have sole power to direct the most significant activities of the entities as, under each LLC agreement, the Board of Managers is comprised of a number of representatives equal to two per Qualified Members (defined as Members with over a 25% interest): two representatives from GenVen and two representatives from a subsidiary of NextEra Energy, Inc., and there is no internal mechanism in place to resolve a board deadlock.

Emerald is also a VIE. The Company is not the primary beneficiary of Emerald as it does not have sole power to direct the most significant activities of the entity. Under the Emerald LLC agreement, the Board of Managers is comprised of two Members: one representative from the Company and one representative from WSIB, with approval from both managers required for the most significant activities and no internal mechanism in place to resolve a board deadlock. The Company's commitment to Emerald as of March 31, 2021 extends to a further $91 million investment to be used for solar and wind generation projects. Subsequent to March 31, 2021, this commitment was increased to $399 million.

The Company’s maximum exposure to loss related to the VIEs owned through GenVen is $25 million and $39 million at March 31, 2021 and 2020, respectively. The Company’s maximum exposure to loss related to Emerald is $179 million and $132 million at March 31, 2021 and 2020, respectively. The maximum exposure to loss represents the carrying value of the Company’s equity method investment as reported on the consolidated balance sheets. There are no other amounts recorded on the Company’s consolidated balance sheets in relation to its investments in unconsolidated VIEs, and no financial support that is not otherwise contractually required has been provided.

During the years ended March 31, 2021 or 2020, the Company did not provide any financial or other support to the VIEs that it was not contractually obligated to.

8. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment at cost and operating lease right-of-use assets, along with accumulated depreciation and amortization:

	March 31,	
	2021	2020
	(in millions of dollars)	
Plant and machinery	**$ 40,320**	$ 41,924
Assets in construction	**2,792**	2,539
Land and buildings	**2,172**	2,259
Software and other intangibles	**1,592**	1,371
Operating lease ROU assets	**996**	894
Total property, plant and equipment	**47,872**	48,987
Accumulated depreciation – Tangible assets	**(9,620)**	(10,078)
Accumulated amortization – Software and other intangibles	**(1,003)**	(895)
Accumulated amortization – Operating lease ROU assets	**(239)**	(143)
Property, plant and equipment, net	**$ 37,010**	$ 37,871

The Company capitalizes costs incurred during the application development stage of internal use software projects to property, plant and equipment. The Company amortizes capitalized software costs ratably over the expected lives of the software, primarily ranging from 7 to 10 years and commencing upon operational use. Amortization expense for capitalized software was $131 million in the year ended March 31, 2021. At March 31, 2021, amortization expense is estimated to be $140 million, $123 million, $100 million, $89 million, and $69 million for 2022 through 2026, respectively.

9. DERIVATIVE INSTRUMENTS AND HEDGING

The Company utilizes derivative instruments to manage commodity price, interest rate, and foreign currency rate risk associated with its natural gas and electricity purchases, its long-term funding activities and its Euro commercial paper program. The Company's commodity risk management strategy is to reduce fluctuations in firm gas and electricity sales prices to its customers. The Company's currency risk management policy is to borrow in the most advantageous market available, and to hedge the risk associated with foreign currency borrowings by utilizing instruments to convert principal and interest payments into U.S. dollars. The Company's interest rate risk management strategy is to minimize its cost of capital by adjusting the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the National Grid plc Board.

The Company's financial exposures are monitored and managed as an integral part of the Company's overall financial risk management policy. The Company engages in risk management activities only in commodities and financial markets where it has an exposure, and only in terms and volumes consistent with its core business.

Notional Amounts

The notional contract amount represents the gross nominal value of the outstanding derivative contracts. Notional amounts of financing derivatives by type are as follows:

	March 31,	
	2021	2020
	(in millions of dollars)	
Cross currency interest rate swaps & interest rate swaps	**$ (2,442)**	$ (3,131)
Foreign exchange forward contracts	**-**	(339)
Equity option contracts	**-**	(994)

Volumes of outstanding commodity derivative instruments measured in dekatherms ("dths") and megawatts hour ("mwhs") are as follows:

	March 31,	
	2021	2020
	(in millions)	
Gas contracts (dths)	**123**	133
Electric contracts (mwhs)	**13**	13

Summary of Derivative Instruments on Consolidated Balance Sheets

The following tables reflect the gross and net amounts of the Company's derivative assets and liabilities as of March 31, 2021 and 2020:

	March 31, 2021 (in millions of dollars)		
	Gross amounts of recognized assets (liabilities)	**Gross amounts not offset on the Consolidated Balance Sheet**	**Net amount**
	A	***B***	***C = A-B***
ASSETS:			
Current assets			
Gas contracts	$ 3	$ (3)	$ 6
Electric contracts	11	6	5
Other non-current assets			
Electric contracts	3	3	-
Interest rate swaps [(1)]	62	36	26
Total	79	42	37
LIABILITIES:			
Current liabilities			
Gas contracts	21	1	20
Electric contracts	24	6	18
Other non-current liabilities			
Gas contracts	47	-	47
Electric contracts	20	3	17
Interest rate swaps [(1)]	15	15	-
Total	127	25	102
Net assets (liabilities)	$ (48)	$ 17	$ (65)

[(1)] Consists of cross-currency interest rate swaps and interest rate swaps designated for hedge accounting.

	March 31, 2020					
	(in millions of dollars)					
	Gross amounts of recognized assets (liabilities)		**Gross amounts not offset on the Consolidated Balance Sheet**		**Net amount**	
	A		***B***		***C = A-B***	
ASSETS:						
Current assets						
Gas contracts	$	10	$	5	$	5
Electric contracts		5		3		2
Equity option contracts		12		-		12
Other non-current assets						
Electric contracts		2		1		1
Interest rate swaps [1]		22		21		1
Total		51		30		21
LIABILITIES:						
Current liabilities						
Gas contracts		44		1		43
Electric contracts		63		3		60
Equity option contracts		12		-		12
Foreign exchange forward contracts		10		1		9
Other non-current liabilities						
Gas contracts		46		-		46
Electric contracts		40		10		30
Interest rate swaps [1]		265		233		32
Total		480		248		232
Net assets (liabilities)	$	(429)	$	(218)	$	(211)

[1] Consists of cross-currency interest rate swaps and interest rate swaps designated for hedge accounting.

Effect of Derivative Instruments on Statements of Operations and Comprehensive Income

Changes in fair value of the Company's rate recoverable contracts (commodity contracts only, hedge contracts are not rate recoverable) are offset by changes in regulatory assets and liabilities. As a result, changes in the fair value of those contracts does not affect earnings. Realized gains or losses on the settlement of the Company's commodity derivative contracts are refunded to, or collected from, customers consistent with regulatory requirements.

The following table summarizes amounts recognized in earnings for commodity derivative instruments not designated as hedging instruments for the years ended March 31, 2021 and 2020:

		Year Ended March 31,			
	Location	**2021**		2020	
		(in millions of dollars)			
Electric contracts	Purchased electric	**$**	**(57)**	$	(80)
Gas contracts	Purchased gas		**(20)**		(36)
Total gains (losses) recognized in earnings		**$**	**(77)**	$	(116)

The following table summarizes changes in fair value of commodity derivative instruments not designated as hedging instruments that are offset by change in regulatory assets and liabilities for the years ended March 31, 2021 and 2020:

	Location	Year Ended March 31, 2021	Year Ended March 31, 2020
		(in millions of dollars)	
Electric contracts	Regulatory Assets	**$ 30**	$ 97
Gas contracts[1]	Regulatory Assets	**72**	80
Total changes in regulatory assets		**$ 102**	$ 177

[1] Amount reported includes $7 million regulatory assets reported as Held for sale

Certain additional information about hedge accounting, disaggregated by risk type and hedge designation type, is provided in the tables below:

	Fair value hedges of foreign currency and interest rate risk		Cash flow hedges of foreign currency and interest rate risk	
	Year Ended March 31,		Year Ended March 31,	
	2021	2020	2021	2020
	(in millions of dollars)			
Statements of operations and comprehensive income				
Net gains (losses) in respect of				
Cash flow hedges	**n/a**	n/a	**$ 17**	$ (86)
Cost of hedging	**(6)**	6	**(1)**	5
Transferred to earnings in respect of				
Cash flow hedges	**n/a**	n/a	**2**	1
Cost of hedging	**-**	-	**-**	(1)
Statements of changes in equity				
Other equity reserves – cost of hedging balances	**(5)**	1	**(5)**	(4)

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge.

Fair value hedges of foreign currency and interest rate risk on recognized borrowings:

	March 31, 2021					
	(in millions of dollars)					
		Balance of fair value hedge adjustments in borrowings		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	**$ (1,060)**	**$ (6)**	**$ (26)**	**$ (50)**	**$ 59**	**$ 9**

	March 31, 2020					
	(in millions of dollars)					
		Balance of fair value hedge adjustments in borrowings		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	$ (1,140)	$ 44	$ (24)	$ 6	$ (5)	$ 1

Cash flow hedges of foreign currency and interest rate risk:

	March 31, 2021					
	(in millions of dollars)					
		Balance in cash flow hedge reserve		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	**$ (1,381)**	**$ 23**	**$ -**	**$ (143)**	**$ 143**	**$ -**

	March 31, 2020					
	(in millions of dollars)					
		Balance in cash flow hedge reserve		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	$ (1,991)	$ 39	$ -	$ 159	$ (159)	$ -

Credit and Collateral

The Company is exposed to credit risk related to transactions entered into for commodity price, interest rate, and foreign currency rate risk management. Credit risk represents the risk of loss due to counterparty non-performance. Credit risk is managed by assessing each counterparty's credit profile and negotiating appropriate levels of collateral and credit support.

The Company enters into enabling agreements that allow for payment netting with its counterparties, which reduces its exposure to counterparty risk by providing for the offset of amounts payable to the counterparty against amounts receivable from the counterparty.

Commodity Transactions

The Company enters into commodity transactions on the NYMEX. The NYMEX clearing houses act as the counterparty to each trade. Transactions on the NYMEX must adhere to comprehensive collateral and margining requirements. As a result, transactions on the NYMEX are significantly collateralized and have limited counterparty credit risk.

The credit policy for commodity transactions is managed and monitored by the Finance Committee to the Parent's Board of Directors ("Finance Committee"), which is responsible for approving risk management policies and objectives for risk assessment, control and valuation, and the monitoring and reporting of risk exposures. NGUSA's Energy Procurement Risk Management Committee ("EPRMC") is responsible for approving transaction strategies, annual supply plans, and counterparty credit approval, as well as all valuation and control procedures. The EPRMC is chaired by the Head of Treasury Risk and Operations, and reports to both the NGUSA Board of Directors and the Finance Committee.

The EPRMC monitors counterparty credit exposure and appropriate measures are taken to bring such exposures below the limits, including, without limitation, netting agreements, and limitations on the type and tenor of trades. In instances where a counterparty's credit quality has declined, or credit exposure exceeds certain levels, the Company may limit its credit exposure by restricting new transactions with the counterparty, requiring additional collateral or credit support, and negotiating the early termination of certain agreements. Similarly, the Company may be required to post collateral to its counterparties.

The Company's credit exposure for all commodity derivative instruments and applicable payables and receivables, net of collateral, and instruments that are subject to master netting agreements, was a liability of $91 million and $172 million as of March 31, 2021 and 2020, respectively.

The aggregate fair value of the Company's commodity derivative instruments with credit-risk-related contingent features that were in a liability position as of March 31, 2021 and 2020 was $34 million and $106 million, respectively. The Company had zero and $10 million collateral posted for these instruments as of March 31, 2021 and 2020, respectively. At March 31, 2021, if the Company's credit rating were to be downgraded by one, two, or three levels, it would be required to post additional collateral to its counterparties of $4 million, $20 million, or $36 million, respectively. At March 31, 2020, if the Company's credit rating had been downgraded by one, two, or three levels, it would have been required to post additional collateral to its counterparties of $9 million, $27 million, or $109 million, respectively.

Financing Transactions

The credit policy for financing transactions is managed by a central treasury department under policies approved by the Finance Committee. In accordance with these treasury policies, counterparty credit exposure utilizations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilization adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties.

In relation to the Company's financial derivative instruments, the Company had $22 million and $234 million collateral posted for these instruments at March 31, 2021 and 2020, respectively. If the Company's credit rating were to be downgraded by one level it would not be required to post any additional collateral at March 31, 2021 and 2020, respectively. At March 31, 2021 and 2020, if the Company's credit rating were to be downgraded by two or three levels, it would be required to post additional collateral to its counterparties of $10 million and $50 million for each downgrade, respectively.

10. FAIR VALUE MEASUREMENTS

The following tables present assets and liabilities measured and recorded at fair value on the consolidated balance sheets on a recurring basis and their level within the fair value hierarchy as of March 31, 2021 and 2020:

	March 31, 2021			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	**$ -**	**$ 2**	**$ 1**	**$ 3**
Electric contracts	**-**	**13**	**1**	**14**
Interest rate swaps [1]	**-**	**62**	**-**	**62**
Sunrun investment	**-**	**-**	**138**	**138**
Financial investments				
Securities	**287**	**184**	**-**	**471**
Other	**-**	**-**	**34**	**34**
Total	**287**	**261**	**174**	**722**
Liabilities:				
Derivative instruments				
Gas contracts	**-**	**60**	**8**	**68**
Electric contracts	**-**	**42**	**2**	**44**
Interest rate swaps [1]	**-**	**15**	**-**	**15**
Contingent consideration	**-**	**-**	**78**	**78**
Total	**-**	**117**	**88**	**205**
Net assets (liabilities)	**$ 287**	**$ 144**	**$ 86**	**$ 517**

[1] Consists of cross-currency interest rate swaps and interest rate swaps.

	March 31, 2020			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	$ -	$ 9	$ 1	$ 10
Electric contracts	-	5	2	7
Interest rate swaps [1]	-	22	-	22
Equity option contracts	-	-	12	12
Sunrun investment	-	-	133	133
Financial investments				
Securities	232	162	-	394
Other	-	-	27	27
Total	232	198	175	605
Liabilities:				
Derivative instruments				
Gas contracts	-	73	17	90
Electric contracts	-	102	1	103
Interest rate swaps [1]	-	265	-	265
Foreign exchange forward contracts	-	10	-	10
Equity option contracts	-	-	12	12
Total	-	450	30	480
Net assets (liabilities)	$ 232	$ (252)	$ 145	$ 125

[1] Consists of cross-currency interest rate swaps and interest rate swaps.

Derivative Instruments

The Company's Level 2 fair value derivative instruments primarily consist of cross-currency, interest rate and foreign exchange derivatives, and commodity swap contracts. The cross-currency, interest rate and foreign exchange derivatives are valued by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. The commodity swap contracts pricing inputs are obtained from NYMEX and the Intercontinental Exchange ("ICE"). The Company may utilize discounting based on quoted interest rate curves, including consideration of non-performance risk, and may include a liquidity reserve calculated based on bid/ask spread for the Company's Level 2 derivative instruments. Substantially all of these price curves are observable in the marketplace throughout at least 95% of the remaining contractual quantity, or they could be constructed from market observable curves with correlation coefficients of 95% or higher.

The Company's Level 3 fair value derivative instruments primarily consist of OTC commodity option contracts and structured physical gas purchase contracts, which are valued based on internally-developed models. A derivative is designated Level 3 when it is valued based on a forward curve that is internally developed, extrapolated, or derived from market observable curves with correlation coefficients less than 95%, where optionality is present, or if non-economic assumptions are made.

The Company did not have any level 1 derivative instruments at either March 31, 2021 or March 31, 2020.

Sunrun Investment

The table below provides a reconciliation of the beginning and ending balance for the Company's investment in Sunrun, for which the Company elected the fair value option, which is classified as Level 3 in the fair value hierarchy. Changes in fair value are reported in Income from equity method investments in the accompanying statements of operations and comprehensive income.

	Year Ended March 31,
	2021
	(in millions of dollars)
Beginning balance	**$ 133**
Unrealized gains (losses)	**11**
Dividends	**(6)**
Ending balance	**$ 138**

The fair value of the Company's investment in Sunrun is determined using a discounted cash flow, with Contractual Target IRR being the significant unobservable input. The fair value measurement is driven by the contractual target internal rate of return. The contractual nature of the distributions to the Class A and Class B Members and the Target IRR results in a low level of measurement uncertainty as it relates to the fair value measurement.

Contingent Consideration

The table below provides a reconciliation of the beginning and ending balance for the Company's contingent consideration related to the acquisition of NGRD, which is classified as Level 3 in the fair value hierarchy. Changes in fair value are reported in Other interest, including affiliate interest in the accompanying statements of operations and comprehensive income.

	Year Ended March 31,
	2021
	(in millions of dollars)
Beginning balance	$ (92)
Fair value adjustment	(17)
Additions	(5)
Payments	36
Ending balance	$ (78)

The fair value of the Contingent Consideration liability is determined using a discounted cash flow, with the estimated timing of project sales and the MWs associated with the sales being the significant unobservable inputs. The fair value measurement is driven by estimated volumes (MW) and timing of project sales over the period April 2021 through December 2022. While both inputs are unobservable, there is a low level of measurement uncertainty associated with the inputs as the Company expects the targets for payment of the remaining contingent consideration will be met.

Financial Investments - Securities

Securities are included in Financial investments on the consolidated balance sheets and primarily include equity and debt investments based on quoted market prices (Level 1) and municipal and corporate bonds based on quoted prices of similar traded assets in open markets (Level 2).

Debt Securities

The following table sets forth the amortized cost and fair value of the Company's available for sale debt securities.

	Longest maturity date	Amortized Cost		Fair Value	
		March 31,			
		2021	2020	2021	2020
		(in millions of dollars)			
Rabbi Trust municipal bonds	2057	$ 175	$ 143	$ 184	$ 162

The following table summarizes gains and losses recorded by the Company in relation to available for sale debt securities. No other than temporary impairments were recorded in earnings or other comprehensive income during the years ended March 31, 2021 and March 31, 2020:

	Location	March 31,	
		2021	2020
		(in millions of dollars)	
Gross realized gains	Other income, net	$ 2	$ -
Gross realized losses	Other income, net	(2)	-
Net unrealized gains (losses) on debt securities	OCI	1	8

Equity Securities

The following table summarizes gains and losses recorded by the Company in relation to investments in equity securities.

	Location	March 31, 2021	March 31, 2020
		(in millions of dollars)	
Gross realized gains	Other income, net	**$ 15**	$ 7
Gross realized losses	Other income, net	**(3)**	(1)
Net unrealized gains (losses) on equity securities	Other income, net	**63**	(17)

Financial Investments – Other

The Company's other investments include corporate venture capital investments held by NGP and a Sunrun Grid Services investment held by NGV measured at fair value with changes in fair value recorded in the consolidated statements of operations and comprehensive income. These equity holdings comprise a series of small ownership interest in unquoted investments where prices or valuation inputs are unobservable, therefore the investments classified as Level 3.

11. EMPLOYEE BENEFITS

The Company sponsors several qualified and non-qualified non-contributory defined benefit plans (the "Pension Plans") and post-retirement benefits other than pension (PBOP) plans (together with the Pension Plan (the "Plans")), covering substantially all employees.

The Company's regulated subsidiaries have regulatory recovery of virtually all of these costs and therefore have recorded related regulatory assets (liabilities) on the consolidated balance sheets. The Company records amounts for its unregulated subsidiaries to AOCI on the consolidated balance sheets.

Pension Plans

The Pension Plans are defined benefit plans which provide union employees, as well as non-union employees with a retirement benefit. For non-union employees, the plans were closed to new entrants as of December 31, 2010. Non-union employees hired on or after January 1, 2011 are provided with a defined contribution plan. For union employees, the plans were closed, with one exception, to new entrants at varying dates from December 31, 2010 through June 2, 2019. Union employees hired on or after the closing of the pension plans to new entrants are provided with a defined contribution plan. Supplemental non-qualified, non-contributory executive retirement programs provide additional defined pension benefits for certain executives. During the years ended March 31, 2021 and 2020, the Company made contributions of approximately $123 million and $173 million, respectively, to the qualified pension plans. The Company expects to contribute $126 million to the qualified pension plans during the year ending March 31, 2022.

Benefit payments to pension plan participants for the years ended March 31, 2021 and 2020 were approximately $498 million and $481 million, respectively.

PBOP Plans

The PBOP plans provide health care and life insurance coverage to eligible retired employees. Eligibility is based on age and length of service requirements and, in most cases, retirees must contribute to the cost of their coverage. During the years ended March 31, 2021 and 2020, the Company made contributions of $20 million and $7 million, respectively, to the PBOP plans. The Company does not expect to contribute to the PBOP plans during the year ending March 31, 2022.

Benefit payments to PBOP plan participants for the years ended March 31, 2021 and 2020 were approximately $190 million and $201 million, respectively.

Components of Net Periodic Benefit Costs

	Pension Plans		PBOP Plans	
	Year Ended March 31, 2021		Year Ended March 31, 2021	
	2021	2020	**2021**	2020
	(in millions of dollars)			
Service cost	**$ 134**	$ 119	**$ 54**	$ 56
Interest cost	**340**	364	**156**	178
Expected return on plan assets	**(493)**	(541)	**(206)**	(237)
Amortization of prior service cost (credit), net	**6**	7	**-**	(5)
Amortization of net actuarial loss	**226**	188	**31**	15
Total cost	**$ 213**	$ 137	**$ 35**	$ 7

Amounts Recognized in AOCI and Regulatory Assets/Liabilities

The following tables summarize other pre-tax changes in plan assets and benefit obligations recognized primarily in regulatory assets and AOCI for the years ended March 31, 2021 and 2020:

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2021	2020	**2021**	2020
	(in millions of dollars)			
Net actuarial loss (gain)	**$ (703)**	$ 700	**$ (991)**	$ 337
Amortization of net actuarial loss	**(214)**	(188)	**(31)**	(15)
Amortization of prior service (cost) credit, net	**(6)**	(8)	**-**	4
Total	**$ (923)**	$ 504	**$ (1,022)**	$ 326
Included in regulatory assets (liabilities)	**$ (751)**	$ 393	**$ (883)**	$ 263
Included in AOCI	**(172)**	111	**(139)**	63
Total	**$ (923)**	$ 504	**$ (1,022)**	$ 326

The Company's regulated subsidiaries have regulatory recovery of these obligations and therefore amounts are included in regulatory assets on the consolidated balance sheets. Costs of non-regulated subsidiaries are recorded as part of AOCI on the consolidated balance sheets.

Amounts Recognized in AOCI and Regulatory Assets/Liabilities – not yet recognized as components of net actuarial loss

The following tables summarize the Company's amounts in regulatory assets and AOCI on the consolidated balance sheets that have not yet been recognized as components of net actuarial loss as of March 31, 2021 and 2020:

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2021	2020	**2021**	2020
	(in millions of dollars)			
Net actuarial loss (gain)	**$ 702**	$ 1,811	**$ (656)**	$ 391
Prior service cost (credit)	**34**	41	**-**	-
Total	**$ 736**	$ 1,852	**$ (656)**	$ 391
Including in regulatory assets (liabilities)	**$ 631**	$ 1,573	**$ (541)**	$ 367
Including in AOCI	**105**	279	**(115)**	24
Total	**$ 736**	$ 1,852	**$ (656)**	$ 391

Reconciliation of Funded Status to Amount Recognized

	Pension Plans		PBOP Plans	
	Years Ended March 31		Years Ended March 31	
	2021	2020	**2021**	2020
	(in millions of dollars)			
Change in benefit obligation:				
Benefit obligation as of the beginning of the year	**$ (9,552)**	$ (9,098)	**$ (4,374)**	$ (4,478)
Service cost	**(134)**	(119)	**(54)**	(55)
Interest cost on projected benefit obligation	**(341)**	(364)	**(156)**	(178)
Net actuarial (loss) gain	**(576)**	(452)	**28**	164
Benefits paid	**498**	481	**190**	201
Employer group waiver plan subsidy received	**-**	-	**(34)**	(28)
Reclassified to Held for sale	**637**	-	**206**	-
Benefit obligation as of the end of the year	**$ (9,468)**	$ (9,552)	**(4,194)**	$ (4,374)
Change in plan assets:				
Fair value of plan assets as of the beginning of the year	**8,659**	8,649	**2,995**	3,437
Actual return on plan assets	**1,818**	294	**1,206**	(264)
Company contributions	**147**	197	**36**	23
Benefits paid	**(498)**	(481)	**(190)**	(201)
Reclassified to Held for sale	**(625)**	-	**(185)**	-
Fair value of plan assets as of the end of the year	**$ 9,501**	$ 8,659	**$ 3,862**	$ 2,995
Funded status	**$ 33**	$ (893)	**$ (332)**	$ (1,379)

The benefit obligation shown above is the projected benefit obligation ("PBO") for the Pension Plans and the accumulated benefit obligation ("ABO") for the PBOP Plans. The Company is required to reflect the funded status of its Pension Plans above in terms of the PBO, which is higher than the ABO, because the PBO includes the impact of expected future compensation increases on the pension obligation. The Pension Plans had ABO balances that exceeded the fair value of plans assets as of

March 31, 2021. The aggregate ABO balances for the Pension Plans were $9.1 billion and $9.2 billion as of March 31, 2021 and 2020, respectively.

Amounts Recognized on the Accompanying Consolidated Balance Sheets

	Pension Plans		**PBOP Plans**	
	Years Ended March 31,		**Years Ended March 31,**	
	2021	2020	**2021**	2020
	(in millions of dollars)			
Projected benefit obligation	**$ (9,468)**	$ (9,552)	**$ (4,194)**	$ (4,374)
Fair value of plan assets	**9,501**	8,659	**3,862**	2,995
Total	**$ 33**	$ (893)	**$ (332)**	$ (1,379)
Non-current assets	**$ 597**	$ 374	**$ 376**	$ 3
Current liabilities	**(22)**	(25)	**(8)**	(9)
Non-current liabilities	**(542)**	(1,242)	**(700)**	(1,373)
Total	**$ 33**	**$** $ (893)	**$ (332)**	**$** $ (1,379)

For the year end March 31, 2021, the net actuarial gain for pension and PBOP was largely the result of asset performance well above expectations and favorable contract negotiations for PBOP, partially offset by liability losses generated from the discount rate decrease and census data experience. For the year end March 31, 2020, the net actuarial loss for pension and PBOP was primarily driven by the discount rate decrease and asset performance below expectations. This loss was partially offset by a gain related to a change in the mortality assumption and a PBOP assumption change for post-65 participation rates.

Expected Benefit Payments

Based on current assumptions, the Company expects to make the following benefit payments subsequent to March 31, 2021:

(in millions of dollars) **Years Ended March 31,**	**Pension Plans**	**PBOP Plans**
2022	$ 514	$ 175
2023	494	181
2024	484	187
2025	481	192
2026	477	196
2027-2031	2,302	1,019
Total	$ 4,752	$ 1,950

Assumptions Used for Employee Benefits Accounting

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2021	2020	**2021**	2020
Benefit Obligations:				
Discount rate	**3.25%**	3.65%	**3.25%**	3.65%
Rate of compensation increase (non-union)	**4.10%**	3.50%	**N/A**	N/A
Rate of compensation increase (union)	**4.50%**	3.50%	**N/A**	N/A
Weighted-average interest crediting rate for cash balanced plans	**2.90%**	3.30%	**N/A**	N/A
Net Periodic Benefit Costs:				
Discount rate	**3.65%**	4.10%	**3.65%**	4.10%
Rate of compensation increase	**3.50%**	3.50%	**N/A**	N/A
Expected return on plan assets	**5.00% - 6.00%**	6.00% - 6.50%	**6.50% - 7.00%**	6.00% - 7.25%
Weighted-average interest crediting rate for cash balanced plans	**3.30%**	N/A	**N/A**	N/A

The Company selects its discount rate assumption based upon rates of return on highly rated corporate bond yields in the marketplace as of each measurement date. Specifically, the Company uses the AON AA Only Bond Universe Curve along with the expected future cash flows from the Company retirement plans to determine the weighted average discount rate assumption.

The expected rate of return for various passive asset classes is based both on analysis of historical rates of return and forward-looking analysis of risk premiums and yields. Current market conditions, such as inflation and interest rates, are evaluated in connection with the setting of the long-term assumptions. A small premium is added for active management of both equity and fixed income securities. The rates of return for each asset class are then weighted in accordance with the actual asset allocation, resulting in a long-term return on asset rate for each plan.

Assumed Health Cost Trend Rate

	Years Ended March 31,	
	2021	2020
Health care cost trend rate assumed for next year		
Pre 65	**6.80%**	7.00%
Post 65	**5.40%**	5.50%
Prescription	**7.70%**	8.00%
Rate to which the cost trend is assumed to decline (ultimate)	**4.50%**	4.50%
Year that rate reaches ultimate trend		
Pre 65	**2031+**	2031+
Post 65	**2031+**	2031+
Prescription	**2031+**	2031+

Plan Assets

The Pension Plan is a trusted non-contributory defined benefit plan covering all eligible represented employees of the Company and eligible non-represented employees of the participating National Grid companies. The PBOP Plans are both a contributory and non-contributory, trusteed, employee life insurance and medical benefit plan sponsored by the Company. Life insurance and medical benefits are provided for eligible retirees, dependents, and surviving spouses of the Company.

The Company manages the benefit plan investments for the exclusive purpose of providing retirement benefits to participants and beneficiaries and paying plan expenses. The benefit plans' named fiduciary is The Retirement Plans Committee ("RPC"). The RPC seeks to minimize the long-term cost of operating the Plans, with a reasonable level of risk. The investment objectives of the plans are to maintain a level and form of assets adequate to meet benefit obligations to participants, to achieve the expected long-term total return on the plans' assets within a prudent level of risk and maintain a level of volatility that is not expected to have a material impact on the Company's expected contribution and expense or the Company's ability to meet plan obligations.

The RPC has established and reviews at least annually the Investment Policy Statement ("IPS") which sets forth the guidelines for how plan assets are to be invested. The IPS contains a strategic asset allocation for each plan which is intended to meet the objectives of the plans by diversifying its funds across asset classes, investment styles and fund managers. An asset/liability study typically is conducted periodically to determine whether the current strategic asset allocation continues to represent the appropriate balance of expected risk and reward for the plan to meet expected liabilities. Each study considers the investment risk of the asset allocation and determines the optimal mix of assets for the plan. The target asset allocation for 2021 reflects the results of such a pension study conducted in 2019. As a result of that asset liability study the asset mix for the Niagara Mohawk Pension Plan was changed to further reduce investment risk given the overfunded nature and shorter duration of liabilities in that plan compared to the other pension plans. The Union PBOP Plan asset liability study was conducted in 2021. As a result of that study the RPC approved changes to the Union PBOP asset allocation effective in fiscal year 2022. The Non-Union PBOP Plan asset liability study is expected to be run within the next 12-18 months.

Individual fund managers operate under written guidelines provided by the RPC, which cover such areas as investment objectives, performance measurement, permissible investments, investment restrictions, trading and execution, and communication and reporting requirements. National Grid management in conjunction with a third party investment advisor, regularly monitors, and reviews asset class performance, total fund performance, and compliance with asset allocation guidelines. This information is reported to the RPC at quarterly meetings. The RPC changes fund managers and rebalances the portfolio as appropriate.

Equity investments are broadly diversified across U.S. and non-U.S. stocks, as well as across growth, value, and small and large capitalization stocks. Likewise, the fixed income portfolio is broadly diversified across market segments and is mainly invested in investment grade securities. Where investments are made in non-investment grade assets the higher volatility is carefully judged and balanced against the expected higher returns. While the majority of plan assets are invested in equities and fixed income other asset classes are utilized to further diversify the investments. These asset classes include private equity, real estate, and diversified alternatives. The objective of these other investments is enhancing long-term returns while improving portfolio diversification. For the PBOP Plans, since the earnings on a portion of the assets are taxable, those investments are managed to maximize after tax returns consistent with the broad asset class parameters established by the asset liability study. Investment risk and return are reviewed by the plan investment advisors, National Grid management and the RPC on a regular basis. The assets of the plans have no significant concentration of risk in one country (other than the United States), industry or entity

The target asset allocations for the benefit plans as of March 31, 2021 and 2020 are as follows:

	Pension Plans		Union PBOP Plans		Non-Union PBOP Plans	
	March 31,		March 31,		March 31,	
	2021	2020	**2021**	2020	**2021**	2020
Equity	**37%**	37%	**63%**	63%	**70%**	70%
Diversified alternatives	**10%**	10%	**17%**	17%	**0%**	0%
Fixed income securities	**40%**	40%	**20%**	20%	**30%**	30%
Private equity	**5%**	5%	**0%**	0%	**0%**	0%
Real estate	**5%**	5%	**0%**	0%	**0%**	0%
Infrastructure	**3%**	3%	**0%**	0%	**0%**	0%
	100%	100%	**100%**	100%	**100%**	100%

Fair Value Measurements

The following tables provide the fair value measurement amounts for the pension and PBOP assets:

	March 31, 2021				
	Level 1	Level 2	Level 3	Not categorized	Total
			(in millions of dollars)		
Pension assets:					
Investments					
Equity	$ 804	$ -	$ -	$ 2,844	$ 3,648
Diversified alternatives	245	-	-	671	916
Corporate bonds	-	2,315	-	743	3,058
Government securities	4	1,140	-	777	1,921
Private equity	-	-	-	628	628
Real estate	-	-	-	364	364
Infrastructure	-	-	-	179	179
Total assets	$ 1,053	$ 3,455	$ -	$ 6,206	$ 10,714
Assets held for sale					(625)
Pending Transactions					(588)
Total net assets					$ 9,501
PBOP assets:					
Investments					
Equity	$ 606	$ -	$ -	$ 1,888	$ 2,494
Diversified alternatives	268	-	-	249	517
Corporate bonds	-	22	-	-	22
Government securities	77	695	-	2	774
Private Equity	-	-	-	-	-
Insurance contracts	-	-	-	237	237
Total assets	$ 951	$ 717	$ -	$ 2,376	$ 4,044
Assets held for sale					(185)
Pending Transactions					3
Total net assets					$ 3,862

	March 31, 2020				
	Level 1	Level 2	Level 3	Not categorized	Total
			(in millions of dollars)		
Pension assets:					
Investments					
Equity	$ 581	$ -	$ -	$ 2,026	$ 2,607
Diversified alternatives	201	-	-	575	776
Corporate bonds	-	1,986	-	639	2,625
Government securities	(17)	1,158	-	902	2,043
Private equity	-	-	-	489	489
Real estate	-	-	-	381	381
Infrastructure	-	-	-	173	173
Insurance contracts	-	-	-	4	4
Total assets	$ 765	$ 3,144	$ -	$ 5,189	$ 9,098
Pending Transactions					(439)
Total net assets					$ 8,659
PBOP assets:					
Investments					
Equity	$ 438	$ -	$ -	$ 1,287	$ 1,725
Diversified alternatives	201	-	-	199	400
Corporate bonds	-	18	-	-	18
Government securities	66	610	-	2	678
Private Equity	-	-	-	1	1
Insurance contracts	-	-	-	164	164
Total assets	$ 705	$ 628	$ -	$ 1,653	$ 2,986
Pending Transactions					9
Total net assets					$ 2,995

The methods used to fair value pension and PBOP assets are described below:

Equity: Equity includes both actively- and passively-managed assets with investments in domestic equity index funds as well as international equities.

Diversified Alternatives: Diversified Alternatives consists of holdings of global tactical asset allocation funds that seek to invest opportunistically in a range of asset classes and sectors globally.

Corporate Bonds: Corporate Bonds consists of debt issued by various corporations and corporate money market funds. Corporate Bonds also includes small investments in preferred securities as these are used in the fixed income portfolios as yield producing investments. In addition, certain fixed income derivatives are included in this category such as credit default swaps to assist in managing credit risk.

Government Securities: Government Securities includes US agency and treasury securities, as well as state and local municipal bonds. The plans also include a small amount of Non-US government debt which is also captured here. US Government money market funds are also included. In addition, interest rate futures and swaps are held as a tool to manage interest rate risk.

Private equity: Private equity consists of limited partnerships investments where all the underlying investments are privately held. This consists of primarily buy-out investments with smaller allocations to venture capital.

Real estate: Real estate consists of limited partnership investments primarily in US core open end real estate funds as well as some core plus closed end real estate funds.

Infrastructure: Infrastructure consists of limited partnership investments that seek to invest in physical assets that are considered essential for a society to facilitate the orderly operation of its economy. Investments in infrastructure typically include transportation assets (such as airports and toll roads) and utility type assets. Investments in infrastructure funds are utilized as a diversifier to other asset classes within the pension portfolio. Infrastructure investments are also typically income producing assets.

Insurance contracts: Insurance consists of Trust Owned Life Insurance.

Pending Transactions/Receivables/Payables: Accounts receivable and accounts payable transactions that are expected to settle within a few days of the measurement date.

Defined Contribution Plans

The Company has two defined contribution pension plans that cover substantially all employees. For the years ended March 31, 2021 and 2020, the Company recognized an expense in the accompanying consolidated statements of operations and comprehensive income of $88 million and $79 million, respectively.

12. CAPITALIZATION

The aggregate maturities of long-term debt for the years subsequent to March 31, 2021 are as follows:

(in millions of dollars) **March 31,**	**Maturities of Long-Term Debt**
2022	$ 919
2023	841
2024	711
2025	1,297
2026	1,200
Thereafter	12,337
Total	$ 17,305

The Company's debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity and financial covenants such as restrictions on the level of indebtedness. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of the Company's debt and may restrict the Company's ability to draw upon its facilities or access the capital markets. The Company's subsidiaries also have restrictions on the payment of dividends which relate to their debt to equity ratios. As of March 31, 2021 and 2020, the Company was in compliance with all such covenants.

Significant Debt Facilities

European Medium-Term Note Program

At March 31, 2021, the Company had a Euro Medium Term Note program (the "Program") under which it is able to issue debt instruments ("Instruments") up to a total of the equivalent of 8 billion Euros. Instruments issued under the Program are admitted to trading on the London Stock Exchange. The Program commenced in December 2007 and is renewed annually, with the latest renewal of the Program expiring in October 2021. If the Program was not renewed, it would have precluded the issuance of new notes under this Program, but it would not impact the outstanding debt balances and their maturity dates. Instruments carry certain affirmative and negative covenants, including a restriction on the Company's ability to mortgage, pledge, charge, or otherwise encumber its assets in order to secure, guarantee, or indemnify other listed or quoted debt obligations, as well as cross-acceleration in the event of breach by the Company or its principal subsidiaries of other listed or quoted debt obligations. At March 31, 2021 and 2020, the Company was in compliance with all covenants. At March 31, 2021 and 2020, $3.2 billion and $3.4 billion of these notes were issued and outstanding, respectively.

Convertible Bond

In September 2015, the Company issued a non-dilutive, cash-settled convertible bond; the conversion options expired in September 2020 without exercise, and the bond matured at par on November 2, 2020. It was valued, on a notional basis, at $497 million at March 31, 2020.

Export Credit Agreements

The Company has Export Credit Agreements totaling $1,854 million, of which $1,218 million and $816 million were outstanding (drawn) as of March 31, 2021 and 2020, respectively. The Company has procured this financing in relation to Parent's share of investment in the North Sea Link interconnector and Interconnexion France-Angleterre 2 interconnector and Viking Interconnector project.

