



**NOTICE OF MEETING AND AGENDA**

April 17, 2024

TO THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY:

PLEASE TAKE NOTICE that a regular meeting the (266<sup>th</sup>) meeting of the New York State Energy Research and Development Authority (“Authority”) will be held at the NY Green Bank Office located at 1333 Broadway, Suite 300, New York, New York and 17 Columbia Circle, Albany, New York on Monday, April 29, 2024, commencing at 2:00 p.m., for the following purposes:

***I. Discussion Agenda:***

1. To receive a report from the President and CEO.
2. To consider and act upon a resolution commending Commissioner Basil Seggos.
3. To consider a resolution to enter into a private session to discuss attorney-client privileged matters, and to enter into an executive session for the purposes of discussing: (1) the employment history of a particular person, and (2) the financial condition of the Authority.
4. To consider appointments to the Authority’s various Committees.
5. To receive a report from the Program Planning Committee and to consider and act upon a resolution approving *NYSERDA’s Strategic Outlook for 2024-2027*.
6. To receive a report from the Governance Committee.
7. To receive a report from the Audit and Finance Committee.
8. To receive a report from the Waste and Facilities Management Committee.
9. To consider and act upon a resolution authorizing the Authority to adopt and issue a Notice of Adoption to establish a new Part 510 of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York.

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10. To receive a report on the Authority's Diversity, Equity, and Inclusion work.
11. To receive a status report on New York Cap-and-Invest.

## ***II. Consent Agenda***

1. To consider and act upon resolutions approving:
  - a. amendments to the Authority's Conflict of Interest Policy;
  - b. the financing of the Green Jobs – Green New York Program; and
  - c. the periodic contracts report.

Members of the public may attend the meeting at any of the above locations or via the video conference which can be accessed at <https://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings>.

The Authority will be posting a video and a transcript of the meeting to the web as soon as practicable after the meeting. The video and transcript will be posted at <http://www.nyserda.ny.gov/About/Board-Governance/Board-and-Committee-Meetings>.

A handwritten signature in blue ink that reads "Peter Costello". The signature is written in a cursive, flowing style.

Peter Costello  
Secretary

**PRESIDENT & CEO REPORT**  
**(Oral Report)**

Resolution No. \_\_\_\_\_

WHEREAS, the Honorable Basil Seggos, Commissioner of the New York State Department of Environmental Conservation, has served with distinction as a Member of the New York State Energy Research and Development Authority for eight years; and

WHEREAS, Commissioner Seggos's leadership and insight were instrumental in coordinating and harmonizing the clean energy related mission and work of the Department and the Authority; and

WHEREAS, Commissioner Seggos's tenure was marked by close collaboration in the continued success of the Authority's mission and strategic direction, including serving as the Co-Chair of the Climate Action Council, spending three tireless years developing the recommendations contained within the Scoping Plan; followed by a commitment to the realization of the goals of the Climate Leadership and Community Protection Act, most notably in their efforts to support the study and advancement of the New York Cap and Invest proposal, and other efforts to maximize the environmental, energy, and economic benefits to the People of the State of New York; and

WHEREAS, the Members of the Authority wish to recognize Commissioner Seggos for his service, dedication and diligence as a Member of the Authority and to memorialize his vision, dedication, and commitment of the Authority and the advancement of its mission;

NOW, THEREFORE, BE IT RESOLVED THAT, the Members of the New York State Energy Research and Development Authority Board, assembled on this 29<sup>th</sup> day of April, 2024, commend the Honorable Basil Seggos, and express their deepest appreciation and respect for his contributions to the Authority and the betterment of the State of New York, the Members wish him well in his future endeavors.

Resolution No. \_\_\_\_

RESOLVED, that pursuant to Section 108 of the Public Officers Law, the Members shall convene in private session on April 29, 2024 for the purpose of discussing attorney-client privileged matters; and

RESOLVED, that pursuant to Section 105 of the Public Officers Law, the Members of the New York State Energy Research and Development Authority shall convene in executive session on April 29, 2024 for the purposes of discussing: (1) the employment history of a particular person and (2) the financial condition of the Authority.

Resolution No. \_\_\_\_\_

RESOLVED, that pursuant to Section 1852(9) of the Public Authorities Law and Section 2 of Article III of the By-laws of the Authority, the Authority hereby appoints Marie Therese Dominguez to the Program Planning Committee.

# Toward a Clean Energy Future: A Strategic Outlook



**2024-27**



**NYSERDA**



# FROM THE PRESIDENT AND CEO

**To our colleagues, partners, and fellow New Yorkers:**

NEW YORK STATE'S JOURNEY TO BECOMING  
A FULLY DECARBONIZED ECONOMY IS  
WELL UNDERWAY.

In the next three years, our State will make even greater progress through the examination of new technologies to achieve a zero-emission grid and flexible loads; the influx of new federal dollars into the energy efficiency and electrification market; the integration of resiliency considerations into infrastructure planning; the continued growth and diversification of our clean energy workforce; and the advancement of policies that will transform the landscape for energy pricing and facilitate an even greater expansion of clean energy markets.

The State's leadership demonstrates to the country that a commitment to clean energy ensures a path toward future energy systems that are affordable, reliable, and equitable, all while improving quality of life, expanding our economy, and most importantly, protecting our environment. The New York State Energy Research and Development Authority (NYSERDA) is well positioned to continue helping New York State chart that path over the years to come.

While there is much to look forward to in the years ahead, 2023 also marked a turning point as clean energy markets entered a critical stage of maturation across the State and, largely due to the cross-cutting impacts of a global energy crisis, faced more challenges than in prior decades. Despite these challenges, with Governor Hochul's steadfast leadership and support, in the coming three years NYSERDA will maintain our core responsibilities of advancing clean energy innovation and investments, working to combat climate change; improving the health, resiliency, and prosperity of New Yorkers; and delivering benefits equitably to all New Yorkers.

In each facet of our work, NYSERDA seeks to maximize our impact in the marketplace by developing policies or delivering programs, transforming markets to allow private actors to create new value and opportunity, and coordinating the contributions of others that will be necessary for NYSERDA's and New York's success. We recognize we are at an intersection that is full of new opportunities to advance our efforts in partnership with local, State, and federal government and private partners from across a variety of sectors.

Some of the opportunity areas we seek to build on over the next three years include:

- **Expansion of the Clean Energy Economy:** NYSERDA is actively supporting career pathway programs aimed at educating, training, and providing services to place individuals—especially those from vulnerable populations—into clean energy occupations, addressing the growing demand for workers in this sector. Such programs have helped drive the creation of approximately 171,000 family-sustaining clean energy jobs statewide, with growth in this sector outpacing overall job growth in New York State. NYSERDA is also focused on analyzing local clean technology manufacturing and supply chains to determine where the State can be the most competitive in attracting investments and jobs. We are coordinating with State partners on a recruitment campaign to bring clean energy firms to New York State, leveraging Federal Inflation Reduction Act tax credits and funding. Through these efforts, we are fostering a robust and equitable expansion of our State's economy overall.



- **Infusion of Federal Dollars:** New York State seeks to demonstrate clean energy leadership both within our State and for others across the country. We expect to see this transition accelerate thanks to the unprecedented amount of federal dollars directed to support clean energy programs. Over the next few years, we will work to leverage these dollars to accelerate our efforts in New York. For example, in December 2023, New York was one of the first states in the country to submit an application to the Department of Energy for funding through the Home Electrification and Appliance Rebates program to amplify the impact of our EmPower+ program, which serves low- and moderate-income homeowners. In total, NYSERDA alone is working to deliver nearly \$1.2 billion in federal funding.
- **Advancing State Energy Policy:** NYSERDA will continue its role as the State’s chief energy policy analyst, driving the development of policies that contribute to a stable, resilient, zero-emissions grid. For instance, under Governor Hochul’s direction, NYSERDA and the Department of Environmental Conservation (DEC) took significant steps this past year to advance an economywide cap-and-invest program. NYSERDA will also continue to inform policy development with robust technical analysis, as evidenced by the technical feasibility study we have launched to support the Public Service Commission proceeding on the technology resources needed to achieve a zero-emissions grid by 2040.
- **Facilitating an Equitable Clean Energy Transition:** NYSERDA continues to advance equity both externally and internally through its programs and internal operations. Through programs such as Clean Energy Communities, which has served more than half the local governments in the State, we are better equipping communities of all sizes to make informed and affordable decisions on their own clean energy futures. We have doubled down on this work through the Regional Clean Energy Hubs program, a network of community-based organizations that serve as a one-stop shop for individuals and businesses to access resources that can help them reduce their energy usage and cut costs, or even seek training or employment in the clean energy sector. Furthermore, the Governor’s 2024 State of the State announced statewide Solar for All, the expansion of NYSERDA and National Grid’s successful Solar for All program. This would increase the State’s use of solar energy resources and result in energy bill savings for low-income New Yorkers.

With this context, I’m proud to present NYSERDA’s Strategic Outlook for 2024-2027, which builds on the progress we’ve made and harnesses the opportunities of this moment to rapidly increase our impact across the State and enhance our leadership across the country and, indeed, the world. The Strategic Outlook focuses our vision on the following key mission outcomes that we seek to achieve as an organization, with a new standalone mission outcome added this year to reflect the critical work we are doing to decarbonize the transportation sector:

- Greenhouse Gas Emissions Reduction
- Clean Electricity
- Clean and Efficient Buildings
- Clean Transportation
- Clean Energy Jobs and Economy
- Sustainable and Climate-Resilient Communities

I want to express my sincere gratitude to the NYSERDA team, including our board, for your support and dedication to the success of our clean energy initiatives. Together, we have made remarkable progress in advancing clean energy and creating opportunities for all New Yorkers. And on behalf of NYSERDA, I would also like to thank our community and industry partners. As we continue our journey toward a more sustainable future, I invite all of you to join us in taking action. Your commitment is instrumental in driving positive change and ensuring a brighter tomorrow for generations to come. Thank you for standing with us as we work tirelessly to build a cleaner, more resilient New York. Together, we can achieve our shared goals and leave a lasting legacy of environmental and energy stewardship.

Sincerely,



**Doreen M. Harris, President and CEO, NYSERDA**

This forward-looking document reflects State policy and NYSERDA’s plans as of April 2024. New York State’s energy policy objectives continue to develop in response to the evidence that aggressive action is needed to combat climate change—and greater ambition is possible. Visit NYSERDA’s website for the latest information.

[nyserderda.ny.gov/Strategic-Outlook](https://nyserderda.ny.gov/Strategic-Outlook)

# CONTENTS

4

## NYSERDA AND ITS CONTEXT

- 4 New York State's Commitments
- 6 NYSERDA's Role
- 9 Federal Infrastructure and Climate Investments

11

## MISSION OUTCOMES FOR 2024–2027

- 12 Greenhouse Gas Emissions Reductions
- 18 Clean Electricity
- 24 Clean and Efficient Buildings
- 30 Clean Transportation
- 35 Clean Energy Jobs and Economy
- 42 Sustainable and Climate-Resilient Communities

46

## APPENDIX: NYSERDA'S STRUCTURE

DRAFT

# NYSERDA AND ITS CONTEXT

## NEW YORK STATE'S COMMITMENTS

Governor Kathy Hochul is driving an energy agenda for New York that can take on climate change, provide affordable and reliable energy, build a robust economy with new job opportunities, and situate our State to take the lead on the advanced technologies that will shape a decarbonized economy. This agenda places New York State in a national leadership role, providing a vision for others to chart a path toward a just and equitable transition to decarbonization while investing in Disadvantaged Communities.

### New York State Energy Plan

**As Chair of the State Energy Planning Board, NYSERDA will lead the examination of energy transitions to support a decarbonizing economy in the next State Energy Plan.**

The State Energy Plan employs a multi-disciplinary approach to inform State energy policy, examining the energy, environmental, economic, societal, and public health impacts of the changes in electricity, fuels, transportation, and related sectors.

By examining existing and recommending new policies, analyzing trends in energy markets, and assessing the development and acceptance of new energy technologies, the State Energy Plan aims to provide decision-makers and the general public with a better understanding and guidance for decisions to advance the State's energy transitions

## Climate Leadership and Community Protection Act

**The Climate Act lays the groundwork for achieving New York State's nation-leading climate targets while calling for an orderly and just transition to clean energy that creates jobs and continues to grow our clean, green economy.**

At the end of 2022, the Climate Action Council adopted New York's Scoping Plan,\* which lays out the State's energy and climate trajectory under the Climate Act. The Scoping Plan set the stage for regulatory and legislative action to unfold and for agencies to begin the work of implementing the Council's numerous recommendations.

Furthermore, the Climate Act stipulates that a minimum of 35%—with a goal of 40%—of benefits of clean energy investments will benefit Disadvantaged Communities. In March 2023, the Climate Justice Working Group finalized the criteria for identifying Disadvantaged Communities. In early 2024, draft Disadvantaged Communities Reporting Guidance was issued for public review and comment. This guidance will help State entities determine progress toward the Disadvantaged Communities investment target. This goal accounts for overall State agency, authority, and entity benefits and investments in clean energy and energy efficiency programs, projects, or investments in the areas of housing, workforce development, pollution reduction, and low-income energy assistance and economic development that benefits Disadvantaged Communities.

\* [climate.ny.gov/scoping-plan](https://climate.ny.gov/scoping-plan)



NYSERDA plays a critical role in charting the direction of our State's energy and climate policies and implementing this ambitious agenda.

**RESILIENT and DISTRIBUTED GRID**  
1,500 MW of energy storage

**ENERGY EFFICIENCY and BUILDING DECARBONIZATION**  
185 Tbtu end-use savings in buildings and industrial facilities

**GHG REDUCTION**  
40% reduction in greenhouse gas emissions from 1990 levels

**RESILIENT and DISTRIBUTED GRID**  
3,000 MW of energy storage\*  
\*Governor Hochul has called for an increase from 3,000 MW to 6,000 MW

**ENERGY EFFICIENCY and BUILDING DECARBONIZATION**  
1 million electric homes and 1 million electrification-ready homes

**CLEAN TRANSPORTATION**  
100% light duty zero-emission vehicle sales

**CLEAN ELECTRICITY**  
100% zero-emission electricity

**GHG REDUCTION**  
85% reduction in greenhouse gas emissions from 1990 levels

**now**

**CLEAN ENERGY ECONOMY**  
171,000 clean energy jobs

**by 2025**

**RENEWABLE ENERGY**  
6,000 MW of distributed solar

**by 2030**

**RENEWABLE ENERGY CLEAN ENERGY STANDARD**  
70% electricity from renewable energy

**CLEAN ENERGY ECONOMY**  
More than 200,000 new jobs added

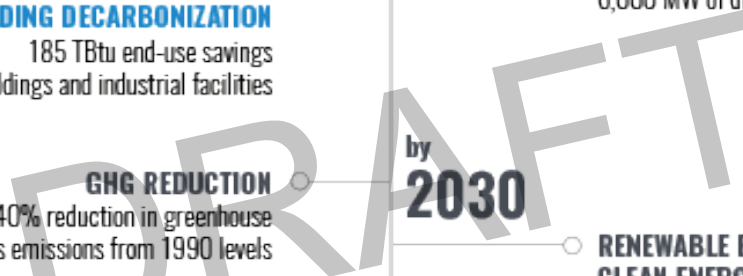
**RENEWABLE ENERGY**  
10,000 MW of distributed solar

**by 2035**

**RENEWABLE ENERGY**  
9,000 MW of offshore wind

**by 2040**

**by 2050**



## NYSERDA'S ROLE

As New York State's clean energy and climate innovation and development agency, NYSERDA plays a central role in planning, designing, and implementing the State's nation-leading policies, programs, and actions—all to deliver a cleaner, healthier, and more prosperous future for all New Yorkers.