Notes Payable

The following table represents the Company's notes payable for the years ended March 31, 2021 and 2020:

			March 31,	
	Interest Rate	Maturity Date	**2021**	2020
			(in millions of dollars)	
Brooklyn Union Unsecured Notes:				
Senior Note	3.41%	March 10, 2026	**$ 500**	$ 500
Senior Note	3.87%	March 4, 2029	**550**	550
Senior Note	4.50%	March 10, 2046	**500**	500
Senior Note	4.27%	March 15, 2048	**650**	650
Senior Note	4.49%	March 4, 2049	**450**	450
Brooklyn Union Notes			**2,650**	2,650
KeySpan Gas East Unsecured Notes:				
Senior Note	5.82%	April 1, 2041	**500**	500
Senior Note	2.74%	August 15, 2026	**700**	700
KeySpan Gas East Notes			**1,200**	1,200
Boston Gas Unsecured Notes:				
Senior Note	3.30%	March 15, 2022	**25**	25
Senior Note	3.15%	August 1, 2027	**500**	500
Senior Note	3.13%	October 5, 2027	**150**	150
Senior Note	3.00%	August 1, 2029	**500**	500
Senior Note	4.49%	February 15, 2042	**500**	500
Senior Note	4.63%	March 15, 2042	**25**	25
Boston Gas Medium-Term Notes:				
MTN Series 1990 A	9.75%	December 1, 2020	**-**	5
MTN Series 1990 A	9.05%	September 1, 2021	**15**	15
MTN Series 1992 A	8.33%	July 5, 2022	**10**	10
MTN Series 1995 C	6.95%	December 1, 2023	**10**	10
MTN Series 1994 B	6.98%	January 15, 2024	**6**	6
MTN Series 1995 C	6.95%	December 1, 2024	**5**	5
MTN Series 1995 C	7.25%	October 1, 2025	**20**	20
MTN Series 1995 C	7.25%	October 1, 2025	**5**	5
Boston Gas Notes			**1,771**	1,776
National Grid USA MTN	8.00%	November 15, 2030	**250**	250
National Grid USA Unsecured Notes:				
Senior Note	5.80%	April 1, 2035	**307**	307

Senior Note	5.88%	April 1, 2033	**150**	150
National Grid USA Notes			**707**	707
Niagara Mohawk Unsecured Notes:				
Senior Note	2.72%	November 28, 2022	**300**	300
Senior Note	3.51%	October 1, 2024	**500**	500
Senior Notes	4.28%	December 15, 2028	**500**	500
Senior Notes	1.96%	June 27, 2030	**600**	-
Senior Note	4.28%	October 1, 2034	**400**	400
Senior Note	4.12%	November 28, 2042	**400**	400
Senior Note	3.03%	June 27, 2050	**500**	-
Niagara Mohawk Notes			**3,200**	2,100
Narragansett Electric Unsecured Notes:				
Senior Note (1)	3.92%	August 1, 2028	**350**	350
Senior Note (1)	3.40%	April 9, 2030	**600**	-
Senior Note (1)	5.64%	March 15, 2040	**300**	300
Senior Note (1)	4.17%	December 10, 2042	**250**	250
Narragansett Electric Notes			**1,500**	900
Massachusetts Electric Unsecured Notes:				
Senior Note	1.73%	November 24, 2030	**500**	-
Senior Note	5.90%	November 15, 2039	**800**	800
Senior Note	4.00%	August 15, 2046	**500**	500
Massachusetts Electric Notes:			**1,800**	1,300
New England Power Unsecured Notes:				
Senior Notes	3.80%	December 5, 2047	**400**	400
Senior Notes	2.81%	October 6, 2050	**400**	-
New England Power Notes:			**800**	400
Total			**$ 13,628**	$ 11,033

(1) Related to held for sale, see Note 19 "Held for sale".

State Authority Financing Bonds

At March 31, 2021, the Company had outstanding $647 million of State Authority Financing Bonds, of which $490 million were issued through the New York State Energy Research and Development Authority ("NYSERDA") and the remaining $157 million were issued through various other state agencies.

At March 31, 2021, Niagara Mohawk had outstanding $424 million of tax-exempt revenue bonds issued by the NYSERDA in a fixed rate interest mode ranging from 3.23% to 3.48%.

Genco has $41 million of 1999 Series A Pollution Control Revenue Bonds due October 1, 2028. The interest rate on the various variable rate series ranged from 1.00% to 10.44% during the year ended March 31, 2021 and 0.85% to 10.44% during the year ended March 31, 2020. Genco also has outstanding $25 million of variable rate 1997 Series A Electric Facilities Revenue Bonds due December 1, 2027 issued through NYSERDA. The interest rate on the various variable rate series ranged from 0.06% to 5.15% during the year ended March 31, 2021 and 0.90% to 5.15% during the year ended March 31, 2020.

At March 31, 2021, NEP had outstanding $106 million of Pollution Control Revenue Bonds in tax-exempt commercial paper mode and Nantucket had $51 million of Electric Revenue Bonds in tax exempt commercial paper mode. The Electric Revenue Bonds were issued by the Massachusetts Development Finance Agency in connection with Nantucket's financing of its first and second underground and submarine cable projects.

First Mortgage Bonds ("FMB")

The assets of Boston Gas are subject to liens and other charges and are provided as collateral over borrowings of non-callable FMB with interest rage ranging from 6.90% to 8.80% of $75 million at March 31, 2021 and 2020. These FMB indentures include, among other provisions, limitations on the issuance of long-term debt.

Term Loans

NEP had an outstanding Term Loan of zero and $100 million as of March 31, 2021 and 2020, respectively. The Term Loan was due to mature in March 2022, with variable interest rate range at 3-month LIBOR plus 0.55%. On October 30, 2020, the Company prepaid the $100 million bank term loan at par.

On September 28, 2021, the Brooklyn Union Gas Company entered into a $400 million Term Loan. The Term Loan has a maturity date of December 2022.

Intercompany Notes Payable

NGNA's intercompany debt is in the form of intercompany loans from the Parent and other non-consolidated affiliated entities obtained to fund the acquisition of various entities. The intercompany loans are paid back by NGNA from the dividends it receives from NGUSA.

NGNA had an intercompany note payable to one of the Parent's affiliates, which was due to mature in July 2027, with an interest rate of 0.92% to 1.08% over LIBOR, however the Company agreed to repay this loan note in full on January 28, 2021. The intercompany note had a balance of $972 million at March 31, 2020, reported in Long-term debt on the consolidated balance sheets.

Standby Bond Purchase Agreement

NEP and Nantucket have a Standby Bond Purchase Agreement, which expires on June 14, 2023. This agreement provides liquidity support for the $157 million long-term bonds in tax-exempt commercial paper mode. The Company has classified the debt as long-term due to its intent and ability to refinance the debt on a long-term basis in the event of a failure to remarket the bonds.

Committed Facility Agreements

At March 31, 2021, the Company, NGUSA, and the Parent had committed revolving credit facilities of $3.6 billion, of which $2.1 billion was due to mature in May 2022, $0.4 billion matures in June 2023, $0.9 billion matures in June 2024 and $0.2 billion matures in June 2025. The $2.1 billion of facilities due to mature in May 2022 were renegotiated in the period after March 31, 2021. The renegotiated facilities have the size of $2.7 billion, a new maturity date of May 2024 and include two one-year extension options to May 2025 and May 2026. These facilities have not been drawn against. The Company, NGUSA, and the Parent can all draw on these facilities in a variety of currencies as needed, but the aggregate borrowings across the group cannot exceed the $3.6 billion limit. The terms of the facilities restrict the borrowing of all U.S. subsidiaries of the Company to $25 billion excluding intercompany indebtedness. Additionally, these facilities have a number of non-financial covenants which the Company is obliged to meet. At March 31, 2021 and 2020, the Company, NGUSA, and the Parent were in compliance with all covenants.

Commercial Paper and Revolving Credit Agreements

At March 31, 2021, the Company had two commercial paper programs approximately totaling $8.7 billion; a $4 billion U.S. commercial paper program and a €4 billion Euro commercial paper program. In support of these programs, the Company was a named borrower under the Parent's credit facilities with $3.6 billion available to the Company. These facilities support both the Parent's and the Company's commercial paper programs for ongoing working capital needs. At March 31, 2021, there were $500 million of borrowings outstanding on the U.S. commercial paper program and zero outstanding on the Euro commercial paper program. At March 31, 2020, there were $483 million of borrowing outstanding on the U.S. commercial paper and $328 million outstanding on the Euro commercial paper program.

The credit facilities allow both the Parent and the Company to borrow in multi-currencies. The current annual commitment fees range from 0.09% to 0.34%. If for any reason the Company was not able to issue sufficient commercial paper or source funds from other sources, the facilities could be drawn upon to meet cash requirements. The facilities contain certain affirmative and negative operating covenants, including restrictions on the Company's utility subsidiaries' ability to mortgage, pledge, encumber, or otherwise subject their utility property to any lien, as well as financial covenants that require the Company and the Parent to limit the total indebtedness in U.S. and non-U.S. subsidiaries to pre-defined limits. Violation of these covenants could result in the termination of the facilities and the required repayment of amounts borrowed thereunder, as well as possible cross defaults under other debt agreements.

Debt Authorizations

Niagara Mohawk

Niagara Mohawk has regulatory approval from the FERC to issue up to $1.0 billion of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Niagara Mohawk had no external short-term debt as of March 31, 2021 and 2020.

The NYPSC authorized Niagara Mohawk to issue up to $2.1 billion of incremental long-term debt in one or more transactions through March 31, 2020. The authorization includes the option to issue up to $429.5 million of the total authorization for a refunding of Niagara Mohawk's existing debt.

Under the authorization, Niagara Mohawk converted $424.2 million of tax-exempt revenue bonds from a variable interest rate into a fixed rate and issued $500.0 million of unsecured long-term debt at 4.28%. Prior to the expiration, Niagara Mohawk filed and received approval from the NYPSC for a one-year extension of the remaining $1.1 billion of authorization through March 31, 2021. Prior to the expiration/under the extended authorization, on June 25, 2020, Niagara Mohawk issued $600 million of unsecured senior long-term debt at a fixed rate of 1.96% with a maturity date of June 27, 2030 and $500 million of unsecured senior long-term debt at a fixed rate of 3.03% with a maturity date of June 27, 2050.

On April 1, 2021, Niagara Mohawk petitioned the NYPSC for authorization to issue, from time to time, through June 30, 2024, new long-term debt in an amount not to exceed $3 billion. On September 13, 2021, the NYPSC authorized Niagara Mohawk to issue up to $2.3 billion of new long-term debt securities. The authorized securities will enable Niagara Mohawk to fund the construction of utility plant, refinance maturing and/or redeemed issues of debt, redemption of preferred stock, refinance callable debt, refinance short-term debt with long-term debt, finance the capital needs of Niagara Mohawk, and meet other general corporate purposes through June 30, 2024, subject to the terms of the order. In addition, Niagara Mohawk is seeking the ability to redeem the preferred stock of approximate $29 million under the requested authorization in lieu of a New Debt issuance, should the economics demonstrate a benefit to customers.

Brooklyn Union

On February 8, 2019 the NYPSC authorized Brooklyn Union to issue up to $1.4 billion of long-term debt in one or more transactions through March 31, 2022. Under the authorization, on February 27, 2019, Brooklyn Union issued $550 million of unsecured senior long-term debt at a fixed rate of 3.87% with a maturity date of March 4, 2029 and $450 million of unsecured senior long-term debt at a fixed rate of 4.49% with a maturity date of March 4, 2049. As of March 31, 2021, $400 million of debt authorization remains under the NYPSC order.

KeySpan Gas East

On February 8, 2019 the NYPSC authorized KeySpan Gas East to issue up to $400 million of long-term debt in one or more transactions through March 31, 2022. KeySpan Gas East did not issue any debt under the authorization during the year ended March 31, 2021.

Massachusetts Electric

Massachusetts Electric has regulatory approval from the FERC to issue up to $750 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Massachusetts Electric had no external short-term debt as of March 31, 2021 and 2020.

On August 31, 2020, Massachusetts Electric received approval from the DPU to issue up to $1.1 billion of long-term debt in one or more transactions through August 31, 2023. In November 2020, Massachusetts Electric issued $500 million of unsecured long-term debt at 1.7% with a maturity date of November 24, 2030, resulting in $600 million of remaining authorization.

NEP

NEP has regulatory approval from the FERC to issue up to $1.5 billion of short-term debt. The authorization was renewed with an effective date of October 15, 2020 and expires on October 14, 2022. NEP had no short-term debt outstanding as of March 31, 2021 and 2020.

On May 23, 2017, NEP had received all required approvals from the Massachusetts Department of Public Utilities, New Hampshire Public Utilities Commission and Vermont Public Service Board authorizing NEP to issue up to $800 million of long-term debt in one or more transactions through May 23, 2020. On November 30, 2017, NEP issued $400 million of unsecured senior long-term debt with a maturity date of December 5, 2047. In addition, NEP entered into a bank term loan for $100 million on March 31, 2020 with a maturity date of March 31, 2022. On October 30, 2020, the Company prepaid the $100 million bank term loan.

On August 31, 2020, NEP received additional approvals from the Massachusetts Department of Public Utilities, New Hampshire Public Utilities Commission and Vermont Public Service Board authorizing NEP to issue up to $1.1 billion of long-term debt in one or more transactions through August 31, 2023. On October 6, 2020, NEP issued $400 million of unsecured senior long-term debt with a maturity date of October 6, 2050, resulting in $700 million of remaining authorization.

Genco

Genco has had regulatory approval from the FERC to issue up to $250 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Genco had no short-term debt outstanding to third-parties as of March 31, 2021 or 2020.

Nantucket

Nantucket has regulatory approval from the FERC to issue up to $15 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Nantucket had no external short-term debt as of March 31, 2021 and 2020.

Narragansett (Held for sale)

Narragansett, which is reported as Held for sale as of March 31, 2021 (see Note 19, “Held for sale”), has regulatory approval from the FERC to issue up to $400 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Narragansett had no external short-term debt as of March 31, 2021 and 2020.

A new financing petition was filed with the RIPUC and approved on January 19, 2020 authorizing the issuance of up to $900 million of new long-term debt through March 31, 2023. In April 2020, Narragansett issued $600 million of unsecured long-term debt at 3.395% with a maturity date of April 9, 2030, resulting in $300 million of remaining authorization.

13. INCOME TAXES

Components of Income Tax Expense

	Years Ended March 31,	
	2021	2020
	(in millions of dollars)	
Current tax expense (benefit):		
Federal	**$ (4)**	$ (64)
State	**(11)**	17
Total current tax expense (benefit)	**(15)**	(47)
Deferred tax expense:		
Federal	**173**	233
State	**104**	95
Total deferred tax expense	**277**	328
Amortized investment tax credits [1]	**(1)**	(2)
Total deferred tax expense	**276**	326
Total income tax expense	**$ 261**	$ 279

[1] Investment tax credits ("ITC") are accounted for using the deferral and gross up method of accounting and amortized over the depreciable life of the property giving rise to the credits.

Statutory Rate Reconciliation

The Company's effective tax rates for the years ended March 31, 2021 and 2020 are 23.7% and 21.7%, respectively. The following table presents a reconciliation of income tax expense (benefit) at the federal statutory tax rate of 21% to the actual tax expense:

	Years Ended March 31,	
	2021	2020
	(in millions of dollars)	
Computed tax	**$ 231**	$ 270
Change in computed taxes resulting from:		
State income tax, net of federal benefit	**73**	89
Amortization of regulatory tax liability	**(25)**	(26)
Audit and related reserve movements	**7**	(56)
Cash Surrender Value	**(24)**	4
Other	**(1)**	(2)
Total changes	**30**	9
Total income tax expense	**$ 261**	$ 279

The Company files a consolidated federal income tax return and Massachusetts and New York unitary state income tax returns. The Company has joint and several liability for any potential assessments against the consolidated group.

Deferred Tax Components

	March 31, 2021	March 31, 2020
	(in millions of dollars)	
Deferred tax assets:		
Allowance for bad debts	**239**	145
Environmental remediation costs	**643**	677
Reserves not currently deducted	**281**	263
Net operating losses	**582**	665
Postretirement benefits and other employee benefits	**470**	796
Regulatory liabilities	**1,549**	1,446
Other	**293**	293
Total deferred tax assets	**4,057**	4,285
Deferred tax liabilities:		
Property-related differences	**6,179**	5,785
Regulatory assets	**1,440**	1,799
Other	**458**	370
Total deferred tax liabilities	**8,077**	7,954
Net deferred income tax liabilities	**4,020**	3,669
Deferred investment tax credits	**41**	36
Deferred income tax liabilities, net	**$ 4,061**	$ 3,705

In April 2021, New York State enacted the 2021/2022 state budget, which included several tax related provisions. The enacted budget includes raising the corporate franchise tax rate to 7.25% and reinstating the capital base of the franchise tax at 0.1875% for three years as part of a three-year COVID recovery plan. The new legislation is effective for tax years beginning on or after January 1, 2021 and before January 1, 2024, which for the Company includes fiscal years ending March 31, 2022 through March 31, 2024. The Company is evaluating the impact of the new legislation, but in accordance with US GAAP, no adjustments have been made as of the balance sheet date.

Net Operating Losses

The amounts and expiration dates of the Company's net operating loss carryforwards as of March 31, 2021 are as follows:

	Gross Carryforward Amount *(in millions of dollars)*	Expiration Period
Federal	$ 3,386	2033 – 2038
Federal – No Expiration	205	Indefinite
New York	2,175 [1]	2035 - 2041
New York City	368 [1]	2035 - 2041
Massachusetts	352	2035 - 2041

(1) The amount contains net operating losses that were incurred before the tax year ended March 31, 2015 that have been converted into a Prior Net Operating Loss Conversion subtraction that can be utilized beginning fiscal year 2017.

As a result of the accounting for uncertain tax positions, the amount of deferred tax assets reflected in the consolidated financial statements is less than the amount of the tax effect of the federal and state net operating loss carryforwards reflected on the income tax returns.

Status of Income Tax Examinations

During the year ended March 31, 2021, the Company reached a settlement with the IRS for the years ended March 31, 2013, March 31, 2014 and March 31, 2015. The outcome of the settlement did not have a material impact on the consolidated results of operations, financial position, or cash flows.

During the year ended March 31, 2021, the IRS informed the Company that it does not intend to audit the Company's income tax returns for the periods ended March 31, 2016 and 2017 and commenced its examination of the next audit cycle which includes periods ended March 31, 2018 and 2019. While the income tax returns for fiscal years 2016 and 2017 are not currently being audited by the IRS, the statute of limitations for these tax periods does not expire until December 31, 2021. Therefore, the income tax returns for the years ended March 31, 2016 through March 31, 2021 remain subject to examination by the IRS.

The state of New York is in the process of examining the Company's New York State income tax returns. The following table presents the subsidiaries and years currently under examination. The income tax returns for the subsequent years through March 31, 2021 remain subject to examination by the state of New York.

The following table indicates the earliest tax year subject to examination for each major jurisdiction:

Companies	**Years Under Examination**
Niagara Mohawk	March 31, 2013 through March 31, 2015
KeySpan Gas East	March 31, 2009 through March 31, 2012
Brooklyn Union	March 31, 2009 through March 31, 2012
KeySpan Energy Corporation	March 31, 2013 through March 31, 2015

The city of New York is in the process of examining the Company's New York City income tax returns. The following table presents the subsidiaries and years currently under examination. The income tax returns for the subsequent years through March 31, 2021 remain subject to examination by the city of New York.

Companies	**Years Under Examination**
KeySpan Corporation and Subsidiaries	December 31, 2003 through March 31, 2009

In September 2021, the Company reached an audit settlement agreement with the State of Massachusetts for the years ended March 31, 2010 through March 31, 2012. The outcome of the settlement did not have a material impact on the Company's results of operations, financial position, or cash flows. The income tax returns for the years ended March 31, 2013 through March 31, 2021 remain subject to examination by the state of Massachusetts.

The following table indicates the earliest tax year subject to examination for each major jurisdiction:

Jurisdiction	**Tax Years**
Federal	March 31, 2016
Massachusetts	March 31, 2013
New York	March 31, 2009
New York City	December 31, 2003

Uncertain Tax Positions

As of March 31, 2021 and 2020, the Company's unrecognized tax benefits totaled $442 million and $600 million, respectively of which $98 million and $112 million, respectively would affect the effective tax rate, if recognized. The unrecognized tax benefits are included in other non-current liabilities in the accompanying consolidated balance sheets. The following table presents changes to the Company's unrecognized tax benefits:

	Year Ended March 31,	
(in millions of dollars)	**2021**	2020
Beginning balance	**$ 600**	$ 553
Gross increases – tax positions in prior periods	**29**	45
Gross decreases – tax positions in prior periods	**(265)**	(80)
Gross increases – current period tax positions	**78**	82
Ending balance	**$ 442**	$ 600

The Company recognizes interest related to unrecognized tax benefits in other interest, including affiliate interest, and related penalties, if applicable, in other income, net, in the accompanying consolidated statements of operations and comprehensive income. As of March 31, 2021 and 2020, the Company has accrued interest related to unrecognized tax benefits of $68 million and $39 million, respectively. During the years ended March 31, 2021 and 2020, the Company recorded an interest expense of $32 million and an interest benefit of $37 million, respectively. No tax penalties were recognized during the years ended March 31, 2021 and 2020.

It is reasonably possible that other events will occur during the next twelve months that would cause the total amount of unrecognized tax benefits to increase or decrease. However, the Company does not believe any such increases or decreases would be material to its results of operations, financial position, or cash flows.

14. ENVIRONMENTAL MATTERS

The normal ongoing operations and historic activities of the Company are subject to various federal, state, and local environmental laws and regulations. Under federal and state Superfund laws, potential liability for the historic contamination of property may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred.

Air

Genco's generating facilities are subject to increasingly stringent emissions limitations under current and anticipated future requirements of the United States Environmental Protection Agency ("EPA") and the NYS Department of Environmental Conservation ("DEC"). In addition to efforts to improve both ozone and particulate matter air quality, there has been an increased focus on greenhouse gas emissions in recent years. Genco's previous investments in low NOx boiler combustion modifications, the use of natural gas firing systems at its steam electric generating stations, and the compliance flexibility available under cap and trade programs have enabled Genco to achieve its prior emission reductions in a cost-effective manner. These investments include the installation of enhanced NOx controls and efficiency improvement projects at certain of Genco's Long Island based electric generating facilities. The total cost of these improvements was approximately $106 million, all of which have been placed in service as of the date of this report; a mechanism for recovery from LIPA of these investments has been established. Genco will continue to make investments for additional emissions reductions, as needed. Genco has developed a compliance strategy to address anticipated future requirements and is closely monitoring the regulatory developments to identify any necessary changes to its compliance strategy. At this time, NGNA is unable to predict what effect, if any, these future requirements will have on its consolidated financial position, results of operations, and cash flows.

Water

Additional capital expenditures associated with the renewal of the surface water discharge permits for Genco's steam electric power plants have been required by the DEC pursuant to Section 316 of the Clean Water Act to mitigate the plants' alleged cooling water system impacts to aquatic organisms. Final permits have been issued for the Port Jefferson and Northport facilities. Capital improvements have been completed at Port Jefferson and are in the design, procurement, and construction phase for Northport. Genco continues to engage in discussions with the DEC regarding the nature of capital upgrades or other mitigation measures necessary to reduce any impacts at the E.F. Barrett facility. Genco is awaiting a final permit from the DEC to proceed with the improvements at E.F. Barrett. Total capital costs for these improvements at Northport and E.F. Barrett are estimated to be approximately $75 million. Costs associated with these capital improvements are reimbursable from LIPA under the PSA.

Land, Manufactured Gas Plants and Related Facilities

Federal and state environmental regulators, as well as private parties, have alleged that several of the Company's subsidiaries are potentially responsible parties under Superfund laws for the remediation of numerous contaminated sites in New York and New England. The Company's greatest potential Superfund liabilities relate to MGP facilities formerly owned or operated by its subsidiaries or their predecessors. MGP byproducts include fuel oils, hydrocarbons, coal tar, purifier waste, and other waste products which may pose a risk to human health and the environment.

Several lawsuits have been filed which allege damages resulting from contamination associated with the historic operations of a former MGP located in Bay Shore, New York. The Company has been conducting remediation at this location pursuant to Administrative Order on Consent with the DEC. The Company intends to contest these proceedings vigorously.

During the year ended March 31, 2020, a regulated subsidiary of the Company received new information concerning the design and remediation work required at several sites in New York, which resulted in the Company increasing its estimate for environmental reserves. The estimated increases were the result of new information arising from notices received from environmental regulators and updated cost estimates prepared by third party engineers. Based on this new information, the Company's subsidiary has revised the total cost estimate accordingly and has increased its provision by approximately $463 million. After recording an offsetting increase in regulatory assets relating to environmental remediation, there was no impact to the net assets of the subsidiary of the Company.

At March 31, 2021 and 2020, the Company's total reserve for estimated MGP-related environmental matters is $2.2 billion and $2.4 billion, respectively. The Company had a current portion of environmental remediation costs of $173 million and $216 million included in other current liabilities on the consolidated balance sheets at March 31, 2021 and 2020, respectively. Management believes that obligations imposed on the Company because of the environmental laws will not have a material adverse effect on its operations, financial position, or cash flows. Through various rate orders issued by the NYPSC, DPU, and RIPUC, costs related to MGP environmental cleanup activities are recovered in rates charged to gas distribution customers. Accordingly, the Company has reflected a net regulatory asset of $2.3 billion and $2.5 billion on the consolidated balance sheets at March 31, 2021 and 2020, respectively. Expenditures incurred for the years ended March 31, 2021 and 2020 were approximately $179 million and $103 million, respectively. The Company is pursuing claims against other potentially responsible parties to recover investigation and remediation costs it believes are the obligations of those parties. The Company cannot predict the likelihood of success of such claims.

The Company believes that its ongoing operations, and its approach to addressing conditions at historic sites, are in substantial compliance with all applicable environmental laws, and that the obligations imposed on it because of the environmental laws will not have a material impact on its results of operations or financial position since, as noted above, environmental expenditures incurred by the Company are generally recoverable from customers.

15. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

The Company's electric subsidiaries have several long-term contracts for the purchase of electric power. Substantially all of these contracts require power to be delivered before the subsidiaries are obligated to make payment. Additionally, the Company's gas distribution subsidiaries have entered into various contracts for gas delivery, storage, and supply services. Certain of these contracts require payment of annual demand charges, which are recoverable from customers. The Company's gas distribution subsidiaries are liable for these payments regardless of the level of service required from third-parties. In addition, the Company has various capital commitments related to the construction of property, plant, and equipment.

The Company's commitments under these long-term contracts for the years subsequent to March 31, 2021 are summarized in the table below:

(in millions of dollars) Years Ending March 31,	Energy Purchases	Capital Expenditures
2022	$ 1,336	$ 159
2023	1,036	71
2024	870	-
2025	691	-
2026	606	-
Thereafter	2,887	-
Total	$ 7,426	$ 230

The amounts in the above table exclude total commitments of $858 million related to Narragansett. See Note 19, "Held for sale".

The Company's subsidiaries can purchase additional energy to meet load requirements from independent power producers, other utilities, energy merchants or on the open market through the NYISO or the ISO-NE at market prices.

Financial Guarantees

The Company has guaranteed the principal and interest payments on certain outstanding debt of its subsidiaries. Additionally, the Company has issued financial guarantees in the normal course of business, on behalf of its subsidiaries, to various third-party creditors. At March 31, 2021, the following amounts would have to be paid by the Company in the event of non-payment by the primary obligor at the time payment is due:

Guarantees for Subsidiaries:		Amount of Exposure	Expiration Dates
		(In millions of dollars)	
KeySpan Ravenswood LLC Lease	(i)	$ 206	May 2040
Reservoir Woods	(ii)	107	October 2029
Surety Bonds	(iii)	200	Revolving
Commodity Guarantees and Other	(iv)	111	August 2025 – August 2042
Letters of Credit	(v)	692	August 2021 – March 2022
Grid NY, LLC	(vi)	341	None
NGRD	(vii)	35	None
NGRD	(viii)	100	None
Emerald's Project companies	(ix)	118	April 2023
		$ 1,910	

The following is a description of the Company's outstanding subsidiary guarantees:

(i) The Company and the Parent have jointly guaranteed certain payment obligations of a former subsidiary (KeySpan Ravenswood LLC) associated with a merchant electric generating facility leased by that subsidiary under a sale/leaseback arrangement. The subsidiary and the facility were sold in 2008. However, the original lease remains in place and the Company and the Parent will continue to make the required payments under the lease through 2040. The cash consideration from the buyer of the facility included the remaining lease payments on a net present value basis. At March 31, 2021, the Company's obligation related to the lease is $31 million and is reflected in other non-current liabilities on the consolidated balance sheets. In the event the Company and the Parent default on the lease payment obligations, and that causes the buyer to lose beneficial use of the leased facility, the buyer is entitled to the unamortized value of the leased facility purchase price. At March 31, 2021, the unamortized value of the leased facility purchase price is $206 million.

(ii) The Company has fully and unconditionally guaranteed $107 million in lease payments through 2029 related to the lease of office facilities by its service company at Reservoir Woods in Waltham, Massachusetts. The Reservoir Woods lease is reported as an operating lease on the Company's consolidated balance sheets.

(iii) The Company has agreed to indemnify the issuers of various surety bonds associated with various construction requirements or projects of its subsidiaries. In the event that the Company or its subsidiaries fail to perform their obligations under contracts, the injured party may demand that the surety make payments or provide services under the bond. The Company would then be obligated to reimburse the surety for any expenses or cash outlays it incurs.

(iv) The Company has guaranteed commodity-related and operational payments for certain subsidiaries. These guarantees are provided to third-parties to facilitate physical and financial transactions supporting the purchase and transportation of natural gas, oil, and other petroleum products for gas and electric production and financing activities. The guarantees cover actual transactions by these subsidiaries that are still outstanding as of March 31, 2021.

(v) The Company has arranged for stand-by letters of credit to be issued to third-parties that have extended credit to certain subsidiaries. Certain vendors require the posting of letters of credit to guarantee subsidiary performance under the Company's contracts and to ensure payment to the Company's subsidiary subcontractors and vendors under those contracts. Certain of the Company's vendors also require letters of credit to ensure reimbursement for amounts they are disbursing on behalf of the Company's subsidiaries, such as to beneficiaries under the Company's self-funded insurance programs. Such letters of credit are generally issued by a bank or similar financial institution. The letters of credit commit the issuer to pay specified amounts to the holder of the letter of credit if the holder demonstrates that the Company has failed to perform specified actions. If this were to occur, the Company would be required to reimburse the issuer of the letter of credit.

(vi) The Company has entered into a Parent Guaranty (the "Guaranty") dated November 14, 2014 for the benefit of NY Transco LLC. The Company, through a wholly owned subsidiary, Grid NY LLC, has an equity investment in NY Transco LLC, which is an independent transmission company that competes for and builds new bulk power transmission facilities in New York. The Guaranty irrevocably and unconditionally guarantees all of Grid NY LLC's payment obligations under the New York Transco Limited Liability Company Agreement ("NY Transco LLC Agreement") dated November 14, 2014 entered into by and among Consolidated Edison Transmission, LLC, Grid NY LLC, Iberdrola USA Networks, NY Transco, LLC and Central Hudson Electric Transmission LLC. Grid NY LLC's payment obligations relate to, but are not limited to, funding project development of the initial projects, obtaining initial regulatory approvals and making capital contributions as set forth in the NY Transco LLC Agreement.

(vii) The Company has provided a guaranty in support of letter of credit facility for NGRD development projects.

(viii) The Company has provided a parent guaranty for NGV's payment obligations under Professional Services Agreement with sellers of NGRD: $12 million in up-front purchase price holdbacks and $88 million of potential earn-outs.

(ix) The Company is guaranteeing payment should the benefiting project companies be unable to pay.

Long-term Contracts for Renewable Energy

Offshore Wind Energy Procurement

On December 6, 2018, Narragansett entered into a 20-year power purchase agreement (“PPA”) with DWW Rev I, LLC (“Revolution Wind”), for the purchase of the electricity and renewable energy credits generated by the offshore windfarm proposed by Revolution Wind, that will have a capacity of up to 408 MW. The anticipated commercial operations date for the windfarm is in January 2024. On May 28, 2019, at an open meeting, the RIPUC approved the contract without remuneration. The written order approving the agreement and that Narragansett will be able to recover the cost incurred under the agreement was issued by the RIPUC on June 7, 2019.

On July 31, 2018, the Massachusetts Electric Companies entered into two separate 20-year PPAs with Vineyard Wind LLC (“Vineyard Wind”) for the purchase of 46.16% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Vineyard Wind, with each individual windfarm having a capacity of up to 400 MW. The contracts with Vineyard Wind were entered into pursuant to Section 83C of the Green Communities Act. On April 12, 2019, the DPU approved the contracts, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. Based on the terms of the contracts, the commercial operations date for the first wind farm was initially expected to be in January 2022, with the second wind farm anticipated in May 2022. On July 9, 2021, Vineyard Wind exercised its fourth and final option to extend the critical milestones associated with the first wind farm and its second option to extend the critical milestones associated with the second wind farm. On July 20, 2021, the Massachusetts Electric Companies executed an amendment to the PPA for the first wind farm, which extends the critical milestone dates by twenty-four months, including the commercial operations date. This amendment was filed with the DPU on July 21, 2021.

Offshore Wind Energy Procurement: Round 2

On January 10, 2020, the Massachusetts Electric Companies entered into two separate 20-year PPAs with Mayflower Wind Energy LLC (“Mayflower Wind”) for the purchase of 45.41% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Mayflower Wind, with the first wind farm having a capacity of up to 408 MWs and the second having a capacity of up to 396 MWs. The contracts with Mayflower Wind were entered into pursuant to Section 83C of the Green Communities Act. Based on the terms of the contracts, the commercial operations date for the first wind farm is expected to be in September 2025, with the second wind farm anticipated in December 2025. These contracts were filed with the DPU on February 10, 2020. On November 5, 2020, the DPU approved the contracts, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. The AG filed a motion for reconsideration on November 25, 2020, in which it asked the DPU for additional information regarding the DPU’s approval of 2.75% remuneration on the annual payments made. The AG’s motion was denied on June 23, 2021. On July 9, 2021, the decision became final and unappealable, and regulatory approval was achieved.

Clean Energy Procurement

On June 13, 2018, the Massachusetts Electric Companies entered into two separate agreements for the transportation and purchase of electricity and the related environmental attributes from hydroelectric facilities located in the Canadian Province of Québec. The two agreements were entered into pursuant to Section 83D of the Green Communities Act. The first agreement is a 20-year PPA with H.Q. Energy Services Inc., ("H.Q. Energy"). for the purchase of approximately 498 MWhs of electricity and the related environmental attributes from a portfolio of hydroelectric facilities owned and operated by affiliates of H.Q Energy. The second agreement is a 20-year transmission service agreement ("TSA") with NECEC Transmission LLC ("NECEC"). This agreement was assigned to NECEC by Central Maine Power Company, with the consent of the Massachusetts Electric Companies. The TSA provides for the transmission of the electricity supplied by H.Q. Energy on a proposed new transmission line that will run from the United States border to Lewiston, Maine, where it will interconnect with the ISO-NE system. Both the TSA with NECEC and the PPA with H.Q. Energy are contingent on the successful development and construction of the underlying transmission line by NECEC. The anticipated commercial operations date of the transmission line is in August 2024, based on the contractual terms. The DPU approved the Section 83D contracts on June 25, 2019, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. NextEra Energy filed an appeal of the DPU's approval of the PPA with H.Q. Energy on July 12, 2019. On September 3, 2020, the Massachusetts Supreme Judicial Court upheld the DPU's approval.

Annual Solicitations

The 2009 Rhode Island law requires that, beginning on July 1, 2010, Narragansett conduct four annual solicitations for proposals from renewable energy developers and, provided commercially reasonable proposals have been received, enter into long-term contracts for the purchase of capacity, energy, and attributes from newly developed renewable energy resources. In 2014 the Long Term Contracting Standard was amended to allow for additional solicitations until the 90 MW contracting capacity requirement was met.

Narragansett's previous four solicitations resulted in four PPAs that have been approved by the RIPUC. Three of the related facilities reached commercial operation range during the period from 2013 to 2017, The remaining PPA was terminated in 2017 due to one of the required permits for the project was rejected.

On May 11, 2020, under the Fifth Solicitation, the RIPUC approved a 20-year PPA with Gravel Pit Solar II, LLC for a 49.5 MW land based bifacial solar project located in East Windsor, CT. The anticipated commercial operation date is March 31, 2023.

As approved by the RIPUC, Narragansett is allowed to pass through commodity-related / purchased power costs to customers and collect remuneration equal to 2.75%.

Legal Matters

The Company is subject to various legal proceedings arising out of the ordinary course of its business. the Company does not consider any of such proceedings to be material, individually or in the aggregate, to its business or likely to result in a material adverse effect on its results of operations, financial position, or cash flows.

NYPSC Investigation

On June 17, 2021, five former National Grid employees in the downstate New York facilities department were arrested on federal charges alleging fraud and bribery. It is National Grid's understanding that the investigation by the US Attorney's Office and FBI remains ongoing; National Grid is a victim of the alleged crimes and will continue to comply with the government's investigation. The New York Public Service Commission, the Massachusetts Department of Public Utilities, and the Rhode Island Public Utilities Commission have each issued request for information related to the alleged criminal conduct. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, the Company does not expect this matter will have a material adverse effect on its results of operations, financial position or cash flows.

Energy Efficiency Programs Investigation

National Grid is performing an internal investigation regarding conduct associated with energy efficiency programs at one of the Company's affiliates. At this time, it is not possible to predict the outcome of the investigation or determine the amount, if any, of any liabilities that may be incurred in connection with it by the Company or its affiliates. However, the Company does not expect this matter will have a material adverse effect on its results of operations, financial position or cash flows.

Hempstead Property Tax Settlement

On July 16, 2018, KeySpan Gas East Corporation received a tax refund of $50 million from the Town of Hempstead pursuant to a judgment for claims related to garbage tax levies for the tax years 1996 through 2012. Both parties have appealed certain aspects of the judgment and the Court ruled on December 30, 2020 that the trial court should have applied 9% prejudgment interests instead of 6%. At the time the proceeds were received, KeySpan Gas East Corporation established a regulatory liability for the benefit of customers. In August 2021, the parties agreed to a final settlement of the litigation in which KeySpan Gas East Corporation will receive an additional payment of $14 million on or before November 1, 2021. In addition, the approved NYPSC rate case, allows KeySpan Gas East Corporation to retain its costs to achieve the ultimate refund and 15% of the refund after the cost to achieve plus interest on KeySpan Gas East Corporation's deferred balance since 2018.

Nassau County Special District Tax Settlement

Litigation began over two decades ago to challenge the methodology employed by Nassau County for the purposes of imposing special ad valorem levies upon KeySpan's real property located in non-countywide special districts for the 1998 through 2001 tax years. On August 2, 2021, the KeySpan Gas East Corporation received approval from the Nassau County Legislature in Resolution No. 116-2021 whereby the County has agreed to make payment in the total amount of $62 million to be paid in four equal installments of $15 million commencing on December 30, 2021, with the final payment due no later than December 30, 2024, inclusive of principal and statutory interest in full settlement of all possible claims the KeySpan Gas East Corporation may have against the County on this matter.

FERC ROE Complaints

Four separate complaints have been filed at the FERC by combinations of New England state attorneys general, state regulatory commissions, consumer advocates, consumer groups, municipal parties and other parties (collectively the "Complainants"). In each of the first three complaints, filed on October 1, 2011, December 27, 2012, and July 31, 2014, respectively, the Complainants challenged the NETO base ROE of 11.14% that had been utilized since 2005 and sought an order to reduce it prospectively from the date of the final FERC order and for the separate 15-month complaint periods. In the fourth complaint, filed April 29, 2016, the Complainants challenged the NETOs' base ROE of 10.57% and the maximum ROE for transmission incentive ("incentive cap") of 11.74%, asserting that these ROEs were unjust and unreasonable. NEP recorded a liability of $33 million and $32 million included in other current liabilities on the consolidated balance sheets as of March 31, 2021 and 2020, respectively, for the potential refund as a result of reduction of the base ROE.

With the exception of the FERC order issued on October 16, 2018 (refer to "Recovery of Transmission Costs" section in Note 5, "Rate Matters"), where the FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable and, if so, how to calculate a replacement ROE, the FERC has not issued a final order on NEP's ROE complaints nor the applicability of the FERC orders on the MISO ROE complaint proceedings on other transmission owners.

Given the significant uncertainty relating to the October 2018 FERC order and the subsequent orders issued on the MISO ROE complaint proceedings, NEP has concluded that there is no reasonable basis for a change to the reserve or recognized ROEs for any of the complaint periods at this time. Further, NEP believes that the current reserve is the best estimate of the potential loss.

FERC 206 Proceeding on Rate Transparency

On December 28, 2015, the FERC initiated a proceeding under Section 206 of the FPA. The FERC found that the ISO-NE Transmission, Markets, and Services Tariff is unjust, unreasonable, and unduly discriminatory or preferential. FERC found that the ISO-New England's Tariff lacks adequate transparency and challenge procedures regarding to the formula rates for ISO-NE Participating Transmission Owners ("PTOs"). In addition, the FERC found that the ISO-NE PTOs', including NEP's, current RNS and LNS formula rates appear to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. FERC explained that the formula rates appear to lack sufficient detail in order to determine how certain costs are derived and recovered in the formula rates. Accordingly, FERC established hearing and settlement judge procedures. Several parties are active in the proceeding, including FERC employees, various interested consumer parties, the New England States Committee on Electricity (NESCOE), and several municipal light departments. In August 2018, the parties to the proceeding agreed to the terms of a settlement and subsequently filed the proposed settlement with the settlement judge in the proceeding. It was opposed by certain municipal parties, making it a contested settlement. On May 22, 2019, FERC rejected the Formula Rate 206 settlement in its entirety and remanded the matter to the Chief Administrative Law Judge ("ALJ") for hearing procedures. The parties continued settlement negotiations and were granted multiple suspensions of the procedural schedule to attempt to finalize settlement. The Chief ALJ held hearing procedures in abeyance while settlement discussions were underway.