### **Our Vision:**

**New York is a global climate leader building a healthier future with thriving communities; homes and businesses powered by clean energy; and economic opportunities accessible to all New Yorkers.**

### **Our Mission:**

**Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.**

### **Our Promise:**

**NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.**

**NYSERDA is on the frontlines of a global energy transition.**

**We bring energy expertise and public service to the challenges of fighting climate change and accelerating the arrival of a clean energy future across all corners of our State and our economy.**

NYSERDA works to foster the adoption of the clean energy technologies and innovations needed to address climate change and improve our quality of life. This work helps families and businesses access affordable and clean energy, energy efficiency and resiliency measures, and all-electric homes and vehicles.

At the same time, NYSERDA encourages the innovation and market competition that deliver value to consumers. NYSERDA uses a data-driven, engagement-focused approach to guide program design and provide high levels of accountability and transparency, stewarding public funds toward prudent investments in a wide variety of clean technologies and green infrastructure.

**NYSERDA's role in pursuing these outcomes focuses on:**

**Market acceleration and resource development**

- Supporting customers and projects to accelerate uptake of clean technologies by helping to address a range of barriers, including finance, supply chain and workforce development, siting, technical assistance, building consumer awareness and confidence, and more
- De-risking energy transitions and deployment, from technological and business model innovation, to demonstration projects and broad commercialization
- Administering key resource deployment programs, including for large-scale renewables and energy storage projects
- Providing targeted financial support where costs present a persistent barrier, such as for low- to moderate-income (LMI) consumers and residents of Disadvantaged Communities

**Minimizing cost and maximizing benefits**

- Leveraging federal funds
- Reducing hard and soft costs of clean energy development by driving demand and focusing the efforts of key stakeholders, as well as by focusing on technological and process innovation
- Proactively driving efforts to attract clean energy economic development, manufacturing, and supply chain growth, and helping other high-tech industries achieve robust sustainability outcomes

**Policy and analysis**

- Instilling confidence in markets and consumers through information, credible analysis, and education
- Designing and administering novel programs and pilots to meet the needs of emerging policy priorities and deep decarbonization pathways
- Investigating and designing ambitious energy and climate strategies and policies for the long term

**Equity and partnerships**

- Leveraging program investments to support job creation in the clean energy economy and expanded access to economic opportunities for underserved populations and Disadvantaged Communities
- Enabling communities, residents, and businesses to take local action on clean energy, climate, and resiliency

**In a dynamic world with global challenges including inflation, high interest rates, supply chain disruptions and international conflict, NYSERDA aims to be a beacon of certainty and reliability for stakeholders and partners in New York State, exhibiting the steadfast, long-term approach and focused attention that is needed to successfully achieve the clean energy transition in the years ahead.**

# Building Blocks of New York’s Clean Energy Agenda



## Climate Act Scoping Plan

Creating policies and recommendations to achieve 40% GHG reduction by 2030 and 85% GHG reduction by 2050



## Clean Energy Fund

Designating more than \$7.7 billion to fund four key program portfolios:

- > NY Green Bank
- > Market Development
- > Innovation & Research
- > NY-Sun



## Clean Energy Standard

Transforming the generation of electricity serving New York State to help reach 70% renewable by 2030 and 100% zero-emission by 2040



## Zero-Emission Vehicles

Reducing transportation emissions through build-out of electric vehicle market and infrastructure, support for electrification of fleets and trucks



## New Efficiency: New York

Delivering energy efficiency savings and emissions reductions with comprehensive building strategies



## NYS Clean Heat

A suite of utility-run incentives—supported by NYSERDA’s market development activities—to replace onsite fuel combustion for heating and cooling with efficient, electric heat pumps (air, ground)



## Regional Greenhouse Gas Initiative (RGGI)

Growing cooperative effort among northeast/mid-Atlantic states to cap and reduce CO<sub>2</sub> emissions from power plants



## New York Cap-and-Invest

New economy-wide program driving emissions reductions, investing proceeds in an equitable manner, sharing benefits with consumers, and maintaining competitiveness of New York’s industries

## FEDERAL INFRASTRUCTURE AND CLIMATE INVESTMENTS


In 2021 and 2022, the federal government passed a trio of laws—the Infrastructure Investment and Jobs Act (IIJA), the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act, and the Inflation Reduction Act (IRA)—that collectively approved the largest amount of federal funding, and many of the most consequential policies, to directly address climate and energy issues in our nation’s history. Combined, these transformational acts will:

- Increase domestic manufacturing capabilities for critical clean energy products
- Create family-sustaining jobs
- Lower energy costs for families
- Reduce emissions and pollution
- Modernize our electric grid and improve its resiliency
- Improve the health, comfort, and resiliency of our country’s aging homes and building stock
- Expand networks of fast chargers and access to clean and reliable public transportation
- Focus investments in Disadvantaged Communities and to populations that have been underserved historically
- Invest in innovation to drive further economic growth and job creation


This federal funding will be an important complement to New York State’s robust policy agenda and program portfolios. In particular, the passage of new tax credits has the potential to unlock significant private investment in new and emerging technologies. More than half of the climate and energy funding approved in the IRA was authorized in the form of tax credits. The Scoping Plan estimates that the IRA can reduce New York State’s cost to meet the Climate Act’s requirements by up to \$70 billion through 2050.

### The IRA reforms energy tax incentives through a mix of extensions, modifications, and new programs in the coming years


#### Selected tax credit modifications in the IRA\*




**\$2,000**  
per year consumer tax credit for the purchase of heat pumps, heat pump hot water heaters, biomass stoves, and boilers  
*(25C, nonbusiness energy property credit)*




**\$30**  
per MWh for zero GHG electricity generation placed into service after 2024: reduces to \$23 in 2034 and \$15 in 2035  
*(45D, production tax credit; 45Y, clean electricity)*




**Adders/ Bonuses**  
for prevailing wage, domestic content, energy communities, low income, and more



**\$7,500**  
per vehicle consumer tax credit for qualifying electric vehicles (EVs)  
*(30D, clean vehicle credit)*



**30%**  
tax credit for standalone energy storage systems  
*(48A, investment tax credit)*



**\$3**  
per kilogram for the production of qualified clean hydrogen  
*(45V, clean hydrogen tax credit)*

\* Source: [www.mckinsey.com/industries/public-and-social-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it](https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it)



Federal funding coming to New York State will be provided by several federal agencies and administered by many State agencies. Interagency partnership and collaboration will be critical to the effective use of these funds.

NYSERDA's approach to leveraging federal funding is multipurposed: reducing costs to New Yorkers, advancing progress toward the Climate Act's goals, ensuring benefits are delivered to underserved and historically marginalized communities, creating new jobs, reducing emissions, and developing infrastructure while driving health and economic benefits.

**NYSERDA alone is working to deliver nearly \$1.2 billion in federal funding through programs administered by federal agencies. NYSERDA tracks and responds to federal funding opportunities to ensure that New York State, local governments, individuals, businesses, Disadvantaged Communities, and other stakeholders can realize the maximum benefits from these investments, helping to achieve our climate and energy goals.**

Several programs to highlight the federal investments in clean energy and this collaboration include:

- **Home Electrification Appliance Rebate program and the Home Efficiency Rebate program:** New York State will receive \$317 million in formula grants to support energy efficiency and home electrification, with a focus on lower income housing and housing located in Disadvantaged Communities. The Department of Energy (DOE) issued guidance for both of these two transformative programs in 2023, and New York State (via NYSERDA) was one of only four states to submit an application by the end of 2023 to fast-track parts of this funding.
- **Weatherization Assistance Program:** \$290 million in federal funding has been allocated to the New York State Homes and Community Renewal program as part of the IIJA, supporting critical energy efficiency improvements in affordable housing.
- **National Electric Vehicle Infrastructure program:** A \$175 million investment over a five-year grant period to develop and implement a robust network of fast chargers across New York State.
- **Greenhouse Gas Reduction Fund:** The Environmental Protection Agency (EPA) announced awardees for \$20 billion in funding through the Inflation Reduction Act's Greenhouse Gas Reduction Fund in April 2024. As part of this announcement, the Coalition for Green Capital (CGC) was one of three awardees through the National Clean Investment Fund. NY Green Bank is a sub-awardee in the CGC application and is now well positioned to receive significant new funding to accelerate their lending activity in New York, with a focus on driving equitable climate solutions. CGC received \$5 billion and NY Green Bank is working with CGC to finalize negotiations regarding NY Green Bank's total sub grant funding amount.

# MISSION OUTCOMES FOR 2024–2027

The following chapters present NYSERDA’s primary mission outcomes. Each outcome chapter summarizes the relevant recommendations from the Scoping Plan, and discusses both NYSERDA’s unique role in delivering on the outcome and corresponding strategies over the planning horizon. Indicators of progress are included to track movement in the market and show progress toward goals. Selected key programs in each mission outcome are highlighted in more detail.

Further information about programs and other resources referenced throughout this document can be found on NYSERDA’s website ([nyserderda.ny.gov](https://nyserderda.ny.gov)).

**NYSERDA works to advance the following mission outcomes in support of New York State’s energy transition:**



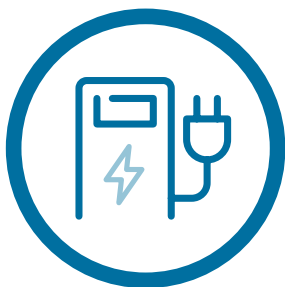
**GREENHOUSE GAS EMISSIONS REDUCTION**



**CLEAN ELECTRICITY**



**CLEAN AND EFFICIENT BUILDINGS**



**CLEAN TRANSPORTATION**



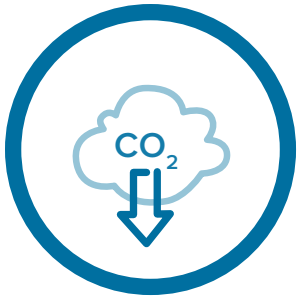
**CLEAN ENERGY JOBS AND ECONOMY**



**SUSTAINABLE AND CLIMATE-RESILIENT COMMUNITIES**

**Progress in these mission outcomes will be an integral contribution toward the State’s ambitious climate objectives.**

Critically, NYSERDA will focus on helping historically marginalized New Yorkers access job opportunities and the growing clean energy economy, providing New York families with cleaner places to live, work, and play, and empowering communities and businesses to drive climate action and public health wins. Accordingly, a number of themes (such as equity, resiliency, and innovation) are addressed in this Strategic Outlook across multiple mission outcomes.



# GREENHOUSE GAS EMISSIONS REDUCTION

## STATE POLICY GOAL

**The Climate Act sets economy-wide greenhouse gas (GHG) emissions limits at 40% lower than 1990 levels by 2030 and 85% by 2050, and sets GHG emissions neutrality goal by 2050.**

**At NYSERDA, a wide range of initiatives are underway to contribute to these goals.**

This includes programs that set emissions caps and price signals for markets to move toward lower and zero-emission alternatives (in particular the Regional Greenhouse Gas Initiative or “RGGI,” and New York Cap-and-Invest or “NYCI”); foundational, advanced technology supporting action such as NYSERDA’s innovation portfolio; and the spectrum of market-transforming efforts that reveal and channel value of clean energy action to the full range of market actors (including building owners and operators, homeowners, equipment manufacturers, and funders) discussed throughout this Strategic Outlook.

By doing its part to cut New York’s GHG emissions that cause climate change, New York State will help to inspire similar market-moving activities in many other jurisdictions.

## SCOPING PLAN

The Scoping Plan recommends that New York State implement a cap-and-invest program, underpinning NYSERDA and DEC’s work underway since 2023 to develop and implement the NYCI program. The Scoping Plan recognizes the crucial role of such a program to unlock economywide GHG emissions reductions, support the State’s burgeoning clean technology economy, send a consistent price signal to individuals and businesses, and utilize the proceeds from emission allowance auctions to mitigate any costs from the program to New Yorkers and invest in decarbonization and workforce development activities.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

- **Policy and analysis.** Help implement and communicate the roadmap of policies and recommendations to achieve the Climate Act's goals under the Scoping Plan. Guide and facilitate State Energy Plan development. Help shape energy policies throughout New York State and implement mandates and Executive Orders. Conduct analyses to better spotlight and maximize the co-benefits of GHG reductions—such as air quality improvements from reduced co-pollutant emissions—with a focus on benefits in Disadvantaged Communities. Support development of the statewide GHG inventory, assisting DEC as it updates emissions methodology rulemaking and implementation.
- **GHG programs.** Help spearhead regional GHG program reviews alongside other states—in particular, as part of RGGI. Support policy development, analysis, and administration of NYCI.
- **Partnerships.** Work in close partnership with other agencies and authorities, including Department of Environmental Conservation (DEC), Department of Public Service (DPS), Department of Transportation (DOT), Homes and Community Renewal (HCR), NY Power Authority (NYPA), and Long Island Power Authority (LIPA). Facilitate State agencies' efforts to lead by example and drive toward operations with reduced or eliminated emissions.
- **Federal funds.** Coordinate and maximize equitable investment of federal climate and clean energy funds under the Infrastructure Investment and Jobs Act, the CHIPS and Science Act, Inflation Reduction Act, and other federal funding in partnership with other New York State agencies and authorities.
- **Gas system transition.** Support the Public Service Commission (PSC) in advancing a comprehensive planning process toward a managed, phased, and just transition from fossil natural gas, with a focus on safety, equity, reliability, and affordability. Promote the development of robust coordinated electric and gas system planning practices, analytical tools, and regulatory policies to enable strategic downsizing of the gas network. Incorporate lessons from thermal energy network pilots to support neighborhood-scale decarbonization.
- **Leading by example.** Guide New York State agencies toward the climate, energy, and sustainability goals set forth in Executive Order 22, while continuing to lead by example through NYSERDA's own operations.



### INDICATORS OF PROGRESS

- Levels and trends in GHG emissions from sources statewide and within priority sectors
- Indicators across all other mission outcomes

## Energy Innovation

### NYSERDA's Innovation and Research portfolio supports decarbonization and the clean energy transition by:

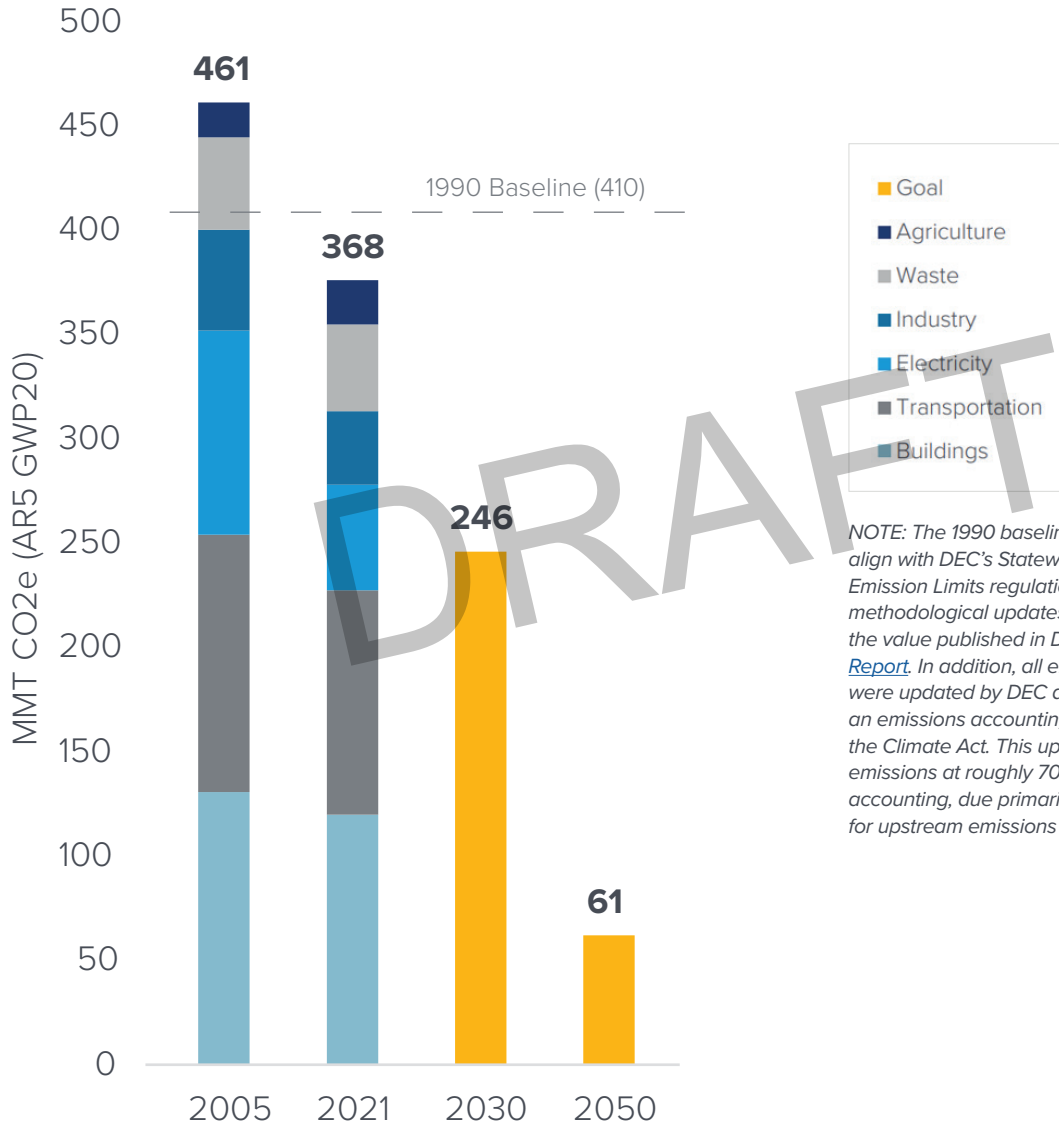
- Building understanding of, and momentum for, technologies necessary to meet the State's Climate Act goals.
- Demonstrating the role of innovation in deep decarbonization, helping the State develop pathways to achieve the most challenging aspects of the long-term emission reduction goals.
- Contributing to resiliency, technology cost reductions, job growth, and economic development.

NYSERDA's innovation activities include awarding funds through competitive solicitations, supporting technologies through public-private partnerships, addressing barriers to commercialization, and providing research and analysis. Innovation initiatives specific to each energy sector are described in the various mission outcomes covered in this Strategic Outlook.

NYSERDA's ongoing program review for the Innovation and Research portfolio will provide a quantitative and qualitative summary of performance, including data trends, lessons-learned, findings from relevant evaluations, and identification of any necessary modifications to further support and align with the Climate Act or otherwise improve the portfolio's effectiveness.

# 2050 target: 85% reduction

Relative to 1990 emissions baseline

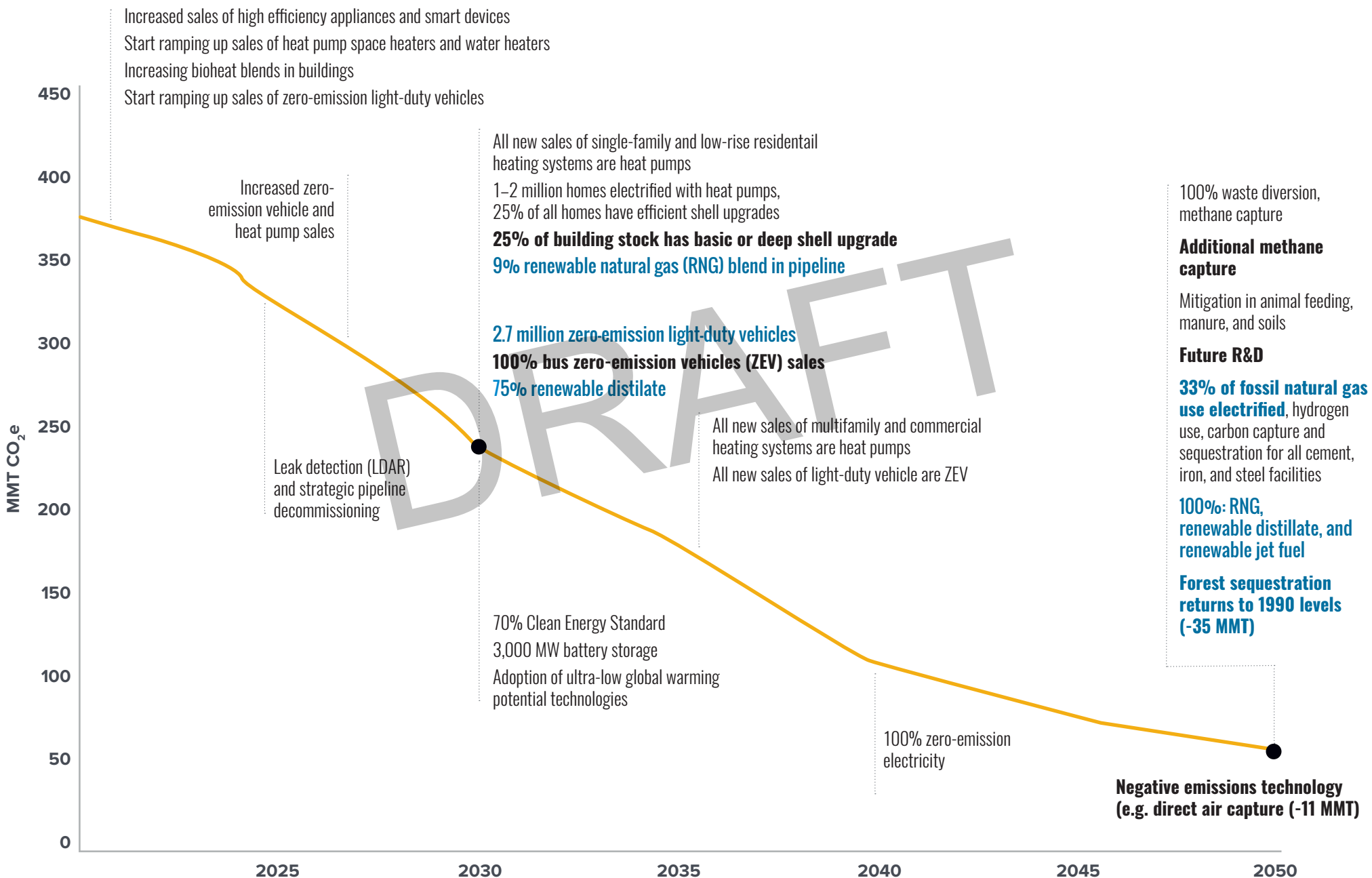


*NOTE: The 1990 baseline and the 2030 and 2050 values align with DEC's Statewide Greenhouse Gas (GHG) Emission Limits regulation (Part 496). Due to ongoing methodological updates, this 1990 value differs from the value published in DEC's annual GHG Emissions Report. In addition, all emissions inventory numbers were updated by DEC at the end of 2021 to incorporate an emissions accounting methodology that aligns with the Climate Act. This update put New York's baseline of emissions at roughly 70% higher than pre-Climate Act accounting, due primarily to the changes in accounting for upstream emissions and global warming potential.*

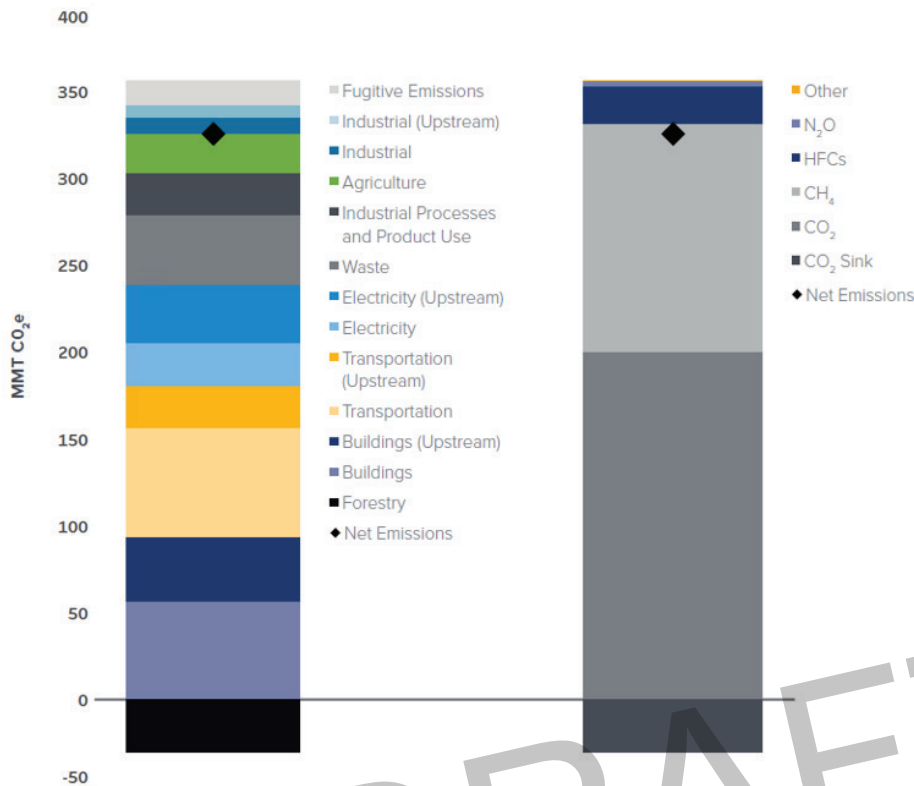
CLIMATE ACTION SNAPSHOT: NEW YORK'S SCOPING PLAN

Highlights from the 2022 Final Scoping Plan issued by the Climate Action Council in December 2022

— Climate Act Scoping Plan - Mitigation Scenario  
 ● Climate Act gross emissions limits



CURRENT ESTIMATED 2021 GREENHOUSE GAS EMISSIONS BY SECTOR AND TYPE



HIGHLIGHTED PROGRAMS AND INITIATIVES

**REGIONAL GREENHOUSE GAS INITIATIVE\***

Under the RGGI program, multiple states in the Northeast (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont) have come together to establish a regional cap on carbon dioxide emissions from power plants. Participating states sell emission allowances at quarterly auctions, in proportion to their respective share of the regional cap. NYSERDA invests New York’s share of the resulting revenue into programs and initiatives that support GHG emissions reductions and clean energy. The participating states are currently undertaking a periodic review that includes technical analysis and consideration of public comments. As the program review moves forward, the RGGI states will release a draft updated Model Rule, conduct public engagement to solicit comments and feedback on the draft model rule, and review results of the technical analysis (e.g., customer bill impacts and the stringency of the regional emissions cap).

**NEW YORK CAP-AND-INVEST (NYCI)\*\***

NYCI is a new program scheduled to launch in 2025 that will enact an economy-wide emissions limit for the State that will gradually decrease over time. In early 2023, Governor Hochul—reflecting Scoping Plan recommendations—directed DEC and NYSERDA to begin NYCI program design and implementation, according to principles of affordability, climate leadership, job-creation, preserving competitiveness, investing in Disadvantaged Communities, and funding a sustainable future. DEC and NYSERDA published a package of preliminary analysis and program design pre-proposals at the end of 2023 and start of 2024, quantifying the expected benefits from the program in terms of improved health outcomes (including reduced mortality and fewer heart attacks and asthma attacks) and an estimated 30,000 new jobs by 2030. NYSERDA’s role in delivering the program will include auctioning allowances and investing proceeds to accelerate New York’s clean energy transition.

\* <https://www.rggi.org/>

\*\* <https://capandinvest.ny.gov>

## HIGHLIGHTED PROGRAMS AND INITIATIVES

**EXECUTIVE ORDER 22**

Recognizing the importance of a lead-by-example role for State agencies in the clean energy transition, this Executive Order, adopted in 2023, sets a range of targets across electricity use and energy use in transport and building operations, green procurement, waste diversion, and other sustainability goals to be achieved by State agencies in their operations. NYSERDA fulfills a role as co-chair of the Green NY Council set up to help facilitate the process with agencies to start implementing these targets and directives.

**AIR QUALITY ANALYSIS**

NYSERDA has significantly strengthened its capability to estimate potential changes in air quality and ensuing public health outcomes (such as by evaluating health benefits when initiatives to reduce GHG emissions also reduce co-pollutant emissions) and by evaluating health effects in different communities (including Disadvantaged Communities). These enhanced modeling approaches have been demonstrated in analysis supporting development of the New York Cap-and-Invest program and in the Climate Act Disadvantaged Communities Investment and Benefits Reporting Guidance.

**TRANSITION AWAY FROM THE FOSSIL NATURAL GAS SYSTEM**

Consistent with the Scoping Plan's electrification focus, the gas system will need to be strategically downsized as progress toward statewide decarbonization proceeds. Proactive planning is necessary to avoid the costs associated with operating and maintaining an underutilized gas system, the corresponding risks of stranded assets, and sharply increasing energy bills for remaining gas customers.

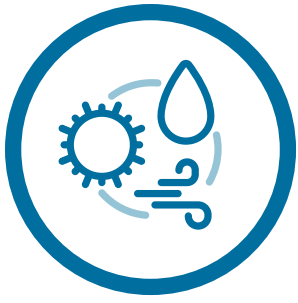
Managing this transition will require such improvements as integrated gas and electric system planning; the implementation of non-pipeline alternatives and thermal energy networks (which would allow whole streets or neighborhoods to transition away from gas in a coordinated manner); workforce development to support current gas workers and accelerate the deployment of energy efficiency, demand response, and electrification; planning for the targeted use of alternative fuels, such as hydrogen and renewable natural gas, for the most essential and high-value end-uses; and the use of novel utility cost recovery practices that allocate system costs to those customers best equipped to bear them. It is also essential that the impacts of this transition on Disadvantaged Communities are well understood and that benefits accrue to these communities. In the meantime, given the health risks and high global warming potential of methane, utilities must continue to mitigate leaks from their transmission and distribution systems for both safety and environmental reasons.

NYSERDA is committed to being a critical thought partner to DPS, the PSC, utilities, and stakeholders across the State as we facilitate the necessary, managed transition of the fossil natural gas system in furtherance of an ambitious and equitable clean energy transition.

**HYDROGEN AND CLEAN FUELS PROGRAM**

NYSERDA's Hydrogen and Clean Fuels program will advance innovative clean hydrogen research, development and demonstration projects that drive emissions reductions in hard-to-electrify sectors. The program will also provide resiliency solutions in medium- and heavy-duty transportation and non-road applications, high-temperature industrial processes, district heating, and power generation. Some of these potential applications will see greater rollout in the near term and others in the longer term. NYSERDA will collaborate with a broad set of stakeholders to develop the building blocks for clean hydrogen infrastructure, from production, to storage, to distribution, while ensuring benefits to Disadvantaged Communities. These investments will stimulate the growth of New York State's hydrogen industry by advancing firms' technical and commercial readiness levels, assuring safety and reliability, and reducing costs, all of which will support the realization of a statewide zero-emissions grid by 2040 and a zero-emissions economy by 2050.





# CLEAN ELECTRICITY

## STATE POLICY GOAL

**The Climate Act establishes that at least 70% of New York State’s electricity should come from renewable energy sources such as wind and solar by 2030 (70x30).**

**Pursuing the 70x30 goal will move the State closer to delivering just, equitable climate action to all New Yorkers. Such action includes improving air quality, buttressing a more resilient grid, and spurring a clean economy through supply chain investments, workforce development, and job creation.**

New York State has also set technology-specific targets in the electricity sector, including 10,000 megawatts (MW) of distributed solar deployment by 2030, 3,000 MW of energy storage by 2030 (with consideration of an increase to 6,000 MW underway), and 9,000 MW of offshore wind by 2035. Progress toward these goals in the coming years will support achievement of the Climate Act’s 70x30 goal and extend beyond it to work toward achievement of the State’s target that the electric grid reach zero emissions by 2040 (0x40).