On June 15, 2020, the parties filed a revised settlement agreement with FERC that is supported and signed by all parties, including all 6 New England states and the parties who opposed the 2018 settlement. The revised settlement reflects a number of transparency-related changes as well as affirmations regarding rate treatment on specific items as requested by FERC trial staff and represented municipal PTF owners. The Settling Parties requested that FERC accept the settlement by November 1, 2020 with an effective date of January 1, 2021, but the FERC did not act to do so. However, on December 28, 2020, FERC approved the settlement without modification. The settlement formula rates will go into effect on January 1, 2022. Interim formula rate protocols go into effect on June 15, 2021 and terminate on June 14, 2023 at which point permanent protocols will go into effect. As part of the settlement approved by the FERC, the parties agreed to a moratorium which applies to Section 205 or Section 206 filings seeking to change Attachment F of the ISO-NE OATT, its appendices or the formula rate Protocols developed as part of the settlement, subject to certain exceptions, until December 31, 2024.

Electric Services and LIPA Agreements

Effective May 28, 2013 (and most recently amended on April 1, 2018), Genco provides services to LIPA under the A&R PSA. Under the A&R PSA, Genco has a ROE of 9.75% and a capital structure of 50% debt and 50% equity. Genco's annual revenue requirement for the year ended March 31, 2021 was $447 million.

The A&R PSA has a term of fifteen years, provided LIPA has the option to terminate the agreement as early as April 2025 on two years advance notice. In addition, LIPA has options to ramp down blocks of capacity on two years advance notice for steam generating units and one year advance notice for other generating units covered by the A&R PSA. The earliest effective ramp down date for Genco's Northport steam generating units is May 2021; ramp downs for all other units could be effective at any time after consideration of the notice periods. Should any ramp downs be exercised, Genco is entitled to a ramp down payment plus operating and maintenance expenses for 18 months for steam generating units and 12 months for all other generating units. The ramp down payment is equivalent to the net book value of the generating unit, less a discount factor. This discount factor ranges from 50% of the unit's net book value if retired with an effective date in 2022, up to 62.5% of the unit's net book value if retired with an effective date thereafter.

In December 2019, LIPA provided advance notice for one non-steam generating unit ramp down, with an effective date in December 2020. This unit is not fully depreciated, and the company incurred a $0.4 million loss. In March 2021, LIPA requested this unit continue to be used and converted to Load Modifier status effective in May 2021.

In February 2020, LIPA provided advance notice for one non-steam generating unit ramp down with an effective date in February 2021. The Company does not expect a material impact from this ramp down. In March 2021, LIPA requested that this unit continue to be used and converted to Load Modifier status effective in March 2021.

The A&R PSA provides potential penalties to Genco if it does not maintain the output capability of the generating facilities, as measured by annual industry-standard tests of operating capability, plant availability, and efficiency. These penalties may total up to $4 million annually. Although the A&R PSA provides LIPA with all of the capacity from the generating facilities, LIPA has no obligation to purchase energy from the generating facilities and can purchase energy on a least-cost basis from all available sources consistent with existing transmission interconnection limitations of the transmission and distribution system. To date, Genco has dispatched to LIPA and LIPA has accepted the level of energy generated at the agreed to price per megawatt hour. Under the terms of the A&R PSA, LIPA is obligated to pay for capacity at rates that reflect recovery of an agreed level of the overall cost of maintaining and operating the generating facilities, including recovery of depreciation and return on its investment in plant. The revenue requirement, which is comprised of the capacity charge, is approximately 88.6% of total revenue and is adjusted each year using cost escalation and inflation factors applied to the prior year's capacity charge. A monthly variable maintenance charge is billed for each unit of energy actually acquired from the generating facilities. The billings to LIPA under the A&R PSA do not include a provision for fuel costs, as such fuel is owned by LIPA.

Nuclear Contingencies

As of March 31, 2021 and 2020, Niagara Mohawk reported a liability of $178 million and $178 million, respectively, recorded in other non-current liabilities on the consolidated balance sheets, for the disposal of nuclear fuel irradiated prior to 1983. The Nuclear Waste Policy Act of 1982 provides three payment options for liquidating such liability and Niagara Mohawk has elected to delay payment, with interest, until the year in which Constellation Energy Group Inc., which purchased Niagara Mohawk's nuclear assets, initially plans to ship irradiated fuel to an approved Department of Energy ("DOE") disposal facility.

The 2010 Federal budget eliminated almost all funding for the creation of the Yucca Mountain repository. A Blue Ribbon Commission ("BRC") on America's Nuclear Future, appointed by the U.S. Energy Secretary, released a report on January 26, 2012, detailing comprehensive recommendations for creating a safe, long-term solution for managing and disposing of the nation's spent nuclear fuel and high-level radioactive waste.

In early 2013, the DOE issued an updated "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste" in response to the BRC recommendations. This strategy included a consolidated interim storage facility that was planned to be operational in 2025. However, due to continued delays on the part of the DOE, and the amount of time required for DOE to select a site location and develop the necessary infrastructure for long-term spent nuclear fuel storage, the Company cannot predict the date at which the DOE will begin accepting spent nuclear fuel.

16. LEASES

The Company has various operating leases, primarily related to a transmission line, buildings, land, real estate, and fleet vehicles used to support the electric and gas operations, with lease terms ranging between 4 and 70 years.

Operating lease ROU assets are included in property, plant and equipment, net, and operating lease liabilities are included in other current liabilities and other noncurrent liabilities on the balance sheet. As of March 31, 2021, the Company does not have any finance leases.

Expense related to operating leases was $148 million and $150 million for the years ended March 31, 2021 and 2020, respectively.

The Company does not have any other material rights or obligations under operating leases that have not yet commenced at March 31, 2021.

The following table presents the components of cash flows arising from lease transactions:

	Years ended March 31,			
	2021		2020	
	(in millions of dollars)			
Cash paid for amounts included in lease liabilities				
Operating cash flows from operating leases	**$**	**150**	$	150
Financing cash flows from finance leases		**1**		1
ROU assets obtained in exchange for operating lease liabilities	**$**	**136**	$	876
Weighted-average remaining lease term – operating leases		**15 years**		15 years
Weighted-average discount rate – operating leases		**3.32%**		3.33%

The following contains the Company's maturity analysis of its operating lease liabilities, showing the undiscounted cash flows on an annual basis reconciled to the undiscounted cash flows of the operating lease liabilities recognized in the comparative balance sheet:

	As of March 31, 2021 Operating Leases	
Year Ending March 31,	*(in millions of dollars)*	
2022	**$**	**120**
2023		**112**
2024		**96**
2025		**78**
2026		**61**
Thereafter		**561**
Total future minimum lease payments		**1,028**
Less: imputed interest		**246**
Total	**$**	**782**
Reported as of March 31, 2021:		
Current lease liability	**$**	**100**
Non-current lease liability		**682**
Total	**$**	**782**

There are certain leases in which the Company is the lessor. Revenue under such leases was immaterial for the year ended March 31, 2021 and March 31, 2020.

17. RELATED PARTY TRANSACTIONS

Accounts Receivable from and Accounts Payable to Affiliates

The Company engages in various transactions with the Parent and its subsidiaries. Certain activities and costs, primarily executive and administrative and some human resources, legal, and strategic planning, are shared between the Company and its affiliates.

A summary of outstanding accounts receivable from affiliates and accounts payable to affiliates is as follows:

	Accounts Receivable from Unconsolidated Affiliates		Accounts Payable to Unconsolidated Affiliates	
	March 31,		March 31,	
	2021	2020	**2021**	2020
		(in millions of dollars)		
National Grid plc	**$ 9**	$ 15	**$ 33**	$ -
National Grid Holding One plc [(1)]	**-**	-	**9**	8
Other	**-**	-	**1**	1
Total	**$ 9**	$ 15	**$ 43**	$ 9

[(1)] National Grid Holding One plc is a subsidiary of National Grid plc.

The Company also records short-term receivables from, and payables to, certain of its affiliates in the ordinary course of business. The amounts receivable from, and payable to, its affiliates do not bear interest and are settled through the intercompany money pool.

The above accounts receivable from affiliate balances of $9 million and $15 million are included in other current assets as of March 31, 2021 and 2020, respectively.

Equity infusion from Parent

During the year-ended March 31, 2021, the Company received capital contributions totaling $2 billion from a subsidiary of the Parent. The contribution represents Additional Paid in Capital.

Advance from Affiliate

In August 2009, the Company entered into an agreement with the Parent, whereby either party can collectively borrow up to $3.0 billion from time to time for working capital needs. These advances currently bear interest rates of LIBOR plus a margin set to reflect the cost of short-term borrowing rates for the Parent at the time of the borrowing. Outstanding balance are due on demand and reported on a net basis in the consolidated statements of cash flows. At March 31, 2021 and 2020, the Company had zero and $300 million advances under this agreement, respectively.

Intercompany Note Payable

NGNA's intercompany debt is in the form of intercompany loans from the Parent and other affiliated entities obtained to fund the acquisition of various entities as well as general corporate purposes. The intercompany loans are paid back by NGNA from the dividends it receives from NGUSA.

As of March 31, 2020, NGNA had an intercompany note payable to one of the Parent's affiliates, due to mature in July 2027, with an interest rate of 0.92% to 1.08% over LIBOR. The Company repaid this loan note in full on January 28, 2021. The intercompany note had a balance of $972 million at March 31, 2020, reported in Long-term debt on the consolidated balance sheets.

Holding Company Charges

The Company receives charges from National Grid Commercial Holdings Limited (an affiliated company in the United Kingdom) for certain corporate and administrative services provided by the corporate functions of the Parent to its U.S. subsidiaries. For the years ended March 31, 2021 and 2020, the effect on income before income taxes was $69 million and $30 million, respectively.

18. PREFERRED STOCK

Preferred stock of NGUSA subsidiaries

The Company's subsidiaries have certain issues of non-participating cumulative preferred stock outstanding where the security is guaranteed by National Grid plc and can be redeemed only at the option of the Company's subsidiaries. There are no mandatory redemption provisions on the cumulative preferred stock and no conversion options. A summary of the cumulative preferred stock of NGUSA subsidiaries at March 31, 2021 and 2020 is presented in the table below. The preferred stock is reported as a non-controlling interest as of March 31, 2021.

		Shares Outstanding		**Amount**		
		March 31,		**March 31,**		Call
Series	Company	**2021**	2020	**2021**	2020	Price
		(in millions of dollars, except per share and number of shares data)				
$100 par value -						
3.40% Series	Niagara Mohawk	**57,524**	57,524	**$ 6**	$ 6	$ 103.500
3.60% Series	Niagara Mohawk	**137,152**	137,152	**14**	14	104.850
3.90% Series	Niagara Mohawk	**95,171**	95,171	**9**	9	106.000
4.44% Series	Massachusetts Electric	**22,585**	22,585	**2**	2	104.068
6.00% Series	NEP	**11,117**	11,117	**1**	1	Non-callable
$50 par value -						
4.50% Series	Narragansett [1]	**49,089**	49,089	**3**	3	55.000
Golden Shares -	Niagara Mohawk and the New York Gas Companies	**3**	3	**-**	-	Non-callable
Total		**372,641**	372,641	**$ 35**	$ 35	

[1] Related to held for sale, see Note 17 "Held for sale".

In connection with the acquisition of KeySpan by NGUSA, the Company's New York Gas Companies became subject to a requirement to issue a class of preferred stock, having one share (the "Golden Share"), subordinate to any existing preferred stock. The holder of the Golden Share would have voting rights that limit the Company's right to commence any voluntary bankruptcy, liquidation, receivership, or similar proceeding without the consent of the holder of the Golden Share. The NYPSC subsequently authorized the issuance of the Golden Share to a trustee, GSS Holdings, Inc. ("GSS"), who will hold the Golden Share subject to a Services and Indemnity Agreement requiring GSS to vote the Golden Share in the best interests of NYS. On July 8, 2011, the Company issued a total of 3 Golden Shares pertaining to Niagara Mohawk and the New York Gas Companies each with a par value of $1.

The Company's subsidiaries did not redeem any preferred stock during the years ended March 31, 2021 or 2020. The annual dividend requirement for cumulative preferred stock was $1 million as of March 31, 2021 and 2020.

19. HELD FOR SALE

On March 17, 2021, NGUSA signed an agreement to sell its 100% indirect ownership interest in Narragansett for $3.8 billion (excluding long-term debt). The sale was agreed to as part of the Parent's acquisition of Western Power Distribution from PPL. As the sale of Narragansett is considered probable and is expected to complete within a year, once all regulatory approvals have been obtained, the associated assets and liabilities that will form part of the sale have been presented as held for sale in the consolidated balance sheets as of March 31, 2021.

	March 31, 2021
	(in millions of dollars)
Current assets:	
Cash and cash equivalents	$ 6
Accounts receivable	314
Allowance for doubtful accounts	(63)
Unbilled revenues	62
Inventory	44
Regulatory assets	72
Derivative instruments	5
Other	3
Total current assets	443
Property, plant and equipment, net	3,734
Non-current assets:	
Regulatory assets	452
Goodwill	780
Derivative instruments	1
Other	26
Total non-current assets	1,259
Total assets	$ 5,436

	March 31, 2021
	(in millions of dollars)
Current liabilities:	
Accounts payable	**$ 147**
Current portion of long-term debt	**1**
Taxes accrued	**39**
Customer deposits	**12**
Interest accrued	**16**
Regulatory liabilities	**109**
Derivative instruments	**6**
Renewable energy certificate obligations	**31**
Payroll and benefits accruals	**15**
Other	**85**
Total current liabilities	**461**
Non-current liabilities:	
Regulatory liabilities	**566**
Asset retirement obligations	**9**
Postretirement benefits	**30**
Environmental remediation obligations	**89**
Derivative instruments	**6**
Operating lease liabilities	**15**
Other	**21**
Total non-current liabilities	**736**
Long-term debt	**1,510**
Total liabilities and equity	**2,707**
Net Assets	**$ 2,729**

The Company's consolidated statements of operations and comprehensive income include $165 million for the year ended March 31, 2021 and $149 million for the year ended March 31, 2020 of Income before income taxes resulting directly from the operations of Narragansett.

7-27 Consolidated Financial Statement 2021/22 National Grid North America Inc

nationalgrid

National Grid North America Inc. and Subsidiaries

Consolidated Financial Statements

For the years ended March 31, 2022 and 2021

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES

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The accompanying notes are an integral part of these consolidated financial statements.

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
National Grid North America Inc.

Opinion

We have audited the consolidated financial statements of National Grid North America Inc. and Subsidiaries (the "Company"), which comprise the consolidated balance sheets and statements of capitalization as of March 31, 2022 and 2021, and the related consolidated statements of operations and comprehensive income, cash flows and shareholders' equity for the years then ended, and the related notes to the consolidated financial statements (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of March 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As discussed in Note 1 and Note 19 to the financial statements, the Company signed an agreement to sell its 100% indirect ownership in The Narragansett Electric Company which closed on May 25, 2022. Therefore, the associated assets and liabilities that will form part of the sale have been presented as held for sale in the consolidated balance sheets as of March 31, 2022 and 2021. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are issued.

Auditor’s Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Deloitte & Touche LLP

July 13, 2022

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(in millions of dollars)

	Years Ended March 31,	
	2022	2021
Operating revenues	**$ 14,212**	$ 12,398
Operating expenses:		
Purchased electricity	**1,951**	1,547
Purchased gas	**2,456**	1,582
Operations and maintenance	**5,133**	4,878
Depreciation and amortization	**1,510**	1,343
Other taxes	**1,423**	1,355
Total operating expenses	**12,473**	10,705
Operating income	**1,739**	1,693
Other income (deductions):		
Interest on long-term debt, net	**(665)**	(649)
Other interest, including affiliate interest, net	**20**	(164)
Income (loss) from equity method investments	**66**	40
Other income, net	**254**	180
Total other income (deductions)	**(325)**	(593)
Income before income taxes	**1,414**	1,100
Income tax expense	**239**	261
Net income	**1,175**	839
Net income attributed to non-controlling interests	**(2)**	(3)
Net income attributed to common shareholders	**$ 1,173**	$ 836
Other comprehensive income, net of taxes:		
Unrealized gains (losses) on securities, net of tax expense (benefit) of ($4) and $1 in 2022 and 2021, respectively	**(9)**	1
Change in pension and other postretirement obligations, net of tax expense (benefit) of $9 and $82 in 2022 and 2021, respectively	**23**	229
Unrealized gains on hedges, net of tax expense (benefit) of $5 and $3 in 2022 and 2021, respectively	**11**	9
Total other comprehensive income	**25**	239
Comprehensive income	**$ 1,200**	$ 1,078
Less: Comprehensive income attributed to non-controlling interest	**(2)**	(3)
Comprehensive income attributed to common shareholders	**$ 1,198**	$ 1,075

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions of dollars)

	Years Ended March 31, 2022	2021
Operating activities:		
Net income	**$ 1,175**	$ 839
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**1,510**	1,343
Impairment loss	**97**	-
Deferred income tax expense and amortization of investment tax credits	**266**	276
Bad debt expense	**192**	412
Gains from financial investments	**(27)**	(183)
Loss (income) from equity method investments	**(66)**	(40)
Allowance for equity funds used during construction	**(100)**	(74)
Net pension and postretirement benefit expense	**(18)**	152
Other, net	**43**	95
Dividends from equity method investments and other financial investments	**69**	56
Pension and postretirement benefits contributions, net	**(148)**	(149)
Environmental remediation payments	**(119)**	(179)
Changes in operating assets and liabilities:		
Accounts receivable and unbilled revenues, net	**(599)**	(770)
Accounts receivable from/payable to affiliates, net	**39**	40
Inventory	**(14)**	18
Regulatory assets and liabilities (current), net	**586**	(47)
Regulatory assets and liabilities (non-current), net	**(225)**	75
Derivative instruments, net	**(454)**	(174)
Prepaid and accrued taxes, net	**(1)**	42
Accounts payable and other liabilities	**461**	523
Other assets and liabilities, net	**53**	43
Net cash provided by operating activities	**2,720**	2,298
Investing activities:		
Capital expenditures	**(4,256)**	(3,788)
Cost of removal	**(178)**	(260)
Contributions to equity method investments	**(323)**	(106)
Purchases of financial investments	**(145)**	(111)
Proceeds from sales of financial investments	**312**	106
Other, net	**30**	7
Net cash used in investing activities	**(4,560)**	(4,152)
Financing activities:		
Payments on long-term debt	**(1,038)**	(2,130)
Proceeds from long-term debt	**2,814**	2,974
Payment of debt issuance costs	**(10)**	(32)
Commercial paper issued	**4,162**	3,369
Commercial paper paid	**(4,026)**	(3,688)
Advance from affiliate, net	**-**	(300)
Equity infusion from Parent	**-**	2,000
Other	**(21)**	-
Net cash provided by financing activities	**1,881**	2,193
Net increase in cash, cash equivalents, restricted cash and special deposits, including cash classified within assets held for sale	**41**	339
Less: Net decrease in cash classified within assets held for sale	**(1)**	(6)
Net increase in cash, cash equivalents, restricted cash and special deposits	**40**	333
Cash, cash equivalents, restricted cash and special deposits, beginning of year	**1,266**	933
Cash, cash equivalents, restricted cash and special deposits, end of year	**$ 1,306**	$ 1,266
Supplemental disclosures:		
Interest paid, net of amounts capitalized	**$ (661)**	$ (789)
Income taxes refunded (paid)	**(21)**	3
Significant non-cash items:		
Capital-related accruals included in accounts payable	**721**	265
ROU assets obtained in exchange for operating lease liabilities	**(48)**	136

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31,	
	2022	2021
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 1,082**	$ 1,164
Restricted cash and special deposits	**224**	102
Accounts receivable	**3,121**	2,692
Allowance for doubtful accounts	**(858)**	(842)
Unbilled revenues	**498**	447
Inventory	**554**	521
Regulatory assets	**441**	492
Derivative instruments	**321**	28
Prepaid taxes	**296**	291
Other	**302**	140
Assets held for sale	**5,839**	5,436
Total current assets	**11,820**	10,471
Equity method investments	**1,243**	656
Property, plant and equipment, net	**39,857**	37,010
Non-current assets:		
Regulatory assets	**4,308**	4,969
Goodwill	**6,457**	6,457
Derivative instruments	**50**	51
Postretirement benefits	**1,544**	973
Financial investments	**737**	894
Other	**181**	111
Total non-current assets	**13,277**	13,455
Total assets	**$ 66,197**	$ 61,592

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions of dollars)

	March 31, 2022	March 31, 2021
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	**$ 2,410**	$ 1,601
Accounts payable to affiliates	**100**	43
Commercial paper	**637**	500
Current portion of long-term debt	**1,461**	1,061
Taxes accrued	**112**	102
Customer deposits	**80**	79
Interest accrued	**175**	196
Regulatory liabilities	**1,154**	670
Derivative instruments	**24**	45
Renewable energy certificate obligations	**268**	246
Payroll and benefits accruals	**379**	402
Other	**995**	805
Liabilities held for sale	**2,850**	2,707
Total current liabilities	**10,645**	8,457
Non-current liabilities:		
Regulatory liabilities	**6,710**	6,668
Asset retirement obligations	**102**	100
Deferred income tax liabilities, net	**4,538**	4,061
Postretirement benefits	**770**	1,242
Environmental remediation obligations	**2,182**	2,017
Derivative instruments	**121**	82
Operating lease liabilities	**474**	682
Other	**617**	727
Total non-current liabilities	**15,514**	15,579
Commitments and contingencies (Note 15)		
Long-term debt	**17,386**	16,140
Equity:		
Common stock and additional paid-in capital	**14,169**	14,133
Retained earnings	**8,546**	7,373
Accumulated other comprehensive loss	**(131)**	(156)
Common shareholders' equity	**22,584**	21,350
Non-controlling interests	**68**	66
Total equity	**22,652**	21,416
Total liabilities and equity	**$ 66,197**	$ 61,592

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CAPITALIZATION
(in millions of dollars)

			March 31, 2022	March 31, 2021
Common shareholders' equity			**$ 22,584**	$ 21,350
Non-controlling interests			**68**	66
Long-term debt* [(1)]*:	Interest Rate	Maturity Date		
European Medium-Term Note	Variable	April 2022 – January 2031	**3,346**	3,237
Export Credit Agreements	Variable	October 2025 – December 2028	**1,193**	1,218
Notes Payable	1.73% - 8.33%	July 2022 – January 2052	**13,288**	12,128
First Mortgage Bonds	6.90% - 8.80%	July 2022 – April 2028	**75**	75
State Authority Financing Bonds	3.23% - 3.48%	December 2023 – July 2029	**424**	424
State Authority Financing Bonds	Variable	October 2022 – August 2042	**223**	223
Term Loan	Variable	December 2022	**400**	-
Total debt			**18,949**	17,305
Unamortized debt discount			**(41)**	(45)
Unamortized debt issuance costs			**(61)**	(59)
Current portion of long-term debt			**(1,461)**	(1,061)
Total long-term debt			**17,386**	16,140
Total debt classified as held-for-sale[(3)]			**1,510**	1,510
Total capitalization			**$ 41,548**	$ 39,066

[(1)] See Note 12, "Capitalization" for additional details.
[(3)] See Note 19, “Held for sale”.

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in millions of dollars)

				Accumulated Other Comprehensive Income (Loss)							
	Common Stock [1]	Cumulative Preferred Stock	Additional Paid-in Capital	Unrealized Gain (Loss) on Securities	Pension and Other Postretirement Benefits	Hedging Activity	Foreign Currency translation	Total Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non-Controlling Interests [2]	Total
Balance as of March 31, 2020	**$ -**	**$ -**	**$ 12,116**	**$ 1**	**$ (222)**	**$ (35)**	**$ (139)**	**$ (395)**	**$ 6,537**	**$ 63**	**$ 18,321**
Net income	-	-	-	-	-	-	-	-	836	3	839
Other comprehensive income (loss):											
Unrealized gains on securities, net of $1 tax expense	-	-	-	1	-	-	-	1	-	-	1
Change in pension and other postretirement obligations, net of $82 tax expense (benefit)	-	-	-	-	229	-	-	229	-	-	229
Unrealized losses on hedges, net of $3 tax expense (benefit)	-	-	-	-	-	9	-	9	-	-	9
Total comprehensive income											1,078
Equity infusion from Parent	-	-	2,000	-	-	-	-	-	-	-	2,000
Stock-based compensation	-	-	17	-	-	-	-	-	-	-	17
Balance as of March 31, 2021	**$ -**	**$ -**	**$ 14,133**	**$ 2**	**$ 7**	**$ (26)**	**$ (139)**	**$ (156)**	**$ 7,373**	**$ 66**	**$ 21,416**
Net income	-	-	-	-	-	-	-	-	1,173	2	1,175
Other comprehensive income (loss):											
Unrealized loss on securities, net of ($4) tax expense (benefit)	-	-	-	(9)	-	-	-	(9)	-	-	(9)
Change in pension and other postretirement obligations, net of $9 tax expense (benefit)	-	-	-	-	23	-	-	23	-	-	23
Unrealized gains on hedges, net of $5 tax expense (benefit)	-	-	-	-	-	11	-	11	-	-	11
Total comprehensive income											1,200
Dissolution of foreign subsidiaries	-	-	9	-	-	-	-	-	-	-	9
Stock-based compensation	-	-	27	-	-	-	-	-	-	-	27
Balance as of March 31, 2022	**$ -**	**$ -**	**$ 14,169**	**$ (7)**	**$ 30**	**$ (15)**	**$ (139)**	**$ (131)**	**$ 8,546**	**$ 68**	**$ 22,652**

(1) The Company had 255 shares of common stock authorized, issued and outstanding, with a par value of $0.10 per share at March 31, 2022 and 2021.

(2) NGUSA subsidiaries had 372,641 shares of cumulative preferred stock authorized, issued and outstanding, with par values of either $100 or $50 per share at March 31, 2022 and 2021. See Note 18, “Preferred Stock”.

The accompanying notes are an integral part of these consolidated financial statements.

NATIONAL GRID NORTH AMERICA INC. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

National Grid North America Inc. ("NGNA" or "the Company") is a Delaware corporation that was created in the United States ("U.S.") as an indirect wholly-owned subsidiary of National Grid plc (the "Parent"), a public limited company incorporated under the laws of England and Wales. It is the intermediate holding company of National Grid USA ("NGUSA") and acts as a funding company on behalf of the Parent for certain subsidiaries' borrowings.

NGUSA has two major lines of business, "Gas Distribution" and "Electric Services," and operates various energy services and investment companies. The Company's Gas Distribution business consists of five gas distribution subsidiaries which provide gas distribution services to customers in the areas of central, northern, and eastern New York, the New York City boroughs of Brooklyn, Queens, and Staten Island, and the Long Island Counties of Nassau and Suffolk, as well as the states of Massachusetts and Rhode Island (see also Note 19, "Held for Sale"). The Company's Electric Services business primarily consists of five electric distribution subsidiaries which provide electric services to customers in the areas of eastern, central, northern, and western New York, as well as the states of Massachusetts and Rhode Island. The Company also operates electric transmission facilities in Massachusetts, New Hampshire, Rhode Island, Maine, and Vermont, and provides energy services, supplies capacity, and produces energy for the use of customers of the Long Island Power Authority ("LIPA") on Long Island, New York. The services provided to LIPA through a power supply agreement provide LIPA with electric generating capacity, energy conversion, and ancillary services from the Company's Long Island generating units.

The Company's wholly-owned New England subsidiaries include: New England Power Company ("NEP"), The Narragansett Electric Company ("Narragansett"), Massachusetts Electric Company ("Massachusetts Electric"), Nantucket Electric Company ("Nantucket"), and Boston Gas Company ("Boston Gas"). The Company's wholly-owned New York subsidiaries include: Niagara Mohawk Power Corporation ("Niagara Mohawk"), National Grid Generation, LLC ("Genco"), The Brooklyn Union Gas Company ("Brooklyn Union"), and KeySpan Gas East Corporation ("KeySpan Gas East"). Certain of the Company's subsidiaries are subject to regulation by state and federal regulatory authorities (see Note 2, "Summary of Significant Accounting Policies" for additional details).

On March 17, 2021, NGUSA announced the sale of its Rhode Island business (Narragansett) to PPL Energy Holdings, LLC. for $3.8 billion (excluding long-term debt). The associated assets and liabilities that form part of the sale have been presented as Held for sale in the consolidated balance sheets as of March 31, 2022 and March 31, 2021. See Note 19, "Held for Sale" for additional details.

The Company also has a wholly-owned subsidiary, National Grid LNG LLC, which is engaged in the business of receiving, storing, and redelivering liquefied natural gas ("LNG") in liquid and gaseous states, through facilities located in Providence, Rhode Island, as well as a 53.7% interest in two hydro-transmission electric companies which are consolidated into these financial statements. The investments in LNG and the hydro-transmission electric companies are not material to the Company's consolidated financial statements.

The Company's unregulated energy investments business consists of development investments such as natural gas pipelines, as well as certain other domestic energy-related investments.

NGV US LLC ("NGV") operates in competitive markets and includes the Company's investments in National Grid Renewables Development LLC ("NGRD"), formerly known as Geronimo Energy LLC., and Emerald Energy Venture LLC ("Emerald")). National Grid Partners LLC ("NGP") holds a portfolio of corporate venture capital investments in technology and innovation companies.

The Company uses the equity method of accounting for its investments in affiliates when it has the ability to exercise significant influence over operating and financial policies but does not control the affiliates. The Company's share of the earnings or losses of such affiliates is reported as part of Income from equity method investments in the accompanying consolidated statements of operations and comprehensive income (see Note 7, “Equity Method Investments” for additional details).

Effective April 1, 2021, the Company implemented a new operating model across its US business operations. Under the new operating model, the Company has identified two reportable operating segments, representing the Company’s New York and New England operations. The Company’s unregulated operations are not material to report as a separate business segment. See Note 3, “Segmental Analysis” for additional details.

The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”), including the accounting principles for rate-regulated entities, as applicable. The consolidated financial statements reflect the ratemaking practices of the applicable regulatory authorities.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Certain of the Company’s wholly-owned non-operating subsidiaries have a functional currency other than the U.S. Dollar (USD). Cumulative translation adjustments arising from translation of the subsidiaries’ financial information into USD are reported in accumulated other comprehensive income. The impact of translation was not material for the years ended March 31, 2022 and 2021. Non-controlling interests of the Company’s majority-owned subsidiaries are calculated based upon the respective non-controlling interest ownership percentages. All intercompany transactions with consolidated subsidiaries have been eliminated in consolidation.

Certain reclassifications have been made to the consolidated financial statements to conform the prior period’s balances to the current period’s presentation. These reclassifications had no effect on reported income, total assets, or stockholders’ equity as previously reported.

Under its holding company structure, the Company does not have significant independent operations or sources of income of its own and conducts most of its operations through its subsidiaries. As a result, the Company depends on the earnings and cash flow of, and dividends or distributions from, its subsidiaries to provide the funds necessary to meet its debt and contractual obligations. Furthermore, a substantial portion of the Company’s consolidated assets, earnings, and cash flow is derived from the operations of its regulated utility subsidiaries, whose legal authority to pay dividends or make other distributions to the Company is subject to regulation by state regulatory authorities.

The novel coronavirus (“COVID-19”) pandemic has disrupted the U.S. and global economies and continues to have a significant impact on global health. Due to this continued uncertainty, the valuations of certain assets and liabilities are necessarily more subjective. In particular, we identified the recoverability of customer receivables in relation to retail customers, in consideration of the suspension of certain debt collection and customer termination activities as an area of estimation uncertainty at both March 31, 2022 and March 31, 2021. In March 2020, the Company ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimize risk to employees. The Company also ceased customer termination activities as requested by relevant local authorities.

For New York, legislation passed in May 2021 established a new moratorium for qualifying customers through June 24, 2021, the end of the declared COVID-19 state of emergency, with additional post-state of emergency protections for qualifying customers running through December 21, 2021. The May 2021 moratorium legislation also extended protections to qualifying small businesses with fewer than 25 customers. New York operations followed the timeline of additional customer protections for residential and qualifying small business service terminations through December 21, 2021. Further, for customers who had attested to being financially impacted by the COVID-19 pandemic, New York operations extended the protection from termination through March 31, 2022. Under the recently approved Electric and Gas Bill Relief program for Energy Affordability Program (“EAP”) customers, utilities have committed to refrain from terminating EAP customers until September 1, 2022 and extended refraining from terminations with customers who have pending applications with certain government assistance programs. For further information on recovery of COVID-19 uncollectible amounts please see Note 6, “Rate Matters”.

Effective July 1, 2021, New England subsidiaries resumed normal collection activities, which includes issuing notices of amounts in arrears and alerting customers that their service is subject to disconnection for non-payment.

The Company has seen adverse impacts from COVID-19 on earnings and cash flow. Earnings are impacted by increased incremental operating costs, increased bad debt expense, and reduced late payment revenues, slightly offset by reduced costs and other mitigation efforts by the Company. Cash flow is negatively impacted by the higher level of operating costs and lower cash collections.

The Company has evaluated subsequent events and transactions through July 13, 2022, the date of issuance of these consolidated financial statements, and concluded that there were no events or transactions that require adjustment to, or disclosure in, the consolidated financial statements as of and for the year ended March 31, 2022, except as otherwise disclosed in Note 1, "Nature of Operations and Basis of Presentation", Note 6, "Rate Matters", Note 15, "Commitments and Contingencies", Note 17, "Related Party Transactions", and Note 19, "Held For Sale".

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

In preparing consolidated financial statements that conform to U.S. GAAP, the Company must make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and the disclosure of contingent assets and liabilities included in the consolidated financial statements. Such estimates and assumptions include the impact of the ongoing COVID-19 pandemic and are reflected in the accompanying financial statements. Actual results could differ from those estimates.

Regulatory Accounting

The Federal Energy Regulatory Commission ("FERC"), the New York Public Service Commission ("NYPSC"), the Massachusetts Department of Public Utilities ("DPU"), and the Rhode Island Public Utilities Commission ("RIPUC") regulate the rates the Company's regulated subsidiaries charge their customers in the applicable states. In certain cases, the rate actions of the FERC, NYPSC, DPU and RIPUC can result in accounting that differs from non-regulated companies. In these cases, the subsidiaries defer costs (as regulatory assets) or recognize obligations (as regulatory liabilities) if it is probable that such amounts will be recovered from, or refunded to, customers through future rates. In accordance with Accounting Standards Codification ("ASC") 980, "Regulated Operations," regulatory assets and liabilities are reflected on the consolidated balance sheets consistent with the treatment of the related costs in the ratemaking process.

Revenue Recognition

Revenues are recognized by regulated subsidiaries for energy services billed on a monthly cycle basis, together with unbilled revenues for the estimated amount of services rendered from the time meters were last read to the end of the accounting period (see Note 3, "Revenue" for additional details).

The Company recognizes lease income from the sale of capacity and energy to LIPA under terms of the amended and restated Power Supply Agreement ("A&R PSA"), with rates approved by the FERC. The A&R PSA is accounted for as an operating lease (see Note 16, "Leases" for additional details).

Income Taxes

Federal and state income taxes have been computed utilizing the asset and liability approach that requires the recognition of deferred tax assets and liabilities for the tax consequences of temporary differences by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. Deferred income taxes also reflect the tax effect of net operating losses, capital losses, and general business credit carryforwards. The Company assesses the available positive and negative evidence to estimate whether sufficient future taxable income of the appropriate tax character will be generated to realize the benefits of existing deferred tax assets.

When the evaluation of the evidence indicates that the Company will not be able to realize the benefits of existing deferred tax assets, a valuation allowance is recorded to reduce existing deferred tax assets to the net realizable amount.

The effects of tax positions are recognized in the consolidated financial statements when it is more likely than not that the position taken, or expected to be taken, in a tax return will be sustained upon examination by taxing authorities based on the technical merits of the position. The financial effect of changes in tax laws or rates is accounted for in the period of enactment. Deferred investment tax credits are amortized over the useful life of the underlying property.

NGNA files consolidated federal tax returns including all of the activities of its subsidiaries. Each subsidiary determines its tax provision based on the separate return method, modified by a benefits-for-loss allocation pursuant to a tax sharing agreement between NGNA and its subsidiaries. The benefit of consolidated tax losses and credits are allocated to the NGNA subsidiaries giving rise to such benefits in determining each subsidiary's tax expense in the year that the loss or credit arises. In a year that a consolidated loss or credit carryforward is utilized, the tax benefit utilized in consolidation is paid proportionately to the subsidiaries that gave rise to the benefit regardless of whether that subsidiary would have utilized the benefit. The tax sharing agreement also requires NGNA to allocate its parent tax losses, excluding deductions from acquisition indebtedness, to each subsidiary in the consolidated federal tax return with taxable income. The allocation of NGNA's parent tax losses to its subsidiaries is accounted for as a capital contribution and is performed in conjunction with the annual intercompany cash settlement process following the filing of the federal tax return.

Other Taxes

The Company's subsidiaries collect taxes and fees from customers such as sales taxes, other taxes, surcharges, and fees that are levied by state or local governments on the sale or distribution of gas and electricity. The Company accounts for taxes that are imposed on customers (such as sales taxes) on a net basis (excluded from revenues), while taxes imposed on the Company, such as excise taxes, are recognized on a gross basis. Excise taxes collected and expected to be paid for the years ended March 31, 2022 and 2021, were $191 million and $179 million, respectively.

Cash and Cash Equivalents

Cash equivalents consist of short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalents are carried at cost, which approximates fair value.

Restricted Cash and Special Deposits

Restricted cash consists of margin calls to the New York Mercantile Exchange ("NYMEX") and collateral paid to the Company's counterparties for outstanding commodity and financial derivative instruments. Special deposits primarily consist of health care deposits, a release of property account for mortgaged property under a mortgage trust indenture, interconnection deposits, and amounts reserved for potential environmental violations. The Company had restricted cash of $122 million and $18 million and special deposits of $102 million and $84 million as of March 31, 2022 and 2021, respectively.

Accounts Receivable and Allowance for Doubtful Accounts

The Company recognizes an allowance for doubtful accounts to record accounts receivable at estimated net realizable value. The allowance is determined based on a variety of factors including, for each type of receivable, applying an estimated reserve percentage to each aging category, taking into account historical collection and write-off experience, and management's assessment of collectability from individual customers, as appropriate. The collectability of receivables is continuously assessed and, if circumstances change, the allowance is adjusted accordingly. Receivable balances are written off against the allowance for doubtful accounts when the accounts are disconnected and/or terminated and the balances are deemed to be uncollectible. The Company recorded bad debt expense of $192 million and $412 million for the years ended March 31, 2022 and 2021, respectively, within operations and maintenance in the accompanying consolidated statements of operations and comprehensive income. For the years ended March 31, 2022 and 2021, the bad debt expense is reflective of an additional provision in relation to the impact of COVID-19.

Inventory

Inventory is composed of materials and supplies, gas in storage, purchased Renewable energy certificates (“RECs”), and emission credits.

Materials and supplies are stated at weighted average cost, which represents net realizable value, and are expensed or capitalized into property, plant and equipment as used. There were no significant write-offs of obsolete inventory for the years ended March 31, 2022 or 2021.

Gas in storage is stated at weighted average cost and the related cost is recognized when delivered to customers. Existing rate orders allow the Company to pass directly through to customers the cost of purchased gas, along with any applicable authorized delivery surcharge adjustments. Gas costs passed through to customers are subject to regulatory approvals and are reported periodically to the applicable state regulators.

RECs are stated at cost and used to measure compliance with renewable energy standards. RECs are held primarily for consumption. Emission credits are comprised of sulfur dioxide, nitrogen oxide (“NOx”), and carbon dioxide credits. Emission credits are valued at the lower of weighted average cost or net realizable value and are held primarily for consumption or may be sold to third-party purchasers.