The State’s climate and energy policies and initiatives continue to drive the clean energy transition, with new large-scale and distributed renewable energy projects coming online every year. Although the decades-high inflation rate experienced globally in recent years initially slowed renewable energy development, New York State quickly responded with a 10-point Action Plan and expedited solicitations for both onshore and offshore renewable generation to maintain stability and progress of in-state renewable energy development.

Continued development of renewable generation at all levels of the State’s electric grid is further enhanced by new investments in the transmission grid recently authorized by the PSC, modernized collaborative statewide grid planning processes and more efficient and effective permitting processes. In the 21st century, the future is electric. NYSERDA is working to remove barriers, help achieve our State’s goals, and deliver benefits to New Yorkers.

## SCOPING PLAN

The Scoping Plan emphasizes that pursuant to the 70x30 mandate, New York State must aggressively procure and deploy wind, solar, and energy storage projects by continuing to fund such technologies, eliminating barriers and reducing costs to renewable energy development and operation, and improving statewide grid planning and coordination. Looking further ahead, the Scoping Plan notes that achieving statewide zero-emissions grid by 2040 will require that the State not only meet its present electric demand with clean energy, but that our grid accommodate additional capacity to power a more electrified State economy—driven by widescale building and vehicle electrification. To pursue this, New York will need to increase the share of renewables that power its grid, retire or repurpose its existing fossil fuel facilities, and integrate both distributed energy resources and energy storage technology in a manner that preserves reliability and minimizes costs to New Yorkers. The clean and resilient grid of the future should be built in a way that ensures our communities—especially Disadvantaged Communities—have a seat at the table and share in the benefits.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

- **Policy and analysis.** Support the continuous development of the policy framework and resource assessment supporting analysis that drives New York State's efforts to deliver the 70x30 and 0x40 goals, including the development of roadmaps for the next generation of market acceleration for energy storage and distributed resources, as well as the assessment of advanced nuclear technologies and their potential applications to the grid or directly serving large loads.
- **Procurements.** Facilitate continued steady, predictable procurements for large-scale and distributed renewable generation and energy storage to continue growing the in-state renewable energy industry and increase the supply of clean, renewable energy to the New York State electric grid.
- **Market acceleration: siting.** Partner with local governments by providing best practices and expert guidance to inform and spur adoption of smart local siting rules/laws. Assist communities in making fact-based decisions when examining renewable energy projects, and build community engagement to cultivate a welcoming environment for suitable renewable energy projects. Advance project development on underutilized lands, and co-location of solar and agriculture.
- **Market acceleration: interconnection.** Partner with utilities and other market participants to build transparency in interconnection processes, overcome grid constraints on project capacity, and alleviate pricing/curtailment issues through innovative and cost-effective solutions to grid constraints.
- **Market acceleration: supply chain.** Drive in-state supply chain growth through workforce training and investments in local port and manufacturing (in particular, those related to offshore wind procurements).
- **Market acceleration: finance.** Use public capital to fill financing gaps and mobilize private investment into key clean energy market segments and projects, enabling increased clean energy generation capacity in New York State.
- **Transmission.** Inform transmission planning processes to drive investment critical to enabling the integration of 20+ gigawatts of Tier 1 and offshore wind renewable projects anticipated for State goals. Continue to administer the Tier 4 program aimed at constructing new transmission line projects into NYISO Zone J (New York City).
- **Cost reductions.** Reduce costs by delivering economies of scale, removing barriers to deployment, reducing risk, and supporting innovation targeted at levelized cost of electricity and levelized cost of storage. Promote infrastructure investments such as transmission and energy storage that will unlock system efficiencies and unbottle resources to drive progress on our goals and ensure cost savings to ratepayers.
- **Partnerships.** Engage in interregional coordination with the federal government and neighboring states to address mutual opportunities related to transmission, supply chain, benefits to Disadvantaged Communities, workforce, and environmental concerns. Continue to engage with New York State Department of Tax and Finance in its implementation of the renewable energy property tax assessment model.

### Climate Resiliency

Comprehensive energy resiliency involves preparing—both sector-wide and at the asset level—for a future with climate change. In 2022, the PSC mandated Climate Change Vulnerability Studies for the first time, requiring major electric utilities to perform studies to prepare for the expected increase in severe weather expected from climate change. As NYSERDA continues to engage in transmission planning processes, it supports the incorporation of climate resiliency considerations that help prepare the sector for increasing climate risks. NYSERDA also works with partners across the State to mitigate risks from climate change while transitioning to clean, reliable energy sources, and will continue to engage in detailed sector studies and incorporate results of evolving resiliency design approaches and best practices to mitigate future climate risks.

At the asset level, recent solicitations for offshore wind projects and other large-scale renewables require proposers to consider and mitigate risks from climate hazards (such as flooding, extreme heat, and extreme storms) and incorporate lessons learned from NYSERDA-led studies (such as the 2021 Offshore Wind Climate Adaptation and Resilience Study and the Climate Impacts Assessment).

## Energy and Climate Equity

NYSERDA incorporates equity considerations as a core aspect of its role to drive the transition to clean energy:

- **Procurement design.** When evaluating projects’ economic benefits, NYSERDA prioritizes Disadvantaged Communities, climate resiliency considerations, and energy storage projects that support the phaseout of the most polluting fossil generators downstate.
- **Transmission planning.** NYSERDA participates in transmission planning to align with clean energy project development, seek important partnerships, and cultivate benefits with communities.
- **Technical assistance and predevelopment.** NYSERDA’s NY-Sun program offers grants to address key barriers to solar and storage projects—providing benefits to Disadvantaged Communities.
- **Peaker reduction and replacement.** NYSERDA’s various programs to promote the deployment of renewables and energy storage help to back down electric-generating peaker units, delivering important health benefits to Disadvantaged Communities. Working with DEC and DPS, NYSERDA supports the development of a guide for retirement and redevelopment of New York State’s oldest and most-polluting fossil facilities by 2030.

## Energy Innovation

NYSERDA’s **Grid Modernization** program will continue to develop innovative technologies and solutions through public/private partnerships to improve the grid performance, meet future grid needs, and enable both existing and future technologies that increase grid flexibility and resiliency. Such solutions will help New York State achieve its 70x30 target and will be critical in achieving the longer-term 0x40 target. Supported technologies include virtual power plants and other demand-side resources, the use of hybrid transmission and storage solutions, and the expanded integration of grid-enhancing technologies, such as dynamic line ratings and power flow control devices.

As New York continues to invest and build its cleaner grid, energy storage will allow better use of existing resources with a grid that can operate more efficiently and with fewer emissions. NYSERDA’s **Long Duration Energy Storage** innovation efforts will utilize public-private partnerships to explore, develop and demonstrate solutions such as hydrogen, electrical, mechanical, chemical, and thermal-electric storage technologies.

## TRANSFORMATION BY 2030

- New York State will have more than 20 GW of new power generation fueled by wind, hydroelectric, and solar energy. Renewable energy sources will account for at least 70% of the State’s electricity needs, with commensurate reductions in power and emissions from fossil fuel generators.
- At least 50,000 new jobs created in the electricity sector (renewables, transmission and distribution, energy storage, etc.).
- Build-out of inter- and intra-regional transmission infrastructure, and long-duration energy storage will be underway.



## INDICATORS OF PROGRESS

- Projects completed and in the pipeline (measured in megawatt capacity) across large-scale, offshore and distributed renewables, and energy storage; renewable energy generated toward the 70x30 target (measured in megawatt-hours). A review of progress toward this goal will be published in 2024 (CES Biennial Review).
- Benefits of renewable energy investments accruing for Disadvantaged Communities and Minority and Women-Owned Business Enterprise (MWBE) engagement.
- Private market investment, clean energy jobs, and cost per Renewable Energy Certificate (REC).

## The Climate Act and new, expanded goals ramp up renewable energy, including:

QUADRUPLING NEW YORK'S OFFSHORE WIND TARGET TO AT LEAST

# 9,000 MW by 2035

up from 2,400 MW by 2030

BOLSTERING DISTRIBUTED SOLAR DEPLOYMENT TO AT LEAST

# 10,000 MW BY 2030

up from 6,000 MW by 2025

## New York State continues to grow a strong pipeline of projects to meet the 70x30 goal.

AS OF MARCH 2024,  
THERE WERE APPROXIMATELY:

# 61 GW

**OF ACTIVE ONSHORE  
RENEWABLE ENERGY  
PROJECTS IN THE NYISO  
INTERCONNECTION QUEUE**

Additionally, there are currently more than **12 PROJECTS** in or in the process of applying for the Article 94c (ORES) queues, with **13 CERTIFICATES/PERMITS GRANTED** in 2022 and 2023 representing **MORE THAN 2.1 GW** of renewable generation—indicating more of the pipeline coming to fruition.

New York has **30 OPERATING** Tier 1 large-scale renewable projects as well as **24 PROJECTS IN ACTIVE DEVELOPMENT** comprised of wind, solar, and hydroelectric generation.

**APPROXIMATELY 1 GW OF ENERGY STORAGE** awarded statewide, with 340 MW operational and several hundred MWs expected to be built in 2024.

**NINE LEASE AREAS** of uncontracted offshore wind, enough to support over 14 GW of offshore generation capacity.

Offshore wind resources in the New York Bight include **15 LEASE AREAS** covering **2,778 SQUARE MILES** that are under development by **10 DIFFERENT OFFSHORE WIND TEAMS**

**MORE THAN 5 GW OF DISTRIBUTED SOLAR** installed statewide, with a **PIPELINE OF 3.5 GW** (high project maturity—lower than 10% attrition).

## HIGHLIGHTED PROGRAMS AND INITIATIVES

**CLEAN ENERGY STANDARD (CES)**

The CES provides the framework for large-scale, clean generation in the State, contributing to the 70x30 goal. It includes programs for the build-out of new large-scale renewable resources (Tier 1 and the Offshore Wind program), maintenance of existing renewable and nuclear generators in the State (Tiers 2 and 3), and new transmission lines to bring renewables generation into Zone J/New York City from Upstate New York and Quebec (Tier 4).

**OFFSHORE WIND**

The Offshore Wind program seeks to advance the cost-effective and responsible development of at least 9,000 MW of capacity by 2035 while building a competitive and sustainable offshore wind industry in the U.S. Current priorities for the program include:

- Finalize contracts with awardees from NYSERDA's fourth offshore wind solicitation (ORECRFP23-1 or "NY4")
- Develop a future NYSERDA Offshore Wind Solicitation, in coordination with progress on the New York City Public Policy Transmission Needs (PPTN) process led by the New York State Independent System Operator (NYISO).
- Work with the NYISO, the New York State Department of Public Service and other State agencies to help ensure the selected New York City PPTN project(s) are advanced efficiently and in a way that minimizes conflicts and costs.
- Continue development of the offshore wind "Masterplan 2.0: Deep Water," which will serve as an organizational framework to continue procuring offshore wind to achieve at least 9,000 MW of offshore wind installed by 2035 and inform approaches to maximize the benefits and minimize costs and risks of further offshore development. This may include next-generation floating turbine technologies and the preparation for a shared regional offshore network to achieve mutual climate goals with neighboring states.
- Make a formal request to the U.S. Bureau of Ocean Energy Management (BOEM) for additional offshore wind lease areas in the New York Bight to reduce costs and address conflicts.
- Launch Offshore Wind Supply Chain RFP(s) to build a portfolio of supply chain projects to support achievement of the offshore wind goals, increase investments in Disadvantaged Communities and support economic development and workforce training across the State.
- Enhance workforce development opportunities, inclusion, and equity by leveraging the expert input from NYSERDA's Jobs and Supply Chain Technical Working Group and the Environmental Justice Technical Working group.
- Engage with regulators, industry, underserved communities, and a broad set of stakeholders to inform approaches and workstreams such as new research, analysis, and program measures related to resiliency and sustainability to reduce risks and improve outcomes.

## HIGHLIGHTED PROGRAMS AND INITIATIVES

**BUILD-READY AND THE OFFICE OF RENEWABLE ENERGY SITING**

**Build-Ready** advances project development on sites that present development challenges for commercial developers. It complements private sector development and expedites the pre-development of large-scale renewable assets into revenue-generating clean energy projects, with a focus on underutilized, previously developed sites, such as brownfields, landfills, and former industrial properties.

The **Office of Renewable Energy Siting (ORES)** consolidates the environmental review and permitting of major renewable energy facilities 20 MW and larger in New York State into a single forum that provides a coordinated and timely review of siting permit applications. In the FY 2025 Executive Budget, Governor Hochul is proposing the Renewable Action Through Project Interconnection and Deployment (RAPID) Act. If enacted as proposed, this would move transmission permitting under the purview of ORES.

**DISTRIBUTED SOLAR**

**NY-Sun** drives distributed solar adoption through residential, commercial rooftop installations, and larger community solar projects. **Community Solar** makes solar energy affordable and accessible for all New Yorkers. **Expanded Solar for All** is a community solar utility bill assistance program that provides utility bill discounts at no cost for low-income residents and eliminates customer acquisition costs for developers. This benefits homeowners and renters who are otherwise unable to access solar. At the 2024 State of the State, Governor Hochul announced the statewide expansion of this successful program.

Together, these programs stand as an example of successful market transformation through a combination of market acceleration (through NY Green Bank finance and action to reduce siting barriers and promote industry development) and initiatives to overcome cost barriers (including through Value of Distributed Energy Resources compensation, on-bill crediting and NY-Sun incentives), with deployment of distributed solar a year ahead of the schedule and below program budgets set to reach the 10,000 MW target.

**ENERGY STORAGE**

The Energy Storage program engages those involved in developing and deploying energy storage technology, with a focus on supporting mature technologies and projects being deployed in the residential, commercial, and utility-scale (bulk) sectors. The program complements the rollout of renewable energy generation, including a focus on regions where energy storage is critically needed to support the replacement of dirty peaker plants, alleviate grid congestion, mitigate grid investment and operational costs, and aid the integration of large-scale renewables and offshore wind. Additionally, the program works to address barriers and risks associated with rapidly scaling energy storage system deployment. Efforts include the Inter-Agency Fire Safety Working Group, interconnection and tariff reform, and soft cost reduction. Furthermore, NYSERDA's public-private partnerships in long duration energy storage innovation explore the promise of deep decarbonization driven by hydrogen, electrical, mechanical, chemical, and thermal-electric storage technologies. NYSERDA and DPS filed New York's 6 GW Energy Storage Roadmap to support the PSC's consideration of an increase in the established 3,000 MW goal.



# CLEAN AND EFFICIENT BUILDINGS

## STATE POLICY GOAL

The Climate Act codifies a 2025 statewide energy efficiency target of 185 trillion British thermal units (TBtu) of cumulative end-use energy savings in New York State buildings and industrial facilities. Governor Hochul set a target to achieve two million climate-friendly homes by 2030, including homes and apartments that are electrification-ready and electrified.

**Achieving the 2025 Climate Act energy efficiency target will deliver near-term progress toward New York State's GHG emission reduction goals. It will also help build the foundation for an increasingly ambitious State effort to modernize and decarbonize the State's buildings across the residential, commercial and institutional sectors—as well as the State's industrial facilities—so they are healthier, cleaner, and more resilient.**

Energy efficiency and electrification will play a dominant role in putting New York State buildings on a course to decarbonization while creating better, more comfortable places to live, work, and play. It will also drive economic opportunity by growing clean energy jobs and businesses. Investments in building energy efficiency and designing for flexible building energy loads can also reduce the amount of electric grid investments needed for a reliable and resilient grid.

There are more than six million buildings in New York State. More than 200,000 buildings per year would need to be decarbonized for the next 30 years to address the entire existing building stock by 2050. NYSERDA will continue to deliver critical activities that support building owners and residents in making investments to advance efficiency and electrification and reduce the use of fossil fuels. This includes market acceleration initiatives and administering targeted incentive programs.

NYSERDA's strategies will need to evolve to support effective scaling of building retrofits across the State, including streamlining the experience of residents, contractors, and vendors, increasing coordination across relevant State entities and utilities, and exploring approaches that move beyond single-building solutions to those that can work block-by-block and community-by-community to achieve the scale and pace needed to address the climate crisis. To ensure the benefits of the clean energy transition are accessible to those who need it the most, State policy and programmatic efforts aimed at modernizing and decarbonizing buildings focus on delivering benefits to Disadvantaged Communities and low- and moderate-income New Yorkers while protecting energy affordability.

As New York makes progress toward its mid-century goal of carbon neutrality, combustion of fossil natural gas for industrial processes and to heat homes and businesses will decline. The corresponding transition away from gas consumption, both for customers and gas system infrastructure, may be one of the most challenging pieces of New York's clean energy transition. NYSERDA will seek to ensure that transition occurs in a way that is safe, reliable, and affordable for customers.

## SCOPING PLAN

To meet the requirements of the Climate Act and reduce emissions from the buildings sector, the Scoping Plan recommends the efficient electrification of heating and cooling systems and appliances, widespread improvements to building envelopes (air sealing, improved insulation, and replacing poorly performing windows) and advanced controls to reduce energy consumption. It also lays out a need for the adoption of lower-carbon construction practices and materials; building and appliance codes and standards that support building electrification and efficiency; expanded financing options for building decarbonization; and continued support for innovations in, and rollout of, low-GHG building technologies. Furthermore, carbon neutral could reduce emissions in applications that are difficult to electrify (such as carbon-intense, high-heat industrial processes). The Scoping Plan also advocates for equitable access to clean buildings technologies by the Disadvantaged Communities most burdened by housing and utility costs, plus air-quality issues and other health impacts.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

- **Policy and analysis.** Deliver policy and strategic leadership on energy efficiency and building electrification including through engagement in State regulatory proceedings, decarbonization partnerships with other State agencies, outreach to stakeholders and analysis of the outcomes, equity impacts, benefits, and costs of policy options. Help advance and implement policy directives in the buildings sector, such as zero-emission new construction codes, benchmarking and performance standards for large buildings' energy consumption, and regulatory direction and planning for a safe, reliable, and affordable gas transition.
- **Market acceleration.** Continue to build market demand for investments in efficiency and clean energy technologies in buildings. These activities include (1) technical assistance to provide accurate and high-quality information to help building owners; (2) capacity building and technical resources targeted at supporting the expansion of the clean and efficient building supply chain; (3) demonstration projects to identify scalable pathways for hard-to-decarbonize segments and emerging technologies including at key points in a building lifecycle (e.g., tenant turnover, renovations); (4) sharing market insights through tools and playbooks; and (5) outreach and education to help New Yorkers understand the holistic benefits of energy efficiency and clean building technologies.
- **Financing solutions.** Provide affordable loans, low-cost energy assessments, and diverse mechanisms to reduce pre-development costs. Enable private financing for energy efficiency and building electrification for residential, commercial, and not-for-profit market participants. Offer diverse forms of credit enhancements to reduce credit risk for conventional and specialized lenders investing in the decarbonization of single-family, multifamily and commercial buildings. Leverage collaboration with the federal government to attract low-cost financing for building decarbonization and related technologies, such as clean transportation and solar energy.
- **Home upgrades to low- and moderate-income (LMI) residents.** Lead delivery of LMI home upgrade programs across New York State, delivering energy savings, improved comfort, and efficient electrification when affordable. Advance equitable electrification for LMI homes through programmatic, regulatory, and other strategies that achieve maintaining energy affordability (limiting energy cost burden to LMI homes at or below 6% of income) for LMI residents. Deepen partnerships and programs that create cleaner, healthier, and more resilient homes and buildings for low-income families and in under-resourced and historically marginalized Disadvantaged Communities.
- **Building and energy codes and standards.** Conduct critical technical and capacity-building activities to ensure New York State is advancing and codifying efficient, cleaner, and healthier buildings and appliances where possible—sending a clear signal to the market that the State is phasing out the use of fossil fuels. Continue to support implementation of zero-emission new construction requirements, including technical support for builders, and help advance the next generation of carbon-neutral and resilient new construction.



- **Thermal energy districts.** Support the development of next-generation thermal energy districts that can deliver affordable, resilient heating and cooling to buildings while providing direct employment to support the transition of the gas workforce—including through the implementation of the Utility Thermal Energy Networks and Jobs Act in coordination with and support of the Department of Public Service.
- **Natural fossil gas transition.** Level the playing field for clean energy alternatives and end the legal obligation to serve customers with fossil natural gas, while maintaining affordability for New York’s most vulnerable customers. Within NYSERDA programs, end incentive support for fossil natural gas and reorient investments around building shell improvements, electrification, and development of deep decarbonization alternatives.

### Energy and Climate Equity

A changing climate disproportionately impacts residents of Disadvantaged Communities, who often have fewer resources to respond and have borne the cumulative economic and health impacts of fossil-based generation and transportation.

Energy burdens for low- to moderate-income households can exceed 20% of annual income, and nearly half of New York State’s population (especially communities of color) has annual income below 80% of the Area Median Income. Therefore, it is vital that investments also address historic inequities with targeted approaches for vulnerable communities.

Equity considerations are a core part of a wide range of NYSERDA clean buildings programs and initiatives described in this and other Mission Outcomes, including:

- Empower+ program
- Regional Clean Energy Hubs
- Financing solutions
- Multifamily housing initiatives, including the Affordable Multifamily Housing Incentive—offered through the NY-Sun program—for solar installations serving affordable housing properties

### Energy Innovation

From single-family homes to skyscrapers, buildings use significant amounts of energy and are a major source of GHG emissions in New York State. Nearly 80% of buildings across the State were constructed before energy codes emerged in the 1970s. They were not designed to be energy efficient.

NYSERDA’s innovation efforts focus on improving availability and performance of alternative and emerging clean heating and cooling and façade solutions, reducing their cost, and building a local clean energy industry. The Advanced Buildings program supports New York State’s energy innovators via public-private partnerships to develop and commercialize new technologies to lower building energy consumption and emissions. Investment areas include:

- Clean heating and cooling product innovation
- Building envelope (shell) improvement solutions for retrofits and new construction
- Solutions to enable low-GHG refrigerants
- Thermal storage solutions for load flexibility and higher energy efficiency
- Low embodied carbon building materials
- Intelligent buildings capable of grid (buildings as a distributed energy resource) and occupant interactions for improved operational efficiency and resiliency

### Climate-Resilient Buildings

Modernizing our buildings is a critical component to both meeting our climate goals and building better, healthier homes and workplaces that are more resilient to climate change. Climate hazards pose unique challenges to the more than six million buildings in New York State. Historical flood maps show that approximately 700,000 New Yorkers live in “flood-prone” zones, with many more working, traveling, or taking recreation in these areas.

In line with Scoping Plan recommendations, work at NYSERDA is underway to identify opportunities to incorporate climate resiliency into its own programs, investments, and assets to support both decarbonization and climate resiliency goals. Drawing from the Carbon Neutral Buildings Roadmap, strategies under consideration include resiliency solutions for all-electric buildings, passive survivability and facilities of refuge to withstand future disruptions to the energy system, with a focus on affordable housing and Disadvantaged Communities.

### HIGHLIGHTED PROGRAMS AND INITIATIVES

#### CLEAN ENERGY FUND

The Clean Energy Fund accelerates the deployment of clean energy solutions in the buildings sector (among other sectors) to help put buildings on pace to reduce emissions and help achieve the Governor's target of Two Million Climate-Friendly Homes by 2030.

#### EMPIRE BUILDING CHALLENGE

Empire Building Challenge advances the market for large building decarbonization, through purposeful demonstrations, with a focus on low-carbon solutions for tall buildings, in partnership with real estate industry and solution providers.

#### EMPIRE TECHNOLOGY PRIZE

The **Empire Technology Prize** program spurs new innovations that meet the needs of New York State's building stock.

#### BUILDINGS OF EXCELLENCE

**Buildings of Excellence** supports the design, construction, and operation of carbon neutral multifamily buildings, including affordable housing. This program demonstrates repeatable approaches to electrifying heating loads in both new and existing buildings while also reducing buildings' peak demand through energy recovery, efficiency, and thermal storage, leading to clean and resilient buildings that also reduce strain on the electric system.

#### EMPOWER+

EmPower+ provides no-cost and discounted energy efficiency and electrification solutions that will help income-eligible New Yorkers save energy and money, increase comfort, and upgrade their homes. This is boosted by a new infusion of State funding and a new 6% affordability pilot for participating customers who fully electrify.

#### CLEAN ENERGY PARTNERSHIPS

Clean Energy Partnerships with both the New York State Division of Housing and Community Renewal and the New York City Department of Housing Preservation and Development deliver energy efficiency and electrification directly into affordable housing financing transactions.

#### CLEAN GREEN SCHOOLS

Clean Green Schools helps fund solutions for P-12 schools in under-resourced communities to reduce energy use, transition away from fossil fuels, and create healthier learning environments while educating students, teachers, and the community about clean energy. In early 2024, an additional \$100 million in funding from the Clean Water, Clean Air, and Green Jobs Environmental Bond Act was made available to expand this program

HIGHLIGHTED PROGRAMS AND INITIATIVES

**FINANCING**

**NY Green Bank and NYSERDA** more widely offer financing for affordable housing and energy efficiency improvements in Disadvantaged Communities. NY Green Bank has set a target of investing at least \$150 million in clean energy, energy efficiency, and building electrification projects that benefit the State’s affordable housing market by 2025. NYSERDA leverages **Green Jobs – Green New York** to continue offering New Yorkers access to low- and no-cost energy assessments, low-interest financing, and work readiness pathways to participate in the energy transition. NYSERDA is also exploring diverse innovative and inclusive financing solutions, with approaches to overcome challenges to access affordable finance, stabilize energy costs, reduce emissions and improve air quality in Disadvantaged Communities.

TRANSFORMATION BY 2030

By 2030 New York State will need to have one to two million homes equipped with modern electric heating and cooling and paired with energy efficiency. A robust supply chain for heat pumps and weatherization will enable widespread electrification and greater consumer choice when retrofitting New York’s existing residential and commercial building stock. Furthermore, building codes will require zero-emission new construction that is electrification ready. This will create better living and working spaces and healthier communities—especially low- and moderate-income New Yorkers.

 INDICATORS OF PROGRESS

- Reduction in GHG emissions from fuel combustion in buildings and industry, from the 2005 peak (measured in annual carbon dioxide equivalent [CO<sub>2</sub>e]).
- Energy savings: total TBtu across all fuels (fossil natural gas, electricity, oil, etc.).
- Number of single-family and multifamily homes that are electrification-ready and/or electrified, as consistent with the Two Million Climate-Friendly Homes target, including number of such homes that qualify as low- to moderate-income.
- Prioritized investment in homes and other buildings located in Disadvantaged Communities.

Progress toward these goals

Combined activities of NYSERDA, investor-owned utilities, Long Island Power Authority, and NY Power Authority across historic and ongoing energy efficiency programs have so far achieved more than 108 TBtu of avoided energy use in the building sector—equivalent to fueling and powering more than one million New York homes.

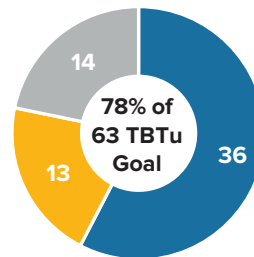
**185 TBtu New Efficiency: New York Energy Savings Goal**

*Progress data is through Q3 2023 for NYSERDA, Investor-Owned Utilities, and LIPA, and through Q4 2022 for NYPA.*



**59% Installed (~108 TBtu)**      **10% Pipeline (~19 TBtu)**

NYSERDA Progress



- Installed
- Pipeline
- Future Contribution

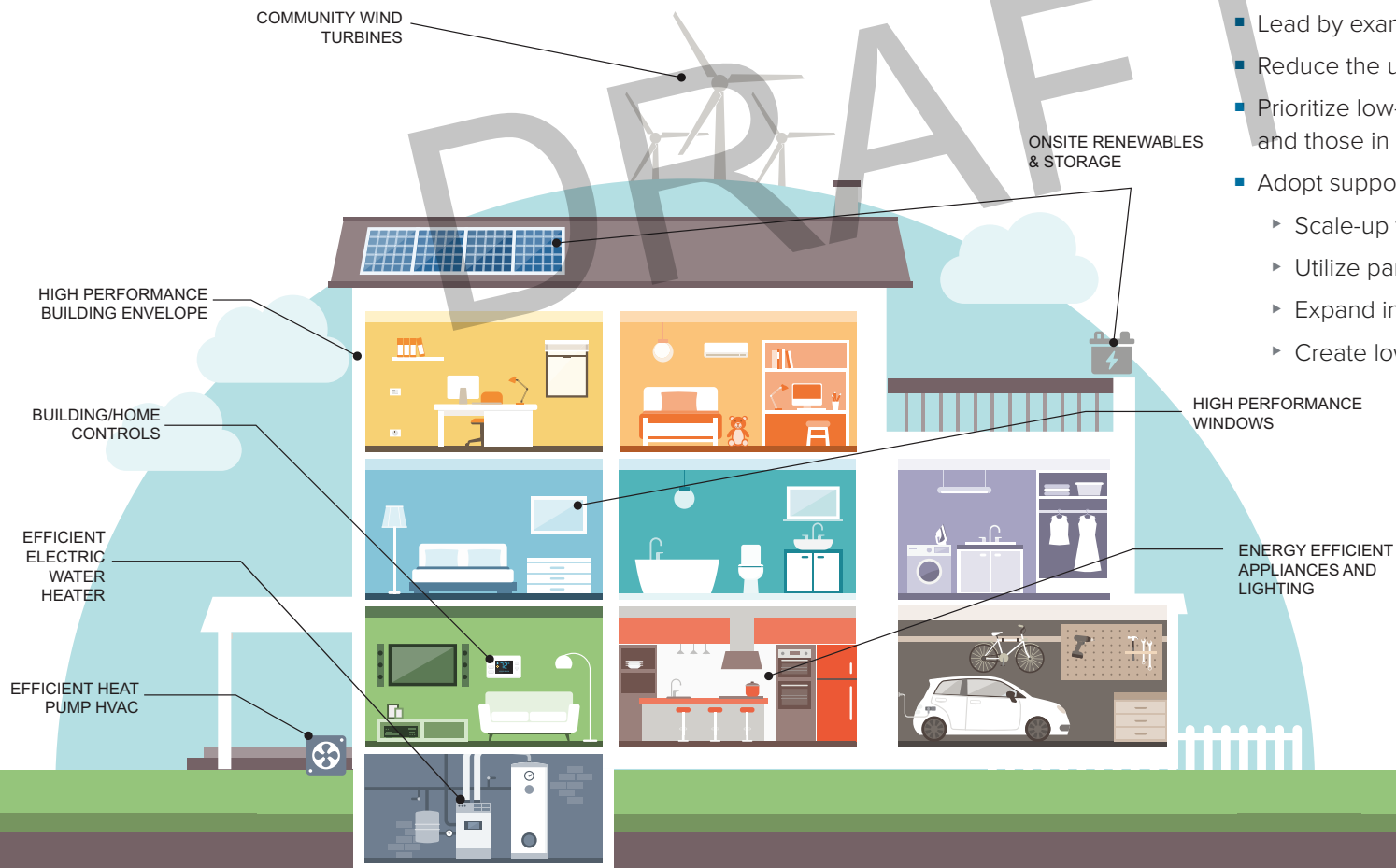
# ATTRIBUTES OF A CARBON NEUTRAL BUILDING