The following table summarizes inventory recorded on the consolidated balance sheets:

	March 31,	
	2022	2021
	(in millions of dollars)	
Materials and supplies	**$ 281**	$ 285
Gas in storage	**126**	123
Purchased RECs	**111**	102
Emission credits	**36**	11
Total inventory	**$ 554**	$ 521

Derivative Instruments

The Company uses derivative instruments to manage commodity price, interest rate, and foreign currency rate risk. All derivative instruments, except commodity contracts that qualify for the normal purchase normal sale exception, are reported at fair value on the consolidated balance sheets.

All commodity costs, including the impact of derivative instruments, are passed on to customers through the Company’s commodity rate adjustment mechanisms. Regulatory assets or regulatory liabilities are recorded to defer the recognition of unrealized losses or gains on derivative instruments, respectively.

Qualifying derivative instruments are designated as fair value or cash flow hedges. Changes in the fair value of the derivative designated in a cash flow hedge are initially recognized in accumulated other comprehensive income (“AOCI”), net of related tax effects. In a fair value hedge, changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the statements of operations and comprehensive income, with the residual difference remaining as ineffectiveness. For both types of hedges, qualifying derivative gains and losses related to the value of currency basis are treated separately as “costs of hedging” and are deferred in a separate component of AOCI.

Amounts accumulated in AOCI are reclassified to the statements of operations and comprehensive income on a systematic basis as the hedged income or expense is recognized. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the consolidated statements of operations and comprehensive income to match the timing of the hedged income or expense. When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the statement of operations and comprehensive income to match the impact of outstanding hedged items. If a forecast transaction becomes no longer probable, the cumulative gain or loss previously reported in equity would be transferred to the statement of operations and comprehensive income. This has not occurred during the years ended March 31, 2022 or 2021.

The Company has certain non-trading instruments for the physical purchase of electricity that qualify for the normal purchase normal sale exception and are accounted for upon settlement. If the Company was to determine that a contract no longer qualifies for the normal purchase normal sale exception, the Company would recognize the fair value of the contract and, if applicable, account for the gains and losses using the regulatory accounting described above. This has not occurred during the years ended March 31, 2022 or 2021.

The Company's accounting policy is to not offset fair value amounts recognized for derivative instruments and related cash collateral receivable or payable with the same counterparty under a master netting agreement, but rather to record and present the fair value of the derivative instrument on a gross basis, with related cash collateral receivable and payable recorded within restricted cash and special deposits, and in other current liabilities, respectively, on the consolidated balance sheets.

Variable Interest Entities

Variable interest entities ("VIEs") are entities that lack either of the following characteristics: (1) the total equity investment at risk is sufficient to enable the entity to finance its ongoing activities, or (2) the equity investors have power to direct the most significant activities of the entity (the activities that impact the economic performance of the entity), the obligation to absorb expected losses of the entity, and the right to receive the residual returns of the entity. The primary beneficiary is the enterprise that has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and the obligation to absorb losses or right to receive benefits that could be significant to the VIE. The primary beneficiary holds a controlling financial interest in the entity and is required to consolidate the VIE.

The Company determines whether it is the primary beneficiary of a VIE by evaluating the purpose and design of the entity, the nature of the VIE and the variability the entity is designed to create and pass along to its interest holders, who has the power to direct the activities of the VIE that most significantly impact the economic performance of the VIE, and who has the obligation to absorb losses or receive benefits that could be significant to the VIE.

The Company holds varying interests in four VIEs, including National Grid Generation Ventures LLC, Emerald Energy Venture LLC, Energy Impact Fund LP, and Community Offshore Wind, LLC ("COSW"). The Company is not the primary beneficiary of these entities as it does not have the power to direct the most significant activities of each entity. The Company accounts for its ownership interest in each entity using the equity method of accounting. See Note 7, "Equity Method Investments" for additional details. Additionally, see Note 15, "Commitments and Contingencies" for details on NGRD guarantee relating to Emerald's project companies.

Power Purchase Agreements

Certain of the Company's subsidiaries enter into power purchase agreements ("PPAs") to procure electricity to serve their electric service customers. The Company first evaluates whether such agreements contain a lease. In performing this evaluation, the Company considers whether the terms of the PPA provide the Company with the right to direct use of the generating facility and if the Company has the right to obtain substantially all of the economic benefits derived from use of the facility. In determining whether the Company has the right to direct use of the facility, the Company will consider which rights have the most significant impact on the economic benefits to be derived from the asset; for example, dispatch rights or the right to be involved in the facility's design. If the PPA is determined to contain a lease, the Company assesses whether it should be classified as a finance lease or an operating lease.

If the PPA does not contain a lease, the Company next assesses whether the contract is a derivative or includes one or more embedded derivatives. In making this determination, the Company assesses whether the PPA includes a notional amount or payment provision through the contract's delivery requirements or terms of default. If the PPA is a derivative or contains one or more embedded derivatives, the Company will assess whether the requirements for election of the normal purchases and normal sales scope exception are met. If the requirements for the election are not met or the election is not made, the Company reports the derivative at fair value on the consolidated balance sheet. If the election is made, the Company accounts for the PPA as an executory contract whereby costs are recognized as electricity is purchased. If the contract does not contain a lease and is not a derivative, the Company accounts for the PPA as an executory contract.

The Company also assesses whether the PPA is a variable interest in a VIE. In determining whether the PPA is a variable interest, the Company assesses whether the contract absorbs certain risks, such as commodity price risk, that the VIE was designed to pass on to its interest holders. If the PPA is determined to be a variable interest in a VIE, the Company determines whether it is the primary beneficiary.

Natural Gas Long-Term Arrangements

Certain of the Company's subsidiaries enter into long-term gas contracts to procure gas to serve their gas customers. Those contracts include Asset Management Agreements, Baseload, and Peaking gas contracts. Similar to the PPAs noted above, the Company evaluates whether such agreements are leases, derivative instruments, or executory contracts and performs an assessment under the guidance for VIEs.

Fair Value Measurements

The Company measures derivative instruments, securities, pension and postretirement benefits other than pension plan ("PBOP") assets, and financial investments for which it has elected the fair value option, including certain equity method investments, at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following is the fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity has the ability to access as of the reporting date;
- Level 2: inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data;
- Level 3: unobservable inputs, such as internally-developed forward curves and pricing models for the asset or liability due to little or no market activity for the asset or liability with low correlation to observable market inputs; and
- Not categorized: Investments in certain funds, that meet certain conditions of ASC 820, are not required to be categorized within the fair value hierarchy. These investments are typically in commingled funds or limited partnerships that are not publicly traded and have ongoing subscription and redemption activity. As a practical expedient, the fair value of these investments is the Net Asset Value ("NAV") per fund share.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The Company uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs.

Hypothetical Liquidation at Book Value

The Company accounts for its share of the earnings of the projects owned by Emerald using the equity method of accounting under the hypothetical liquidation at book value ("HLBV"). Under this method, the Company calculates the amount each owner would receive if the partnership were liquidated at book value at the end of each measurement period based on the contractual liquidation provisions in the applicable partnership agreements. The change in amount allocated to each partner after adjusting for distributions and contributions is recorded as income or loss for that period in the consolidated statements of operations and comprehensive income.

Property, Plant and Equipment

Property, plant and equipment is stated at cost. The capitalized cost of additions to property, plant and equipment includes costs such as direct materials, labor and benefits, and an allowance for funds used during construction ("AFUDC"). The cost of repairs and maintenance is charged to expense and the cost of renewals and betterments that extend the useful life of property, plant and equipment is capitalized.

Depreciation is computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update the composite rates and are approved by the state authorities. The average composite rates for the years ended March 31, 2022 and 2021 are as follows:

	Composite Rates	
	Years Ended March 31,	
	2022	2021
Electric	**2.7%**	2.7%
Gas	**2.5%**	2.6%
Common	**12.5%**	11.0%

Depreciation expense for regulated subsidiaries includes a component for the estimated cost of removal, which is recovered through rates charged to customers. Any difference in cumulative costs recovered and costs incurred is recognized as a regulatory asset or regulatory liability. When property, plant and equipment is retired, the original cost, less salvage, is charged to accumulated depreciation, and the related cost of removal is removed from the associated regulatory asset or regulatory liability. The Company recognized a regulatory liability for the amount that was in excess of costs incurred of $1.6 billion and $1.5 billion at March 31, 2022 and 2021, respectively, and a regulatory asset for the excess of costs incurred over amounts collected in rates of $70 million and $97 million at March 31, 2022 and 2021, respectively.

Allowance for Funds Used During Construction

The Company records AFUDC, which represents the debt and equity costs of financing the construction of new property, plant and equipment. The equity component of AFUDC is reported in other income, net within the accompanying consolidated statements of operations and comprehensive income. The debt component of AFUDC is reported as an offset to other interest, including affiliate interest, net. After construction is completed, the Company is permitted to recover these costs through their inclusion in rate base. The Company recorded AFUDC related to equity of $100 million and $74 million and AFUDC related to debt of $36 million and $28 million for the years ended March 31, 2022 and 2021, respectively. The average AFUDC rates for the years ended March 31, 2022 and 2021 were 6.5% and 5.2%, respectively.

Impairment of Long-Lived Assets

The Company tests long-lived assets for impairment when events or changes in circumstances indicate that the carrying amount of the asset (or asset group) may not be recoverable. If such an event is identified, the recoverability of an asset group is determined by comparing its carrying value to the estimated undiscounted cash flows the asset group is expected to generate. If the comparison indicates that the carrying value is not recoverable, an impairment loss is recognized for the excess of carrying value over the estimated fair value. For its regulated subsidiaries, the Company also considers whether there have been any abandonments or disallowances of recently completed plant, such that guidance provided by ASC 980 on regulated property, plant and equipment may apply.

For the year ended March 31, 2022, the Company recorded a disallowance of $77 million at Boston Gas against costs capitalized in relation to the Mid Cape pipeline project in Massachusetts. The disallowance arose due to the DPU's decision to not provide Boston Gas with any return on the project, which represents recently completed plant. The DPU did not disallow the recovery of depreciation expense on the project. The Company also recorded $10 million of disallowances for recently completed plant at Narragansett.

The Company recorded a total of $10 million of other impairments during the year-ended March 31, 2022. For the year ended March 31, 2021, there were $0.2 million of impairment losses recognized for long-lived assets at Genco.

Goodwill

The Company tests goodwill for impairment annually on January 1, or more frequently if events occur or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is below its carrying amount. During the year ended March 31, 2022, the Company tested goodwill residing at NGNA based upon four identified reporting units, New York, New England, NGV Renewables, and the NECO Held for Sale group, aligned with its new operating model which became effective on April 1, 2021. Previously, the Company had identified five reporting units at NGNA: New York, Massachusetts, Rhode Island, FERC, and NGV. As a result of the Company's reorganization, goodwill was re-allocated to the newly identified reporting units based on the relative fair value of those impacted reporting units, resulting in a portion of goodwill previously allocated to the FERC reporting unit being reassigned to the NGV Renewables reporting unit, and the remainder reallocated to the New England reporting unit. The allocation to NGV Renewables represented goodwill ascribed to Genco's operations, with the allocation to the New England reporting unit representing goodwill primarily ascribed to NEP.

At March 31, 2022, the carrying value of goodwill assigned to the New England and New York reporting units, representing the Company's reportable segments (see Note 3, "Segment Analysis" for additional details), amounted to $2,364 million and $3,981 million, respectively. At March 31, 2021, the carrying value of goodwill assigned to the New England and New York reporting units amounted to $2,368 million and $3,981 million, respectively. There are no historical accumulated impairment losses included in the carrying values of goodwill.

The Company has adopted Accounting Standards Update ("ASU") No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which eliminates step two from the two-step goodwill impairment test previously required under the former standard. The goodwill impairment test requires a recoverability test based on the comparison of the Company's estimated fair value for each reporting unit with the reporting unit's carrying value, including goodwill. If the estimated fair value exceeds the carrying value, goodwill is not considered impaired. If the carrying value exceeds the estimated fair value, the Company is required to recognize an impairment charge for such excess, limited to the allocated carrying amount of goodwill.

For goodwill at the New York and New England reporting units, the Company applies two valuation methodologies to estimate the fair value of its reporting units, principally discounted projected future net cash flows and market-based multiples, commonly referred to as the income approach and market approach. Key assumptions include, but are not limited to, the use of estimated future cash flows, multiples of earnings, and an appropriate discount rate. In estimating future cash flows, the Company incorporates current market information and historical factors. The determination of fair value incorporates significant unobservable inputs, requiring the Company to make significant judgments, whereby actual results may differ from assumed and estimated amounts. For the year ended March 31, 2022, the Company applied a 50/50 weighting for each valuation methodology, as it believes that each approach provides equally valuable and reliable information regarding the New York and New England reporting units' estimated fair value.

For goodwill at the NGV Renewables reporting unit, the Company estimates the fair value based solely on the income approach. The Company believes that this approach provides the most reliable information about estimated fair value based on the reporting unit's renewable development activities and overall operations.

Based on the resulting estimated fair values calculated in the annual assessment, the Company did not recognize any impairment of goodwill during the years ended March 31, 2022, and 2021.

Financial Investments

The Company holds a range of financial investments, including short-term money funds, equity securities and available-for-sale debt securities.

Corporate owned life insurance policies ("COLI") and Trust owned life insurance policies ("TOLI") are measured at cash surrender value with increases and decreases in the value of these assets recorded in earnings.

Available-for-sale debt securities are measured at fair value with changes in fair value recorded in other comprehensive income. Investments in available-for-sale debt securities are monitored for other than temporary impairment by comparing fair value against amortized cost.

Equity securities consist of shares held as part of a portfolio of financial instruments, such as corporate stocks and mutual funds, and are measured at fair value with changes in fair value recorded in earnings.

The Company has mutual funds and money market funds representing funds designated for Supplemental Executive Retirement Plans ("SERPs"). These investments are measured at fair value with changes in fair value recorded in earnings.

Other financial investments are primarily comprised of corporate venture capital investments held by NGP and investments held by NGV. These investments are measured at fair value with changes in fair value recorded in earnings.

The following table presents the financial investments recorded on the consolidated balance sheets:

	March 31,	
	2022	2021
	(in millions of dollars)	
COLI/TOLI	**$ 308**	$ 389
Debt securities [(1)]	**235**	184
Equity securities [(1)]	**112**	248
SERPs [(1)]	**37**	39
Other [(1)]	**45**	34
Total financial investments	**$ 737**	$ 894

(1) See Note 10, "Fair Value Measurements" for additional details.

Asset Retirement Obligations

Asset retirement obligations are recognized for legal obligations associated with the retirement of property, plant and equipment, primarily associated with the Company's gas distribution and electric generation facilities. Asset retirement obligations are recorded at fair value in the period in which the obligation is incurred, provided fair value can be reasonably estimated. In the period in which new asset retirement obligations, or changes to the timing or amount of existing retirement obligations are recorded, the associated asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset. In each subsequent period the asset retirement obligation is accreted to its present value. The Company applies regulatory accounting guidance, whereby accretion costs associated with asset retirement obligations are recorded as increases to regulatory assets on the consolidated balance sheets. These regulatory assets represent timing differences between the recognition of costs in accordance with U.S. GAAP and costs recovered through the ratemaking process.

Employee Benefits

The Company has defined benefit pension plans and postretirement benefit other than pension plans for its employees. The Company recognizes all pension and PBOP plans' funded status on the consolidated balance sheets as a net liability or asset with an offsetting adjustment to AOCI in shareholders' equity. If the cost of providing these plans is recovered in rates through the Company's regulated subsidiaries, the net funded status is offset by a regulatory asset or liability. The Company measures and records its pension and PBOP funded status at each year-end. Pension and PBOP plan assets are measured at fair value.

Reference Rate

The benchmark interest rates hedged are currently based on US London Interbank Offered Rate ("LIBOR"). LIBOR is being replaced as an interest rate benchmark by alternative reference rates ("ARRs") in certain currencies including USD, and foreign currencies in which the Company operates. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which can impact valuations. The Company is managing the risk by planning to replace US LIBOR cash flows with ARRs mainly Sterling Overnight Interbank Average Rate ("SONIA"), on our affected contracts. The Company has not amended any of its current agreements that have LIBOR as a reference rate during the years ended March 31, 2022 and 2021.

Leases

Lease liabilities are recognized based on the present value of the lease payments over the lease term at the commencement date. For any leases that do not provide an implicit rate, the Company uses an estimate of its collateralized incremental borrowing rate based on the information available at the commencement date to determine the present value of future payments. In measuring lease liabilities, the Company excludes variable lease payments, other than those that depend on an index or a rate, or are in substance fixed payments, and includes lease payments made at or before the commencement date. Variable lessee payments were not material for the years ended March 31, 2022 and 2021. The Company does not reflect short-term leases on the consolidated balance sheets. Expenses related to short-term leases were not material for the years ended March 31, 2022 and 2021.

The Company's policy is to not evaluate whether sales tax and other similar taxes are lessor and lessee costs. Instead, such costs are deemed lessee costs. The Company does not combine lease and non-lease components for contracts in which the Company is the lessee or the lessor.

Certain building leases provide the Company with an option to extend the lease term. The Company has included the periods covered by an extension option in its determination of the lease term when management believes it is reasonably certain the Company will exercise its option.

Right-of-use assets consist of the lease liability, together with any payments made to the lessor prior to commencement of the lease (less any lease incentives) and any initial direct costs. Right-of-use assets are amortized over the lease term.

The Company's regulated subsidiaries recognize lease expense based on a pattern that conforms to the regulatory ratemaking treatment.

New and Recent Accounting Guidance

Accounting Guidance Recently Adopted

Income Taxes

In December 2019, the Financial Accounting Standards Board ("FASB") issued ASU No. 2019-12 "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes" which simplifies various aspects of the accounting for income taxes by eliminating certain exceptions to current requirements. The standard also enhances and simplifies other requirements, including tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. The Company adopted this new guidance prospectively on April 1, 2021. The adoption did not materially affect the Company's financial position, results of operations, or cash flows for the fiscal year ended March 31, 2022.

Investments – Equity Securities

In January 2020, the FASB issued ASU No. 2020-01 "Investments—Equity Securities (Topic 321), Investments—Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815): Clarifying the Interactions between Topic 321, Topic

323, and Topic 815 (a consensus of the FASB Emerging Issues Task Force)" which clarifies that an entity should consider transaction prices for purposes of measuring the fair value of certain equity securities immediately before applying or upon discontinuing the equity method. This accounting standard also clarifies that when accounting for contracts entered into to purchase equity securities, an entity should not consider whether, upon the settlement of the forward contract or exercise of the purchased option, the underlying securities would be accounted for under the equity method or the fair value option. The Company adopted this new guidance prospectively on April 1, 2021. The adoption did not materially impact the Company's financial position, results of operations, or cash flows for the fiscal year ended March 31, 2022.

Callable Debt Securities

In October 2020, the FASB issued ASU No. 2020-08 "Codification Improvements to Subtopic 310-20, Receivables – Nonrefundable Fees and Other Costs", which clarifies that an entity should reevaluate whether a callable debt security with multiple call dates is within the scope of paragraph ASC 310-20-35-33 for each reporting period such that the premium should be amortized over the period ending at the earliest call date. The Company adopted this new guidance prospectively on April 1, 2021. The adoption did not materially impact the Company's financial position, results of operations, or cash flows for the fiscal year ended March 31, 2022.

Accounting Guidance Not Yet Adopted

Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU No. 2016-13 "Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements", which requires a financial asset (or a group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The accounting standards provide a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses that replaces the incurred loss impairment methodology of delayed recognition of credit losses. A broader range of reasonable and supportable information must be considered in developing the credit loss estimates. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses.

In May 2019, the FASB issued ASU 2019-05, "Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief", permitting entities to irrevocably elect the fair value option for financial instruments that were previously recorded at amortized cost basis within the scope of Topic 326, except for held-to-maturity debt securities. In March 2022, the FASB issued ASU 2022-02, "Financial Instruments—Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures." The update eliminates the accounting guidance for troubled debt restructurings by creditors and enhances the disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty. In addition, the amendments require a public business entity to disclose current period gross write-offs for financing receivables and net investment in leases by year of origination in the vintage disclosures.

The Company will adopt these updates on April 1, 2023 and is currently assessing the application of these standards to determine whether their adoption will have a material impact on its financial statements.

Leases – Certain Leases with Variable Lease Payments for Lessors

In July 2021, the FASB issued ASU No. 2021-05 "Lessors – Certain Leases with Variable Lease Payments," which eliminates the lessor's day-one loss issue on sales-type (or direct financing) leases with variable lease payments that do not depend on a reference index or a rate by requiring the lessors to classify and account for such leases as operating leases. The Company will adopt this standard on April 1, 2022 prospectively and does not expect it will have a material impact on the presentation, results of operations, cash flows, and financial position of the Company.

3. SEGMENT ANALYSIS

Revenue and the business results are analyzed by operating segment, based on information that the Parent's Board of Directors (the "Board") uses internally to evaluate each operating segment's performance to determine resource allocations between them. The Board serves as the Company's chief operating decision-maker ("CODM") and assesses the profitability of operations based principally on operating profit.

Effective April 1, 2021, the Company implemented a new operating model across all US business operations. As a result, the sole US Regulated reportable segment that previously existed under the former operating model is now reported up to the Board as two separate and reportable operating segments, representing the Company's New York and New England operations.

The following is a brief description of the primary activities undertaken by these reportable operating segments:

New York	Gas distribution networks, electricity distribution networks, and high-voltage electricity transmission networks, located throughout New York.
New England	Gas distribution networks, electricity distribution networks, and high-voltage electricity transmission networks located throughout New England.

The NGV operating segment, which now manages the operations of Genco under the new operating model, and continues to include the Company's investment in NGRD, does not meet the thresholds required by ASC 280 to be identified as a separate reportable segment. Further, NGP and the Company's other insurance and corporate activities do not form part of any of the operating segments under the new operating model and are reported to the Board on an aggregated basis. These non-reportable segments are aggregated and presented as "NGV and Other" in the segmental schedules below.

Revenue

	Year Ended March 31, 2022 *(in millions of dollars)*			Year Ended March 31, 2021 *(in millions of dollars)*		
	Total Revenue	**Intercompany Revenue**	**External Customer Revenue**	Total Revenue	Intercompany Revenue	External Customer Revenue
Reportable operating segments:						
New York	**$ 7,445**	**-**	**$ 7,445**	$ 6,140	-	$ 6,140
New England	**6,503**	**(437)**	**6,066**	6,059	(418)	5,641
Total reportable segment revenue	**13,948**	**(437)**	**13,511**	12,199	(418)	11,781
Reconciliation to consolidated totals:						
Total reportable segment revenue	**13,948**	**(437)**	**13,511**	12,199	(418)	11,781
NGV and Other	**701**	**-**	**701**	617	-	617
Total consolidated revenue	**$ 14,649**	**(437)**	**$ 14,212**	$ 12,816	$ (418)	$ 12,398

The following schedules present revenues from contracts with customers and other revenues from sources other than contracts with customers for reportable segments and all other segments, disaggregated by major source:

	Year Ended March 31, 2022 *(in millions of dollars)*			
	New York	**New England**	**NGV & Other**	**Consolidated Total**
Revenue from contracts with customers:				
Electric services	**$ 3,217**	**$ 3,702**	**$ -**	**$ 6,919**
Gas distribution	**3,985**	**2,217**	**-**	**6,202**
Off system sales	**241**	**156**	**-**	**397**
Other	**-**	**-**	**173**	**173**
Total revenue from contracts with customers	**7,443**	**6,075**	**173**	**13,691**
Other revenue sources:				
Revenue from regulatory mechanisms	**(31)**	**(29)**	**-**	**(60)**
Other revenue	**33**	**20**	**528**	**581**
Total operating revenue	**$ 7,445**	**$ 6,066**	**$ 701**	**$ 14,212**

	Year Ended March 31, 2021 *(in millions of dollars)*			
	New York	New England	NGV & Other	Consolidated Total
Revenue from contracts with customers:				
Electric services	$ 2,695	$ 3,618	$ -	$ 6,313
Gas distribution	3,330	1,933	-	5,263
Off system sales	96	68	-	164
Other	-	-	87	87
Total revenue from contracts with customers	6,121	5,619	87	11,827
Other revenue sources:				
Revenue from regulatory mechanisms	(4)	10	-	6
Other revenue	23	12	530	565
Total operating revenue	$ 6,140	$ 5,641	$ 617	$ 12,398

Operating Income and Reconciliation to Consolidated Income Before Income Taxes

The following schedule provides a reconciliation of operating income by reportable segment and to total consolidated operating income before income tax:

	Years Ended March 31, (in millions of dollars)	
	2022	2021
Reportable operating segments:		
New York	**$ 947**	$ 809
New England	**721**	852
Total operating income from reportable segments	**1,668**	1,661
Reconciliation to consolidated totals:		
Total operating income from reportable segments	**1,668**	1,661
NGV and Other	**71**	32
Total consolidated operating income	**1,739**	1,693
Reconciliation to income before income taxes:		
Total consolidated operating income	**1,739**	1,693
Interest on long-term debt, net	**(665)**	(649)
Other interest, including affiliate interest, net	**20**	(164)
Income (loss) from equity method investments	**66**	40
Other income, net	**254**	180
Total consolidated income before income taxes	**$ 1,414**	$ 1,100

Capital Expenditures

Capital expenditures represents additions to property, plant, and equipment and other intangible assets but excludes additional investment in, and loans to, joint ventures and equity investments.

	Capital Expenditures		Depreciation and Amortization	
	March 31,		March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)		(in millions of dollars)	
Operating segments:				
New York	**$ 2,528**	$ 2,077	**$ 704**	$ 615
New England[1]	**1,643**	1,440	**739**	665
Total from reportable segments	**4,171**	3,517	**1,443**	1,280
Reconciliation to consolidated totals:				
Total from reportable segments	**4,171**	3,517	**1,443**	1,280
NGV and Other	**59**	63	**67**	63
Held-for-sale	**350**	360	**-**	-
Consolidated total	**$ 4,580**	$ 3,940	**$ 1,510**	$ 1,343

[1] The New England segment excludes the assets of Narragansett, as the Rhode Island assets are presented separately as Held-for-sale. See Note 19, "Held for Sale" for additional details.

4. REVENUE

The following table presents, for the years ended March 31, 2022 and 2021, revenue from contracts with customers, as well as additional revenue from sources other than contracts with customers, disaggregated by major source:

	Years ended March 31	
	2022	2021
	(in millions of dollars)	
Revenue from contracts with customers:		
Electric services	**$ 6,919**	$ 6,313
Gas distribution	**6,202**	5,263
Off system sales	**397**	164
Other	**173**	87
Total revenue from contracts with customers	**13,691**	11,827
Revenue from regulatory mechanisms	**(60)**	6
Other revenue	**581**	565
Total operating revenues	**$ 14,212**	$ 12,398

Electric Services and Gas Distribution: Revenue from contracts with customers includes electric services and gas distribution. Electric services are comprised of electric distribution and transmission services.

The Company's subsidiaries own and maintain electric and natural gas distribution networks. Distribution revenues are primarily from the sale of electricity, gas, and related services to retail customers. Distribution sales are regulated by the applicable state agencies, which are responsible for determining the prices and other terms of services as part of the ratemaking process. The arrangement where a utility provides a service to a customer in exchange for a price approved by a regulator is referred to as a tariff sales contract. Gas and electric distribution revenues are derived from the regulated sale and distribution of electricity and natural gas to residential, commercial, and industrial customers within the Company's service territory under the tariff rates. The tariff rates approved by the regulator are designed to recover the costs incurred by the Company for products and services provided along with a return on investment.

The performance obligation related to these sales is to provide electricity or natural gas to customers on demand. The electricity or natural gas supplied under the tariff represents a single performance obligation as it is a series of distinct goods or services that are substantially the same. The performance obligation is satisfied over time because the customer simultaneously receives and consumes the electricity or natural gas as the Company provides these services. The Company records revenues related to distribution sales based upon the approved tariff rate and the volume delivered to the customers, which corresponds with the amount the Company has the right to invoice.

Distribution revenue also includes estimated unbilled amounts, which represent the estimated amounts due from retail customers for electricity and natural gas provided to customers by the Company, but not yet billed. Unbilled revenues are determined based on estimated unbilled sales volumes for the respective customer classes and then applying the applicable tariff rate to those volumes. Actual amounts billed to customers when the meter readings occur, may be different from the estimated amounts.

Certain customers have the option to obtain electricity or natural gas from other suppliers. In those circumstances revenue is only recognized for providing delivery of the commodity to the customer.

Transmission services are provided as demanded by customers and represents a single performance obligation. The price for the services provided are based on the underlying tariff rates established by FERC related to both Niagara Mohawk and New York Independent System Operator ("NYISO"). The performance obligation is satisfied over time as the transmission services are provided by Niagara Mohawk. Niagara Mohawk records revenue related to transmission services based on the volumes delivered and the approved tariff rates, which corresponds with the amount Niagara Mohawk has the right to invoice, as it is entitled to compensation for the performance completed to date.

Off system sales: Represents direct sales of gas to participants in the wholesale natural gas marketplace, which occur after customers' demands are satisfied.

Other revenues from contracts with customers: Primarily relates to revenues at NGRD from the sale of renewable projects. NGRD recognizes revenue for projects sold when all performance obligations have been fulfilled and it is probable that a significant reversal in the amount of revenue recognized will not occur.

Revenue from regulatory mechanisms: The Company's regulated subsidiaries record revenues in accordance with accounting principles for rate-regulated operations for arrangements between the regulated subsidiaries and their respective regulators, which are not accounted for as contracts with customers. These include various deferral mechanisms such as capital trackers, energy efficiency programs, storm deferral, and other programs that also qualify as Alternative Revenue Programs ("ARPs"). ARPs enable the regulated subsidiaries to adjust rates in the future in response to past activities or completed events. The regulated subsidiaries' electric and gas distribution rates have revenue decoupling mechanisms ("RDM"), which allow for periodic adjustments to delivery rates as a result of the reconciliation between allowed revenue and billed revenue. The regulated subsidiaries also have other ARPs related to the achievement of certain objectives, demand side management initiatives, and certain other ratemaking mechanisms. Revenues from ARPs are recognized with a corresponding offset to a regulatory asset or liability account when the regulatory-specified events or conditions have been met, the amounts are determinable and probable of recovery (or payment) through future rate adjustments within 24-months from the end of the annual reporting period.

Other Revenue: Includes lease income and other transactions that are not considered contracts with customers. Lease income primarily includes electric generation revenue, which is derived from billings to LIPA for electric generation capacity and, to the extent requested, energy from the Company's existing oil and gas-fired generating plants. The arrangement is treated as an operating lease within the scope of the leasing standard, where Genco acts as lessor with rental income being recorded as other income, which forms part of total revenue. Lease payments (capacity payments) are recognized on a straight-line basis and variable lease payments are recognized as the energy is generated.

5. REGULATORY ASSETS AND LIABILITIES

The Company records regulatory assets and liabilities that result from the ratemaking process. Regulatory deferrals are recorded by each legal entity as right of offset does not exist across the Company's regulated subsidiaries. The following table presents the regulatory assets and regulatory liabilities recorded on the consolidated balance sheets:

	March 31,	
	2022	2021
	(in millions of dollars)	
Regulatory assets		
Current:		
Derivative instruments	**$ -**	$ 95
Gas cost adjustment mechanism	**144**	130
Rate adjustment mechanisms	**107**	101
Renewable energy certificates	**97**	87
Revenue decoupling mechanism	**39**	45
Other	**54**	34
Total	**441**	492
Non-current:		
Cost of removal	**70**	97
Environmental response costs	**2,534**	2,428
Net metering deferral	**170**	191
Postretirement benefits	**390**	883
Property taxes	**54**	173
Recovery of acquisition premium	**143**	151
Storm costs	**409**	292
Temperature control/interruptible sharing	**-**	152
Other	**538**	602
Total	**4,308**	4,969
Regulatory liabilities		
Current:		
Energy efficiency	**354**	346
Derivative instruments	**345**	-
Gas cost adjustment mechanism	**152**	89
Rate adjustment mechanisms	**93**	20
Revenue decoupling mechanism	**142**	153
Transmission service	**20**	18
Other	**48**	44
Total	**1,154**	670
Non-current:		
Carrying charges	**292**	346
Cost of removal	**1,611**	1,512
Environmental response costs	**197**	139
Postretirement benefits	**1,259**	845
Regulatory tax liability	**2,341**	2,542
Other	**1,010**	1,284
Total	**6,710**	6,668

As of March 31, 2022 and 2021, other than $276 million ($205 million of Postretirement benefits, $52 million of Environmental response costs, and $19 million of Other costs) and $316 million ($232 million of Postretirement benefits, $54 million of Environmental response costs, and $30 million of Other costs), respectively, of the regulatory assets summarized above, all regulatory assets earn a rate of return.

As of March 31, 2022 and 2021, $265 million and $223 million, respectively, of allowances for earnings on shareholders' investment were capitalized for rate-making purposes, but not for US GAAP.

Carrying charges: The Company records carrying charges on regulatory balances for which cash expenditures have been made and are subject to recovery, or for which cash has been collected and is subject to refund. Carrying charges are not recorded on items for which expenditures have not yet been made.

Cost of removal: The regulatory asset represents cumulative removal amounts spent, but not yet collected, to dispose of property, plant and equipment, while the regulatory liability represents cumulative removal amounts collected but not yet spent. The asset is reduced as the allowance for cost of removal is recovered in rates. The liability is discharged as removal costs are incurred.

Derivative instruments: The Company evaluates open commodity derivative instruments for regulatory deferral by determining if they are probable of recovery from, or refund to, customers through future rates. Derivative instruments that qualify for recovery are recorded at fair value, with changes in fair value recorded as regulatory assets or regulatory liabilities in the period in which the change occurs.

Energy efficiency: Represents the difference between revenue billed to customers through the Company's energy efficiency charge and the costs of the Company's energy efficiency programs as approved by the state authorities.

Environmental response costs: The regulatory asset represents deferred costs associated with the Company's share of the estimated costs to investigate and perform certain remediation activities at former manufactured gas plant ("MGP") sites and related facilities. The Company believes future costs, beyond the expiration of current rate plans, will continue to be recovered through rates. The regulatory liability represents the excess of amounts received in rates over the Company's actual site investigation and remediation ("SIR") costs.

Gas costs adjustment: The Company is subject to rate adjustment mechanisms for commodity costs, whereby an asset or liability is recognized resulting from differences between billed revenues and the underlying cost of supply. These amounts will be refunded to, or recovered from, customers over the next year.

Net metering deferral: Net metering deferral reflects the recovery mechanism for costs associated with customer installed on-site generation facilities, including the costs of renewable generation credits. This surcharge provides the Company with a mechanism to recover such amounts.

Postretirement benefits: The regulatory asset balance represents the Company's unamortized, non-cash accrual of net pension actuarial gains and losses in addition to actual costs associated with the Company's pension plans in excess of amounts received in rates that are to be collected in future periods. The regulatory liability represents the Company's, unamortized, non-cash accrual of net PBOP actuarial gains and losses in addition to excess amounts received in rates over actual costs of the Company's PBOP plans that are to be recovered from or passed back to customers in future periods.

Property taxes: The property tax regulatory asset represents 85% of actual property and special franchise tax expenses above the rate allowance for future collection from the Brooklyn Union Gas Company and KeySpan Gas East Corporation ("New York Gas Companies") customers. The property tax regulatory liability (reported within 'Other non-current regulatory liabilities') represents the balance of property tax refunds received by the New York Gas Companies due to be refunded to customers.

Rate adjustment mechanisms: In addition to commodity costs, the Company is subject to a number of additional rate adjustment mechanisms whereby an asset or liability is recognized resulting from differences between actual revenues and the underlying cost being recovered or differences between actual revenues and targeted amounts as approved by the applicable state regulatory bodies.

Recovery of acquisition premium: Represents the unrecovered amount (plus related taxes) by which the purchase price paid exceeded net book value in the 1998 acquisition of Colonial Gas Company by Eastern Enterprises, Inc. Eastern Enterprises, Inc. was owned by KeySpan Corporation ("KeySpan") at the time of NGUSA's acquisition of KeySpan in 2007. In exchange for certain rate concessions and the achievement of certain merger savings targets, the DPU has allowed Boston Gas (as the sole surviving entity from the legal consolidation of Boston Gas and Colonial Gas Company that occurred during the year-ended March 31, 2020) to recover the acquisition premium in rates through August 2039.

Regulatory tax liability: Represents over-recovered federal and state deferred taxes of the Company primarily as a result of regulatory flow through accounting treatment, state income tax rate changes and excess federal deferred taxes as a result of the Tax Act.

Renewable energy certificates: Represents deferred costs associated with the Company's compliance obligations with Renewable Portfolio Standards ("RPS") in Rhode Island and Massachusetts. The RPS is legislation established to foster the development of new renewable energy sources. The regulatory asset will be recovered over the next year.

Revenue decoupling mechanism ("RDM"): As approved by the applicable state regulatory bodies, the Company has electric and gas RDMs which allow for an annual adjustment to the Company's delivery rates as a result of the reconciliation between allowed and billed revenues. Any difference is recorded as a regulatory asset or regulatory liability.

Storm costs: The Company is allowed to recover storm costs from retail delivery service customers. This balance reflects costs yet to be recovered. See Note 6, "Rate Matters," for additional information regarding the recovery of storm costs.

Temperature control/interruptible ("TC/IT") sharing: Under a previous rate agreement, the New York Gas Companies were subject to an annual price cap on interruptible and temperature control customers and was allowed to defer related amounts, subject to sharing with customers – 90% to customers and 10% to shareholders. This mechanism was discontinued under the current rate agreement. In conjunction with its 2019 rate case filing (see Note 6, "Rate Matters", for additional details), the New York Gas Companies proposed to combine this and other regulatory assets and liabilities into a single net deferral liability to offset the revenue requirement in the pending rate case to mitigate rate increases over the term of the rate plan.

Transmission service: Massachusetts Electric and Nantucket (the "Massachusetts Electric Companies") arrange transmission service on behalf of their customers and bill the costs of those services to customers, pursuant to the transmission service cost adjustment provision. Any over or under recoveries of these costs are passed on to customers receiving transmission service over the subsequent year.

6. RATE MATTERS

Niagara Mohawk

Electric and Gas Filing

On July 31, 2020, Niagara Mohawk filed a rate case to increase its base electric and gas delivery revenues by $100 million and $42 million per year, respectively, beginning with the twelve-month period from July 1, 2021 through June 30, 2022 ("Rate Year (RY) 1"). To facilitate a potential multi-year settlement, Niagara Mohawk submitted comprehensive financial information for two additional Data Years ending June 30, 2023 ("RY2") and June 30, 2024 ("RY3"). The filings propose to invest approximately $3.5 billion across the Rate Year and Data Years and present a comprehensive framework to advance New York State's energy goals outlined in the Climate Leadership and Community Protection Act ("CLCPA"). Niagara Mohawk filed Corrections and Updates on October 14, 2020, which requested rate increases of $103 million for electric delivery and $37 million for gas delivery. To facilitate settlement discussions by the parties, the NYPSC approved Niagara Mohawk's extension of the suspension period in these proceedings, such that new rates would become effective February 1, 2022. This extension is subject to a make whole provision that would assure that Niagara Mohawk is restored to the same financial position it would have been in had there been no extension and new rates went into effect on July 1, 2021.

On September 27, 2021, Niagara Mohawk, DPS Staff and other settlement parties filed a Joint Proposal ("NIMO-JP") for a three-year rate plan for Niagara Mohawk's electric and gas businesses beginning July 1, 2021 and ending June 30, 2024. The highlights of the rate plan include: enhanced energy affordability programs and services for low and moderate income customers; initiatives to reduce methane emissions and deploy clean energy solutions, including electric vehicles ("EV"), battery storage and energy efficiency and demand response programs, in support of CLCPA; support for deploying Advanced Metering Infrastructure; and funding for $3.3 billion in capital projects to improve safety, resiliency and reliability of our energy networks. The proposed revenue increases are 1.4% for electric operations and 1.8% for gas operations in RY1 and 1.9% for both electric and gas operations in RY2 and RY3. In addition, the NIMO-JP also includes mechanisms that would allow Niagara Mohawk to extend the rate plan by nine months ("Stayout Period"), such that new rates would become effective April 1, 2025. To mitigate the potential bill impacts on customers, the settlement applies existing deferral credits of $146 million and $53 million for electric and gas customers, respectively, over the term of the rate plan and Stayout Period. The settlement is based upon a 9% return on equity and a ratemaking capital structure reflecting a common equity component of 48%. The NIMO-JP includes an earnings sharing mechanism by which customers will share in earnings in excess of a 9.5% calculated return on equity ("ROE") for each rate year under the rate plan.

On January 20, 2022, the NYPSC approved and adopted the three-year settlement through June 30, 2024, and supporting schedules for Niagara Mohawk's electric and gas businesses with limited additional requirements. Pursuant to the NIMO-JP, Niagara Mohawk recorded the Make Whole provision with new rates effective February 1, 2022. The Make Whole provision covering the period July 2021 through January 2022 was recorded in the year ended March 31, 2022, to ensure Niagara Mohawk is restored to the same financial position it would have been in had new rates gone into effect July 1, 2021. The NYPSC stated in its approval that the agreed upon electric and gas rate plans will result in sufficient mitigation of rate impacts on customers while preserving Niagara Mohawk's operational and financial stability; are consistent with the environmental, social and economic policies of the Commission and the State of New York, including CLCPA; and fall within the range of potential litigated outcomes or otherwise provide benefits to ratepayers that could not have been achieved in a fully litigated proceeding.

Advanced Metering Infrastructure

On November 20, 2020, the NYPSC approved the Niagara Mohawk's proposal for the deployment of Advanced Metering Infrastructure ("AMI"), also referred to as smart meters. The upstate New York Smart Meter program will provide our customers with real-time energy consumption data and tools to make clean energy choices and reduce costs. The approval assumes a six-year project deployment schedule (two years of back-office systems followed by four years of meter deployment). Niagara Mohawk intends to install approximately 1.7 million electric AMI meters and 640,000 gas modules across its service territory. Under Niagara Mohawk's implementation plan, 20% of the electric meters and gas modules will be installed in the first year of deployment, followed by 35% in both years two and three, and 10% in year four of the deployment period. In the approved rate case Niagara Mohawk will be authorized to recover $119 million of AMI-related operations and maintenance ("O&M") expense incurred during the six-year AMI deployment period beginning fiscal year 2022 subject to a downward only reconciliation at the end of the six-year AMI deployment period.

NYPSC Investigation

On June 17, 2021, five former National Grid employees in the downstate New York facilities department pleaded guilty to federal charges alleging fraud and bribery. It is National Grid's understanding that the investigation by the US Attorney's Office and FBI remains ongoing. National Grid has been identified as a victim of the alleged crimes and will continue to comply with the government's investigation. The defendants have been, or are scheduled to be, sentenced between May and July of 2022. On June 23, 2021, based on the US Attorney's announcement, the NYPSC issued an order commencing a proceeding to examine certain programs and related capital and O&M expenditures of NGUSA, and the New York Gas Companies. Over the past year, National Grid has submitted various reports and documents regarding its response to the alleged misconduct. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, National Grid does not expect this matter will have a materially adverse effect on its results of operations, financial position, or cash flows.

Proceeding on Energy Affordability Programs and Effects of COVID-19 on Utility Service

On June 11, 2020, the NYPSC opened a proceeding to investigate the impacts of COVID-19 on utilities' customers, operations, finances, and ability to provide safe and reliable service at just and reasonable rates. Niagara Mohawk along with the other New York State utilities are working closely with our regulators to develop approaches that support residential and commercial customers, utilities, clean energy developers, and other stakeholders, all of whom contribute to the State's economic health. On January 20, 2021, the DPS Staff issued a guidance letter regarding deferral treatment of incremental COVID-19 costs. The letter articulated two scenarios under which utilities could seek deferral of such costs – through change in law provisions contained in utilities' existing rate plans or through a separate deferral petition.

On December 16, 2021, Niagara Mohawk notified the NYPSC that under its previous and current rate plan provisions, Niagara Mohawk has met the requirements during Rate Year Three and the Stayout period to defer, for ratemaking purposes, the unbilled fees (late payment charges and other waived fees, net of related savings) of approximately $17 million and $3 million, for the electric and gas businesses, respectively, resulting from New York State's COVID related orders and legislation. On February 7, 2022, the New York Companies petitioned for approval of an alternative recovery mechanism for the COVID-19 related unbilled fees thar are deferred during the term of the rate plans. On June 16, 2022, the NYPSC approved Niagara Mohawk's petition for an alternative recovery mechanism of COVID-19 unbilled fees, whereby Niagara Mohawk will collect its deferral for the last fifteen months of its prior rate plan (April 1, 2020 – June 30, 2021) of $17 million for the electric business and $3 million for the gas business through a surcharge effective July 1, 2022, through June 30, 2023. In addition, the NYPSC authorizes Niagara Mohawk to surcharge or credit the deferred COVID-19 unbilled fees, net of related savings, for Rate Years One and Two under its current rate plan during the periods from July 1, 2023, through June 30, 2024, and July 1, 2024, through June 30, 2025, respectively. The order also approved the Niagara Mohawk's proposal to commit $2 million of the deferred unbilled fee toward customer arrearages, discussed below.

On February 4, 2021, the DPS issued a Whitepaper providing recommendations in both the proceeding for Energy Affordability for Low Income utility customers and the proceeding on the effects of COVID-19 on utility service. On August 12, 2021, the NYPSC issued an order to adopt recommendations that aim to provide uniformity of energy affordability programs statewide via standardized practices and facilitate the ease of enrollment and customer participation. The Commission also adopted modifications to the bill discount calculation methodology to move further toward achieving the Commission's six percent energy burden goal. In the order, the NYPSC directs the joint utilities to update their respective Energy Affordability program bill discounts and file tariff modifications to become effective on a temporary basis, on September 1, 2021, to quickly provide relief to low-income customers and to establish an Energy Affordability Policy working group ("EAP Working Group").

Several initiatives have been developed since the issuance of the August 2021 order, most notably, the Utility Arrears Relief Program ("UARP"), which was included in the fiscal year 2022-2023 New York State budget ("NYS budget"), and which is aimed at reducing the arrears held by ratepayers from March 7, 2020, until March 1, 2022. Pursuant to the requirements of the UARP, the NYS budget enacted in April 2022 directed the DPS to establish a residential arrears reduction program for electric and gas customers, in consultation with the EAP working group, in which Niagara Mohawk participates, to first prioritize the $250 million allocation of State funds to eligible low-income customers no later than August 1, 2022.

In May 2022, the EAP working group issued an Arrears Report recommending, among other matters, to implement an arrears reduction program in two phases. The first phase (“Phase 1”) would target low-income customers to provide much needed COVID-19 related relief through a one-time bill credit that eliminates accrued arrears through May 1, 2022, with portions above the $250 million state appropriation being funded largely by ratepayers. The second phase would allow the EAP working group to continue discussions to develop a program that provides incentives and/or other measures to reduce arrears for customers who are not eligible under the EAP (i.e. remaining residential and small commercial customers) for future consideration by the NYPSC The disbursement of funds from the utility-funded low-income arrears reduction program is expected to occur after the disbursement of the NYS Office of Temporary and Disability Assistance administered programs and the $250 million in state funds. The utility funded portion of the arrears reduction program would be paid for by ratepayers and collected by the utility via a surcharge effectuated by a tariff filing. The Arrears Report recommends that the total customer bill impacts be limited to 0.5%, so as to minimize customer impacts while providing relief.

On June 16, 2022, the NYPSC approved the recommendations made in the Arrears Report, discussed above. This order authorized the implementation of the Phase 1 Arrears Reduction Program, whereby the Niagara Mohawk’s total EAP arrears reduction one-time credits totaling $100 million are to be funded by $40 million of NYS budget allocation, shareholder’s contribution of $2 million under the Niagara Mohawk’s approved petition for alternative recovery mechanism of COVID-19 unbilled fees, utilization of $25 million from existing deferred EAP liabilities, with the remaining balance of $33 million to be recovered from customers through a surcharge over a three-year period effective on August 1, 2022. This order denied a petition filed on September 29, 2020 which requested the approval for a COVID-19 Customer Assistance Program and instead directs Niagara Mohawk to use the deferred low-income balances to reduce the cost of Niagara Mohawk’s arrears reduction program.

The New York Gas Companies

General Rate Case

On April 30, 2019, the New York Gas Companies filed to increase revenues for the twelve-month ending March 31, 2021 (“Rate Year 1”). The New York Gas Companies were granted an extension of the suspension period, such that new rates would now become effective September 1, 2021 and included a Make Whole provision in order to keep the New York Gas Companies and their customers in the same financial position they would have been had the Brooklyn Union Gas Company and KeySpan Gas East Corporation filed for new rates by April 30, 2020.

On May 14, 2021, the Department of Public Service (“DPS”) Staff and the New York Gas Companies filed a Joint Proposal (“DSNY-JP”) for a three-year rate plan beginning April 1, 2020 and ending March 31, 2023. The total revenue increases for Brooklyn Union Gas Company is: 0% in rate year one, 2% in rate years two and three. The revenue increase for KeySpan Gas East Corporation is: 0% in rate year one, 1.8% in rate years two and three. To mitigate the potential bill impacts on customers, the settlement applies nearly $100 million of existing net regulatory liabilities over the three years of the rate plan. In addition, the revenue requirements include amounts from the amortization of excess federal accumulated deferred income taxes (“ADIT”), which was also used to benefit customers by mitigating rates.

The DSNY-JP addresses the goals of the CLCPA and includes provisions that promote energy efficiency, demand response, geothermal, and electrification options to meet customers’ energy needs while minimizing the need for additional gas infrastructure. The settlement is based upon an 8.8% ROE and 48% common equity ratio and includes an earnings sharing mechanism with customers when the New York Gas Companies’ ROE is in excess of 9.3%. In addition, the DSNY-JP also includes a mechanism that would allow the New York Gas Companies to extend the rate plan by twelve months (“Stayout Period”), such that new rates would become effective April 1, 2024.

The DSNY-JP authorizes KeySpan Gas East Corporation to establish a regulatory asset of $47 million, for pension and postretirement benefit other than pension related amounts. This resulted because KeySpan Gas East Corporation's customers previously received the benefit of historical gains which were properly allocated based on the accounting treatment for a curtailment event, but ultimately should not have been economically shared with this customer group.

On August 12, 2021, the NYPSC approved and adopted the DSNY-JP and supporting schedules with limited additional requirements. Pursuant to the DYNY-JP, the New York Gas Companies recorded the Make Whole provision during the fiscal year ended March 31, 2022.

Downstate Gas Moratorium

On November 24, 2019, the New York Gas Companies reached settlements resolving the Order to Show Cause relating to the downstate gas moratorium (the "Settlement Agreement"), which was subsequently approved by a Commissioner Order by the NYPSC. Specifically, the New York Gas Companies are lifting the moratorium for approximately two years and implementing $35 million in customer assistance, demand response, energy efficiency and other shareholder funded programs. The settlement also provides for the appointment of a monitor to oversee gas supply operations and compliance with the settlement.

On February 25, 2021, the DPS Staff and the New York Gas Companies entered into the Second Amendment to the Settlement Agreement, approved by the NYPSC on April 15, 2021, which repurposed the $20 million of shareholder funding designated to support clean energy projects under the original Settlement Agreement. On August 12, 2021, the NYPSC approved the New York Gas Companies rate case which authorized to use the $20 million settlement amount to offset the revenue requirement of the New York Gas Companies' current rate plan. As of September 1, 2021, the monitor issued its Closing Report to National Grid and the NY DPS, thereby ending the monitorship to the settlement agreement.

Downstate Order to Show Cause

On November 15, 2018, the NYPSC issued an Order to Show Cause against the New York Gas Companies for violations of gas safety regulations designed to ensure underground gas pipelines are protected from corrosion. On February 25, 2021, the DPS Staff and the New York Gas Companies entered into a settlement agreement resolving all issues arising out of the "Orders Instituting Proceeding and to Show Cause" dated July 2019 and November 2018 for alleged gas safety violations. The settlement agreement, approved by the NYPSC on March 18, 2021, authorizes the New York Gas Companies to establish a deferral at shareholder expense for its portion of the settlement of $15 million and $6 million for the benefit of customers to offset the costs of the Brooklyn Union Gas Company and KeySpan Gas East Corporation's approved energy efficiency and demand response programs, respectively. On August 12, 2021, the NYPSC approved the New York Companies rate case which authorized to use the $15 million and $6 million settlement amount to offset the revenue requirement of the Brooklyn Union Gas Company and KeySpan Gas East Corporation in the current rate plan, respectively.

Tax Act

In response to the Tax Act, the NYPSC issued an Order Instituting Proceeding under Case 17-M-0815 - Proceeding on Motion of the Commission on Changes in Law that May Affect Rates. This proceeding was instituted to solicit comments on the Tax Act's implications and places the utilities on notice of the NYPSC's intent to protect ratepayers' interest and to ensure that any cost reductions from the changes in federal income taxes are deferred for future ratepayer benefit. On August 9, 2018, the NYPSC issued an order in its generic proceeding considering the impacts of federal tax reform. NYPSC Staff had advocated that all New York utilities implement a sur-credit by October 1 that would reflect the immediate effects of the Tax Act and also return any deferred benefits to customers. In response, the New York Gas Companies filed a proposal to (i) delay any sur-credit to January 1 to offset scheduled rate increases and (ii) retain any deferred benefits, including accumulated deferred federal income taxes ("ADFIT"), for future rate moderation.

The NYPSC's order effectively approved all aspects of the New York Gas Companies' proposal. The NYPSC agreed that the New York Gas Companies should be allowed to defer both the pass back of calendar year 2018 tax savings and the amortization of excess ADFIT balances and use the benefits as a rate moderator when base rates are next revised in

2020/2021. Specifically, the NYPSC approved the New York Gas Companies' proposal to implement a sur-credit to reflect the lower tax rate effective January 1, 2019 to offset planned rate increases and retain the calendar year 2018 deferred amounts for future rate mitigation and/or to offset investments. This sur-credit ended in FY21, and the mechanism was discontinued under the current rate case 19-G-0310.

NYPSC Investigation

Refer to "NYPSC Investigation" section under Niagara Mohawk.

Proceeding on Energy Affordability Programs and effects of COVID-19 on Utility Service

Refer to "Proceeding on Energy Affordability Programs and Effects of COVID-19 on Utility Service" section under Niagara Mohawk.

Different from Niagara Mohawk, on December 16, 2021, the New York Gas Companies notified the NYPSC that under its current rate plan provisions the New York Gas Companies has met the requirements during Rate Year One to defer, for ratemaking purposes, the unbilled fees (late payment charges and other waived fees, net of related savings) resulting from New York State's COVID related orders and legislation.

On June 16, 2022, the NYPSC approved the New York Gas Companies petition for alternative recovery mechanism of COVID-19 unbilled fees, whereby, the Brooklyn Union Gas Company and KeySpan Gas East Corporation will collect its deferral for Rate Year One of $13 million and $6 million, respectively through a surcharge effective July 1, 2022, through June 30, 2023. In addition, the NYPSC authorizes the New York Gas Companies to surcharge or credit the deferred COVID-19 unbilled fees, net of related savings, for Rate Years Two and Three under its rate plan during the periods from July 1, 2023, through June 30, 2024, and July 1, 2024, through June 30, 2025, respectively.

On June 16, 2022, the NYPSC approved the recommendations made in the Arrears Report discussed above. This order authorized the implementation of the Phase 1 Arrears Reduction Program, whereby, the Brooklyn Union Gas Company and KeySpan Gas East Corporation's total EAP arrears reduction one-time credits totaling $42 million and $3 million are to be funded by $10 million and $1 million of NYS budget allocation, shareholder's contribution of $1 million and $0.4 million respectively, under the New York Gas Companies' approved petition for alternative recovery mechanism of COVID-19 unbilled fees, with the remaining balance of $30 million and $2 million to be recovered from customers through a surcharge over a three and a half year and twelve month recovery period effective on August 1, 2022 for the Brooklyn Union Gas Company and KeySpan Gas East Corporation, respectively.

The Massachusetts Electric Companies

General Rate Case

On November 15, 2018, the Massachusetts Electric Company and its affiliate, Nantucket Electric, filed an application for new base distribution rates that became effective October 1, 2019. On September 30, 2019, and updated on October 11, 2019, the DPU approved for the Massachusetts Electric Company and Nantucket Electric an overall net increase in base distribution revenue of approximately $40 million based upon a 9.6% ROE, with a 53.49% equity, 46.43% long-term debt, and 0.08% preferred stock capital structure. The DPU approved a five-year performance-based ratemaking ("PBR") plan, which adjusts base distribution revenue annually based on a pre-determined formula. With the approval of the PBR plan, Massachusetts Electric Company and Nantucket Electric agreed not to file for an effective change in base distribution rates outside of the operation of the PBR plan for five years. Also, the Capital Investment Recovery Mechanism ("CIRM") has been discontinued after a transition period that concluded with nine months of recovery of vintage year 2019 investments through September 30, 2021, at which point the recovery of capital investments has fully transitioned to the PBR plan. The approved net increase includes an increase in annual funding of the storm fund from $11 million to $16 million per year and an extension of the storm fund replenishment factor through November 2023.

PBR Plan Filing

On June 15, 2021, the Massachusetts Electric Company and Nantucket Electric filed the second annual PBR plan filing for rates effective October 1, 2021. The PBR plan filing adjusts base distribution rates pursuant to a revenue cap formula, provides a credit to customers for any customer share of excess earnings pursuant to the earnings sharing mechanism, and recovers from or credits customers for the impact of costs in excess of a threshold associated with exogenous events, including storms having incremental costs in excess of $30 million. The result of the revenue cap formula was a proposed increase to base distribution revenue of 2.71%, or $23 million. On September 8, 2021, the DPU approved the Massachusetts Electric Company and Nantucket Electric's proposed PBR and Capital Expenditure Adjustment filing, effective October 1, 2021, subject to further investigation and reconciliation in the second phase of the proceeding. On February 23, 2022, the DPU issued its final approval of the Massachusetts Electric Company and Nantucket Electric's proposed PBR and Capital Expenditure Adjustment filing.

On June 17, 2022, the Massachusetts Electric Company and Nantucket Electric filed the third annual PBR plan filing for rates effective October 1, 2022. The Massachusetts Electric Company and Nantucket Electric requested approval of a PBR adjustment of $44 million, based on a PBR percentage of 4.92%. This adjustment reflects the implementation of the Massachusetts Electric Company and Nantucket Electric's proposed one-time Customer Impact Mitigation Plan, which the Massachusetts Electric Company is proposing due to the extreme economic circumstances currently impacting customers. In the absence of the Customer Impact Mitigation Plan, the Massachusetts Electric Company and Nantucket Electric would be proposing a PBR adjustment of $68 million, based on a PBR percentage of 7.63%, which includes the annualized impact of a change in how several Massachusetts communities assess municipal property taxes, in addition to requesting recovery of $11 million annually over five years associated with an exogenous storm event in which the Massachusetts Electric Company and Nantucket Electric incurred incremental costs in excess of $30 million, resulting in a total of $79 million, in accordance with the PBR formula. The Massachusetts Electric Company cannot predict the outcome of this request.

Recovery of Transmission Costs

The Massachusetts Electric Company's transmission facilities are operated in combination with the transmission facilities of its New England affiliates, Narragansett and NEP, as a single integrated system, with NEP designated as the combined operator. NEP collects the costs of the combined transmission asset pool, including a return on those facilities, under NEP's Tariff No. 1 from the Independent System Operator – New England ("ISO-NE"). The ISO-NE allocates these costs among transmission customers in New England, in accordance with the ISO-NE Open Access Transmission Tariff ("ISO-NE OATT").

According to the FERC's orders, the Massachusetts Electric Company is compensated for its actual monthly transmission costs, with its authorized maximum ROE of 11.74% on its transmission assets. The amounts remitted by NEP to the Massachusetts Electric Company for the years ended March 31, 2022 and 2021 were $24 million and $23 million, respectively, which are reflected as credits within operations and maintenance expenses in the consolidated statements of operations and comprehensive income.

The ROE for transmission rates under the ISO-NE OATT is the subject of four complaints pending before the FERC. On October 16, 2014, the FERC issued an order on the first complaint, Opinion No. 531-A, resetting the base ROE applicable to transmission assets under the ISO-NE OATT from 11.14% to 10.57% effective as of October 16, 2014 and establishing a maximum ROE of 11.74%. On March 3, 2015, the FERC issued an Order on Rehearing, Opinion No. 531-B, affirming the 10.57% base ROE and clarifying that the 11.74% maximum ROE applies to all individual transmission projects with ROE incentives previously granted by the FERC. On April 14, 2017, the U.S. Court of Appeals for the D.C. Circuit ("Court of Appeals") vacated and remanded the FERC's Opinion No. 531 (and successor orders), through which the FERC had lowered the New England Transmission Owners' ("NETOs") base ROE from 11.14% to 10.57% and capped the total incentives at 11.74%. Despite the Court of Appeals' ruling, the base ROE in New England remains at 10.57%. NEP appealed the FERC's decision to keep the base ROE in New England at 10.57%, and this appeal is still pending.

On October 16, 2018, the FERC issued an order on four New England ROE complaints, describing how it intends to address the issues that were remanded by the Court of Appeals. The FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable, and, if so, how to calculate a replacement ROE. The FERC stated that its calculations were merely preliminary and asked the parties to the New England ROE complaint cases to check the numbers and brief the FERC. NEP, along with other NETOs, filed a brief supporting the FERC's new methodology and confirming the illustrative numbers that the FERC arrived at in its October 2018 order—a 10.41% base ROE. The FERC has not issued a final order on NEP's brief, and the base ROE in New England remains at 10.57%.

In November 2019, the FERC issued an order in the Midcontinent Independent System Operator ("MISO") transmission owner ROE complaint dockets, changing the way it arrives at a just and reasonable ROE. Base ROEs were reduced from 10.32% to 9.88% when the FERC applied this revised methodology in two MISO ROE complaints. In the MISO order, the FERC made statements that it is setting new ROE policy nationwide. In December 2019, the NETOs filed a supplemental brief in the New England ROE complaint dockets, showing the FERC the detrimental effects on New England if the 2019 MISO order was applied to New England. In that brief, the NETOs asked the FERC to reopen the record in New England so that the NETOs could submit more testimony. Other stakeholders had an opportunity to reply to the NETOs' supplemental brief by January 21, 2020 and did so, arguing that the NETOs' request should be denied, and that the record in New England should not be reopened.

On May 21, 2020, the FERC, on rehearing, revised the methodology to determine MISO transmission owner ROEs. The FERC's November 2019 order proposed to create "zones of reasonableness" based on averages of two (rather than four) models to judge whether ROEs are just and reasonable in complaint cases. The May 2020 order relies on three models to estimate ROEs. The application of this new methodology increased base ROEs in the MISO complaints from 9.88% to 10.02%. On November 19, 2020, the FERC issued a further order on rehearing in the MISO complaint dockets, upholding the 10.02% base ROE. The FERC's MISO ROE orders are currently on appeal before the Court of Appeals.

On March 17, 2022, the FERC issued an order in a case addressing the base ROE for Pacific Gas and Electric Company ("PG&E"). The FERC applied the ROE methodology from the 2020 MISO ROE orders and found that 9.26% was the just and reasonable base ROE for PG&E in that proceeding. Requests for a rehearing on this March 2022 PG&E order are pending before the FERC.

The Massachusetts Electric Company does not believe the outcomes of these complaints will have a material impact on the Massachusetts Electric Company's financial condition, results of operations, or cash flows.

Tax Act

In February 2018, the DPU opened an investigation to examine the effect of the Tax Act on the rates of the investor-owned utilities in Massachusetts as of January 1, 2018 and directed the utilities to account for any revenues associated with the difference between the previous and current corporate income tax rates and establish a regulatory liability for excess recovery in rates of ADIT. On December 21, 2018, the DPU issued an order requiring all utilities to begin crediting in rates the amortization of excess deferred federal income taxes, to the extent such amortization was not already included in base distribution rates, through the combination of factors associated with certain reconciling mechanisms and a separate factor for the amortization of the remaining amounts.

On February 15, 2019, the DPU issued an order (D.P.U. 18-15-F) finding that the Massachusetts utilities were not required to refund tax savings previously accrued from January 1, 2018 through June 30, 2018 as a result of the federal income tax rate reduction, on grounds that refunds would not be "appropriate", based upon the prohibition against retroactive ratemaking.

On March 7, 2019, the Massachusetts Attorney General's ("AG") office filed a motion for clarification and reconsideration, requesting that the DPU provide additional clarity regarding its ruling and reconsider its determination to allow utilities to keep the federal tax savings accrued from January 1, 2018 through June 30, 2018. On October 22, 2021, the DPU issued a ruling denying the AG's motion for reconsideration on grounds that the AG established no mistake or inadvertence in the DPU's initial determination. Accordingly, the DPU upheld its 2019 decision in D.P.U. 18-15-F, finding that the "timing of the Act, and retroactive nature of any rate adjustments [made] a refund of tax savings accrued from January 1, 2018 to June 30, 2018 inappropriate." The deadline for the AG to appeal the DPU's ruling on this issue to the Massachusetts Supreme Judicial Court ("SJC") expired on November 1, 2021, and, as no appeal was filed, order D.P.U. 18-15-F is final.

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act. On June 29, 2020, NEP, on behalf of the Massachusetts Electric Company and Nantucket Electric, submitted a compliance filing to address the application of Order 864 in NEP's Tariff No. 1. The filing proposes changes to various revenue requirement calculations in the tariff for the inclusion of the Rate Adjustment and Income Tax Allowance mechanisms. The filing also includes the populated permanent ADIT worksheet, which will be provided with the issuance of final bills pursuant to the provisions of the tariff. NEP has proposed for the Massachusetts Electric Company and Nantucket Electric to amortize transmission-related, protected property-related excess or deficient ADIT associated with the 2017 Tax Act using the Average Rate Assumption Method ("ARAM"), and a 21-year amortization period for unprotected property-related excess or deficient balances. Other unprotected excess or deficient ADIT is proposed to be amortized over five years, consistent with the time period approved in the DPU docket addressing the Tax Act. The FERC has not yet acted on NEP's compliance filing.

Grid Modernization Plan

On August 19, 2015, the Massachusetts Electric Company, together with Nantucket Electric, filed their first proposed grid modernization plan ("GMP") with the DPU. On May 10, 2018, the DPU issued an order in this proceeding. The order approved $82 million in grid-facing investments over three years in: (1) conservation voltage reduction and volt/volt-amps reactive optimization; (2) advanced distribution automation; (3) feeder monitors; (4)communications and information/operational technologies; and (5) advanced distribution management/distribution supervisory control and data acquisition. The DPU allowed recovery of both O&M expenses and capital costs through a reconciling mechanism. The DPU did not approve any customer-facing (i.e., AMI) investments; the DPU said it would address these in a further investigation to see if there are ways to achieve cost-effective deployment of these investments. The Massachusetts Electric Company, together with Nantucket Electric have filed annual reports and cost recovery filings with the DPU for its GMP in 2019, 2020, 2021 and 2022.

In an order in D.P.U. 20-69-A, on May 21, 2021, the DPU directed the Massachusetts Electric Company, together with Nantucket Electric to include an AMI proposal in its July 1, 2021 GMP filing. The Massachusetts Electric Company, together with Nantucket Electric filed its proposed four-year GMP (for calendar years 2022–2025) on July 1, 2021, which includes proposals to continue the previously-approved investments (designated as "Track 1" in the proceeding), invest in a distributed energy resource management system ("DERMS"), conduct two demonstration projects, and deploy AMI (designated as "Track 2" in the proceeding). The Massachusetts Electric Company is seeking authorization for $316 million in grid-facing investments over four years, consisting of $289 million for Track 1 investments, $8 million for DERMS investments, $6 million for the two demonstration projects, and $13 million to support the implementation of FERC Order No. 2222. The proceedings on Track 1 have concluded, and, on December 30, 2021, the DPU issued an interim order allowing investments in Track 1 to continue, pending the DPU's final order on Track 1. The DPU's investigation of Track 2 is ongoing, with hearings concluding in April 2022 and orders expected sometime in 2022.

Operational and Management Audit

On September 30, 2019, in its decision regarding the Massachusetts Electric Company and Nantucket Electric's most recent request for a change in base distribution rates, the DPU stated that, pursuant to its supervisory authority, it would require a comprehensive independent management audit of the Massachusetts Electric Company and Nantucket Electric, including a review of its relationship with National Grid USA Service Company. On November 25, 2019, the DPU formally opened the investigation to undertake an independent audit. The draft audit report was provided to the Massachusetts Electric Company and Nantucket Electric on March 1, 2021 for review and factual corrections, and the final report was submitted to the DPU on March 29, 2021. On April 30, 2021, the Massachusetts Electric Company and Nantucket Electric filed a comprehensive response to the audit report, formally adopting the findings and recommendations, with certain modifications, for the DPU's consideration. On June 30, 2021, the AG's office filed written comments in response to the final audit report. The Massachusetts Electric Company and Nantucket Electric and the independent auditor filed reply comments to the AG on July 21, 2021. On November 24, 2021, the DPU issued a final order finding that the Massachusetts Electric Company and Nantucket Electric shall implement the recommendations contained in the final report and file a comprehensive update regarding the implementation of the recommendations at or around the time of the next base rate proceeding.

COVID-19 Moratorium on Utility Shut Offs

Between March 24, 2020 and February 26, 2021, the Chairman of the DPU declared a moratorium prohibiting all residential utility collection activities due to the COVID-19 pandemic until July 1, 2021. Effective July 1, 2021, the Massachusetts Electric Company recommenced normal collections activities, which includes issuing notices of amounts in arrears and alerting customers that their service is subject to disconnection for non-payment. The commercial and industrial ("C&I") moratorium was lifted effective September 1, 2020.

The following are highlights of the customer assistance programs implemented to assist customers during the pandemic:

- Extended deferred payment arrangements ("DPAs") - up to 12 months for residential and small C&I customers, with the ability to extend to 18 months for unique circumstances; up to six months for large C&I customers, with the terms to be determined on a case-by-case basis. On January 24, 2022, the Massachusetts Electric Company discontinued the zero down payment COVID-19 DPAs, and the Massachusetts Electric Company discontinued its transitional DPA program in May 2022.

- Late fees for C&I customers were waived during the pandemic and resumed effective January 7, 2022.

- Revisions to residential Arrearage Management Programs ("AMPs") (to provide more flexible enrollment terms and an increase in arrearages forgiven from $4,000 to $12,000) are still in effect. The Massachusetts Electric Company has proposed to continue to apply most of the COVID-19. AMP terms for the 2022 AMP program year in its AMP filing submitted on February 25, 2022.

- Established a COVID-19 small C&I Arrearage Forgiveness Program that was extended several times and expired on September 30, 2021.

On December 31, 2020, the DPU approved the following implementation items related to the ratemaking treatment of the COVID-19 customer assistance programs on which the Massachusetts local distribution companies and the AG's office had reached consensus: (1) the distribution companies should be allowed to record, defer and track their bad debt and other COVID-related expenses; (2) cost recovery should be limited to the incremental costs incurred; and (3) certain costs must be extraordinary to qualify for recovery. As of March 31, 2022, the Massachusetts Electric Company has deferred $38 million of delivery bad debt (for both the Massachusetts Electric Company and Nantucket Electric) and $1 million of other COVID-related costs, as the Massachusetts Electric Company believes that these amounts are probable of recovery.

The DPU decided that the contested issues, including the extent to which the distribution companies will be allowed to recover their COVID-19 costs, should be fully adjudicated in a new docket, D.P.U. 20-91.

The AG opposes recovery by distribution companies with PBR plans (including the Massachusetts Electric Company) of incremental COVID-related O&M expenses. The AG also opposes using the pre-tax overall weighted cost of capital for the calculation of carrying charges on bad debt, arguing that the short-term debt rate, or, in the alternative, an interest rate contemporaneous to two-year U.S. Treasury notes, is the correct rate. The AG also takes the position that the DPU should consider the significance of the distribution companies' net incremental O&M costs due to COVID-19 to determine whether they resulted in substantial harm to the distribution companies' financial position. The briefing phase has concluded, and the DPU's order is pending.

Massachusetts Petition for Waiver of Jurisdiction Regarding the Rhode Island Sale

On March 17, 2021, NGUSA announced the sale of its Rhode Island business to PPL Energy Holdings, LLC. On May 3, 2021, PPL Energy Holdings, LLC assigned its right to acquire Narragansett to its wholly owned subsidiary, PPL Rhode Island Holdings, LLC ("PPL Rhode Island"), such that, upon closing, PPL Rhode Island will own 100 percent of the outstanding shares of common stock in Narragansett. On May 4, 2021, NGUSA filed a petition with the DPU for a waiver of jurisdiction under G.L. c. 164, § 96(c), based on a finding that the sale of Narragansett to PPL Rhode Island will have no adverse impacts on any electric or gas company subject to the DPU's jurisdiction, as applicable, or the customers of any such electric or gas company. On July 16, 2021, the DPU issued an order (D.P.U. 21-60) approving NGUSA's request for a waiver of Section 96 regarding the sale of Narragansett.

On August 12, 2021, the AG filed an appeal of the DPU's waiver of jurisdiction with the SJC. The AG filed a motion to stay order D.P.U. 21-60 along with a request for the court to issue a decision on the motion on or before February 14, 2022. On January 7, 2022, NGUSA filed its opposition to the AG's motion to stay the order. On February 10, 2022, the single SJC justice referred the matter to the full court instead of ruling on the motion for a stay. On February 16, 2022, the full court issued an order requesting that the single justice make a recommendation to the full court regarding the motion for a stay. On February 24, 2022, the single justice issued a temporary stay of the DPU's order. NGUSA provided an update to the single justice and the SJC on the Rhode Island legal process and the anticipated closing date of March 8, 2022 and requested a decision on the stay by March 4, 2022. On March 3, 2022, the full court issued a docket entry order allowing the AG's motion to stay the DPU decision in docket D.P.U. 21-60 "until further order." On March 25, 2022, NGUSA reached a settlement with the AG and jointly petitioned the SJC to lift the stay and withdraw the appeal. On March 29, 2022, the SJC approved the motion to lift the stay and dismissed the appeal. On May 25, 2022, Narragansett was sold to PPL Rhode Island after all regulatory approvals were obtained.

As a result of NGUSA's settlement with the AG and the sale of Narragansett to PPL Rhode Island, the Massachusetts Electric Company, together with Nantucket Electric, expects to incur the following costs:

• The Massachusetts Electric Company expects to record a regulatory liability of up to $3 million relating to the potentially excess recovery of indirectly attributable service company ("IASC") costs. The Massachusetts Electric Company will ultimately need to provide a credit to customers equal to any incremental amount of IASC costs above the calendar year 2021 baseline level, and the Massachusetts Electric Company will true-up the regulatory liability accordingly.

• Over the course of 90 days, the Massachusetts Electric Company, together with Nantucket Electric, will forgive $3 million in arrearages for electric distribution customers.

• $0.6 million contribution from the Massachusetts Electric Company and Nantucket Electric to the AG's residential energy assistance grant program.

• As compensation to customers for potential future increases in IASC costs during the first five years after the Narragansett divestiture, the Massachusetts Electric Company and Nantucket Electric will provide a one-time credit of $4 million to customers. The form and timing of this one-time credit will be subject to the DPU's review and approval.

Storm Threshold Deferral Requests

On June 15, 2021, the Massachusetts Electric Company and Nantucket Electric petitioned the DPU for authorization to defer for future recovery from the storm fund $14 million in storm cost threshold amounts associated with nine qualifying major storm events that occurred in calendar year 2020. On December 22, 2021, the DPU allowed the Massachusetts Electric Company and Nantucket Electric to defer the nine storm fund threshold amounts from calendar year 2020 until the next base rate case, at which point the DPU will determine the appropriate level of recovery for the storm threshold amounts, if any.

On June 17, 2022, the Massachusetts Electric Company and Nantucket Electric petitioned the DPU for authorization to defer for future recovery from the storm fund $6 million in storm cost threshold amounts associated with four qualifying major storm events that occurred in calendar year 2021. The Massachusetts Electric Company cannot predict the outcome of this request.

The Boston Gas Company

General Rate Case

On November 13, 2020, the Boston Gas Company filed a rate case with the DPU, including a request for approval of a PBR Plan and related proposals. The Boston Gas Company requested that the DPU approve new distribution rates to increase distribution revenues by $221 million, including the transfer of $82 million of recovery of the Boston Gas Company's Gas System Enhancement Program ("GSEP") investments completed through March 31, 2020, from the GSEP factors to base distribution rates, with new rates to be effective October 1, 2021. The actual net revenue deficiency calculated by the Boston Gas Company for distribution rates is $139 million, or an incremental increase in distribution revenue of 18.1%.

On September 30, 2021, the DPU issued an Order in the Boston Gas Company's rate case. The Order allowed an increase in base revenues of $145 million. On October 20, 2021, the Attorney General filed a motion for recalculation. On October 22, 2021, the Boston Gas Company filed a motion for recalculation and reconsideration. On November 17, 2021, the DPU issued its Order on those motions which reduced annual base distribution revenues to $142 million effective December 1, 2021. DPU authorized an ROE of 9.70%, raised from the previous ROE of 9.50%. The Order also authorized a capital structure of 53.44% equity and 46.56% debt. The DPU approved a five-year PBR plan for the Boston Gas Company which is applicable to both core capital expenditures and operational expenditures, and which allows the Boston Gas Company to adjust revenues each year for inflation, adjusted by a productivity factor and consumer dividend. As part of the PBR, the DPU approved cost recovery for certain exogenous events where an individual event's cost change is over $2 million annually, and also approved an Earnings Sharing Mechanism, pursuant to which the Boston Gas Company will share 75% of excess earnings with customers set to begin at 200 basis points over the allowed ROE of 9.70%. The DPU allowed for recovery of the costs of 133 new employees hired after the end of the test year in the case and approves a roll-in of capital additions after the test year through December 31, 2020. The Order also permits the Boston Gas Company to make a request for a one-time roll-in of LNG investments, at a point in the 5-year PBR term chosen by the Boston Gas Company.

As per this rate order the Boston Gas Company is not allowed to earn a return on investment on the Mid-Cape Main Replacement Project. This event qualifies as an indirect disallowance under ASC 980-360, the impairment loss in the amount of $77 million resulting from this indirect disallowance that has been recorded in the accompanying statement of operations and comprehensive income for the year ended March 31, 2022 and consolidated balance sheet as of March 31, 2022 respectively. On June 17, 2022 the Boston Gas Company filed a late Motion for Clarification regarding the Mid-Cape disallowance: (1) whether the Department's decision in D.P.U. 20-120 applies to Project costs that were not presented for recovery in the case, but that relate to the Project; and (2) whether the disallowed return on Project costs that were reviewed by the Department carries beyond the term of the PBR Plan and would preclude the presentation of new evidence in the Boston Gas Company's next base distribution rate proceeding following the conclusion of the PBR Plan.

On July 16, 2021, in response to allegations that five former New York-based National Grid employees accepted bribes and kickbacks from contractors, the DPU indicated that it would open an investigation into this matter, after the conclusion of the NYPSC's investigation.

PBR Plan Filing

On June 17, 2022, Boston Gas Company filed the first annual PBR plan filing for rates effective October 1, 2022. The Boston Gas Company requested approval of a PBR adjustment effective October 1, 2022 of approximately $64 million based on a PBR Percentage of 4.80% and an one-time adjustment for certain investment during the period April 2020 through December 2020. This PBR Adjustment is the result of implementing the Boston Gas Company's proposed one-time Customer Impact Mitigation Plan, which the Boston Gas Company is proposing due to the extreme economic circumstances currently impacting customers at this time. In the absence of the Customer Impact Mitigation Plan, the Boston Gas Company would be proposing a PBR Adjustment of $77 million based on a PBR Percentage of 6.35% and the capital investment adjustment noted above, in accordance with the PBR Tariff. The Boston Gas Company cannot predict the outcome of this request.

COVID-19 Moratorium on Utility Shut Offs

Refer to "COVID-19 Moratorium on Utility Shut Offs" section under The Massachusetts Electric Companies.

For Boston Gas Company, as of March 31, 2022, Boston Gas Company has deferred $4 million of delivery bad debt and $0.1 million of other COVID-related costs, as Boston Gas Company believes that these amounts are probable of recovery.

Gas System Enhancement Plan (GSEP)

On April 30, 2022, the DPU approved recovery of approximately $82 million in revenue requirements, related to approximately $403 million of anticipated investments in 2022 under an accelerated pipe replacement program, through GSEP. The rates are effective from May 2022 to April 2023. The DPU approved the Boston Gas Company's plan for replacing of leak-prone infrastructure in 2022, finding that the Boston Gas Company's GSEP accomplishes the continued accelerated replacement of leak-prone infrastructure consistent with the requirements of state law.

Massachusetts Petition for Waiver of Jurisdiction regarding the Rhode Island Sale

Refer to "Massachusetts Petition for Waiver of Jurisdiction Regarding the Rhode Island Sale" section under The Massachusetts Electric Companies.