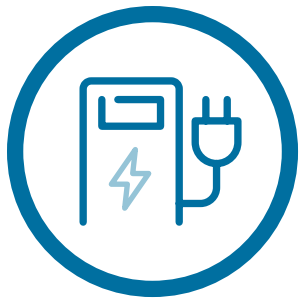
- Maximizes energy efficiency
- No fossil fuel combustion for building energy services (all-electric end uses)
- Produces or procures zero-emission electricity
- Designed with flexible loads and/or storage that can respond to grid conditions
- Features resiliency measures that protect building occupants
- Designed with attention to embodied carbon and refrigerants

# STRATEGIES NEEDED TO DRIVE PROGRESS IN CARBON NEUTRAL BUILDINGS

- Advanced codes for new construction
- Prohibit replacement of fossil-fuel heating and hot water equipment
- Benchmarking and disclosure of energy performance
- Performance requirements for existing buildings to improve energy efficiency
- Plan for the gas transition
- Fund research development and demonstrations
- Lead by example on embodied carbon
- Reduce the use of hydrofluorocarbons (HFCs)
- Prioritize low- and moderate-income residents and those in Disadvantaged Communities
- Adopt supporting policies to drive action:
  - Scale-up the workforce
  - Utilize partnerships
  - Expand incentives
  - Create low-cost financing

[nysenr.ny.gov/Carbon-Neutral-Buildings](https://nysenr.ny.gov/Carbon-Neutral-Buildings)





# CLEAN TRANSPORTATION

## STATE POLICY GOAL

**New York State has adopted ambitious clean energy targets in the transportation sector through legislation and regulation. By 2027, all new school buses purchased in the State will be zero-emission vehicles, with the entire school bus fleet transitioning to zero-emission buses by 2035.**

**By 2035, all new light-duty vehicle sales in the State must be zero-emission vehicles, and all medium- and heavy-duty vehicle sales must be zero-emission vehicles by 2045.**

The coming years will see a dramatic expansion of zero-emission vehicles, coupled with an increased investment in public transportation and other low-carbon transportation modes.

Reducing GHG emissions from the transportation sector—which is responsible for nearly 30% of the State’s total GHG emissions—is essential to meeting the State’s 2030 and 2050 Climate Act emission limits. Also of critical importance, the transportation sector has historically been a major source of local air pollution, especially in New York State’s most overburdened communities. Shifting away from combustion to electric and hydrogen fuel-cell technology in the sector will improve air quality and health outcomes for all New Yorkers, and the most vulnerable New Yorkers are likely to see outsized health benefits.

Under Governor Hochul’s leadership, New York State has set ambitious goals for the adoption of zero-emission vehicles like electric vehicles (EVs). To meet these goals, NYSERDA is accelerating adoption through a mix of incentives, research, engagement, and market development activities designed to remove barriers to EV adoption.

Transitioning to zero-emission vehicles is only part of the solution for decarbonizing the transportation sector. Improving access to clean transportation options can also provide much-needed access to jobs, education, and essential services for people who have been underserved by transportation options for years. New York State’s commitment to a substantial expansion in public transit and the use of low-GHG transportation modes under the Scoping Plan, will provide new opportunities to communities that have lacked clean options and been burdened by the high cost of personal transportation. As part of this commitment, NYSERDA is using its programs to increase the affordability and accessibility of new technologies such as electric vehicles and e-bikes.

## SCOPING PLAN

The Scoping Plan recommends an aggressive transition of New York State's light-, medium-, and heavy-duty vehicles and non-road equipment to zero-emission technologies, including battery electric, clean hydrogen fuel cells, and other renewable fuels. It indicates New York should rapidly expand public transportation use and continue to promote community development patterns that are conducive to low-GHG modes of transportation and fewer vehicle-miles travelled (VMT). The State should develop new frameworks and policy mechanisms that drive economywide emissions reductions in the transportation sector, such as a clean transportation standard.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

- **Policy and analysis.** Provide policy guidance and strategic direction to policymakers based on market intelligence, technology expertise, and learned experience in administering programs. Scope future programs and advise on potential legislative and regulatory approaches that could advance transportation decarbonization. Build upon existing programs such as the NY Truck Voucher Incentive program and identify additional approaches to electrifying the medium- and heavy-duty vehicle market and non-road equipment through activities such as technical assistance, incentives, and financing. In collaboration with DEC, launch a study to analyze the benefits of a clean transportation standard (a policy that encourages the use of an increasing amount of low- and zero-carbon transportation fuels), focusing on how such a program could help drive the State toward a zero-emission transportation sector by 2050 while supporting the deployment of electric and zero-emission transportation in overburdened and Disadvantaged Communities.
- **Partnerships.** Lead coordination and collaboration across State agencies and federal and local government entities to encourage consistent approaches to reducing transportation GHG emissions and energy use. Coordinate programs to ensure investments of State funding and State-administered federal funding are complementary and reflect State priorities, including a collaborative effort across State agencies to direct funding for EVs and EV charging to the most impactful uses. Engage utilities and the DPS to ensure the electric grid is ready for an influx of EVs, charging stations are built to keep pace with rapid EV adoption, and regulatory approaches are supportive of transportation electrification.
- **Incentive programs.** Deliver impactful programs to catalyze market activity and accelerate clean transportation investments, including EVs and EV charging incentives. Maintain light-duty EV and EV charging incentive programs and adapt them to evolving market conditions to ensure New York is on track to meet its 2030 EV goals.
- **Market acceleration.** Add new approaches to removing barriers to market adoption, such as addressing EV charging station permitting and increasing consumer awareness and acceptance of EVs. Provide technical assistance to fleets and industries looking for help in reducing their transportation GHG emissions, with a primary focus on school bus fleets, but also working with other industries to identify viable low-GHG technologies and plan for long-term emission reductions. Work with communities to identify needs, support the introduction of new services, and adopt local ordinances supporting low-VMT transportation options, land uses, and development.
- **Financing.** Offer support for innovative clean transportation businesses and projects to reduce risk associated with these projects, and demonstrate to private sector financiers that these projects can be successful and generate returns on their investments.

### Energy and Climate Equity

Historically, diesel vehicles and engines have been a major source of harmful pollution in overburdened communities. NYSERDA works to advance access to clean transportation for residents of Disadvantaged Communities and accelerate the transition to electric vehicles within Environmental Justice areas to reduce emissions and improve air quality. Projects funded through the NY Clean Transportation Prizes are a primary example of this work.

For example, Disadvantaged Communities in the Rockaways in Queens and Brentwood in Suffolk County have limited public transportation options but relatively low rates of vehicle ownership. To expand clean transportation choices in these communities, Circuit (a NY Clean Transportation Prize winner) has launched two affordable, electric micro-shuttle services, available for on-demand trips to bridge first/last mile gaps in both communities. The 21-vehicle electric microtransit fleet, which launched in December 2023, uses locally hired and trained drivers and mobile ride-request app technology to provide service. Service planning has been accomplished through close collaboration with local organizations. New EV charging stations, installed as part of the project, will provide charging options to both fleet vehicles and the public.

## Energy Innovation

NYSERDA has a strong track record of supporting new technology and business model development related to EVs, transit, and mobility. NYSERDA funds new technology research, development, and demonstration projects to bring cutting-edge products to market, test emerging technologies, and identify both barriers to adoption for new technologies and business models and potential resolutions to those barriers.

NYSERDA will continue investing in new solutions that minimize EV impacts on the electric grid through advanced vehicle-grid interactions—critical for deploying EVs at scale and at a reasonable cost. Additional future areas of study include e-bike battery safety and efficiency improvements for EV auxiliary loads. NYSERDA anticipates funding demonstration projects related to micromobility freight solutions, shared mobility business models that serve low- to moderate-income populations, and hard-to-electrify market segments (especially large trucks, construction equipment, and agricultural equipment).

NYSERDA will also focus on advancing fuel cell electric vehicles (FCEVs), which can help New York State meet the ZEV target in medium- and heavy-duty sectors, reduce peak load on the grid from the transportation sector, and provide resiliency solutions. NYSERDA will support the development of innovative solutions to reduce cost and improve performance in FCEVs and hydrogen fueling infrastructure for medium- and heavy-duty applications, while collaborating with other State agencies and communities to ensure safe deployment in New York.

### INDICATORS OF PROGRESS

- Reduced GHG emissions from the transportation sector
- Number of EVs (light-, medium-, and heavy-duty) on the road and EV charging stations installed across New York State
- Market share (measured as a percent of sales) for light-duty EVs
- Number of electric school buses on the road
- Increased use of public and low-GHG transportation options such as biking and walking and a reduction in single-occupant vehicle use and VMT, especially in New York’s Disadvantaged Communities

## NEW YORK STATE’S ZERO-EMISSION VEHICLE (ZEV) MARKET

**197,358**

ZEVs on the road  
(as of 1/1/2024)



**8.9%**

of new cars sold in 2023 were ZEVs

**92**

light-duty models available for purchase



**12,274**

public and workplace Level 2 chargers available

**1,364**

public DC fast chargers available



**\$127 million**

federal funding received for electric school buses under the IIJA to date

**\$500 million**

NYS funding available for electric school buses

**\$203.5 million**

federal funding received for EV charging under the IIJA to date

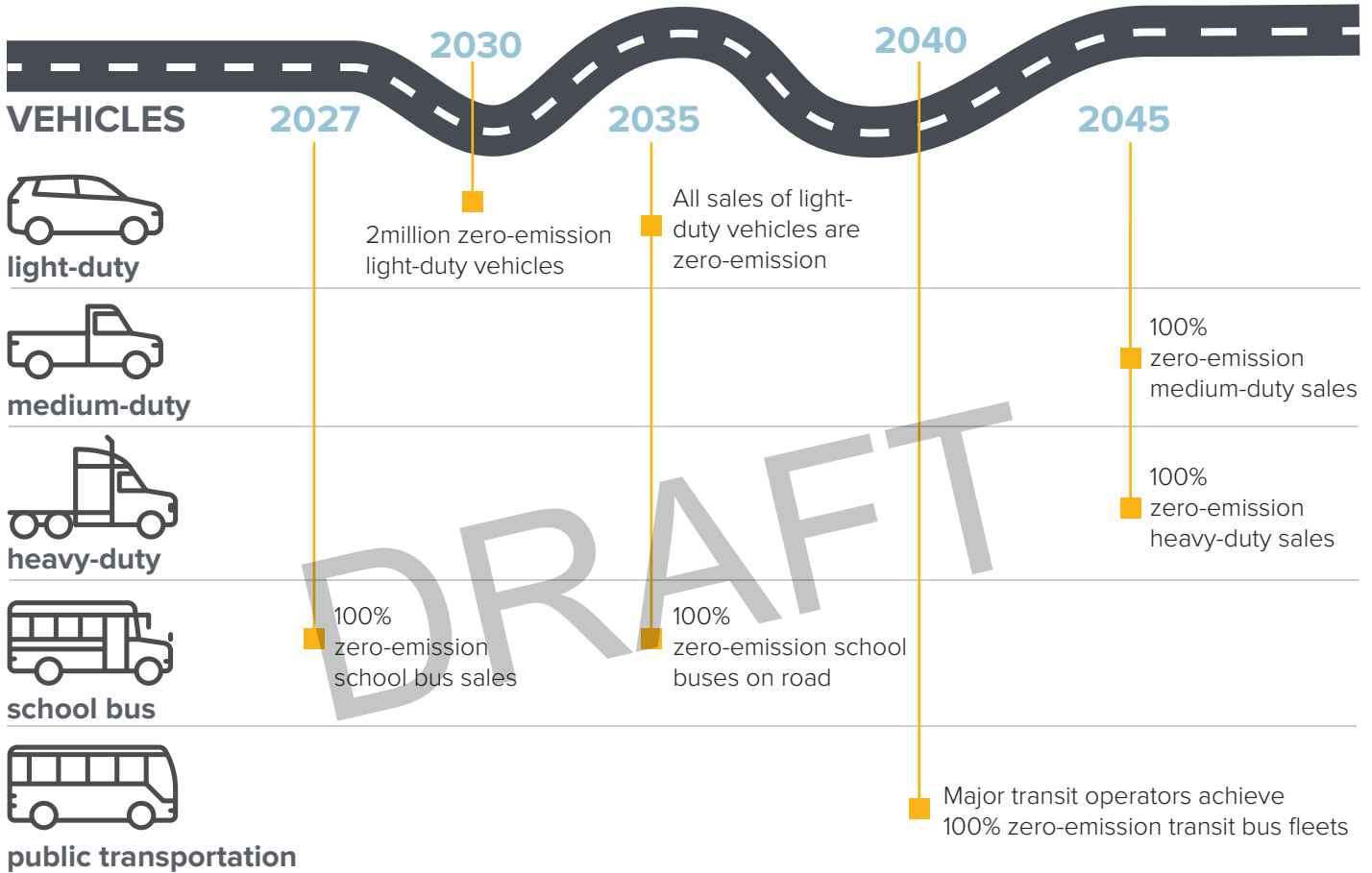
**\$2.75 billion**

total NYS investment in transportation electrification

### TRANSFORMATION BY 2030

Service improvements will make public transit viable for even more New Yorkers and the auto industry will be well on its way to a new era of electrified transportation, with EVs comprising more than 90% of new car sales in 2030.

## CLEAN TRANSPORTATION TIMELINE



### HIGHLIGHTED PROGRAMS AND INITIATIVES

#### ELECTRIC SCHOOL BUSES

NYSERDA is leading State efforts to support schools in implementing legislation that requires, by 2027, all new school buses purchased are zero-emission—and that by 2035, all school buses on the road are zero-emission. This includes administering the **NY School Bus Incentive Program**, which uses \$500 million in Environmental Bond Act funding, to cover up to 100% of the difference in cost between an electric bus and a diesel bus as well as the cost of charging infrastructure. NYSERDA funds fleet electrification plans to help school bus fleets determine how electric school buses can best fit into their operations; facilitates engagement between school bus fleets and their electric utilities; and coordinates with stakeholders across the school transportation system to answer questions and address market challenges.

Schools and their contractors can also receive funding for school bus fleet electrification planning, which helps fleets understand electric school bus and charging technologies, scope necessary utility upgrades, and develop a long-term plan to transition to a zero-emission fleet in a financially responsible manner.



## HIGHLIGHTED PROGRAMS AND INITIATIVES

### **NY TRUCK VOUCHER INCENTIVE PROGRAM**

NY Truck Voucher Incentive program uses funding from the Volkswagen diesel emissions settlement to retire older diesel trucks and buses and replace them with new, zero-emissions models.

### **DRIVE CLEAN REBATE**

Drive Clean Rebate has provided more than 100,000 point-of-sale rebates of up to \$2,000 for New Yorkers buying EVs since 2016.

### **CHARGE READY NY 2.0**

Charge Ready NY 2.0 offers rebates for workplaces, multifamily buildings, and municipalities that install Level 2 charging stations, with bonuses available for partners who work with NYSERDA to promote EVs to their employees and tenants.

### **DIRECT CURRENT FAST CHARGER (DCFC) INVESTMENTS**

NYSERDA's DCFC investments target specific geographic areas of New York State that lack fast charging stations to partner with private entities to install rapid chargers for community members and travelers.