As a result of NGUSA's settlement with the AGO and the sale of Narragansett to PPL Rhode Island, the Boston Gas Company expects to incur the following costs:

• The Boston Gas Company expects to record a regulatory liability of up to $2 million relating to the potentially excess recovery of indirectly attributable service company ("IASC") costs. The Boston Gas Company will ultimately need to provide a credit to customers equal to any incremental amount of IASC costs above the calendar year 2021 baseline level, and the Boston Gas Company will true-up the regulatory liability accordingly.

• Over the course of 90 days, the Boston Gas Company will forgive $1 million in arrearages for gas distribution customers.

• $0.4 million contribution from the Boston Gas Company to the AGO's residential energy assistance grant program.

• As compensation to customers for potential future increases in IASC costs during the first five years after the Narragansett divestiture, the Boston Gas Company will provide a one-time credit of $4 million to customers. The form and timing of this one-time credit will be subject to the DPU's review and approval.

Geothermal District Energy Demonstration Program

On December 15, 2021, the DPU approved the Boston Gas Company's petition for a five-year, $16 million geothermal district energy demonstration program. The costs for the demonstration program are recovered through a factor in the Local Distribution Adjustment Factor (LDAF). The program allows the Boston Gas Company to install, own, and operate up to four geothermal shared-loops sites that evaluate one or more of the following: (1) assessing the thermal performance and economics of shared loops serving a larger number of customers with more diverse load profiles than the project completed by the Boston Gas Company's affiliate KeySpan Gas East Corporation on Long Island, New York; (2) switching gas customers to geothermal energy as an alternative to leak-prone pipe replacements; (3) installing shared loops to manage local gas system constraints and peaks; and (4) installing shared loops to lower operating costs and greenhouse gas emissions for low-income customers and environmental justice communities. The Boston Gas Company is developing the implementation plan and customer agreement that will be filed with the DPU for review and approval.

Investigation into the Future of Natural Gas

On October 29, 2020, the DPU opened an investigation into the role of local gas distribution companies ("LDCs") in achieving the Commonwealth's 2050 climate goals. The investigation will explore strategies to meet the Commonwealth's greenhouse gas emissions reductions targets while ensuring safe, reliable, and cost-effective natural gas service, and potentially recasting the role of gas companies in the Commonwealth. On or before 18 March 2022, each company was required to submit a proposal to the MADPU that includes its recommendations and plans for helping Massachusetts achieve its 2050 climate goals, supported by an independent consultants' report, that incorporates feedback and advice obtained through a stakeholder process. Supported by the consultants' analysis, the Boston Gas Company's proposal envisions meeting the state's 2050 climate goals by utilizing a decarbonized and integrated gas and electric system that: (1) increases investment and adoption of energy efficiency measures, including the prioritization of building envelope; (2) eliminates fossil fuels from our gas supply by pursuing delivery of fossil-free gas such as renewable natural gas and renewable hydrogen through our network to all our customers; (3) enables customer use of hybrid heating by supporting customer adoption of heating technologies best suited to their needs; and (4) utilizes targeted electrification, including new solutions such as networked geothermal where safe and cost-effective. Initial comments on the consultants' report, LDC plans, and any alternative proposals may be submitted to the DPU until May 6, 2022, and the discovery period ended June 7, 2022. The DPU has postponed the procedural schedule that required further stakeholder comments be filed by June 22, 2022, LDC comments by July 6, 2022, and all reply comments by August 10, 2022. The LDCs are waiting for the DPU to issue a revised procedural schedule.

NEP

Stranded Cost Recovery

Under the settlement agreements approved by state commissions and the FERC, NEP is permitted to recover stranded costs (those costs associated with its former generating investments (nuclear and non-nuclear) and related contractual commitments that were not recovered through the sale of those investments). NEP earns a ROE related to stranded cost recovery consisting of nuclear-related investments. In Massachusetts and Rhode Island, the current ROEs are 9.2% and 10.46%, respectively. NEP will recover its remaining non-nuclear stranded costs until the costs associated with its decommissioned nuclear units cease.

Transmission Return on Equity and Recovery of Transmission Costs

Transmission revenues are based on a formula rate that recovers NEP's actual costs plus a return on investment. Approximately 75% of NEP's transmission facilities are included under regional network service ("RNS") rates. NEP earns an additional 0.5% ROE incentive adder on RNS-related transmission facilities approved under the Regional Transmission Organization's ("RTO") Regional System Plan and placed in service on or before December 31, 2008. It also earns a 1.25% ROE incentive on its portion of New England East-West Solution ("NEEWS") (see the "New England East-West Solution" section).

NEP's transmission rates applicable to transmission service through October 15, 2014 reflected a base ROE of 11.14% applicable to NEP's transmission facilities, plus an additional 0.5% RTO participation adder applicable to transmission facilities included under the RNS rate. For the details on the order FERC issued on the first complaint, Opinion No. 531-A, refer to "Recovery of Transmission Costs" section under The Massachusetts Electric Companies.

The FERC orders on the MISO ROE complaint proceedings, and the proposed revised ROE methodology, are specific to MISO; however, the FERC could order the revised methodology be applied to all transmission companies including our own ROE complaint proceedings. On May 12, 2020, NEP filed jointly with other NETOs supplemental arguments in the ROE Notice of Inquiry ("NOI") docket, which was commenced on March 21, 2019 and to which NEP previously responded, addressing concerns with ROE policy making and the methodologies proposed by the FERC in the MISO ROE compliant proceedings. From NEP's perspective, the May 21, 2020 FERC order on the MISO ROE complaint proceedings represents an improvement from the November 19, 2019 order but it does not address all the arguments filed jointly by NEP and the NETOs.

As of January 2021, the FERC has a full complement of commissioners and has the ability apply the MISO orders to the NE Complaint proceedings at any time, but has not done so as of the date of these financial statements. Until the FERC issues a final decision on NEP's own ROE complaints or an order applying the revised ROE methodology proposed in the MISO orders to all transmission companies, there is significant uncertainty, and, at this time, NEP does not know the impact to its current base ROE and therefore no estimated accrual can be made.

Refer to “Recovery of Transmission Costs” section under The Massachusetts Electric Companies for order related to MISO.

Transmission Incentive Policy Inquiry

On March 21, 2019, the FERC announced a NOI seeking comments on possible improvements to its electric transmission incentives policy to ensure that it appropriately encourages the development of the infrastructure needed to ensure grid reliability and reduce congestion to reduce the cost of power for consumers. NEP filed comments in the NOI docket on June 26, 2019 and filed reply comments on August 26, 2019.

On March 19, 2020, the FERC issued a Notice of Proposed Rulemaking (“NOPR”). In the NOPR, the FERC proposes to shift the test for transmission incentives from risks and challenges to an approach based on benefits to customers. The NOPR also proposes to: 1) Increase the incentives for joining and remaining a member of a Regional Transmission Organization, an Independent System Operator or other FERC-approved transmission organization from 50 basis points to 100 basis points; 2) Provide 50 basis point to transmission projects that meet a pre-construction benefit-to-cost ratio in the top 25% of projects examined over a sample period and an additional 50 basis points for projects that meet a post-construction benefit-to-cost ratio in the top 10% percent of projects over the same sample period; 3) Provide 50 basis points for projects that demonstrate reliability benefits by providing quantitative analysis and 4) Offer a 100 basis point incentive for transmission technologies that enhance reliability, efficiency, and capacity as well as improve the operation of new or existing transmission facilities. The NOPR also proposes a 250 basis point cap on total ROE incentives rather than limitation to the zone of reasonableness. Comments are requested within 90 days of publication in the Federal Register after which, at some point, the FERC will issue a final rule. NEP filed comments in response to the NOPR on July 1, 2020.

On April 15, 2021, the FERC issued a Supplemental Notice of Proposed Rulemaking (the “Supplemental NOPR”) reversing its proposal in the March 19, 2020 NOPR to increase the incentives for joining and remaining a member of a Regional Transmission Organization, an Independent System Operator or other FERC-approved transmission organization from 50 basis points to 100 basis points. In the Supplemental NOPR, the FERC proposed that the incentive remain at 50 basis points and that the 50-basis-point increase in ROE be available for only the first three years after the transmitting utility transfers operational control of its facilities to an RTO/ISO. The FERC also stated that the statutory language actually only requires incentives to a utility that joins an RTO/ISO but not for remaining in an RTO/ISO in perpetuity. NEP filed joint comments on June 25, 2021 with other NETOs opposing the Supplemental NOPR.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient ADIT related to the Tax Act. The order applies to public utility transmission providers with formula rates who must demonstrate how the public utilities formula rate adjusts rate base via a Rate Adjustment mechanism, returns or recovers excess or deficient ADIT via an Income Tax Allowance Mechanism and must include an ADIT worksheet to support the excess or deficient ADIT calculation and amortization. The order does not prescribe a recovery/refund period for deficient/excess ADIT for unprotected excess/deficient ADIT that is not subject to the normalization requirements.

On July 30, 2020, NEP, along with the NETOs, submitted a compliance filing to address the application of Order 864 in RNS and local network service (“LNS”) rates. In the compliance filing, NEP proposed to amortize protected and unprotected property related excess ADIT associated with the 2017 Tax Act using the ARAM and a 10-year amortization period on unprotected other excess or deficient balances.

The FERC issued the settlement agreement order approving the settlement filing in the FERC 206 Proceeding on Rate Transparency with an effective date of January 1, 2022.

Given that the Settled Formula Rate will become effective January 1, 2022, the NETOs submitted a supplemental compliance filing on February 12, 2021 to propose tariff changes to the former version of Attachment F to the ISO-NE OATT in order to comply with Order No. 864 for the period January 1, 2020 through December 31, 2021.

On March 1, 2021, ISO-NE, on behalf of NEP, submitted a supplemental compliance filing to supplement the July 30 compliance filing with respect to LNS under Schedule 21-NEP to the ISO-NE OATT. As with the RNS filing, NEP proposed that the compliance revisions to Schedule 21-NEP submitted in the LNS filing be in effect for an interim period from January 1, 2020, through December 31, 2021. For the period commencing January 1, 2022, compliance with Order No. 864 for LNS provided by NEP will be governed by the compliance revisions to the ISO-NE OATT submitted by NEP and the other NETOs in the FERC 206 Proceeding on Rate Transparency. NEP has proposed the same amortization method and periods for protected and unprotected balances as proposed in the initial filing.

On December 30, 2021, FERC issued an order on the Order No. 864 compliance filings for LNS service. The order found that NEP's proposed revisions comply with the requirements of Order No. 864, and accepted the proposed revisions subject to a further compliance filing relative to the effective date of the tariff changes. FERC directed NEP to file the revised tariff sheets with a January 27, 2020 effective date.

In compliance with Order 864, NEP has also submitted additional compliance filings to amend various service agreements and contracts to include the Rate Adjustment and Income Tax Allowance mechanisms as well as the new permanent ADIT worksheet. The FERC has not yet acted on any of these compliance filings.

NEP estimates that the net excess ADIT balance associated with the TCJA of $295 million will result in an annual reduction in revenue requirement of $3 million.

New England East-West Solution ("NEEWS") Project

In September 2008, NEP, its affiliate Narragansett, and Northeast Utilities jointly filed an application with the FERC to recover financial incentives for the NEEWS project, pursuant to the FERC's Transmission Pricing Policy Order No. 679. NEEWS consists of a series of inter-related transmission upgrades identified in the New England Regional System Plan and is being undertaken to address a number of reliability problems in Connecticut, Massachusetts, and Rhode Island. Effective November 18, 2008, the FERC granted (1) an incentive ROE of 12.89% (125 basis points above the approved base ROE of 11.64% including the RTO participation adder), (2) 100% construction work in progress in rate base, and (3) recovery of plant abandoned for reasons beyond the companies' control. As discussed in the preceding section, effective October 16, 2014, the FERC issued a series of orders establishing a maximum ROE of 11.74% that effectively caps the NEEWS incentive ROE at that level. The NEEWS upgrades were placed in service in December 2015.

Narragansett

General Rate Case

On August 24, 2018 and pursuant to Report and Order No. 23823 issued May 5, 2020, the Rhode Island Public Utilities Commission ("RIPUC") approved the terms of an Amended Settlement Agreement ("ASA"). The ASA reflects an allowed ROE rate of 9.28% based on a common equity ratio of approximately 51%. We are currently in year four of the multi-year rate plan ("Rate Plan"). On June 30, 2021, the RIPUC consented to an extension of the term of the Rate Plan such that Narragansett is not required to file its next rate case so that new rates take effect no later than September 1, 2022. The ASA will remain in effect and Narragansett will continue to operate under the current Rate Plan until a new Rate Plan is approved by the RIPUC. Narragansett filed a copy of the Division consent letter with the RIPUC on July 15, 2021. Base distribution rates will remain at the Rate Year 3 levels until the next base rate case.

The ASA includes an Electric Transportation Initiative (the ET Initiative or Program) to facilitate the growth of EV adoption and scaling of the market for EV charging equipment to advance Rhode Island's zero emission vehicles and greenhouse gas emissions policy goals. The ASA also includes two energy storage demonstration projects. Both projects are on track for timely completion.

The ASA also introduces a new incentive-only performance incentive for System Efficiency: Annual Megawatt ("MW") Capacity Savings, with maximum earnings ranging from approximately $0.4 million in 2019 to $0.9 million in 2021. In addition, the ASA identifies several additional metrics for tracking and reporting purposes only.

Recovery of Transmission Costs

Refer to “Recovery of Transmission Costs” section under The Massachusetts Electric Companies.

The amounts remitted by NEP to Narragansett Electric Company for the years ended March 31, 2022 and 2021 were $155 million and $160 million, respectively, which are eliminated as operating revenues and operations and maintenance expenses within the consolidated statement of operations and comprehensive income.

Tax Act

On November 21, 2019, the FERC issued Order 864 to address ratemaking and regulatory reporting of excess or deficient accumulated deferred income tax (“ADIT”) related to the Tax Act. The order applies to public utility transmission providers with formula rates and stated rates and provides that public utilities with formula rates submit a compliance filing within 30 days of the effective date of the final rule or in the public utilities next annual informational filing following the issuance of the final rule.

On June 29, 2020, NEP, on behalf of Narragansett, submitted a compliance filing to address the application of Order 864 in NEP Tariff No. 1. The filing proposes changes to various revenue requirement calculations in the tariff for the inclusion of the Rate Adjustment and Income Tax Allowance Mechanism. The filing also includes the populated permanent ADIT worksheet to be provided with the issuance of final bills pursuant to the provisions of the tariff. NEP has proposed for Narragansett to amortize transmission related protected property related excess or deficient ADIT associated with the 2017 Tax Act using the ARAM and a 30-year amortization period on unprotected property related excess or deficient balances. Other unprotected excess or deficient ADIT is proposed to be amortized over 10 years consistent with periods approved in the RIPUC Docket addressing the Tax Act. Narragansett’s transmission related net excess ADIT balance associated with the Tax Act is $100 million. The FERC has not yet acted on this compliance filing.

New England East-West Solution (“NEEWS”) Project

Refer to “New England East-West Solution (“NEEWS”) Project” section under NEP.

Narragansett’s share of the NEEWS-related transmission investment was approximately $560 million. Narragansett is fully reimbursed for its transmission revenue requirements on a monthly basis by NEP through NEP’s Tariff No. 1.

Suspension of Service Terminations and Certain Collections Activities

At an open meeting on March 16, 2020, the RIPUC issued an order prohibiting all electric, natural gas, water, and sewer utilities from engaging in certain collections activities, including termination of residential and non-residential service for nonpayment (the “Order”). This moratorium expired on July 18, 2020 for commercial and industrial customers, on September 30, 2020 for residential customers, and on November 1, 2020 for customers eligible for the low-income rate. On July 25, 2021, the RIPUC’s extension of the moratorium on service disconnections for National Grid’s protected status customers, including those on National Grid’s low-income rate, expired. Per the RIPUC’s June 25, 2021 order extending the moratorium to July 25, 2021, there will be no further extensions, unless there is substantial evidence of a major resurgence of the COVID-19 pandemic. To date, the RIPUC has not ordered any additional extensions of the moratorium so the moratorium is no longer in effect. The RIPUC’s order directing Narragansett to temporarily suspend credit card fees, debit card fees and ACH fees remains in effect, and Narragansett continues to track these costs for later review by the RIPUC. The RIPUC will review these costs in Narragansett’s cost recovery filing in a separate docket (RIPUC Docket No. 5154).

On May 15, 2020, pursuant to the RIPUC’s directive, Narragansett filed a plan with the RIPUC and the Division that details Narragansett’s plans for recommencing collection activities when the RIPUC lifts the moratorium on utility terminations (the “Plan”). The Plan consists of a four-phase approach, including initial efforts primarily focused on “bill health” messaging and assuring that customers are aware of the programs and services available to assist them with managing and paying their bills. Narragansett continues to submit arrearage data to the RIPUC and the Division on a weekly and monthly basis, respectively. On September 2, 2021, Narragansett filed its responses to the RIPUC’s data requests regarding waived fees. On October 21, 2021, Narragansett submitted written comments to the RIPUC in response to the RIPUC's request for comments from all parties in the docket regarding whether the prohibition on fees should be lifted, the amount of notice to be given to customers prior to the lifting of the prohibition, and the rationale for the position. At an open meeting on November 5, 2021, the PUC made the following rulings:

(1) The PUC voted to allow reinstatement of the late fees and interest charges on bills issued no less than 30 days from November 5, 2021.
(2) The PUC voted to require the utilities to provide direct customer notification of the reinstatement of the fees no less than 30 days prior to the first bill on which those fees would appear.
(3) The PUC voted to require the utilities to continue to absorb any online payment transaction fees and to allow the utilities who do not have those costs included in their cost of service the opportunity to file for rate recovery on a going forward basis through a specific ratemaking mechanism that would be in effect through the utility's next rate case.
(4) The PUC voted to require National Grid to file the current weekly arrearage reports on a monthly basis in Docket No. 5026.

COVID-19 Deferral Filing

On April 30, 2021, Narragansett filed a petition for approval to recognize regulatory assets related to COVID-19 impacts (RIPUC Docket No. 5154). In its Petition, Narragansett seeks the RIPUC's authorization to recognize regulatory assets and consideration of future cost recovery for the following COVID-19 Costs: (1) the increased cost of customer accounts receivable that Narragansett will be unable to collect as a result of the COVID-19 pandemic, and the executive orders and RIPUC orders restricting Narragansett's collection activities as a result of the pandemic, which will result in increased net charge-offs; (2) lost revenue from unassessed late payment charges; and (3) charges to Narragansett for other fees that Narragansett has waived pursuant to the RIPUC's orders in RIPUC Docket No. 5022. Narragansett will continue to monitor the proceeding.

Advanced Metering Functionality and Grid Modernization

On January 21, 2021, Narragansett filed its updated Advance Metering Functionality ("AMF") Business Case and GMP with the RIPUC in accordance with the rate case settlement. The updated AMF Business Case - a foundational component of the GMP – seeks approval to deploy smart meters throughout the service territory. The updated AMF Business Case includes approximately $224 million (20-year net present value)/$344 million (20-year nominal) of investment in smart meters and the associated communications infrastructure, as well as customer education and engagement based on a joint deployment scenario with New York. The GMP consists of a five-year implementation plan and ten-year roadmap that serve as a guide for addressing anticipated distribution system needs. Although Narragansett is not seeking cost recovery for any specific GMP investment at this time, Narragansett is seeking approval of the GMP business case and benefit-cost analysis, which will provide regulatory clarity when seeking to implement such projects and pursue cost. Pursuant to written order issued on July 14, 2021, the RIPUC stayed the AMF and GMP proceedings pending further consideration following the issuance of a final Order by the Division on the PPL Transaction. The RIPUC did not rule on whether or not to consolidate the matters.

Block Island Transmission System Surcharge

The Block Island Transmission System ("BITS") is a project to provide power to Block Island using submarine cables between Rhode Island and Block Island. Narragansett bear the risk of any additional cost in excess of the Cost Cap of $144 million to complete the reconstruction of the BITS cable, including the incremental cost incurred as a result of the conduit blockage and any additional costs incurred in the fall of 2021 or Spring of 2022 when the BITS Project restarts. Narragansett will not be entitled to recover from customers any capital investment in excess of the Cost Cap.

The RIPUC issued discovery to Narragansett regarding the BITS surcharge calculation during its 2021 Annual Retail Rates proceeding. The Chairman questioned Narragansett's BITS arrangement. In addition, RIPUC expressed ongoing concerns with the incremental costs associated with the reburial project related to the BITS cable and retained FERC counsel. Narragansett has reached an agreement in principle with the Division regarding these matters and made a notification filing with RIPUC on February 2, 2022 outlining the actions Narragansett would take to revise the BITS surcharge calculation prospectively to reduce the rate and to provide cost protections for customers around the reburial project. In addition, Narragansett provided

National Grid customers and Block Island Power Company ("BIPCO") with a one-time credit equal to $12 million. The portion of the $12 million allocable to National Grid's customers was applied to Narragansett's Storm Contingency Fund. Narragansett, in conjunction with ISO-NE and BIPCO, submitted the 205 Filings required to revise all applicable FERC tariffs with FERC on January 31, 2022. In the 205 Filings, the parties are requesting that the FERC issue an order on the tariff revisions within the minimum time frame permitted under 16 U.S.C. § 824d (i.e., 60 days) and permit the revised local service agreements to become effective as of January 1, 2022. On March 31, 2022, FERC issued an order accepting the filed changes to the BIPCO and Narragansett Local Service Agreements without modification and granting the request that the revisions become effective as of January 1, 2022.

PPL Transaction

Pursuant to a Share Purchase Agreement dated March 17, 2021, by and among PPL Energy Holdings, LLC, PPL Corporation ("PPL"), and National Grid USA (the "Transaction"), National Grid USA agreed to sell 100% of the outstanding shares of common stock in Narragansett to PPL Rhode Island Holdings, LLC ("PPL Rhode Island"), a wholly owned indirect subsidiary of PPL. On May 4, 2021, PPL, PPL Rhode Island, National Grid USA, and Narragansett filed a joint petition with the Division seeking the Division's consent and approval of the Transaction in Docket No. D-21-09.

Subsequently, PPL reached an agreement with the RI Attorney General ("RIAG") enabling withdrawal of the RIAG appeal and lifting of the stay by the RI Superior Court. The sale was closed on May 25, 2022, with all regulatory approvals obtained and with sale proceeds of $3.8 billion.

7. EQUITY METHOD INVESTMENTS

The following table presents the equity method investments recorded on the consolidated balance sheets:

	March 31,	
	2022	2021
	(in millions of dollars)	
COSW	**$ 300**	$ -
Millennium Pipeline Company LLC	**204**	206
Sunrun Neptune Investor 2016 LLC	**139**	138
Emerald	**381**	179
Energy Impact Fund LP	**86**	59
National Grid Generation Ventures LLC	**54**	25
New York Transco LLC	**75**	46
Other	**4**	3
Total equity method investments	**$ 1,243**	$ 656

As of March 31, 2022, the Company has ownership interests of:

- 27.27% interest in COSW, a limited liability company formed under the laws of the State of Delaware that focus on the Northeast U.S. offshore wind market.
- 26.25% interest in Millennium Pipeline Company LLC, a company that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.
- 100% of the Class A shares in San Francisco-based Sunrun Neptune Investor 2016 LLC ("Sunrun"), a leading U.S. provider of residential solar energy systems, to provide investment capital.
- 51% interest in Emerald, a solar and wind generation investment. NGRD provides accounting, asset and construction management, and back-office support services to Emerald.
- 9.4% interest in Energy Impact Fund LP ("EIF"), a strategic energy venture investment fund.
- 50% interest in each of four individual LLCs (Island Park Energy Center LLC, LI Solar Generation LLC, LI Energy Storage System LLC, and Clean Energy Storage Systems LLC) through its wholly-owned subsidiary, National Grid Generation Ventures LLC ("GenVen").
- 28.3% interest in New York Transco LLC, a company formed for the purpose of planning, construction, owning, operating, maintaining, and expanding transmission facilities in the state of New York.

The Company has elected to account for its investment in Sunrun, which would otherwise be accounted for under the equity method of accounting, at fair value with changes in fair value reported as part of 'Income from equity method investments' in the consolidated statements of operations and comprehensive income.

The Company accounts for its share of the earnings of the projects owned by Emerald using the HLBV method, with changes in the amount allocated to the Company after adjusting for distributions and contributions recorded as income or loss for that period in Income from equity method investments in the consolidated statements of operations and comprehensive income.

Unconsolidated VIEs

Certain of the LLCs owned through GenVen (50% interests in Island Park Energy Center LLC, LI Solar Generation LLC and Clean Energy Storage Systems LLC) are VIEs. The Company is not the primary beneficiary as it does not have the sole power to direct the most significant activities of the entities as, under each LLC agreement, the Board of Managers is comprised of several representatives equal to two per Qualified Members (defined as Members with over a 25% interest): two representatives from GenVen and two representatives from a subsidiary of NextEra Energy, Inc.; there is no internal mechanism in place to resolve a board deadlock.

Emerald is also a VIE. The Company is not the primary beneficiary of Emerald as it does not have the sole power to direct the most significant activities of the entity. Under the Emerald LLC agreement, the Board of Managers is comprised of two Members: one representative from the Company and one from WSIB, with approval from both managers required for the most significant activities and no internal mechanism in place to resolve a board deadlock. The Company's commitment to Emerald as of March 31, 2022 and March 31, 2021 was $135 million and $91 million, respectively.

The maximum exposure to loss represents the carrying value of the Company’s equity method investment as reported on the consolidated balance sheets. The Company’s maximum exposure to loss related to the VIEs owned through GenVen is $33 million and $25 million at March 31, 2022 and 2021, respectively. The Company’s maximum exposure to loss related to COSW is $300 million and $0.45 million at March 31, 2022 and 2021, respectively. The Company’s maximum exposure to loss related to EIF is $86 million and $59 million at March 31, 2022 and 2021, respectively. The Company’s maximum exposure to loss associated with Emerald is $381 million and $179 million at March 31, 2022 and 2021, respectively. No other amounts recorded on the Company’s consolidated balance sheets in relation to its investments in unconsolidated VIEs, and no financial support that is not otherwise contractually required has been provided.

During the years ended March 31, 2022 or 2021, the Company did not provide any financial or other support to the VIEs that it was not contractually obligated to.

8. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment at cost and operating lease right-of-use assets, along with accumulated depreciation and amortization:

	March 31,	
	2022	2021
	(in millions of dollars)	
Plant and machinery	**$ 43,027**	$ 40,320
Assets in construction	**3,581**	2,792
Land and buildings	**2,218**	2,172
Software and other intangibles	**1,910**	1,592
Operating leases ROU assets	**930**	996
Total property, plant and equipment	**51,666**	47,872
Accumulated depreciation – Tangible assets	**(10,279)**	(9,620)
Accumulated amortization – Software and other intangibles	**(1,183)**	(1,003)
Accumulated amortization – Operating lease ROU assets	**(347)**	(239)
Property, plant and equipment, net	**$ 39,857**	$ 37,010

The Company capitalizes costs incurred during the application development stage of internal use software projects to property, plant and equipment. The Company amortizes capitalized software costs ratably over the expected lives of the software, primarily ranging from 7 to 10 years and commencing upon operational use. Amortization expense for capitalized software was $181 million and $131 million for the years ended March 31, 2022 and 2021, respectively. As of March 31, 2022, amortization expense is estimated to be $169 million, $139 million, $129 million, $114 million, and $96 million for 2023 through 2027, respectively.

9. DERIVATIVE INSTRUMENTS AND HEDGING

The Company utilizes derivative instruments to manage commodity price, interest rate, and foreign currency rate risk associated with its natural gas and electricity purchases, its long-term funding activities and its Euro commercial paper program. The Company's commodity risk management strategy is to reduce fluctuations in firm gas and electricity sales prices to its customers. The Company's currency risk management policy is to borrow in the most advantageous market available, and to hedge the risk associated with foreign currency borrowings by utilizing instruments to convert principal and interest payments into U.S. dollars. The Company's interest rate risk management strategy is to minimize its cost of capital by adjusting the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the National Grid plc Board.

The Company's financial exposures are monitored and managed as an integral part of the Company's overall financial risk management policy. The Company engages in risk management activities only in commodities and financial markets where it has an exposure, and only in terms and volumes consistent with its core business.

Notional Amounts

The notional contract amount represents the gross nominal value of the outstanding derivative contracts. The financing derivatives consisted of cross currency interest rate swaps and interest rate swaps of ($2,732) million, and ($2,442) million at March 31, 2022 and 2021, respectively.

Volumes of outstanding commodity derivative instruments measured in dekatherms ("dths") and megawatts hour ("mwhs") are as follows:

	March 31,	
	2022	2021
	(in millions)	
Gas contracts (dths)*	**126**	123
Electric contracts (mwhs)	**14**	13

Summary of Derivative Instruments on Consolidated Balance Sheets

The following tables reflect the gross and net amounts of the Company's derivative assets and liabilities as of March 31, 2022 and 2021:

	March 31, 2022		
	(in millions of dollars)		
	Gross amounts of recognized assets (liabilities)	Gross amounts not offset on the Consolidated Balance Sheet	Net amount
	A	B	C = A-B
ASSETS:			
Current assets			
Gas contracts	$ 102	$ (7)	$ 109
Electric contracts	219	1	218
Other non-current assets			
Gas contracts	1	-	1
Electric contracts	44	7	37
Interest rate swaps [(1)]	5	4	1
Total	371	5	366
LIABILITIES:			
Current liabilities			
Gas contracts	8	1	7
Other non-current liabilities			
Gas contracts	1	-	1
Electric contracts	12	7	5
Interest rate swaps [(1)]	124	106	18
Total	145	114	31
Net assets (liabilities)	$ 226	$ (109)	$ 335

[(1)] Consists of cross-currency interest rate swaps and interest rate swaps designated for hedge accounting.

	March 31, 2021		
	(in millions of dollars)		
	Gross amounts of recognized assets (liabilities)	**Gross amounts not offset on the Consolidated Balance Sheet**	**Net amount**
	A	***B***	***C = A-B***
ASSETS:			
Current assets			
Gas contracts	$ 3	$ (3)	$ 6
Electric contracts	11	6	5
Other non-current assets			
Electric contracts	3	3	-
Interest rate swaps (1)	62	36	26
Total	79	42	37
LIABILITIES:			
Current liabilities			
Gas contracts	21	1	20
Electric contracts	24	6	18
Other non-current liabilities			
Gas contracts	47	-	47
Electric contracts	20	3	17
Interest rate swaps (1)	15	15	-
Total	127	25	102
Net assets (liabilities)	$ (48)	$ 17	$ (65)

(1) Consists of cross-currency interest rate swaps and interest rate swaps designated for hedge accounting.

Effect of Derivative Instruments on Statements of Operations and Comprehensive Income

Changes in fair value of the Company's rate recoverable contracts (commodity contracts only, hedge contracts are not rate recoverable) are offset by changes in regulatory assets and liabilities. As a result, changes in the fair value of those contracts does not affect earnings. Realized gains or losses on the settlement of the Company's commodity derivative contracts are refunded to, or collected from, customers consistent with regulatory requirements.

The following table summarizes amounts recognized in earnings for commodity derivative instruments not designated as hedging instruments for the years ended March 31, 2022 and 2021:

		Year Ended March 31,	
	Location	**2022**	2021
		(in millions of dollars)	
Electric contracts	Purchased electric	**$ 145**	$ (57)
Gas contracts	Purchased gas	**129**	(20)
Total gains (losses) recognized in earnings		**$ 274**	$ (77)

The following table summarizes changes in the fair value of commodity derivative instruments not designated as hedging instruments that are offset by change in regulatory assets and liabilities for the years ended March 31, 2022 and 2021:

	Location	Year Ended March 31,	
		2022	2021
		(in millions of dollars)	
Electric contracts	Regulatory Assets (Liabilities)	**$ (250)**	$ 30
Gas contracts[1]	Regulatory Assets (Liabilities)	**(157)**	72
Total changes in regulatory assets		**$ (407)**	$ 102

[1] Amounts reported include $40 million and $7 million regulatory assets reported as Held for sale for the years ended March 31, 2022 and 2021, respectively.

Certain additional information about hedge accounting, disaggregated by risk type and hedge designation type, is provided in the tables below:

	Fair value hedges of foreign currency and interest rate risk		Cash flow hedges of foreign currency and interest rate risk	
	Year Ended March 31,		Year Ended March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Statements of operations and comprehensive income				
Net gains (losses) in respect of				
Cash flow hedges	**n/a**	n/a	**$ 13**	$ 17
Cost of hedging	**5**	(6)	**6**	(1)
Transferred to earnings in respect of				
Cash flow hedges	**n/a**	n/a	**(8)**	2
Cost of hedging	**-**	-	**-**	-
Statements of changes in equity				
Other equity reserves – cost of hedging balances	**-**	(5)	**1**	(5)

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge.

Fair value hedges of foreign currency and interest rate risk on recognized borrowings:

	March 31, 2022 *(in millions of dollars)*					
		Balance of fair value hedge adjustments in borrowings		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	**$ (1,404)**	**$ 114**	**$ (25)**	**$ 117**	**$ (109**	**$ 8**

	March 31, 2021 *(in millions of dollars)*					
		Balance of fair value hedge adjustments in borrowings		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	$ (1,060)	$ (6)	$ (26)	$ (50)	$ 59	$ 9

Cash flow hedges of foreign currency and interest rate risk:

	March 31, 2022 *(in millions of dollars)*					
		Balance in cash flow hedge reserve		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	**$ (1,327)**	**$ 18**	**$ -**	**$ 34**	**$ (34)**	**$ -**

	March 31, 2021 *(in millions of dollars)*					
		Balance in cash flow hedge reserve		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional**	**Continuing hedges**	**Discontinued hedges**	**Hedged item**	**Hedging instrument**	**Hedge ineffectiveness**
Foreign currency and interest rate risk on borrowings	$ (1,381)	$ 23	$ -	$ (143)	$ 143	$ -

Credit and Collateral

The Company is exposed to credit risk related to transactions entered into for commodity price, interest rate, and foreign currency rate risk management. Credit risk represents the risk of loss due to counterparty non-performance. Credit risk is managed by assessing each counterparty's credit profile and negotiating appropriate levels of collateral and credit support.

The Company enters into enabling agreements that allow for payment netting with its counterparties, which reduces its exposure to counterparty risk by providing for the offset of amounts payable to the counterparty against amounts receivable from the counterparty.

Commodity Transactions

The Company enters into commodity transactions on the NYMEX. The NYMEX clearing houses act as the counterparty to each trade. Transactions on the NYMEX must adhere to comprehensive collateral and margining requirements. As a result, transactions on the NYMEX are significantly collateralized and have limited counterparty credit risk.

The credit policy for commodity transactions is managed and monitored by the Finance Committee to the Parent's Board of Directors ("Finance Committee"), which is responsible for approving risk management policies and objectives for risk assessment, control and valuation, and the monitoring and reporting of risk exposures. NGUSA's Energy Procurement Risk Management Committee ("EPRMC") is responsible for approving transaction strategies, annual supply plans, and counterparty credit approval, as well as all valuation and control procedures. The EPRMC is chaired by the Head of Treasury Risk and Operations, and reports to both the NGUSA Board of Directors and the Finance Committee.

The EPRMC monitors counterparty credit exposure and appropriate measures are taken to bring such exposures below the limits, including, without limitation, netting agreements, and limitations on the type and tenor of trades. In instances where a counterparty's credit quality has declined, or credit exposure exceeds certain levels, the Company may limit its credit exposure by restricting new transactions with the counterparty, requiring additional collateral or credit support, and negotiating the early termination of certain agreements. Similarly, the Company may be required to post collateral to its counterparties.

The Company's credit exposure for all commodity derivative instruments and applicable payables and receivables, net of collateral, and instruments that are subject to master netting agreements, was an asset of $345 million and a liability of $91 million as of March 31, 2022 and 2021, respectively.

The aggregate fair value of the Company's commodity derivative instruments with credit-risk-related contingent features that were in a liability position as of March 31, 2022 and 2021 was $1 million and $34 million, respectively. The Company had zero collateral posted for these instruments as of March 31, 2022 and 2021, respectively. At March 31, 2022, if the Company's credit rating were to be downgraded by one, two, or three levels, it would be required to post additional collateral to its counterparties of zero, $6 million, or $6 million, respectively. At March 31, 2021, if the Company's credit rating had been downgraded by one, two, or three levels, it would have been required to post additional collateral to its counterparties of $4 million, $20 million, or $36 million, respectively. The counterparties had $66 million in collateral posted to the Company as of March 31, 2022.

Financing Transactions

The credit policy for financing transactions is managed by a central treasury department under policies approved by the Finance Committee. In accordance with these treasury policies, counterparty credit exposure utilizations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilization adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties.

In relation to the Company's financial derivative instruments, the Company had $109 million and $22 million collateral posted for these instruments at March 31, 2022 and 2021, respectively. If the Company's credit rating were to be downgraded by one level it would not be required to post any additional collateral at March 31, 2022 and 2021, respectively. At March 31, 2022 and 2021, if the Company's credit rating were to be downgraded by two or three levels, it would be required to post additional collateral to its counterparties of zero and $10 million for each downgrade, respectively.

10. FAIR VALUE MEASUREMENTS

The following tables present assets and liabilities measured and recorded at fair value on the consolidated balance sheets on a recurring basis and their level within the fair value hierarchy as of March 31, 2022 and 2021:

	March 31, 2022			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	$ -	$ 58	$ 46	$ 104
Electric contracts	-	255	7	262
Interest rate swaps [(1)]	-	5	-	5
Sunrun investment	-	-	139	139
Financial investments				
Securities	149	235	-	384
Other	-	-	45	45
Total	149	553	237	939
Liabilities:				
Derivative instruments				
Gas contracts	-	7	1	8
Electric contracts	-	13	-	13
Interest rate swaps [(1)]	-	125	-	125
Contingent consideration	-	-	54	54
Total	-	145	55	200
Net assets (liabilities)	$ 149	$ 408	$ 182	$ 739

[(1)] Consists of cross-currency interest rate swaps and interest rate swaps.

	March 31, 2021			
	Level 1	Level 2	Level 3	Total
		(in millions of dollars)		
Assets:				
Derivative instruments				
Gas contracts	$ -	$ 2	$ 1	$ 3
Electric contracts	-	13	1	14
Interest rate swaps [(1)]	-	62	-	62
Sunrun investment	-	-	138	138
Financial investments				
Securities	287	184	-	471
Other	-	-	34	34
Total	287	261	174	722
Liabilities:				
Derivative instruments				
Gas contracts	-	60	8	68
Electric contracts	-	42	2	44
Interest rate swaps [(1)]	-	15	-	15
Contingent consideration	-	-	78	78
Total	-	117	88	205
Net assets (liabilities)	$ 287	$ 144	$ 86	$ 517

[(1)] Consists of cross-currency interest rate swaps and interest rate swaps.

Derivative Instruments

The Company's Level 2 fair value derivative instruments primarily consist of cross-currency, interest rate derivatives, and commodity swap contracts. The cross-currency and interest rate derivatives are valued by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. The commodity swap contracts pricing inputs are obtained from NYMEX and the Intercontinental Exchange ("ICE"). The Company may utilize discounting based on quoted interest rate curves, including consideration of non-performance risk, and may include a liquidity reserve calculated based on bid/ask spread for the Company's Level 2 derivative instruments. Substantially all of these price curves are observable in the marketplace throughout at least 95% of the remaining contractual quantity, or they could be constructed from market observable curves with correlation coefficients of 95% or higher.

The Company's Level 3 fair value derivative instruments primarily consist of OTC commodity option contracts and structured physical gas purchase contracts, which are valued based on internally-developed models. A derivative is designated Level 3 when it is valued based on a forward curve that is internally developed, extrapolated, or derived from market observable curves with correlation coefficients less than 95%, where optionality is present, or if non-economic assumptions are made.

The Company did not have any Level 1 derivative instruments at either March 31, 2022 or March 31, 2021.

Sunrun Investment

The table below provides a reconciliation of the beginning and ending balance for the Company's investment in Sunrun, for which the Company elected the fair value option, which is classified as Level 3 in the fair value hierarchy. Changes in fair value are reported in Income from equity method investments in the accompanying statements of operations and comprehensive income.

	Year Ended March 31,	
	2022	2021
	(in millions of dollars)	
Beginning balance	**$ 138**	$ 133
Unrealized gains (losses)	**12**	11
Dividends	**(11)**	(6)
Ending balance	**$ 139**	$ 138

The fair value of the Company's investment in Sunrun is determined using a discounted cash flow, with Contractual Target IRR being the significant unobservable input. The fair value measurement is driven by the contractual target internal rate of return. The contractual nature of the distributions to the Class A and Class B Members and the Target IRR results in a low level of measurement uncertainty as it relates to the fair value measurement.

Contingent Consideration

The table below provides a reconciliation of the beginning and ending balance for the Company's contingent consideration related to the acquisition of NGRD, which is classified as Level 3 in the fair value hierarchy. Changes in fair value are reported in Other interest, including affiliate interest in the accompanying statements of operations and comprehensive income.

	Year Ended March 31,	
	2022	2021
	(in millions of dollars)	
Beginning balance	**$ (78)**	$ (92)
Fair value adjustment	**(5)**	(17)
Addition	**-**	(5)
Payments	**29**	36
Ending balance	**$ (54)**	$ (78)

The fair value of the Contingent Consideration liability is determined using a discounted cash flow, with the estimated timing of project sales and the MWs associated with the sales being the significant unobservable inputs. The fair value measurement is driven by estimated volumes (MW) and timing of project sales over the next two years. While both inputs are unobservable, there is a low level of measurement uncertainty associated with the inputs as the Company expects the targets for payment of the remaining contingent consideration will be met.

Financial Investments - Securities

Securities are included in Financial investments on the consolidated balance sheets and primarily include equity and debt investments based on quoted market prices (Level 1) and municipal and corporate bonds based on quoted prices of similar traded assets in open markets (Level 2).

Debt Securities

The following table sets forth the amortized cost and fair value of the Company's available for sale debt securities.

		Amortized Cost		Fair Value	
	Longest maturity date	March 31,			
		2022	2021	**2022**	2021
		(in millions of dollars)			
Rabbi Trust municipal bonds	2057	**$ 240**	$ 175	**$ 235**	$ 184

The following table summarizes gains and losses recorded by the Company in relation to available for sale debt securities. No other than temporary impairments were recorded in earnings or other comprehensive income during the years ended March 31, 2022 and March 31, 2021:

		March 31,	
		2022	2021
	Location	*(in millions of dollars)*	
Gross realized gains	Other income, net	**$ 3**	$ 2
Gross realized losses	Other income, net	**(6)**	(2)
Net unrealized gains (losses) on debt securities	OCI	-	1

Equity Securities

The following table summarizes gains and losses recorded by the Company in relation to investments in equity securities.

	Location	March 31,			
		2022		2021	
		(in millions of dollars)			
Gross realized gains	Other income, net	**$**	**114**	$	15
Gross realized losses	Other income, net		**(1)**		(3)
Net unrealized gains (losses) on equity securities	Other income, net		**-**		63

Financial Investments – Other

The Company's other investments include corporate venture capital investments held by NGP and the Sunrun Grid Services investment held by NGV measured at fair value with changes in fair value recorded in the consolidated statements of operations and comprehensive income. These equity holdings comprise a series of small ownership interest in unquoted investments where prices or valuation inputs are unobservable, therefore the investments classified as Level 3.

11. EMPLOYEE BENEFITS

The Company sponsors several qualified and non-qualified non-contributory defined benefit plans (the "Pension Plans") and post-retirement benefits other than pension (PBOP) plans (together with the Pension Plan (the "Plans")), covering substantially all employees.

The Company's regulated subsidiaries have regulatory recovery of virtually all of these costs and therefore have recorded related regulatory assets (liabilities) on the consolidated balance sheets. The Company records amounts for its unregulated subsidiaries to AOCI on the consolidated balance sheets.

Pension Plans

The Pension Plans are defined benefit plans which provide union employees, as well as non-union employees with a retirement benefit. For non-union employees, the plans were closed to new entrants as of December 31, 2010. Non-union employees hired on or after January 1, 2011 are provided with a defined contribution plan. For union employees, the plans were closed, with one exception, to new entrants at varying dates from December 31, 2010 through June 2, 2019. Union employees hired on or after the closing of the pension plans to new entrants are provided with a defined contribution plan. Supplemental non-qualified, non-contributory executive retirement programs provide additional defined pension benefits for certain executives. During the years ended March 31, 2022 and 2021, the Company made contributions of approximately $132 million and $123 million, respectively, to the qualified pension plans. The Company expects to contribute $71 million to the qualified pension plans during the year ending March 31, 2023.

NGUSA became the single sponsoring company of most of the nonqualified pension arrangements previously administered by a subsidiary, through a transfer of assets and liabilities effective April 1, 2021. Assets and liabilities transferred with these nonqualified pension arrangements are now held by NGUSA and funding from operating company customer rates will not be sought by the operating companies. NGUSA does not expect to need any future contributions to be made to these arrangements to satisfy their ongoing obligations.

Benefit payments to pension plan participants for the years ended March 31, 2022 and 2021 were approximately $451 million and $498 million, respectively.

In May 2022, Niagara Mohawk agreed to purchase a group annuity contract that will transfer approximately $694 million of pension obligations and related plan assets to an insurance company. This transaction will result in a settlement gain, which will reduce existing regulatory assets or increase existing regulatory liabilities depending upon the impacted jurisdiction.

PBOP Plans

The PBOP plans provide health care and life insurance coverage to eligible retired employees. Eligibility is based on age and length of service requirements and, in most cases, retirees must contribute to the cost of their coverage. During the years ended March 31, 2022 and 2021, the Company made contributions of $0.5 million and $20 million, respectively, to the PBOP plans. The Company expects to contribute $7 million to the PBOP plans during the year ending March 31, 2023.

Benefit payments to PBOP plan participants for the years ended March 31, 2022 and 2021 were approximately $217 million and $190 million, respectively.

Components of Net Periodic Benefit Costs

	Pension Plans Year Ended March 31,		PBOP Plans Year Ended March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Service cost	**$ 139**	$ 134	**$ 55**	$ 54
Interest cost	**319**	340	**136**	156
Expected return on plan assets	**(499)**	(493)	**(198)**	(206)
Amortization of prior service cost (credit), net	**6**	6	**-**	-
Amortization of net actuarial loss	**188**	226	**(59)**	31
Settlement gain	**(12)**	-	**-**	-
Total cost	**$ 141**	$ 213	**$ (66)**	$ 35

Amounts Recognized in AOCI and Regulatory Assets/Liabilities

The following tables summarize other pre-tax changes in plan assets and benefit obligations recognized primarily in regulatory assets and AOCI for the years ended March 31, 2022 and 2021:

	Pension Plans Years Ended March 31,		PBOP Plans Years Ended March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Net actuarial loss (gain)	**$ (446)**	$ (703)	**$ (387)**	$ (991)
Prior Service Cost	**3**	-	**-**	-
Amortization of net actuarial loss	**(175)**	(214)	**59**	(31)
Amortization of prior service (cost) credit, net	**(6)**	(6)	**-**	-
Total	**$ (624)**	$ (923)	**$ (328)**	$ (1,022)
Included in regulatory assets (liabilities)	**$ (626)**	$ (751)	**$ (294)**	$ (883)
Included in AOCI	**2**	(172)	**(34)**	(139)
Total	**$ (624)**	$ (923)	**$ (328)**	$ (1,022)

The Company's regulated subsidiaries have regulatory recovery of these obligations and therefore amounts are included in regulatory assets on the consolidated balance sheets. Costs of non-regulated subsidiaries are recorded as part of AOCI on the consolidated balance sheets.

Amounts Recognized in AOCI and Regulatory Assets/Liabilities – not yet recognized as components of net actuarial loss

The following tables summarize the Company's amounts in regulatory assets and AOCI on the consolidated balance sheets that have not yet been recognized as components of net actuarial loss as of March 31, 2022 and 2021:

	Pension Plans		**PBOP Plans**	
	Years Ended March 31,		**Years Ended March 31,**	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Net actuarial loss (gain)	**$ 81**	$ 702	**$ (984)**	$ (656)
Prior service cost (credit)	**31**	34	**-**	-
Total	**$ 112**	$ 736	**$ (984)**	$ (656)
Including in regulatory assets (liabilities)	**$ 5**	$ 631	**$ (835)**	$ (541)
Including in AOCI	**107**	105	**(149)**	(115)
Total	**$ 112**	$ 736	**$ (984)**	$ (656)

Reconciliation of Funded Status to Amount Recognized

	Pension Plans		**PBOP Plans**	
	Years Ended March 31		**Years Ended March 31**	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Change in benefit obligation:				
Benefit obligation as of the beginning of the year	**$ (9,468)**	$ (9,552)	**$ (4,194)**	**$ (4,374)**
Service cost	**(139)**	(134)	**(55)**	**(54)**
Interest cost on projected benefit obligation	**(319)**	(341)	**(136)**	**(156)**
Plan amendment	**(3)**	-	**-**	**-**
Net actuarial (loss) gain	**537**	(576)	**500**	**28**
Benefits paid	**451**	498	**217**	**190**
Employer group waiver plan subsidy received	**-**	-	**(33)**	**(34)**
Settlements	**92**	-	**-**	**-**
Reclassified to Held for sale	**(47)**	637	**(28)**	**206**
Benefit obligation as of the end of the year	**$ (8,896)**	$ (9,468)	**$ (3,729)**	**$ (4,194)**
Change in plan assets:				
Fair value of plan assets as of the beginning of the year	**9,501**	8,659	**3,862**	**2,995**
Actual return on plan assets	**465**	1,818	**108**	**1,206**
Company contributions	**157**	147	**24**	**36**
Benefits paid	**(451)**	(498)	**(217)**	**(190)**
Settlements	**(92)**	-	**-**	**-**
Reclassified to Held for sale	**(8)**	(625)	**17**	**(185)**
Fair value of plan assets as of the end of the year	**$ 9,572**	$ 9,501	**$ 3,794**	**$ 3,862**
Funded status	**$ 676**	$ 33	**$ 65**	**$ (332)**

The benefit obligation shown above is the projected benefit obligation ("PBO") for the Pension Plans and the accumulated benefit obligation ("ABO") for the PBOP Plans. The Company is required to reflect the funded status of its Pension Plans above in terms of the PBO, which is higher than the ABO, because the PBO includes the impact of expected future compensation increases on the pension obligation. The Pension Plans had ABO balances that exceeded the fair value of plans assets as of March 31, 2022. The aggregate ABO balances for the Pension Plans were $8.5 billion and $9.1 billion as of March 31, 2022 and 2021, respectively.

Amounts Recognized on the Accompanying Consolidated Balance Sheets

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)			
Projected benefit obligation	**$ (8,896)**	$ (9,468)	**$ (3,729)**	$ (4,194)
Fair value of plan assets	**9,572**	9,501	**3,791**	3,862
Total	**$ 676**	$ 33	**$ 62**	$ (332)
Non-current assets	**$ 914**	$ 597	**$ 630**	$ 376
Current liabilities	**(24)**	(22)	**(12)**	(8)
Non-current liabilities	**(214)**	(542)	**(556)**	(700)
Total	**$ 676**	$ 33	**$ 62**	$ (332)

For the year end March 31, 2022, the net actuarial gain for pension and PBOP was largely driven by the increase in discount rate and change in the mortality assumption resulting from the recent experience study, partially offset by small asset losses due to returns less than expected. For the year end March 31, 2021, the net actuarial gain for pension and PBOP was largely the result of asset performance well above expectations and favorable contract negotiations for PBOP, partially offset by liability losses generated from the discount rate decrease and census data experience.

Expected Benefit Payments

Based on current assumptions, the Company expects to make the following benefit payments subsequent to March 31, 2022:

(in millions of dollars) **Years Ended March 31,**	**Pension Plans**	**PBOP Plans**
2023	$ 510	$ 172
2024	502	178
2025	495	182
2026	490	186
2027	483	189
2028-2032	2,277	976
Total	$ 4,757	$ 1,883

Assumptions Used for Employee Benefits Accounting

	Pension Plans		PBOP Plans	
	Years Ended March 31,		Years Ended March 31,	
	2022	2021	**2022**	2021
Benefit Obligations:				
Discount rate	**3.65%**	3.25%	**3.65%**	3.25%
Rate of compensation increase (non-union)	**4.30%**	4.10%	**N/A**	N/A
Rate of compensation increase (union)	**4.80%**	4.50%	**N/A**	N/A
Weighted-average interest crediting rate for cash balanced plans	**3.00%**	2.90%	**N/A**	N/A
Net Periodic Benefit Costs:				
Discount rate	**2.95% - 3.25%**	3.65%	**3.25%**	3.65%
Rate of compensation increase (non-union)	**4.10%**	3.50%	**N/A**	N/A
Rate of compensation increase (union)	**4.50%**	3.50%	**N/A**	N/A
Expected return on plan assets	**4.00% - 5.50%**	5.00% - 6.00%	**5.00% - 5.50%**	6.50% - 7.00%
Weighted-average interest crediting rate for cash balanced plans	**2.90%**	3.30%	**N/A**	N/A

The Company selects its discount rate assumption based upon rates of return on highly rated corporate bond yields in the marketplace as of each measurement date. Specifically, the Company uses the AON AA Only Bond Universe Curve along with the expected future cash flows from the Company retirement plans to determine the weighted average discount rate assumption.

The expected rate of return for various passive asset classes is based both on analysis of historical rates of return and forward-looking analysis of risk premiums and yields. Current market conditions, such as inflation and interest rates, are evaluated in connection with the setting of the long-term assumptions. A small premium is added for active management of both equity and fixed income securities. The rates of return for each asset class are then weighted in accordance with the actual asset allocation, resulting in a long-term return on asset rate for each plan.

Assumed Health Cost Trend Rate

	Years Ended March 31,	
	2022	2021
Health care cost trend rate assumed for next year		
Pre 65	**6.60%**	6.80%
Post 65	**5.00%**	5.40%
Prescription	**7.40%**	7.70%
Rate to which the cost trend is assumed to decline (ultimate)	**4.50%**	4.50%
Year that rate reaches ultimate trend		
Pre 65	**2031+**	2031+
Post 65	**2031+**	2031+
Prescription	**2031+**	2031+

Plan Assets

The Pension Plan is a trusted non-contributory defined benefit plan covering all eligible represented employees of the Company and eligible non-represented employees of the participating National Grid companies. The PBOP Plans are both a contributory and non-contributory, trusteed, employee life insurance and medical benefit plan sponsored by the Company. Life insurance and medical benefits are provided for eligible retirees, dependents, and surviving spouses of the Company.

The Company manages the benefit plan investments for the exclusive purpose of providing retirement benefits to participants and beneficiaries and paying plan expenses. The benefit plans' named fiduciary is The Retirement Plans Committee ("RPC"). The RPC seeks to minimize the long-term cost of operating the Plans, with a reasonable level of risk. The investment objectives of the plans are to maintain a level and form of assets adequate to meet benefit obligations to participants, to achieve the expected long-term total return on the plans' assets within a prudent level of risk and maintain a level of volatility that is not expected to have a material impact on the Company's expected contribution and expense or the Company's ability to meet plan obligations.

The RPC has established and reviews at least annually the Investment Policy Statement ("IPS") which sets forth the guidelines for how plan assets are to be invested. The IPS contains a strategic asset allocation for each plan which is intended to meet the objectives of the plans by diversifying its funds across asset classes, investment styles and fund managers. An asset/liability study typically is conducted periodically to determine whether the current strategic asset allocation continues to represent the appropriate balance of expected risk and reward for the plan to meet expected liabilities. Each study considers the investment risk of the asset allocation and determines the optimal mix of assets for the plan. The target asset allocation for fiscal year 2022 reflects the results of such a pension study conducted and implemented in fiscal year 2022. As a result of that asset liability study, the asset mix for the National Grid Pension Plan and KeySpan Pension Plan were changed to further reduce investment risk given the increased funded status of the plans and strong returns over the past 12-18 months. The Union PBOP Plan asset liability study was conducted in 2021. As a result of that study the RPC approved changes to the Union PBOP asset allocation effective in fiscal year 2022. The Non-Union PBOP Plan asset liability study is expected to be run within the next 12-18 months.

Individual fund managers operate under written guidelines provided by the RPC, which cover such areas as investment objectives, performance measurement, permissible investments, investment restrictions, trading and execution, and communication and reporting requirements. National Grid management in conjunction with a third-party investment advisor, regularly monitors, and reviews asset class performance, total fund performance, and compliance with asset allocation guidelines. This information is reported to the RPC at quarterly meetings. The RPC changes fund managers and rebalances the portfolio as appropriate.

Equity investments are broadly diversified across U.S. and non-U.S. stocks, as well as across growth, value, and small and large capitalization stocks. Likewise, the fixed income portfolio is broadly diversified across market segments and is mainly invested in investment grade securities. Where investments are made in non-investment grade assets the higher volatility is carefully judged and balanced against the expected higher returns. While the majority of plan assets are invested in equities and fixed income, other asset classes are utilized to further diversify the investments. These asset classes include private equity, real estate, and diversified alternatives. The objective of these other investments is enhancing long-term returns while improving portfolio diversification. For the PBOP Plans, since the earnings on a portion of the assets are taxable, those investments are managed to maximize after tax returns consistent with the broad asset class parameters established by the asset liability study. Investment risk and return are reviewed by the plan investment advisors, National Grid management and the RPC on a regular basis. The assets of the plans have no significant concentration of risk in one country (other than the United States), industry or entity.

The target asset allocations for the benefit plans as of March 31, 2022 and 2021 are as follows:

	National Grid Pension Plans		Union PBOP Plans		Non-Union PBOP Plans	
	March 31,		March 31,		March 31,	
	2022	2021	**2022**	2021	**2022**	2021
Equity	**25%**	37%	**39%**	63%	**70%**	70%
Diversified alternatives	**7%**	10%	**11%**	17%	**0%**	0%
Fixed income securities	**59%**	40%	**50%**	20%	**30%**	30%
Private equity	**4%**	5%	**0%**	0%	**0%**	0%
Real estate	**3%**	5%	**0%**	0%	**0%**	0%
Infrastructure	**2%**	3%	**0%**	0%	**0%**	0%
	100%	100%	**100%**	100%	**100%**	100%

Fair Value Measurements

The following tables provide the fair value measurement amounts for the pension and PBOP assets:

	March 31, 2022				
	Level 1	Level 2	Level 3	Not categorized	Total
			(in millions of dollars)		
Pension assets:					
Investments					
Equity	$ 422	$ -	$ -	$ 1,854	$ 2,276
Diversified alternatives	211	-	-	483	694
Corporate bonds	-	3,118	-	852	3,970
Government securities	(13)	1,096	-	947	2,030
Private equity	-	-	-	888	888
Real estate	-	-	-	387	387
Infrastructure	-	-	-	238	238
Total assets	$ 620	$ 4,214	$ -	$ 5,649	$ 10,483
Assets held for sale					(633)
Pending Transactions					(278)
Total net assets					$ 9,572
PBOP assets:					
Investments					
Equity	$ 253	$ -	$ -	$ 1,396	$ 1,649
Diversified alternatives	197	-	-	165	362
Corporate bonds	-	999	-	-	999
Government securities	360	344	-	1	705
Private Equity	-	-	-	-	-
Insurance contracts	-	-	-	242	242
Total assets	$ 810	$ 1,343	$ -	$ 1,804	$ 3,957
Assets held for sale					(168)
Pending Transactions					2
Total net assets					$ 3,791

	March 31, 2021				
	Level 1	Level 2	Level 3	Not categorized	Total
			(in millions of dollars)		
Pension assets:					
Investments					
Equity	$ 804	$ -	$ -	$ 2,844	$ 3,648
Diversified alternatives	245	-	-	671	916
Corporate bonds	-	2,315	-	743	3,058
Government securities	4	1,140	-	777	1,921
Private equity	-	-	-	628	628
Real estate	-	-	-	364	364
Infrastructure	-	-	-	179	179
Total assets	$ 1,053	$ 3,455	$ -	$ 6,206	$ 10,714
Assets held for sale					(625)
Pending Transactions					(588)
Total net assets					$ 9,501
PBOP assets:					
Investments					
Equity	$ 606	$ -	$ -	$ 1,888	$ 2,494
Diversified alternatives	268	-	-	249	517
Corporate bonds	-	22	-	-	22
Government securities	77	695	-	2	774
Private Equity	-	-	-	-	-
Insurance contracts	-	-	-	237	237
Total assets	$ 951	$ 717	$ -	$ 2,376	$ 4,044
Assets held for sale					(185)
Pending Transactions					3
Total net assets					$ 3,862

The methods used to fair value pension and PBOP assets are described below:

Equity: Equity includes both actively- and passively-managed assets with investments in domestic equity index funds as well as international equities.

Diversified Alternatives: Diversified Alternatives consists of holdings of global tactical asset allocation funds that seek to invest opportunistically in a range of asset classes and sectors globally.

Corporate Bonds: Corporate Bonds consists of debt issued by various corporations and corporate money market funds. Corporate Bonds also includes small investments in preferred securities as these are used in the fixed income portfolios as yield producing investments. In addition, certain fixed income derivatives are included in this category such as credit default swaps to assist in managing credit risk.

Government Securities: Government Securities includes US agency and treasury securities, as well as state and local municipal bonds. The plans also include a small amount of Non-US government debt which is also captured here. US Government money market funds are also included. In addition, interest rate futures and swaps are held as a tool to manage interest rate risk.

Private equity: Private equity consists of limited partnerships investments where all the underlying investments are privately held. This consists of primarily buy-out investments with smaller allocations to venture capital.

Real estate: Real estate consists of limited partnership investments primarily in US core open end real estate funds as well as some core plus closed end real estate funds.

Infrastructure: Infrastructure consists of limited partnership investments that seek to invest in physical assets that are considered essential for a society to facilitate the orderly operation of its economy. Investments in infrastructure typically include transportation assets (such as airports and toll roads) and utility type assets. Investments in infrastructure funds are utilized as a diversifier to other asset classes within the pension portfolio. Infrastructure investments are also typically income producing assets.

Insurance contracts: Insurance consists of Trust Owned Life Insurance.

Pending Transactions: Accounts receivable and accounts payable transactions that are expected to settle within a few days of the measurement date.

Defined Contribution Plans

The Company has two defined contribution pension plans that cover substantially all employees. For the years ended March 31, 2022 and 2021, the Company recognized an expense in the accompanying consolidated statements of operations and comprehensive income of $96 million and $88 million, respectively.

12. CAPITALIZATION

The aggregate maturities of long-term debt for the years subsequent to March 31, 2022 are as follows:

(in millions of dollars) **March 31,**	**Maturities of Long-Term Debt**
2023	$ 1,241
2024	671
2025	1,253
2026	1,675
2027	1,685
Thereafter	12,424
Total	$ 18,949

The Company's debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity and financial covenants such as restrictions on the level of indebtedness. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of the Company's debt and may restrict the Company's ability to draw upon its facilities or access the capital markets. The Company's subsidiaries also have restrictions on the payment of dividends which relate to their debt to equity ratios. As of March 31, 2022, and 2021, the Company was in compliance with all such covenants.

Significant Debt Facilities

European Medium-Term Note Program

At March 31, 2022, the Company had a Euro Medium Term Note program (the "Program") under which it is able to issue debt instruments ("Instruments") up to a total of the equivalent of 8 billion Euros. Instruments issued under the Program are admitted to trading on the London Stock Exchange. The Program commenced in December 2007 and is renewed annually, with the latest renewal of the Program expiring in October 2022. If the Program was not renewed, it would have precluded the issuance of new notes under this Program, but it would not impact the outstanding debt balances and their maturity dates. Instruments carry certain affirmative and negative covenants, including a restriction on the Company's ability to mortgage, pledge, charge, or otherwise encumber its assets in order to secure, guarantee, or indemnify other listed or quoted debt obligations, as well as cross-acceleration in the event of breach by the Company or its principal subsidiaries of other listed or quoted debt obligations. At March 31, 2022 and 2021, the Company was in compliance with all covenants. At March 31, 2022 and 2021, $3.3 billion and $3.2 billion of these notes were issued and outstanding, respectively.

Export Credit Agreements

The Company has Export Credit Agreements totaling $1,695 million, of which $1,193 million and $1,218 million were outstanding (drawn) as of March 31, 2022 and 2021, respectively. The Company has procured this financing in relation to Parent's share of investment in the North Sea Link interconnector and Interconnexion France-Angleterre 2 interconnector and Viking Interconnector project.

Notes Payable

The following table represents the Company's notes payable for the years ended March 31, 2022 and 2021:

	Interest Rate	Maturity Date	March 31, **2022**	March 31, 2021
			(in millions of dollars)	
Brooklyn Union Unsecured Notes:				
Senior Note	3.41%	March 10, 2026	**$ 500**	$ 500
Senior Note	3.87%	March 4, 2029	**550**	550
Senior Note	4.50%	March 10, 2046	**500**	500
Senior Note	4.27%	March 15, 2048	**650**	650
Senior Note	4.49%	March 4, 2049	**450**	450
Brooklyn Union Notes			**2,650**	2,650
KeySpan Gas East Unsecured Notes:				
Senior Note	5.82%	April 1, 2041	**500**	500
Senior Note	2.74%	August 15, 2026	**700**	700
Senior Note	3.59%	January 18, 2052	**400**	-
KeySpan Gas East Notes			**1,600**	1,200
Boston Gas Unsecured Notes:				
Senior Note	3.30%	March 15, 2022	**-**	25
Senior Note	3.15%	August 1, 2027	**500**	500
Senior Note	3.13%	October 5, 2027	**150**	150
Senior Note	3.00%	August 1, 2029	**500**	500
Senior Note	3.76%	March 16, 2032	**400**	-
Senior Note	4.49%	February 15, 2042	**500**	500
Senior Note	4.63%	March 15, 2042	**25**	25
Boston Gas Medium-Term Notes:				
MTN Series 1990 A	9.05%	September 1, 2021	**-**	15
MTN Series 1992 A	8.33%	July 5, 2022	**10**	10
MTN Series 1995 C	6.95%	December 1, 2023	**10**	10
MTN Series 1994 B	6.98%	January 15, 2024	**6**	6
MTN Series 1995 C	6.95%	December 1, 2024	**5**	5
MTN Series 1995 C	7.25%	October 1, 2025	**20**	20
MTN Series 1995 C	7.25%	October 1, 2025	**5**	5
Boston Gas Notes			**2,131**	1,771
National Grid USA MTN	8.00%	November 15, 2030	**250**	250
National Grid USA Unsecured Notes:				
Senior Note	5.80%	April 1, 2035	**307**	307
Senior Note	5.88%	April 1, 2033	**150**	150
National Grid USA Notes			**707**	707
Niagara Mohawk Unsecured Notes:				
Senior Note	2.72%	November 28, 2022	**300**	300

Senior Note	3.51%	October 1, 2024	**500**	500
Senior Notes	4.28%	December 15, 2028	**500**	500
Senior Notes	1.96%	June 27, 2030	**600**	600
Senior Notes	2.76%	January 10, 2032	**400**	-
Senior Note	4.28%	October 1, 2034	**400**	400
Senior Note	4.12%	November 28, 2042	**400**	400
Senior Note	3.03%	June 27, 2050	**500**	500
Niagara Mohawk Notes			**3,600**	3,200
Narragansett Electric Unsecured Notes:				
Senior Note [1]	3.92%	August 1, 2028	**350**	350
Senior Note [1]	3.40%	April 9, 2030	**600**	600
Senior Note [1]	5.64%	March 15, 2040	**300**	300
Senior Note [1]	4.17%	December 10, 2042	**250**	250
Narragansett Electric Notes			**1,500**	1,500
Massachusetts Electric Unsecured Notes:				
Senior Note	1.73%	November 24, 2030	**500**	500
Senior Note	5.90%	November 15, 2039	**800**	800
Senior Note	4.00%	August 15, 2046	**500**	500
Massachusetts Electric Notes:			**1,800**	1,800
New England Power Unsecured Notes:				
Senior Notes	3.80%	December 5, 2047	**400**	400
Senior Notes	2.81%	October 6, 2050	**400**	400
New England Power Notes:			**800**	800
Total			**$ 14,788**	$ 13,628

[1] Related to held for sale, see Note 19 "Held for sale".

First Mortgage Bonds ("FMB")

The assets of Boston Gas and Narragansett are subject to liens and other charges and are provided as collateral over borrowings of non-callable FMB with interest rage ranging from 6.90% to 8.80% of $75 million at March 31, 2022 and 2021. These FMB indentures include, among other provisions, limitations on the issuance of long-term debt.

State Authority Financing Bonds

At March 31, 2022, the Company had outstanding $647 million of State Authority Financing Bonds, of which $490 million were issued through the New York State Energy Research and Development Authority ("NYSERDA") and the remaining $157 million were issued through various other state agencies, for the subsidiaries listed below.

Niagara Mohawk had outstanding $424 million of tax-exempt revenue bonds issued by the NYSERDA in a fixed rate interest mode ranging from 3.23% to 3.48%.

Genco has $41 million of 1999 Series A Pollution Control Revenue Bonds due October 1, 2028. The interest rate on the various variable rate series ranged from 0.04% to 2.55% during the year ended March 31, 2022 and 1.00% to 10.44% during the year ended March 31, 2021. Genco also has outstanding $25 million of variable rate 1997 Series A Electric Facilities Revenue Bonds due December 1, 2027 issued through NYSERDA. The interest rate on the various variable rate series ranged from 0.06% to 0.65% during the year ended March 31, 2022 and 0.06% to 5.15% during the year ended March 31, 2021.

NEP had outstanding $106 million of Pollution Control Revenue Bonds in tax-exempt commercial paper mode.

Nantucket had $51 million of Electric Revenue Bonds in tax exempt commercial paper mode. The Electric Revenue Bonds were issued by the Massachusetts Development Finance Agency in connection with Nantucket's financing of its first and second underground and submarine cable projects.

Term Loans

On September 28, 2021, the Brooklyn Union Gas Company entered into a $400 million Term Loan. The Term Loan has a maturity date of December 28, 2022 and includes an option to extend by an additional year (twelve months). The interest rate is based on the daily compounded Secured Overnight Financing Rate ("SOFR") that will be finalized at the end of the term plus a credit spread.

Intercompany Notes Payable.

NGNA's intercompany debt is in the form of intercompany loans from the Parent and other non-consolidated affiliated entities obtained to fund the acquisition of various entities. The intercompany loans are paid back by NGNA from the dividends it receives from NGUSA.

NGNA had an intercompany note payable to one of the Parent's affiliates, which was due to mature in July 2027, with an interest rate of 0.92% to 1.08% over LIBOR, however the Company agreed to repay this loan note in full on January 28, 2021.

Standby Bond Purchase Agreement

NEP and Nantucket have a Standby Bond Purchase Agreement, which expires on June 14, 2023. This agreement provides liquidity support for the $157 million long-term bonds in tax-exempt commercial paper mode, as noted under the *State Authority Financing Bonds* section above. The Company has classified the debt as long-term due to its intent and ability to refinance the debt on a long-term basis in the event of a failure to remarket the bonds.

Committed Facility Agreements

At March 31, 2022, the Company, NGUSA, and the Parent had committed revolving credit facilities of $3.9 billion, of which $2.5 billion was due to mature in May 2024, $1.2 billion matures in June 2024, and $0.2 billion matures in June 2025. These facilities have not been drawn against. The Company, NGUSA, and the Parent can all draw on these facilities in a variety of currencies as needed, but the aggregate borrowings across the group cannot exceed the $3.9 billion limit. The terms of the facilities restrict the borrowing of all U.S. subsidiaries of the Company to $25 billion excluding intercompany indebtedness. Additionally, these facilities have a number of non-financial covenants which the Company is obliged to meet. At March 31, 2022 and 2021, the Company, NGUSA, and the Parent were in compliance with all covenants.

Commercial Paper and Revolving Credit Agreements

At March 31, 2022, the Company had two commercial paper programs approximately totaling $8.4 billion; a $4 billion U.S. commercial paper program and a €4 billion Euro commercial paper program. In support of these programs, the Company was a named borrower under the Parent's credit facilities with $3.9 billion available to the Company. These facilities support both the Parent's and the Company's commercial paper programs for ongoing working capital needs. At March 31, 2022, there were $637 million of borrowings outstanding on the U.S. commercial paper program and zero outstanding on the Euro commercial paper program. At March 31, 2021, there were $500 million of borrowing outstanding on the U.S. commercial paper and zero outstanding on the Euro commercial paper program.

The credit facilities allow both the Parent and the Company to borrow in multi-currencies. The current annual commitment fees range from 0.09% to 0.34%. If for any reason the Company was not able to issue sufficient commercial paper or source funds from other sources, the facilities could be drawn upon to meet cash requirements. The facilities contain certain affirmative and negative operating covenants, including restrictions on the Company's utility subsidiaries' ability to mortgage, pledge, encumber, or otherwise subject their utility property to any lien, as well as financial covenants that require the Company and the Parent to limit the total indebtedness in U.S. and non-U.S. subsidiaries to pre-defined limits. Violation of these covenants could result in the termination of the facilities and the required repayment of amounts borrowed thereunder, as well as possible cross defaults under other debt agreements.

Debt Authorizations

Niagara Mohawk

Niagara Mohawk has regulatory approval from the FERC to issue up to $1.0 billion of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Niagara Mohawk had no external short-term debt as of March 31, 2022 and 2021.

On September 13, 2021 the NYPSC authorized Niagara Mohawk to issue up to $2.3 billion of long-term debt in one or more transactions through June 30, 2024. Under the authorization, Niagara Mohawk issued a $400 million senior unsecured long-term debt at a fixed rate of 2.759% on January 10, 2022 with a maturity date of January 10, 2032.

Brooklyn Union

On February 8, 2019 the NYPSC authorized Brooklyn Union to issue up to $1.4 billion of long-term debt in one or more transactions through March 31, 2022. Under the authorization, on February 27, 2019, Brooklyn Union issued $550 million of unsecured senior long-term debt at a fixed rate of 3.87% with a maturity date of March 4, 2029 and $450 million of unsecured senior long-term debt at a fixed rate of 4.49% with a maturity date of March 4, 2049. With the remaining authorization, Brooklyn Union entered into a $400 million bank term loan at a variable rate with a maturity of December 28, 2022, with an option to extend the loan for one year.

On June 17, 2022, the NYPSC authorized Brooklyn Union to issue up to $1.8 billion of new long term debt securities, requesting that the authorization be valid for a period beginning on the effective date of the commission's order and ending on March 31, 2025.

KeySpan Gas East

On February 8, 2019 the NYPSC authorized KeySpan Gas East to issue up to $400 million of long-term debt in one or more transactions through March 31, 2022. Under the authorization, KeySpan Gas East issued a $400 million senior unsecured long-term debt at a fixed rate of 3.586% on January 18, 2022 with a maturity date of January 18, 2052.

On June 17, 2022, the NYPSC authorized KeySpan Gas East to issue up to $890 million of new long-term debt securities, requesting that the authorization be valid for a period beginning on the effective date of the commission's order and ending on March 31, 2025.

Boston Gas

On November 24, 2021 the DPU authorized Boston Gas to issue up to $1.5 billion of long-term debt in one or more transactions through November 24, 2024. Under the authorization, Boston Gas issued $400 million senior unsecured long-term debt at a fixed rate of 3.757% on March 16, 2022 with a maturity date of March 16, 2032.

Massachusetts Electric

Massachusetts Electric has regulatory approval from the FERC to issue up to $750 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Massachusetts Electric had no external short-term debt as of March 31, 2022 and 2021.

On August 31, 2020, Massachusetts Electric received approval from the DPU to issue up to $1.1 billion of long-term debt in one or more transactions through August 31, 2023. In November 2020, Massachusetts Electric issued $500 million of unsecured long-term debt at 1.729% with a maturity date of November 24, 2030, resulting in $600 million of remaining authorization.

NEP

NEP has regulatory approval from the FERC to issue up to $1.5 billion of short-term debt. The authorization was renewed with an effective date of October 15, 2020 and expires on October 14, 2022. NEP had no short-term debt outstanding as of March 31, 2022 and 2021.

Genco

Genco has regulatory approval from the FERC to issue up to $250 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Genco had no short-term debt outstanding to third-parties as of March 31, 2022 or 2021.

Nantucket

Nantucket has regulatory approval from the FERC to issue up to $15 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Nantucket had no external short-term debt as of March 31, 2022 and 2021.

Narragansett (Held for sale)

Narragansett, which is reported as Held for sale as of March 31, 2021 (see Note 19, "Held for sale"), has regulatory approval from the FERC to issue up to $400 million of short-term debt. The authorization was renewed with an effective date of January 11, 2021 and expires on October 14, 2022. Narragansett had no external short-term debt as of March 31, 2022 and 2021.

A new financing petition was filed with the RIPUC and approved on January 19, 2020 authorizing the issuance of up to $900 million of new long-term debt through March 31, 2023. In April 2020, Narragansett issued $600 million of unsecured long-term debt at 3.395% with a maturity date of April 9, 2030, resulting in $300 million of remaining authorization.

13. INCOME TAXES

Components of Income Tax Expense

	Years Ended March 31,	
	2022	2021
	(in millions of dollars)	
Current tax benefit:		
Federal	**$ (4)**	$ (4)
State	**(23)**	(11)
Total current tax benefit	**(27)**	(15)
Deferred tax expense:		
Federal	**67**	173
State	**201**	104
Total deferred tax expense	**268**	277
Amortized investment tax credits [1]	**(2)**	(1)
Total deferred tax expense	**266**	276
Total income tax expense	**$ 239**	$ 261

[1] Investment tax credits ("ITC") are accounted for using the deferral and gross up method of accounting and amortized over the depreciable life of the property giving rise to the credits.

Statutory Rate Reconciliation

The Company's effective tax rates for the years ended March 31, 2022 and 2021 are 16.9% and 23.7%, respectively. The following table presents a reconciliation of income tax expense (benefit) at the federal statutory tax rate of 21% to the actual tax expense:

	Years Ended March 31,	
	2022	2021
	(in millions of dollars)	
Computed tax	**$ 297**	$ 231
Change in computed taxes resulting from:		
State income tax, net of federal benefit	**65**	73
State apportionment reset – NECO sale, net of federal benefit	**76**	-
Amortization of regulatory tax liability	**(158)**	(25)
Audit and related reserve movements	**(12)**	7
Cash Surrender Value	**(2)**	(24)
R&D Credit, net of reserves	**(31)**	**-**
Other	**4**	(1)
Total changes	**(58)**	30
Total income tax expense	**$ 239**	$ 261

The Company files a consolidated federal income tax return and Massachusetts and New York unitary state income tax returns. The Company has joint and several liability for any potential assessments against the consolidated group.

Deferred Tax Components

	March 31,	
	2022	2021
	(in millions of dollars)	
Deferred tax assets:		
Allowance for bad debts	**247**	239
Environmental remediation costs	**696**	643
Net operating losses	**523**	582
Postretirement benefits	**228**	470
Regulatory liabilities	**1,691**	1,549
Reserves not currently deducted	**226**	281
Other items , net	**435**	293
Total deferred tax assets	**4,046**	4,057
Deferred tax liabilities:		
Property related differences	**6,596**	6,179
Regulatory assets	**1,276**	1,440
Other items	**667**	458
Total deferred tax liabilities	**8,539**	8,077
Net deferred income tax liabilities	**4,493**	4,020
Deferred investment tax credits	**45**	41
Deferred income tax liabilities, net	**$ 4,538**	$ 4,061

Net Operating Losses

The amounts and expiration dates of the Company's net operating losses carryforward as of March 31, 2022 are as follows:

	Gross Carryforward Amount *(in millions of dollars)*	Expiration Period
Federal	$ 3,231	2033 – 2038
Federal – No Expiration	209	Indefinite
New York	2,407 [1]	2035 - 2042
New York City	401 [1]	2035 - 2042
Massachusetts	492	2035 - 2042

(1) The amount contains net operating losses that were incurred before the tax year ended March 31, 2015 that have been converted into a Prior Net Operating Loss Conversion subtraction that can be utilized beginning fiscal year 2017.

As a result of the accounting for uncertain tax positions, the amount of deferred tax assets reflected in the consolidated financial statements is less than the amount of the tax effect of the federal and state net operating losses carryforward reflected on the income tax returns.

Tax Years Subject to Examination

The following table indicates the earliest tax year subject to examination for each major jurisdiction:

Jurisdiction	Tax Years
Federal	March 31, 2020
Massachusetts	March 31, 2013
New York	March 31, 2013
New York City	March 31, 2010

In May 2022, the Company reached an audit settlement agreement with the IRS for the years ended March 31, 2018 and March 31, 2019. The outcome of the settlement did not have a material impact on the Company's results of operations, financial position, or cash flows. The income tax returns for the years ended March 31, 2020 through March 31, 2022 remain subject to examination by the IRS.