### **NEW YORK CLEAN TRANSPORTATION PRIZES**

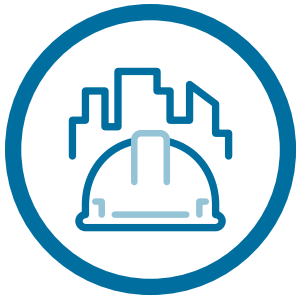
New York Clean Transportation Prizes focus on community-scale transportation solutions, advanced mobility, and electric truck and bus innovation. Many of the projects will launch new services in 2024 and begin collecting data to inform future programs and policy. A new clean mobility program is expected to start in 2024 as well.

### **EV AND MOBILITY RESEARCH AND DEVELOPMENT**

Programs investing in EV and mobility research and development support a range of projects that have advanced the state of knowledge and technology development in clean transportation. Collaborations with the Grid Modernization program help ensure that projects are investigating new ways to minimize grid impacts and save ratepayers and EV owners money.

### **NY GREEN BANK**

NY Green Bank continues to work to address financing gaps and accelerate the advancement of the clean transportation market, including through providing capital to support the deployment of electric and zero-emission vehicles and the build-out of EV charging infrastructure in New York State, aiming to invest at least \$100 million in clean transportation projects by 2025.



# CLEAN ENERGY JOBS AND ECONOMY

## STATE POLICY GOAL

**With nearly 171,000 clean energy jobs across the State at the end of 2022—and hundreds of thousands of additional new jobs to be created by Climate Act investments—New York’s nation-leading climate policies continue to drive economic opportunity and job creation.**

**New York’s clean energy businesses have continued to add workers at a faster pace than the State’s overall workforce, with clean energy employment increasing by 3.5% from 2021 to 2022, compared to 3% across all industries statewide. Moreover, quality job growth can be seen across all technology sectors, with existing clean energy workers reporting high rates of career satisfaction.**

Looking forward, the State has an unprecedented opportunity to harness the economic development benefits expected from new federal incentives through the Inflation Reduction Act, the Bipartisan Infrastructure Law, and the CHIPS and Science Act. Combined, these federal programs are expected to invest more than \$500 billion to support clean energy deployment as well as domestic manufacturing of clean energy products and services. These federal programs offer a generational opportunity to create more than nine million jobs across the U.S. and significantly increase the pace of U.S. manufacturing supply projects over the coming years. If New York State is going to be a strong competitor in the national race to domesticate the clean energy supply chain, our economic development initiatives need to be strategic, aggressive, and send strong signals to the market that the State is open for business.

New York State has the opportunity to position itself as an innovation, research, and manufacturing capital of clean technology, by focusing investment on next generation technology development at the State’s global research universities and industrial facilities. Combined, these activities will create thousands of jobs, establish the supply chain for clean energy equipment and technologies, and attract national and global investments across New York for a decarbonized economy of the future.

Availability of finance is an essential component of growing New York State’s clean energy economy. NY Green Bank, a division of the NYSERDA and State-sponsored investment fund, plays a critical role in removing barriers and filling financing gaps to mobilize private investment into the State’s clean energy and sustainable infrastructure markets.

To build an inclusive clean energy economy and cultivate a just transition, NYSERDA, along with other State agencies and clean energy industry partners, will continue building upon efforts to develop a pipeline of skilled labor. In particular, emphasis will be placed on ensuring these economic opportunities are open to communities that have been historically disadvantaged and transitioning fossil-fuel-based workers. New York State’s communities on the frontlines of the climate crisis—including Environmental Justice areas, low- and moderate-income families, communities of color, and otherwise Disadvantaged Communities—have disproportionately been impacted by structural inequities in education and workforce opportunities.

## SCOPING PLAN

Workforce development and access to economic opportunities are central themes throughout the Scoping Plan. It indicates that in addition to managing a just transition for current fossil fuel workers, New York State must facilitate the education and training of a skilled workforce across the clean energy economy. The State will partner with industry, labor, and educational institutions to drive job growth and expand access to new job opportunities, ensuring that members of Disadvantaged Communities actively participate in, and benefit from, the transition to a clean, green economy. The Scoping Plan also highlights the importance of cross-sectoral clean technology innovation and business ecosystem development in building a competitive and comprehensive clean technology supply chain in New York.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

### Economic development

- Attract new clean energy businesses and expand existing New York State firms by coordinating clean energy business recruitment, site and infrastructure development, and competitive advantage positioning (e.g., leveraging research and development assets), in partnership with key economic development stakeholders, including Empire State Development and regional and local economic development organizations.
- Help New York-based companies pivot to the clean energy supply chain and help New York State itself compete more aggressively with other states for clean energy manufacturing projects. Partner with economic development stakeholders to continuously examine—and make recommendations to enhance—the State’s clean energy economic development “toolkit” of programs and policies.
- Stimulate economic development in key clean energy sectors through direct investments and other supportive action such as development of offshore wind, energy storage, and other technologies.
- Support regional economic development projects (including Micron, Global Foundries, and others that will have significant economic impacts) as they strive to achieve sustainability goals.
- Develop policy and analysis to support additional investment in clean energy supply chain growth.

### Workforce development

- Fund training organizations (such as technical high schools, colleges and universities, community-based organizations, and unions) to scale-up recruiting, training, and placement of New Yorkers in clean energy careers. Develop training infrastructure to upskill existing workers (such as building operations and maintenance and HVAC workers) to facilitate career advancement and prepare the next generation of clean energy workers in high-growth sectors (such as high-efficiency HVAC, building decarbonization, electric vehicle repair and charging stations, energy storage, and large-scale renewables). Develop career awareness initiatives for young adults and transitioning workers to introduce them to clean energy careers.
- Leverage and augment wrap-around support and services such as housing support, childcare, financial literacy, and transportation assistance for residents of Disadvantaged Communities and Priority Populations (this includes veterans, individuals with disabilities, previously incarcerated individuals, incumbent fossil fuel workers, and homeless individuals).
- Provide targeted support to unions and businesses to train and hire new workers in “earn-as-you learn” models, such as apprenticeships and on-the-job training. Expand clean energy pre-apprenticeship programs that provide pathways to registered apprenticeship programs (direct-entry programs), with a focus on providing careers to individuals who face barriers to employment.
- Coordinate with, and leverage the work of, other State agencies and organizations such as the New York State Department of Labor (DOL), the State University of New York (SUNY), the City University of New York (CUNY), NY Power Authority (NYPA), and Empire State Development (ESD). For example, many of these agencies are working together to support the development of DOL’s Office of Just Energy Transition in support of the Climate Act.
- Build community capacity by leveraging the 12 Regional Clean Energy Hubs (established in 2023) to connect local residents with workforce development opportunities (see the mission outcome Sustainable and Climate-Resilient Communities).

## Finance: NY Green Bank

NY Green Bank helps to accelerate clean energy development by working with the private sector to overcome finance barriers, including through transactions related to:

- Building decarbonization and electrification, including affordable housing
- Clean transportation, including electric vehicles and charging infrastructure
- Energy storage
- Large-scale renewable energy projects
- Community distributed generation

### NY Green Bank's focus areas include:

- Alleviate financing gaps in sustainable infrastructure markets by developing replicable, scalable financing products that encourage private sector lenders and investors to expand their activity in New York State's clean energy markets.
- By 2025, achieve investment targets in clean transportation (\$100 million), building electrification (\$100 million), affordable housing (\$150 million), and energy storage (\$200 million).
- Continue to explore and refine innovative financing models to help other financiers gain comfort with funding new asset classes (including newer business models featuring less well understood cash flow and risk profiles, structures and approaches).
- Build capacity of New York's climate finance ecosystem through knowledge sharing and highlighting NY Green Bank's underwriting practices in priority market segments.
- Collaborate with New York State clean energy ecosystem partners to deploy awards from the EPA's Greenhouse Gas Reduction Fund as efficiently, effectively, and impactfully as possible.

As a component of New York's Clean Energy Fund, NY Green Bank is currently undergoing its regularly scheduled 10-year Program Review in 2024. This process will include summarizing NY Green Bank's performance to date and its impact on the markets it has engaged in. The review will include an assessment of the overall performance of the portfolio (by sector as well as technology type) of investments compared to projections, the self-sufficiency of NY Green Bank, data trends, lessons-learned and findings from relevant evaluations. In addition, this review will include the identification of any potential modifications or expansions of NY Green Bank's original mission and mandate, which would further support and align with the Climate Act or otherwise improve the effectiveness of NY Green Bank's activities.

## Energy and Climate Equity

Equity considerations are built into the core of NYSERDA's workforce development and training initiatives to support a just transition for historically disadvantaged populations and industries affected by the transition from fossil fuels, as described in the strategies summarized in this mission outcome.

In addition, NYSERDA incorporates new progressive labor and economic development provisions, including prevailing wage/project labor agreements; prioritization of minority- and women-owned business enterprises (MWBs) and service-disabled veteran-owned businesses (SDVOBs); and Buy America provisions into its renewable procurements.

NYSERDA also leads by example through its focus on diversity, equity and inclusion across NYSERDA's internal policies and processes, following publication of its Diversity, Equity, & Inclusion Strategic Plan in 2021.

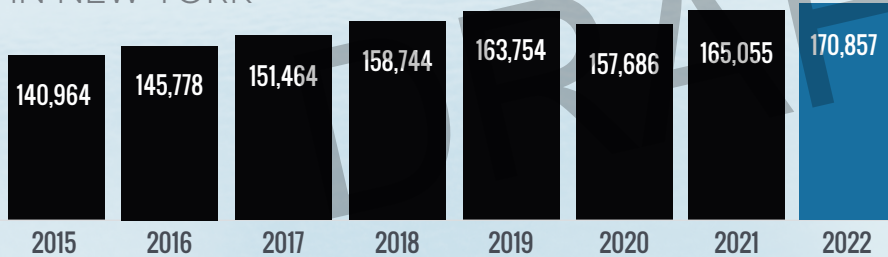
NY Green Bank aims to demonstrate the attractiveness and viability of investments in projects that benefit the State's Disadvantaged Communities by investing at least 35% of total capital commitments between January 1, 2020, and December 31, 2025 in these types of projects. NY Green Bank launched a concessionary wholesale funding pathway—the \$250 million Community Decarbonization Fund—to help Community Development Financial Institutions and other specialty lenders expand their green lending activity (including sustainable infrastructure and decarbonization investments). These financing products will benefit residents of Disadvantaged Communities and ensuring greater opportunities to support local green projects across New York State.

**INDICATORS  
OF PROGRESS**

- Statewide clean energy industry jobs and job creation supported by Climate Act investments
- Number of New Yorkers, including residents from Disadvantaged Communities and Priority Populations, trained and employed in clean energy
- Commercialized climate solutions and launches of incubated firms, including related revenues
- Total capital invested in New York State’s sustainable infrastructure market, particularly in Disadvantaged Communities

**171,000**  
**clean energy jobs in 2022**  
across New York State

ANNUAL CLEAN ENERGY EMPLOYMENT  
IN NEW YORK



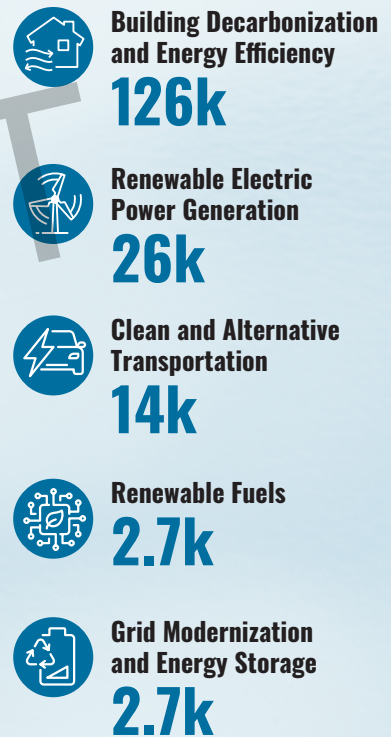
New York’s clean energy industry gained 5,800 jobs between 2021 and 2022, demonstrating a return to robust clean energy growth.

Clean energy businesses in New York added workers at a faster rate than the State’s overall workforce, and in greater numbers than neighboring states.

All clean energy sectors experienced growth in 2022, with the rapidly expanding clean and alternative transportation and grid modernization and storage sectors seeing double-digit employment increases in the past 12 months.

New York’s clean energy workforce is well-positioned for success as interest and investments into the clean energy industry continue to increase.

CLEAN ENERGY EMPLOYMENT  
BY TECHNOLOGY  
(number of jobs, December 2022)



[nyserdera.ny.gov/  
Clean-Energy-Jobs](https://nyserdera.ny.gov/Clean-Energy-Jobs)

## New York State Climate Jobs Study

Based on independent research conducted for New York’s Just Transition Working Group, Climate Act Scoping Plan Investments are expected to spur hundreds of thousands of new jobs in coming decades.

**Expected clean energy job growth 2X greater than 2016–2020**

**More than half of new jobs will tackle building decarbonization**

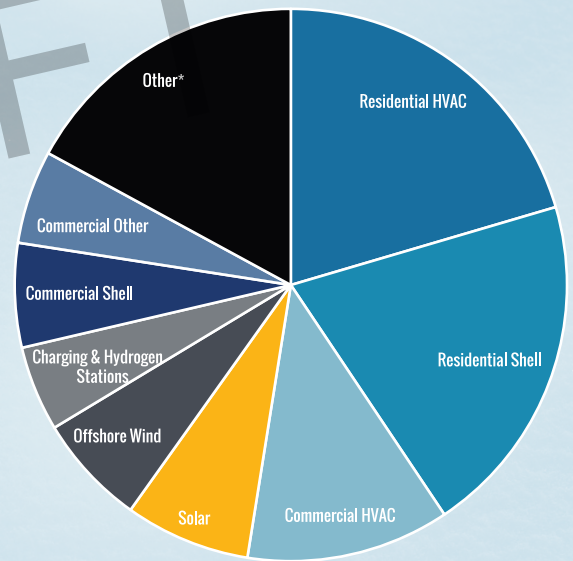
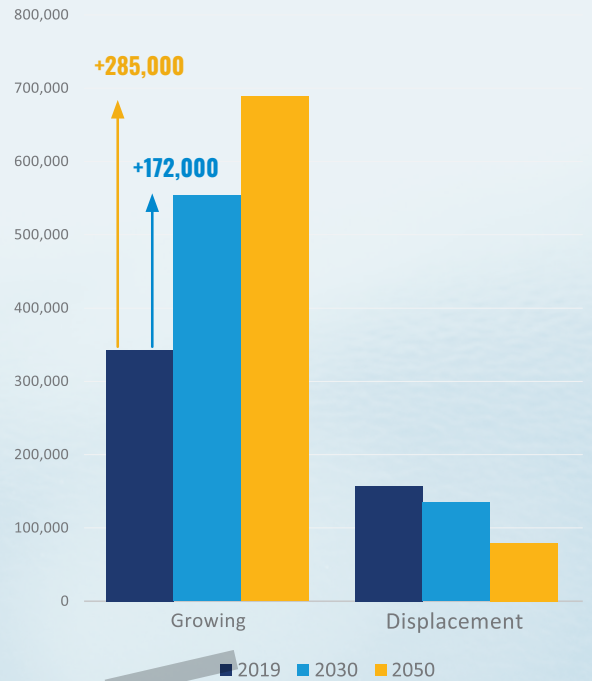
**Offshore wind will be one of the fastest growing sectors**

- Employment in growth sub-sectors increases by at least 172,000 jobs by 2030, a 55% increase in the workforce from 2019 to 2030.
- Employment grows in these sub-sectors by at least 285,000 jobs through 2050.
- In New York State, clean energy jobs, in their comparable sub-sectors, are expected to grow annually at more than twice the rate from 2021 through 2030 as the growth experienced between 2016 through 2020.
- By 2050, growth sub-sectors in New York State will reach nearly 600,000 jobs.