Uncertain Tax Positions

As of March 31, 2022 and 2021, the Company's unrecognized tax benefits totaled $421 million and $442 million, respectively of which $83 million and $98 million, respectively, would affect the effective tax rate, if recognized. The unrecognized tax benefits are included in other non-current liabilities in the accompanying consolidated balance sheets.

The following table presents changes to the Company's unrecognized tax benefits:

	Year Ended March 31,	
(in millions of dollars)	**2022**	2021
Beginning balance	**$ 442**	$ 600
Gross increases – tax positions in prior periods	**19**	29
Gross decreases – tax positions in prior periods	**(26)**	(265)
Gross increases - current period tax positions	**85**	78
Gross decreases - current period tax positions	**(12)**	-
Settlements with tax authorities	**(87)**	-
Ending balance	**$ 421**	$ 442

The Company recognizes interest related to unrecognized tax benefits in other interest, including affiliate interest, and related penalties, if applicable, in other income, net, in the accompanying consolidated statements of operations and comprehensive income. As of March 31, 2022 and 2021, the Company has accrued for interest related to unrecognized tax benefits of $13 million and $68 million, respectively. During the years ended March 31, 2022 and 2021, the Company recorded an interest income of $32 million and an interest expense of $32 million, respectively. No tax penalties were recognized during the years ended March 31, 2022 and 2021.

It is reasonably possible that other events will occur during the next twelve months that would cause the total amount of unrecognized tax benefits to increase or decrease. However, the Company does not believe any other additional increases or decreases would be material to its results of operations, financial position, or cash flows.

14. ENVIRONMENTAL MATTERS

The normal ongoing operations and historic activities of the Company are subject to various federal, state, and local environmental laws and regulations. Under federal and state Superfund laws, potential liability for the historic contamination of property may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred.

Air

Genco's generating facilities are subject to increasingly stringent emissions limitations under current and anticipated future requirements of the United States Environmental Protection Agency ("EPA") and the NYS Department of Environmental Conservation ("DEC"). In addition to efforts to improve both ozone and particulate matter air quality, there has been an increased focus on greenhouse gas emissions in recent years. Genco's previous investments in low NOx boiler combustion modifications, the use of natural gas firing systems at its steam electric generating stations, and the compliance flexibility available under cap and trade programs have enabled Genco to achieve its prior emission reductions in a cost-effective manner. These investments include the installation of enhanced NOx controls and efficiency improvement projects at certain of Genco's Long Island based electric generating facilities. The total cost of these improvements was approximately $106 million, all of which have been placed in service as of the date of this report; a mechanism for recovery from LIPA of these investments has been established. Genco will continue to make investments for additional emissions reductions, as needed. Genco has developed a compliance strategy to address anticipated future requirements and is closely monitoring the regulatory developments to identify any necessary changes to its compliance strategy. At this time, NGNA is unable to predict what effect, if any, these future requirements will have on its consolidated financial position, results of operations, and cash flows.

Water

Additional capital expenditures associated with the renewal of the surface water discharge permits for Genco's steam electric power plants have been required by the DEC pursuant to Section 316 of the Clean Water Act to mitigate the plants' alleged cooling water system impacts to aquatic organisms. Final permits have been issued for the Port Jefferson and Northport facilities. Capital improvements have been completed at Port Jefferson and are in the design, procurement, and construction phase for Northport. Genco continues to engage in discussions with the DEC regarding the nature of capital upgrades or other mitigation measures necessary to reduce any impacts at the E.F. Barrett facility. Genco is awaiting a final permit from the DEC to proceed with the improvements at E.F. Barrett. Total capital costs for these improvements at Northport and E.F. Barrett are estimated to be approximately $78 million. Costs associated with these capital improvements are reimbursable from LIPA under the PSA.

Land, Manufactured Gas Plants and Related Facilities

Federal and state environmental regulators, as well as private parties, have alleged that several of the Company's subsidiaries are potentially responsible parties under Superfund laws for the remediation of numerous contaminated sites in New York and New England. The Company's greatest potential Superfund liabilities relate to MGP facilities formerly owned or operated by its subsidiaries or their predecessors. MGP byproducts include fuel oils, hydrocarbons, coal tar, purifier waste, and other waste products which may pose a risk to human health and the environment.

Several lawsuits have been filed which allege damages resulting from contamination associated with the historic operations of a former MGP located in Bay Shore, New York. The Company has been conducting remediation at this location pursuant to Administrative Order on Consent with the DEC. The Company intends to contest these proceedings vigorously.

At March 31, 2022 and 2021, the Company's total reserve for estimated MGP-related environmental matters is $2.4 billion and $2.2 billion, respectively. The Company had a current portion of environmental remediation costs of $172 million and $173 million included in other current liabilities on the consolidated balance sheets at March 31, 2022 and 2021, respectively. Management believes that obligations imposed on the Company because of the environmental laws will not have a material adverse effect on its operations, financial position, or cash flows. Through various rate orders issued by the NYPSC, DPU, and

RIPUC, costs related to MGP environmental cleanup activities are recovered in rates charged to gas distribution customers. Accordingly, the Company has reflected a net regulatory asset of $2.3 billion on the consolidated balance sheets at March 31, 2022 and 2021, respectively. Expenditures incurred for the years ended March 31, 2022 and 2021 were approximately $119 million and $179 million, respectively. The Company is pursuing claims against other potentially responsible parties to recover investigation and remediation costs it believes are the obligations of those parties. The Company cannot predict the likelihood of success of such claims.

The Company believes that its ongoing operations, and its approach to addressing conditions at historic sites, are in substantial compliance with all applicable environmental laws, and that the obligations imposed on it because of the environmental laws will not have a material impact on its results of operations or financial position since, as noted above, environmental expenditures incurred by the Company are generally recoverable from customers.

The Company is pursuing environmental insurance recoveries in connection with several legal proceedings that are ongoing between the Company and insurance companies who have provided historic coverage over environmentally impacted sites. Following any favorable resolution of these claims, the Company is expected to return insurance recoveries to customers through the Company's regulatory mechanisms. However, legal proceedings in each case still have a number of stages to complete, any of which could modify the amount of any eventual claim. As such, it is not currently practicable to provide a reliable estimate of the amount of likely eventual recoveries.

15. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

The Company's electric subsidiaries have several long-term contracts for the purchase of electric power. Substantially all of these contracts require power to be delivered before the subsidiaries are obligated to make payment. Additionally, the Company's gas distribution subsidiaries have entered into various contracts for gas delivery, storage, and supply services. Certain of these contracts require payment of annual demand charges, which are recoverable from customers. The Company's gas distribution subsidiaries are liable for these payments regardless of the level of service required from third-parties. In addition, the Company has various capital commitments related to the construction of property, plant, and equipment.

The Company's commitments under these long-term contracts for the years subsequent to March 31, 2022 are summarized in the table below:

(in millions of dollars) Years Ending March 31,	**Energy Purchases**	**Capital Expenditures**
2023	$ 1,504	$ 98
2024	1,116	464
2025	979	-
2026	820	-
2027	681	-
Thereafter	2,677	-
Total	$ 7,777	$ 562

The amounts in the above table exclude total commitments of $867 million related to Narragansett. See Note 19, "Held for sale".

The Company's subsidiaries can purchase additional energy to meet load requirements from independent power producers, other utilities, energy merchants or on the open market through the NYISO or the ISO-NE at market prices.

Long-term Contracts for Renewable Energy

Offshore Wind Energy Procurement

On December 6, 2018, Narragansett entered into a 20-year power purchase agreement ("PPA") with DWW Rev I, LLC ("Revolution Wind"), for the purchase of the electricity and renewable energy credits generated by the offshore windfarm proposed by Revolution Wind, that will have a capacity of up to 408 MW. The anticipated commercial operations date for the windfarm is in January 2024. On May 28, 2019, at an open meeting, the RIPUC approved the contract without remuneration. The written order approving the agreement and that Narragansett will be able to recover the cost incurred under the agreement was issued by the RIPUC on June 7, 2019. In April 2022, Revolution Wind exercised 3 of their 4 available critical milestone extensions, and provided the required additional development period security. The exercised extensions will delay the guaranteed commercial operations date to July 2025.

On July 31, 2018, the Massachusetts Electric Companies entered into two separate 20-year PPAs with Vineyard Wind LLC ("Vineyard Wind") for the purchase of 46.16% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Vineyard Wind, with each individual windfarm having a capacity of up to 400 MW. The contracts with Vineyard Wind were entered into pursuant to Section 83C of the Green Communities Act. On April 12, 2019, the DPU approved the contracts, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. Based on the terms of the contracts, the commercial operations date for the first wind farm was initially expected to be in January 2022, with the second wind farm anticipated in May 2022. On October 21, 2021, the DPU approved two amendments to the PPAs for both wind farms, which extend the critical milestone dates by twenty-four months, including the commercial operations dates. The new guaranteed commercial operations dates are January 15, 2024 for the first wind farm and May 31, 2024 for the second wind farm.

Offshore Wind Energy Procurement: Round 2

On January 10, 2020, the Massachusetts Electric Companies entered into two separate 20-year PPAs with Mayflower Wind Energy LLC ("Mayflower Wind") for the purchase of 45.41% of the electricity and renewable energy credits generated by two offshore windfarms proposed by Mayflower Wind, with the first wind farm having a capacity of up to 408 MWs and the second having a capacity of up to 396 MWs. The contracts with Mayflower Wind were entered into pursuant to Section 83C of the Green Communities Act. Based on the terms of the contracts, the commercial operations date for the first wind farm is expected to be in September 2025, with the second wind farm anticipated in December 2025. These contracts were filed with the DPU on February 10, 2020. On November 5, 2020, the DPU approved the contracts, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. The AG filed a motion for reconsideration on November 25, 2020, in which it asked the DPU for additional information regarding the DPU's approval of 2.75% remuneration on the annual payments made. The AG's motion was denied on June 23, 2021. On July 9, 2021, the decision became final and unappealable, and regulatory approval was achieved. On May 25, 2022, the Massachusetts Electric Companies filed an amendment to the PPAs for the DPU's review and approval. The amendment extends the critical milestone dates by approximately eighteen months, including the commercial operations dates.

Offshore Wind Energy Procurement: Round 3

On April 8, 2022, the Massachusetts Electric Companies entered into a 20-year PPA with Commonwealth Wind LLC ("Commonwealth Wind") for the purchase of 43.87% of the electricity and renewable energy credits generated by an offshore wind farm with a nameplate capacity of 1,232 MWs. On April 15, 2022, the Massachusetts Electric Companies entered into a 20-year PPA with Mayflower Wind for the purchase of 38.003% of the electricity and renewable energy credits generated by an offshore wind farm with a nameplate capacity of 480 MWs. Both PPAs were filed with the DPU for review and approval on May 25, 2022. These contracts were entered into pursuant to Section 83C of the Green Communities Act. The Commonwealth Wind project has a commercial operations date of November 2027, and the Mayflower Wind project has a commercial operations date of March 2028.

Clean Energy Procurement

On June 13, 2018, the Massachusetts Electric Companies entered into two separate agreements for the transportation and purchase of electricity and the related environmental attributes from hydroelectric facilities located in the Canadian Province of Québec. The two agreements were entered into pursuant to Section 83D of the Green Communities Act. The first agreement is a 20-year PPA with H.Q. Energy Services Inc., ("H.Q. Energy"). for the purchase of approximately 498 MWhs of electricity and the related environmental attributes from a portfolio of hydroelectric facilities owned and operated by affiliates of H.Q Energy. The second agreement is a 20-year transmission service agreement ("TSA") with NECEC Transmission LLC ("NECEC"). This agreement was assigned to NECEC by Central Maine Power Company, with the consent of the Massachusetts Electric Companies. The TSA provides for the transmission of the electricity supplied by H.Q. Energy on a proposed new transmission line that will run from the United States border to Lewiston, Maine, where it will interconnect with the ISO-NE system. Both the TSA with NECEC and the PPA with H.Q. Energy are contingent on the successful development and construction of the underlying transmission line by NECEC. The anticipated commercial operations date of the transmission line is in August 2024, based on the contractual terms. The DPU approved the Section 83D contracts on June 25, 2019, and the Massachusetts Electric Companies will be able to recover the costs incurred under the agreements, including 2.75% remuneration on the annual payments made. NextEra Energy filed an appeal of the DPU's approval of the PPA with H.Q. Energy on July 12, 2019. On September 3, 2020, the Massachusetts Supreme Judicial Court upheld the DPU's approval. On November 2, 2021, the citizens of Maine passed a referendum which rejected the construction of the NECEC transmission line. NECEC has halted construction at the request of Maine's Governor while appeals are ongoing. The Massachusetts electric distribution companies have filed a joint amicus brief supporting continuation of the project, and oral arguments in the case began in May 2022.

Annual Solicitations

The 2009 Rhode Island law requires that, beginning on July 1, 2010, Narragansett conduct four annual solicitations for proposals from renewable energy developers and, provided commercially reasonable proposals have been received, enter into long-term contracts for the purchase of capacity, energy, and attributes from newly developed renewable energy resources. In 2014 the Long Term Contracting Standard was amended to allow for additional solicitations until the 90 MW contracting capacity requirement was met.

Narragansett's previous four solicitations resulted in four PPAs that have been approved by the RIPUC. Three of the related facilities reached commercial operation range during the period from 2013 to 2017, The remaining PPA was terminated in 2017 due to one of the required permits for the project was rejected.

On May 11, 2020, under the Fifth Solicitation, the RIPUC approved a 20-year PPA with Gravel Pit Solar II, LLC for a 49.5 MW land based bifacial solar project located in East Windsor, CT. The anticipated commercial operation date is March 31, 2023.

As approved by the RIPUC, Narragansett is allowed to pass through commodity-related / purchased power costs to customers and collect remuneration equal to 2.75%.

Financial Guarantees

The Company has guaranteed the principal and interest payments on certain outstanding debt of its subsidiaries. Additionally, the Company has issued financial guarantees in the normal course of business, on behalf of its subsidiaries, to various third-party creditors. At March 31, 2022, the following amounts would have to be paid by the Company in the event of non-payment by the primary obligor at the time payment is due:

Guarantees for Subsidiaries:		**Amount of Exposure**	**Expiration Dates**
		(In millions of dollars)	
KeySpan Ravenswood LLC Lease	(i)	$ 196	May 2040
Reservoir Woods	(ii)	31	December 2022
Surety Bonds	(iii)	196	Revolving
Commodity Guarantees and Other	(iv)	111	August 2025 – August 2042
Letters of Credit	(v)	700	April 2022 – March 2023
Grid NY, LLC	(vi)	304	None
NGRD	(vii)	35	July 2023
NGRD	(viii)	66	September 2023
Emerald's Project companies	(ix)	118	April 2023
COSW	(x)	300	October 2022
		$ 2,057	

The following is a description of the Company's outstanding subsidiary guarantees:

(i) The Company and the Parent have jointly guaranteed certain payment obligations of a former subsidiary (KeySpan Ravenswood LLC) associated with a merchant electric generating facility leased by that subsidiary under a sale/leaseback arrangement. The subsidiary and the facility were sold in 2008. However, the original lease remains in place and the Company and the Parent will continue to make the required payments under the lease through 2040. The cash consideration from the buyer of the facility included the remaining lease payments on a net present value basis. At March 31, 2022, the Company's obligation related to the lease is $33 million and is reflected in other non-current liabilities on the consolidated balance sheets. In the event the Company and the Parent default on the lease payment obligations, and that causes the buyer to lose beneficial use of the leased facility, the buyer is entitled to the unamortized value of the leased facility purchase price. At March 31, 2022, the unamortized value of the leased facility purchase price is $196 million.

(ii) The Company has fully and unconditionally guaranteed $31 million in lease payments through December 2022 related to the lease of office facilities by its service company at Reservoir Woods in Waltham, Massachusetts. The Reservoir Woods lease is reported as an operating lease on the Company's consolidated balance sheets.

(iii) The Company has agreed to indemnify the issuers of various surety bonds associated with various construction requirements or projects of its subsidiaries. In the event that the Company or its subsidiaries fail to perform their obligations under contracts, the injured party may demand that the surety make payments or provide services under the bond. The Company would then be obligated to reimburse the surety for any expenses or cash outlays it incurs.

(iv) The Company has guaranteed commodity-related and operational payments for certain subsidiaries. These guarantees are provided to third-parties to facilitate physical and financial transactions supporting the purchase and transportation of natural gas, oil, and other petroleum products for gas and electric production and financing activities. The guarantees cover actual transactions by these subsidiaries that are still outstanding as of March 31, 2022.

(v) The Company has arranged for stand-by letters of credit to be issued to third-parties that have extended credit to certain subsidiaries. Certain vendors require the posting of letters of credit to guarantee subsidiary performance under the Company's contracts and to ensure payment to the Company's subsidiary subcontractors and vendors under those contracts. Certain of the Company's vendors also require letters of credit to ensure reimbursement for amounts they are disbursing on behalf of the Company's subsidiaries, such as to beneficiaries under the Company's self-funded insurance programs. Such letters of credit are generally issued by a bank or similar financial institution. The letters of credit commit the issuer to pay specified amounts to the holder of the letter of credit if the holder demonstrates that the Company has failed to perform specified actions. If this were to occur, the Company would be required to reimburse the issuer of the letter of credit.

(vi) The Company has entered into a Parent Guaranty (the "Guaranty") dated November 14, 2014 for the benefit of NY Transco LLC. The Company, through a wholly owned subsidiary, Grid NY LLC, has an equity investment in NY Transco LLC, which is an independent transmission company that competes for and builds new bulk power transmission facilities in New York. The Guaranty irrevocably and unconditionally guarantees all of Grid NY LLC's payment obligations under the New York Transco Limited Liability Company Agreement ("NY Transco LLC Agreement") dated November 14, 2014 entered into by and among Consolidated Edison Transmission, LLC, Grid NY LLC, Iberdrola USA Networks, NY Transco, LLC and Central Hudson Electric Transmission LLC. Grid NY LLC's payment obligations relate to, but are not limited to, funding project development of the initial projects, obtaining initial regulatory approvals and making capital contributions as set forth in the NY Transco LLC Agreement.

(vii) The Company has provided a guaranty in support of letter of credit facility for NGRD development projects.

(viii) The Company has provided a guaranty for NGV's payment obligations under Professional Services Agreement with sellers of NGRD: $6 million in up-front purchase price holdbacks and $60 million of potential earn-outs.

(ix) The Company is guaranteeing payment should the benefiting project companies be unable to pay.

(x) The Company provides an unconditional guaranty of payment up to maximum amount in COSW, related to the Offshore Wind ("OSW") lease.

Legal Matters

The Company is subject to various legal proceedings arising out of the ordinary course of its business. the Company does not consider any of such proceedings to be material, individually or in the aggregate, to its business or likely to result in a material adverse effect on its results of operations, financial position, or cash flows.

NYPSC Investigation

On June 17, 2021, five former National Grid employees in the downstate New York facilities department pleaded guilty to federal charges alleging fraud and bribery. It is National Grid's understanding that the investigation by the US Attorney's Office and FBI remains ongoing; National Grid is a victim of the alleged crimes and will continue to comply with the government's investigation. The defendants have been, or are scheduled to be, sentenced between May and July of 2022. The New York Public Service Commission, the Massachusetts Department of Public Utilities, and the Rhode Island Public Utilities Commission have each issued requests for information related to the alleged criminal conduct. Over the past year, National Grid has submitted various reports and documents regarding its response to the alleged misconduct. At this time, it is not possible to predict the outcome of the regulatory review or determine the amount, if any, of any potential liabilities that may be incurred by the Company related to this matter. However, the Company does not expect this matter will have a material adverse effect on its results of operations, financial position or cash flows.

Energy Efficiency Programs Investigation

National Grid is performing an internal investigation regarding conduct associated with energy efficiency programs at one of the Company's affiliates. At this time, it is not possible to predict the outcome of the investigation or determine the amount, if any, of any liabilities that may be incurred in connection with it by the Company or its affiliates. However, the Company does not expect this matter will have a material adverse effect on its results of operations, financial position or cash flows.

Hempstead Property Tax Settlement

On July 16, 2018, KeySpan Gas East Corporation received a tax refund of $50 million from the Town of Hempstead pursuant to a judgment for claims related to garbage tax levies for the tax years 1996 through 2012. Both parties have appealed certain aspects of the judgment and the Court ruled on December 30, 2020 that the trial court should have applied 9% prejudgment interests instead of 6%. At the time the proceeds were received, KeySpan Gas East Corporation established a regulatory liability for the benefit of customers. In August 2021, the parties agreed to a final settlement of the litigation in which KeySpan Gas East Corporation received an additional interest related payment of $14 million in November 2021. In addition, the approved NYPSC rate case allowed KeySpan Gas East Corporation to retain its costs to achieve the ultimate refund and 15% of the refund after the cost to achieve plus interest on KeySpan Gas East Corporation's deferred balance since 2018.

Nassau County Special District Tax Settlement

Litigation began over two decades ago to challenge the methodology employed by Nassau County for the purposes of imposing special ad valorem levies upon KeySpan's real property located in non-countywide special districts for the 1998 through 2001 tax years. On August 2, 2021, the KeySpan Gas East Corporation received approval from the Nassau County Legislature in Resolution No. 116-2021 whereby the County has agreed to make payment in the total amount of $62 million to be paid in four equal installments of $15.5 million commencing on December 30, 2021, with the final payment due no later than December 30, 2024, inclusive of principal and statutory interest in full settlement of all possible claims the KeySpan Gas East Corporation may have against the County on this matter. In August 2021 KeySpan Gas East Corporation recorded an undiscounted receivable for $62 million. The benefit was reported as a credit against Other taxes for $33 million, Other income, net for $27 million, and Operations and maintenance for $2 million. As authorized in an order of the NYPSC approved in 2007, the Company is allowed to retain the full settlement related to this litigation for the benefit of shareholders.

FERC ROE Complaints

Four separate complaints have been filed at the FERC by combinations of New England state attorneys general, state regulatory commissions, consumer advocates, consumer groups, municipal parties and other parties (collectively the "Complainants"). In each of the first three complaints, filed on October 1, 2011, December 27, 2012, and July 31, 2014, respectively, the Complainants challenged the NETO base ROE of 11.14% that had been utilized since 2005 and sought an order to reduce it prospectively from the date of the final FERC order and for the separate 15-month complaint periods. In the fourth complaint, filed April 29, 2016, the Complainants challenged the NETOs' base ROE of 10.57% and the maximum ROE for transmission incentive ("incentive cap") of 11.74%, asserting that these ROEs were unjust and unreasonable. NEP recorded a liability of $34 million and $33 million included in other current liabilities on the consolidated balance sheets as of March 31, 2022 and 2021, respectively, for the potential refund as a result of reduction of the base ROE.

With the exception of the FERC order issued on October 16, 2018 (refer to "Recovery of Transmission Costs" section in Note 6, "Rate Matters"), where the FERC proposed a new framework to determine whether an existing ROE is unjust and unreasonable and, if so, how to calculate a replacement ROE, the FERC has not issued a final order on NEP's ROE complaints nor the applicability of the FERC orders on the MISO ROE complaint proceedings on other transmission owners.

Given the significant uncertainty relating to the October 2018 FERC order and the subsequent orders issued on the MISO ROE complaint proceedings, NEP has concluded that there is no reasonable basis for a change to the reserve or recognized ROEs for any of the complaint periods at this time. Further, NEP believes that the current reserve is the best estimate of the potential loss.

FERC 206 Proceeding on Rate Transparency

On December 28, 2015, the FERC initiated a proceeding under Section 206 of the FPA. The FERC found that the ISO-NE Transmission, Markets, and Services Tariff is unjust, unreasonable, and unduly discriminatory or preferential. FERC found that the ISO-New England's Tariff lacks adequate transparency and challenge procedures regarding to the formula rates for ISO-NE Participating Transmission Owners ("PTOs"). In addition, the FERC found that the ISO-NE PTOs', including NEP's, current RNS and LNS formula rates appear to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. FERC explained that the formula rates appear to lack sufficient detail in order to determine how certain costs are derived and recovered in the formula rates. Accordingly, FERC established hearing and settlement judge procedures. Several parties are active in the proceeding, including FERC employees, various interested consumer parties, the New England States Committee on Electricity (NESCOE), and several municipal light departments. In August 2018, the parties to the proceeding agreed to the terms of a settlement and subsequently filed the proposed settlement with the settlement judge in the proceeding. It was opposed by certain municipal parties, making it a contested settlement. On May 22, 2019, FERC rejected the Formula Rate 206 settlement in its entirety and remanded the matter to the Chief Administrative Law Judge ("ALJ") for hearing procedures. The parties continued settlement negotiations and were granted multiple suspensions of the procedural schedule to attempt to finalize settlement. The Chief ALJ held hearing procedures in abeyance while settlement discussions were underway.

On June 15, 2020, the parties filed a revised settlement agreement with FERC that is supported and signed by all parties, including all 6 New England states and the parties who opposed the 2018 settlement. The revised settlement reflects a number of transparency-related changes as well as affirmations regarding rate treatment on specific items as requested by FERC trial staff and represented municipal PTF owners. The Settling Parties requested that FERC accept the settlement by November 1, 2020 with an effective date of January 1, 2021, but the FERC did not act to do so. However, on December 28, 2020, FERC approved the settlement without modification. The settlement formula rates went into effect on January 1, 2022. Interim formula rate protocols went into effect on June 15, 2021 and terminate on June 14, 2023, at which point permanent protocols will go into effect. As part of the settlement approved by the FERC, the parties agreed to a moratorium which applies to Section 205 or Section 206 filings seeking to change Attachment F of the ISO-NE OATT, its appendices or the formula rate Protocols developed as part of the settlement, subject to certain exceptions, until December 31, 2024.

Electric Services and LIPA Agreements

Effective May 28, 2013 (and most recently amended on April 1, 2018), Genco provides services to LIPA under the A&R PSA. Under the A&R PSA, Genco has a ROE of 9.75% and a capital structure of 50% debt and 50% equity. Genco's annual revenue requirement for the year ended March 31, 2022 was $466 million.

The A&R PSA has a term of fifteen years, provided LIPA has the option to terminate the agreement as early as April 2025 on two years advance notice. In addition, LIPA has options to ramp down blocks of capacity on two years advance notice for steam generating units and one year advance notice for other generating units covered by the A&R PSA. Should any ramp downs be exercised, Genco is entitled to a ramp down payment equal to the net book value of the retired unit as defined in the A&R PSA plus operating and maintenance expenses for 18 months for steam generating units and 12 months for all generating units. The ramp down payment for a steam unit includes a discount factor. This discount factor ranges from 50% of the unit's net book value if retired with an effective date in 2022 up to 62.5% of the unit's net book value if retired with an effective date thereafter.

On April 18, 2022, Genco and LIPA signed a Letter Agreement to Clarify and Settle Ramp Down Rights and Other Issues under the A&R PSA ("Letter Agreement") which will become effective once it receives approval from the New York State Comptroller and FERC. The Letter Agreement provides for further ramp down options, clarification on how a ramp down is calculated in regards to the capacity charge and recovery of $5 million of previously incurred costs, among other provisions. The Letter Agreement does not change the terms of the A&R PSA, except as explicitly discussed in the letter.

The A&R PSA provides potential penalties to Genco if it does not maintain the output capability of the generating facilities, as measured by annual industry-standard tests of operating capability, plant availability, and efficiency. These penalties may total $4 million annually. Although the A&R PSA provides LIPA with all of the capacity from the generating facilities, LIPA has no obligation to purchase energy from the generating facilities and can purchase energy on a least-cost basis from all available sources consistent with existing transmission interconnection limitations of the transmission and distribution system. Genco must, therefore, operate its generating facilities in a manner such that Genco can remain competitive with other producers of energy. To date, Genco has dispatched to LIPA and LIPA has accepted the level of energy generated at the agreed to price per megawatt hour. Under the terms of the A&R PSA, LIPA is obligated to pay for capacity at rates that reflect recovery of an agreed level of the overall cost of maintaining and operating the generating facilities, including recovery of depreciation and return on its investment in plant. The revenue requirement, which is comprised of the capacity charge, is approximately 92.7% of total revenue and is adjusted each year using cost escalation and inflation factors applied to the prior year's capacity charge. A monthly variable maintenance charge is billed for each unit of energy actually acquired from the generating facilities. The billings to LIPA under the A&R PSA do not include a provision for fuel costs, as such fuel is owned by LIPA.

Nuclear Contingencies

As of March 31, 2022 and 2021, Niagara Mohawk reported a liability of $178 million, recorded in other non-current liabilities on the consolidated balance sheets, for the disposal of nuclear fuel irradiated prior to 1983. The Nuclear Waste Policy Act of 1982 provides three payment options for liquidating such liability and Niagara Mohawk has elected to delay payment, with interest, until the year in which Constellation Energy Group Inc., which purchased Niagara Mohawk's nuclear assets, initially plans to ship irradiated fuel to an approved Department of Energy ("DOE") disposal facility.

The 2010 Federal budget eliminated almost all funding for the creation of the Yucca Mountain repository. A Blue Ribbon Commission ("BRC") on America's Nuclear Future, appointed by the U.S. Energy Secretary, released a report on January 26, 2012, detailing comprehensive recommendations for creating a safe, long-term solution for managing and disposing of the nation's spent nuclear fuel and high-level radioactive waste.

In early 2013, the DOE issued an updated "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste" in response to the BRC recommendations. This strategy included a consolidated interim storage facility that was planned to be operational in 2025. However, due to continued delays on the part of the DOE, and the amount of time required for DOE to select a site location and develop the necessary infrastructure for long-term spent nuclear fuel storage, the Company cannot predict the date at which the DOE will begin accepting spent nuclear fuel.

In the Consolidated Appropriations Act, 2021, Congress appropriated funds to the Department for interim storage activities. Interim storage is an important component of a waste management system and will enable near-term consolidation and temporary storage of spent nuclear fuel. This will allow for removal of spent nuclear fuel from reactor sites, provide useful research opportunities, and build trust and confidence with stakeholders and the public by demonstrating a consent-based approach to siting.

DOE anticipates that an interim storage facility would need to operate until the fuel can be moved to final disposal. The duration of the interim period depends on the completion of a series of significant steps, such as the need to identify, license, and construct a facility, plus the time needed to move the spent nuclear fuel.

16. LEASES

The Company has various operating leases, primarily related to a transmission line, buildings, land, real estate, and fleet vehicles used to support the electric and gas operations, with lease terms ranging between 4 and 70 years.

Operating lease ROU assets are included in property, plant and equipment, net, and operating lease liabilities are included in other current liabilities and other noncurrent liabilities on the consolidated balance sheets. As of March 31, 2022 and 2021, the Company does not have any finance leases. Expense related to operating leases was $155 million and $148 million for the years ended March 31, 2022 and 2021, respectively.

During the year-ended March 31, 2022, the Company modified a real estate lease. The modification resulted in a reduction to ROU assets and lease liabilities of $165 million. No gain or loss was recorded as a result of the modification.

The Company does not have any other material rights or obligations under operating leases that have not yet commenced as of March 31, 2022.

The following table presents the components of cash flows arising from lease transactions:

	Years ended March 31,			
	2022		2021	
	(in millions of dollars)			
Cash paid for amounts included in lease liabilities				
Operating cash flows from operating leases	**$**	**164**	$	150
Financing cash flows from finance leases		**-**		1
ROU assets obtained in exchange for operating lease liabilities	**$**	**(48)**	$	136
Weighted-average remaining lease term – operating leases		**9 years**		15 years
Weighted-average discount rate – operating leases		**2.60%**		3.32%

The following contains the Company's maturity analysis of its operating lease liabilities, showing the undiscounted cash flows on an annual basis reconciled to the undiscounted cash flows of the operating lease liabilities recognized in the comparative balance sheet:

	As of March 31, 2022 Operating Leases	
Year Ending March 31,	(in millions of dollars)	
2023	**$**	**145**
2024		**100**
2025		**82**
2026		**64**
2027		**59**
Thereafter		**250**
Total future minimum lease payments		**700**
Less: imputed interest		**94**
Total	**$**	**606**
Reported as of March 31, 2022:		
Current lease liability	**$**	**132**
Non-current lease liability		**474**
Total	**$**	**606**

There are certain leases in which the Company is the lessor. Revenue under such leases was immaterial for the year ended March 31, 2022 and March 31, 2021.

17. RELATED PARTY TRANSACTIONS

Accounts Receivable from and Accounts Payable to Affiliates

The Company engages in various transactions with the Parent and its subsidiaries. Certain activities and costs, primarily executive and administrative and some human resources, legal, and strategic planning, are shared between the Company and its affiliates.

A summary of outstanding accounts receivable from affiliates and accounts payable to affiliates is as follows:

	Accounts Receivable from Unconsolidated Affiliates		Accounts Payable to Unconsolidated Affiliates	
	March 31,		March 31,	
	2022	2021	**2022**	2021
	(in millions of dollars)			
National Grid plc	**$ 27**	$ 9	**$ 100**	$ 33
National Grid Holding One plc [(1)]	**-**	-	**-**	9
Other	**-**	-	**-**	1
Total	**$ 27**	$ 9	**$ 100**	$ 43

(1) National Grid Holding One plc is a subsidiary of National Grid plc.

The Company also records short-term receivables from, and payables to, certain of its affiliates in the ordinary course of business. The amounts receivable from, and payable to, its affiliates do not bear interest and are settled through the intercompany money pool.

The above accounts receivable from affiliate balances of $27 million and $9 million are included in other current assets as of March 31, 2022 and 2021, respectively.

Equity infusion from Parent

During the year-ended March 31, 2021, the Company received capital contributions totaling $2 billion from a subsidiary of the Parent. The contribution was accounted for as Additional Paid in Capital.

Dividend payment to Parent

On May 25, 2022, in connection with the sale of the Narragansett Electric Company business to PPL Corporation, the Company paid a cash dividend of $2.1 billion to a subsidiary of the Parent.

Advance from Affiliate

In August 2009, the Company entered into an agreement with the Parent, whereby either party can collectively borrow up to $3.0 billion from time to time for working capital needs. These advances currently bear interest rates of LIBOR plus a margin set to reflect the cost of short-term borrowing rates for the Parent at the time of the borrowing. Outstanding balances are due on demand and reported on a net basis in the consolidated statements of cash flows. At March 31, 2022 and 2021, the Company had zero advances under this agreement, respectively.

Holding Company Charges

The Company receives charges from National Grid Commercial Holdings Limited (an affiliated company in the United Kingdom) for certain corporate and administrative services provided by the corporate functions of the Parent to its U.S. subsidiaries. For the years ended March 31, 2022 and 2021, the effect on income before income taxes was $73 million and $69 million, respectively.

18. PREFERRED STOCK

Preferred stock of NGUSA subsidiaries

The Company's subsidiaries have certain issues of non-participating cumulative preferred stock outstanding where the security is guaranteed by National Grid plc and can be redeemed only at the option of the Company's subsidiaries. There are no mandatory redemption provisions on the cumulative preferred stock and no conversion options. A summary of the cumulative preferred stock of NGUSA subsidiaries at March 31, 2022 and 2021 is presented in the table below. The preferred stock is reported as a non-controlling interest as of March 31, 2022.

		Shares Outstanding March 31,		Amount March 31,		
Series	Company	**2022**	2021	**2022**	2021	Call Price
		(in millions of dollars, except per share and number of shares data)				
$100 par value -						
3.40% Series	Niagara Mohawk	**57,524**	57,524	**$ 6**	$ 6	$ 103.500
3.60% Series	Niagara Mohawk	**137,152**	137,152	**14**	14	104.850
3.90% Series	Niagara Mohawk	**95,171**	95,171	**9**	9	106.000
4.44% Series	Massachusetts Electric	**22,585**	22,585	**2**	2	104.068
6.00% Series	NEP	**11,117**	11,117	**1**	1	Non-callable
$50 par value -						
4.50% Series	Narragansett [(1)]	**49,089**	49,089	**3**	3	55.000
Golden Shares -	Niagara Mohawk and the New York Gas Companies	**3**	3	**-**	-	Non-callable
Total		**372,641**	372,641	**$ 35**	$ 35	

(1) Related to held for sale, see Note 19 "Held for sale".

In connection with the acquisition of KeySpan by NGUSA, the Company's New York Gas Companies became subject to a requirement to issue a class of preferred stock, having one share (the "Golden Share"), subordinate to any existing preferred stock. The holder of the Golden Share would have voting rights that limit the Company's right to commence any voluntary bankruptcy, liquidation, receivership, or similar proceeding without the consent of the holder of the Golden Share. The NYPSC subsequently authorized the issuance of the Golden Share to a trustee, GSS Holdings, Inc. ("GSS"), who will hold the Golden Share subject to a Services and Indemnity Agreement requiring GSS to vote the Golden Share in the best interests of NYS. On July 8, 2011, the Company issued a total of 3 Golden Shares pertaining to Niagara Mohawk and the New York Gas Companies each with a par value of $1.

The Company's subsidiaries did not redeem any preferred stock during the years ended March 31, 2022 or 2021. The annual dividend requirement for cumulative preferred stock was $1 million as of March 31, 2022 and 2021.

19. HELD FOR SALE

On March 17, 2021, NGUSA signed an agreement to sell its 100% indirect ownership interest in Narragansett for $3.8 billion (excluding long-term debt). The sale was agreed to as part of the Parent's acquisition of Western Power Distribution from PPL. As the sale of Narragansett was considered probable and expected to complete once all regulatory approvals have been obtained, the associated assets and liabilities that form part of the sale have been presented as held for sale in the consolidated balance sheets as of March 31, 2022 and March 31, 2021. The sale was completed on May 25, 2022, and an estimate of the impact to the financial statements cannot be made at this time (as the closing balance sheet is still being finalized).

	March 31, 2022 *(in millions of dollars)*
Current assets:	
Cash and cash equivalents	$ 8
Accounts receivable	318
Allowance for doubtful accounts	(62)
Unbilled revenues	57
Inventory	51
Regulatory assets	90
Derivative instruments	56
Other	16
Total current assets	534
Property, plant and equipment, net	4,004
Non-current assets:	
Regulatory assets	437
Goodwill	780
Postretirement benefits	44
Derivative instruments	12
Other	28
Total non-current assets	1,301
Total assets	$ 5,839

	March 31, 2022
	(in millions of dollars)
Current liabilities:	
Accounts payable	**$ 189**
Current portion of long-term debt	**14**
Taxes accrued	**43**
Interest accrued	**16**
Regulatory liabilities	**177**
Derivative instruments	**3**
Renewable energy certificate obligations	**33**
Payroll and benefits accruals	**14**
Environmental remediation obligations	**8**
Other	**91**
Total current liabilities	**588**
Non-current liabilities:	
Regulatory liabilities	**616**
Asset retirement obligations	**10**
Postretirement benefits	**10**
Environmental remediation obligations	**95**
Derivative instruments	**3**
Operating lease liabilities	**15**
Other	**18**
Total non-current liabilities	**767**
Long-term debt	**1,495**
Total liabilities	**2,850**
Net Assets	**$ 2,989**

The Company's consolidated statements of operations and comprehensive income include $155 million for the year ended March 31, 2022 and $165 million for the year ended March 31, 2021 of Income before income taxes resulting directly from the operations of Narragansett.

7-28 Moody's Credit Opinion National Grid North America Inc 08/2018

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7-29 Moody's Credit Opinion National Grid North America Inc 05/2019

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7-30 Moody’s Issuer Comment National Grid North America Inc 08/2019

This document contains confidential information and is excluded from this public version.

7-31 Moody's Credit Opinion National Grid North America Inc 09/2020

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7-32 Moody's Rating Action National Grid plc and most subsidiaries 03/2021

This document contains confidential information and is excluded from this public version.

7-33 Moody's Credit Opinion National Grid North America Inc 05/2022

This document contains confidential information and is excluded from this public version.

7-34 Standard & Poor's Rating Report National Grid North America Inc 09/2018

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7-35 Standard & Poor’s Research Update National Grid North America Inc 11/2019

This document contains confidential information and is excluded from this public version.

7-36 Standard & Poor’s Research Update National Grid North America Inc 08/2020

This document contains confidential information and is excluded from this public version.

7-37 Standard & Poor’s Research Update National Grid North America Inc 03/2021

This document contains confidential information and is excluded from this public version.

7-38 Standard & Poor’s Research Update National Grid North America Inc 08/2021

This document contains confidential information and is excluded from this public version.

7-39 Standard & Poor's Rating Report National Grid North America Inc 11/2022

This document contains confidential information and is excluded from this public version.

7-40 Letter of financing support from Bank of America

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