### Key Employment Findings\*\*

Sub-Sectoral Breakdown of 172,000 Jobs Added by 2030

- Over half of the new jobs, in the growth sub-sectors, from 2019 to 2030, will be found in the buildings sub-sectors (shaded blue).
- The next largest growth sub-sectors are solar and offshore wind electricity generation, and electric vehicle charging and hydrogen fueling stations.



\* Includes Transmission, Storage, Other Generation, Bioenergy, Residential Other, Hydrogen, Onshore Wind, and Vehicle Manufacturing

\*\* Key employment findings derived from S2: LCF Scenario. Learn more by reading the [New York State Just Transition Working Group Jobs Study](#).

## TRANSFORMATION BY 2030

- Nearly half-a-million family-sustaining clean energy jobs in New York State by 2030.
- Fine-tuned workforce development initiatives with job creation opportunities resulting from Climate Act investments.
- Additional \$12–\$15 billion in capital leveraged by NY Green Bank, Innovation and Research portfolio activities, and private capital mobilized through the federal BIL, CHIPS and Science Act, and IRA.
- Comprehensive economic development strategy has made New York State the leading market for clean energy business growth and supply chain localization.

## HIGHLIGHTED PROGRAMS AND INITIATIVES

### Economic development

#### OFFSHORE WIND PORTS

NYSERDA is investing \$500 million in offshore wind manufacturing and port infrastructure. The goal is to attract and drive the private investment in the State to ensure cost-competitive products are available to support the growing volume of New York's and regional offshore wind projects, and to establish operations in New York State to maximize economic benefits and job opportunities to the State.

#### MICRON AND GLOBAL FOUNDRIES

The \$100 billion **Micron** investment in Onondaga County and \$11.6 billion **Global Foundries** investment in Saratoga County are transformational projects to the State in terms of jobs, wages, community growth, and sustainability. Investments made at manufacturing facilities as well as the surrounding communities will necessitate innovative approaches to reducing carbon emissions while growing the State's economy. Micron and Global Foundries participate in New York State's Green CHIPS program, a first-in-the-nation major economic development program that incentivizes sustainability outcomes (such as the use of 100% clean, renewable electricity in participant manufacturing operations)\* As sustainability becomes a business imperative, more companies like Micron and Global Foundries can be attracted to New York State thanks to its rich renewable asset base, sustained clean energy investment horizon, and policies driving the clean energy economy

#### SOUTHERN TIER, FINGER LAKES, AND WESTERN NEW YORK ENERGY STORAGE SUPPLY CHAIN

NYSERDA is actively participating in the New Energy New York Coalition (NENY), which has been awarded more than \$280 million in federal and State funds. Originally established in 2022 by the U.S. Economic Development Administration's (EDA) Build Back Better Regional Commission, NENY and has since won other designations and funding such as the EDA's Tech Hub and the U.S. National Science Foundation's (NSF) Regional Innovation Engines award. NENY will help the U.S. meet the demand for domestic battery products by accelerating the battery development and manufacturing ecosystem in the Southern Tier, Finger Lakes, and Western New York regions. Specifically, NYSEDA will support and connect existing New York State manufacturers to supply chain opportunities, attract energy storage manufacturers to these regions and the State, and enhance the region's profile via marketing and site development.

**The passage of the Inflation Reduction Act will significantly increase opportunities to attract these kinds of projects to New York State.**

\* <https://esd.ny.gov/green-chips>

## HIGHLIGHTED PROGRAMS AND INITIATIVES

### Workforce development

#### **BUILDING OPERATIONS AND MAINTENANCE TRAINING**

This program is designed to develop training projects that create the educational strategy, on-site training framework, and tools needed to advance the skills of building operations and maintenance workers and to prepare new workers beyond conventional classroom training.

To date, 69 projects totaling over \$16 million have been awarded to train and upskill more than 8,000 building operations and maintenance workers. Approximately 40% of program expenditures to date have gone to train operators at buildings located in Disadvantaged Communities.

#### **ENERGY EFFICIENCY AND CLEAN TECHNOLOGY TRAINING FOR NEW AND EXISTING WORKERS**

This initiative is designed to strengthen the pipeline of skilled talent for the clean energy labor market, focusing on energy efficiency, building electrification, renewables, energy storage, and electric vehicle charging station infrastructure.

Projects funded through this program are intended to develop and/or deliver clean energy technical training and relevant education, hands-on experience, and apprenticeships, full-time jobs, or advanced formal training. The goal is to ensure that both new and existing workers, apprentices, journeypersons, and students, as applicable, have the skills, experience, and qualifications required to meet industry demand.

To date, 57 projects have been provided more than \$17 million to train and upskill nearly 16,000 individuals.

#### **APPRENTICESHIP AND PRE-APPRENTICESHIP CLEAN ENERGY TRAINING**

This new initiative is designed to create and/or expand the capacity of existing direct entry pre-apprenticeship and registered apprenticeship programs as a pathway to family-supporting, high-quality jobs. NYSERDA expects to train approximately 3,500–4,000 new and existing workers, with at least 50% of those trainees coming from a Disadvantaged Community or Priority Population through Registered Apprenticeships and Direct-Entry Pre-apprenticeships by 2025/2026.

#### **MANUFACTURING CORPS (M-CORPS)**

The M-Corps program connects startups who are scaling products that lower greenhouse gases or reduce energy consumption with local supply chain partners, manufacturers, and suppliers—attracting new technologies to the State and prioritizing connections in underserved communities. To date, the program has engaged 68 cohort members and signed 268 manufacturing agreements. Cohort members have manufactured over 27,000 climatetech product units, raised over \$40M in revenue, and seen an estimated 17-month decrease in average time to achieve manufacturing readiness.





# SUSTAINABLE AND CLIMATE- RESILIENT COMMUNITIES

## STATE POLICY GOAL

**Build a resilient and distributed energy system—and supportive social infrastructure—that can anticipate, absorb, adapt to, and recover quickly from a wide range of shocks and stresses.**

**In this period of dynamic and fast-paced change—marked by a global pandemic, wildfires, extreme storms, record-breaking heat, and cyber threats—the energy system faces a range of new risks and disruptions. It is crucial that the transition to clean energy and net zero emissions maintain and enhance reliability and resiliency.**

New York State's power system is evolving from more vulnerable, centralized power generation toward an increasingly balanced, diversified, and digitalized network. Furthermore, advancements in flexible, responsive resources—such as energy storage and building load flexibility—are underway. But the State must ensure its infrastructure is designed for our new climate reality, including changing flood zones, sea level rise, storm surges, high windspeeds, severe hail, and extreme temperatures.

Measuring and valuing risk reduction and resiliency can catalyze opportunities to harness the market system in service of the State's goals. In line with Scoping Plan recommendations, NYSERDA will use the latest climate science to identify opportunities to incorporate climate resiliency into its own programs, investments, and assets to support both decarbonization and climate resiliency goals. This will enable NYSERDA to better support New York State's communities—major partners in the transition to a clean and resilient energy system. Not only do communities host the distributed energy resources that enable grid reliability and flexibility, but by promoting decarbonized transportation and buildings, our communities are showing how holistic, community-scale climate solutions with neighborhood-level impact can improve health outcomes, generate new economic opportunities, and strengthen local decision making and ownership.

NYSERDA is particularly focused on approaches that center on the lived experiences and priorities of frontline communities. NYSERDA recognizes the role State policy has played in perpetuating inequities faced by historically marginalized communities. This includes low-income communities, Black people and other People of Color, Indigenous Nations and people, hard-to-reach underserved rural communities, and other areas of the State with high levels of poverty and limited access to resources. In response, NYSERDA is addressing the climate crisis, energy injustice, and the legacy of environmental racism by engaging with frontline communities, bringing their voices to the table, and ensuring equity in processes and outcomes for those disproportionately burdened by the current energy system.

## New York State Communities

New York's communities are as diverse as New Yorkers themselves, spanning 932 towns, 62 cities, and 10 Indigenous Nations. More broadly, though, communities throughout the State have shared interests in preserving and expanding quality of life including affordable housing, education, job opportunities, clean air and water, and health and safety.

New York State's communities are essential partners in this clean energy transition and must be engaged in planning, coordination, and decisions that will impact generations to come.

## Disadvantaged Communities Barriers and Opportunities Report

Released at the end of 2021, this report identifies the barriers faced by Disadvantaged Communities in accessing and owning certain services and commodities related to distributed renewable energy, energy efficiency and weatherization, low- and no-emissions transportation, adaptation and resiliency, and other services and infrastructure that can reduce the risks of climate hazards.

The report also identifies 35 opportunities to overcome these barriers, organized under eight principles and three themes that are:

- ensure processes are inclusive
- streamline program access
- address emerging issues.

The Scoping Plan expects all State entities to incorporate these themes into their programs, with NYSERDA leading the way by modeling best practices. This is reflected in NYSERDA's strategies as set out throughout this mission outcome.

## SCOPING PLAN

The Scoping Plan acknowledges that climate change is the new reality, and New York State must improve the resiliency of our communities and the infrastructure that supports them. It urges the State to continue assessing the scope of the risks before us so we can better understand threats to our energy system, ecosystems, and communities, and incorporate these considerations into our programming. The State should also offer its expertise to community partners so they may improve support for resiliency and emergency preparedness for extreme heat and other dangerous weather events.

The Scoping Plan identifies local governments as key partners in the clean energy transition. As such, the State can promote smart growth principles and proactive local government planning. This would facilitate more sustainable transportation patterns; the beneficial siting of renewables and distributed energy resources; the protection of our natural resources, ecosystems, and agricultural land; the sustainable use and reuse of the State's land and buildings; the sequestration of carbon; the furtherance of equitable development practices and local ownership; and the improvement of our communities' resiliency to a changing climate.

## NYSERDA'S ROLE AND STRATEGIES FOR 2024–2027

### Climate Adaptation and Resiliency

- Lead statewide climate resiliency and adaptation planning efforts in partnership with DEC, DOS, and other State agencies. Identify best practices for resiliency to climate hazards, particularly in Disadvantaged Communities, using lessons learned statewide through the Extreme Heat Action Plan (EHAP).
- Lead by example by incorporating resiliency considerations into NYSERDA programming.
- Spearhead the next generation of climate change impacts and adaptation research to provide insights for infrastructure, investment, and energy system planning decisions based on the latest climate projection data.
- Continue to administer and refine flagship distributed energy resources programs, such as NY-Sun, and energy storage incentive programs that boost resiliency, provide grid value, and reduce costs.
- Leverage the findings from the New York State Energy Security Plan to increase awareness of the risks and mitigation opportunities across different segments of the energy sector, and coordinate with industry stakeholders and other government entities to collectively strengthen the energy resiliency and energy security abilities of the State.
- Consider climate risk on NY Green Bank investments and incorporate relevant climate resiliency considerations when evaluating future investments.
- Pursue energy innovation activities in Grid Modernization to help the grid to withstand, adapt to, and recover from climate impacts, thereby becoming more resilient.
- Accelerate the development and deployment of transformative technologies, products, and services to address climate adaptation and resiliency challenges, including through the energy innovation Tech to Market program.

### Community Partnerships and Support

- Provide support through network organizations such as the Clean Energy Hubs to help communities in implementing their own sustainability and clean energy goals.
- Promote neighbor-to-neighbor clean energy campaigns and testimonials, sharing best practices by local champions for clean energy.
- Offer guidance, training, technical resources, and planning services, including through the Clean Energy Communities initiative, to inform local decision making on land use, siting, project economics, taxes, community benefits, building codes, and the mitigation of negative impacts from pending or future fossil fuel power plant closures.
- Increase engagement of frontline, climate-vulnerable communities to ensure their representation in decision-making and policymaking.
- Provide building science expertise to help schools address the dual challenges of sustainability and indoor air quality—creating healthier, more sustainable schools.

### Energy and Climate Equity

NYSERDA pursues an inclusive approach with a focus on Disadvantaged Communities as part of the strategies described above to strengthen climate resiliency and adaption as well as support and partner with communities.

- NYSERDA partners with stakeholders and community-based organizations within Disadvantaged Communities to co-develop local clean energy agendas and deploy climate resiliency hubs. These Hubs enable residents to safely shelter in place through community-scale distributed energy resources including solar, energy storage, green hydrogen, and district geothermal systems.
- NYSERDA ensures robust engagement opportunities for historically marginalized communities, in terms of involvement in program planning and design. NYSERDA provides financial support via a Disadvantaged Community stakeholder service provider pool and a Disadvantaged Community stakeholder reimbursement.

### TRANSFORMATION BY 2030

- Resiliency considerations and investments imbedded in all relevant energy/clean energy infrastructure and programming.
- Community-, neighborhood-, and household-level infrastructure investments to boost social cohesion and people-centric resiliency, with physical refuges from extreme heat and weather events and a particular emphasis on Disadvantaged Communities.
- Ubiquitous and actionable energy data access, allowing thousands of distributed energy assets (i.e., solar, electric vehicles, grid-interactive buildings) to communicate and participate responsively, delivering value to both customers and the grid.



### INDICATORS OF PROGRESS

- Percentage of NYSERDA solicitations that incorporate resiliency provisions
- Proliferation of homes and buildings equipped with clean and resilient onsite technologies (i.e., heat pumps, solar, energy storage and/or electric vehicles) and the proportion benefitting residents of Disadvantaged Community
- Statewide grid-interactive building load

## HIGHLIGHTED PROGRAMS AND INITIATIVES

### CLIMATE ADAPTATION PLANNING

Governor Hochul’s 2024 State of the State committed NYSERDA, DEC, and DOS in partnership with other relevant agencies to develop a comprehensive climate change adaptation and resiliency plan. This effort will ensure State entities and localities can equitably adapt to climate change, including by assessing impacts on Disadvantaged Communities, ecosystems, infrastructure, and vulnerable economic sectors. This initiative will draw from foundational climate data provided through the New York State Climate Impacts Assessment (led and funded by NYSERDA and updated in 2024) as well as draw from lessons learned from the State’s first broad-scale adaptation planning effort through the Extreme Heat Action Plan (published 2024).

### CLEAN ENERGY COMMUNITIES

The Clean Energy Communities initiative, in conjunction with DEC’s Climate Smart Communities, recognizes and rewards communities for implementing clean energy and climate actions that save taxpayer dollars, create jobs, and improve the environment.

### REGIONAL CLEAN ENERGY HUBS

The Regional Clean Energy Hubs were established in 2022 and are a network of trusted, knowledgeable, community-based organizations in and from the regions they serve. Twelve organizations currently serve as Hubs—one in each of the Economic Development Regions of the State and three in New York City. Each Hub serves as a trusted local advisor to help residents understand and deploy energy efficiency, building electrification, renewable energy, and clean transportation solutions that can benefit them and their community. The Hubs:

- Provide residents and small businesses with information about utility, NYSERDA, and other building electrification, energy efficiency, and clean energy opportunities.
- Assist with applications.
- Provide energy literacy such as explaining how to understand an electric bill and linking residents to workforce development opportunities.
- Work with residents on local projects and clean energy community campaigns.

# APPENDIX: NYSERDA STRUCTURE

## NYSERDA BOARD MEMBERS

**Richard L. Kauffman**

NYSERDA Chair

**Charles Bell**

NYSERDA Vice Chair

**Sherburne B. Abbott**

Teaching Professor, Department of Environmental Health and Engineering,  
Whiting School of Engineering, Johns Hopkins University

**Rory M. Christian**

Chair and CEO, New York State Public Service Commission

**Marie Therese Dominguez**

Commissioner, New York State Department of Transportation

**Justin E. Driscoll**

President and Chief Executive Officer, NY Power Authority

**Arturo Garcia-Costas**

Senior Program Officer for the Local, National, and International Environment, The New York Community Trust

**Jay L. Koh**

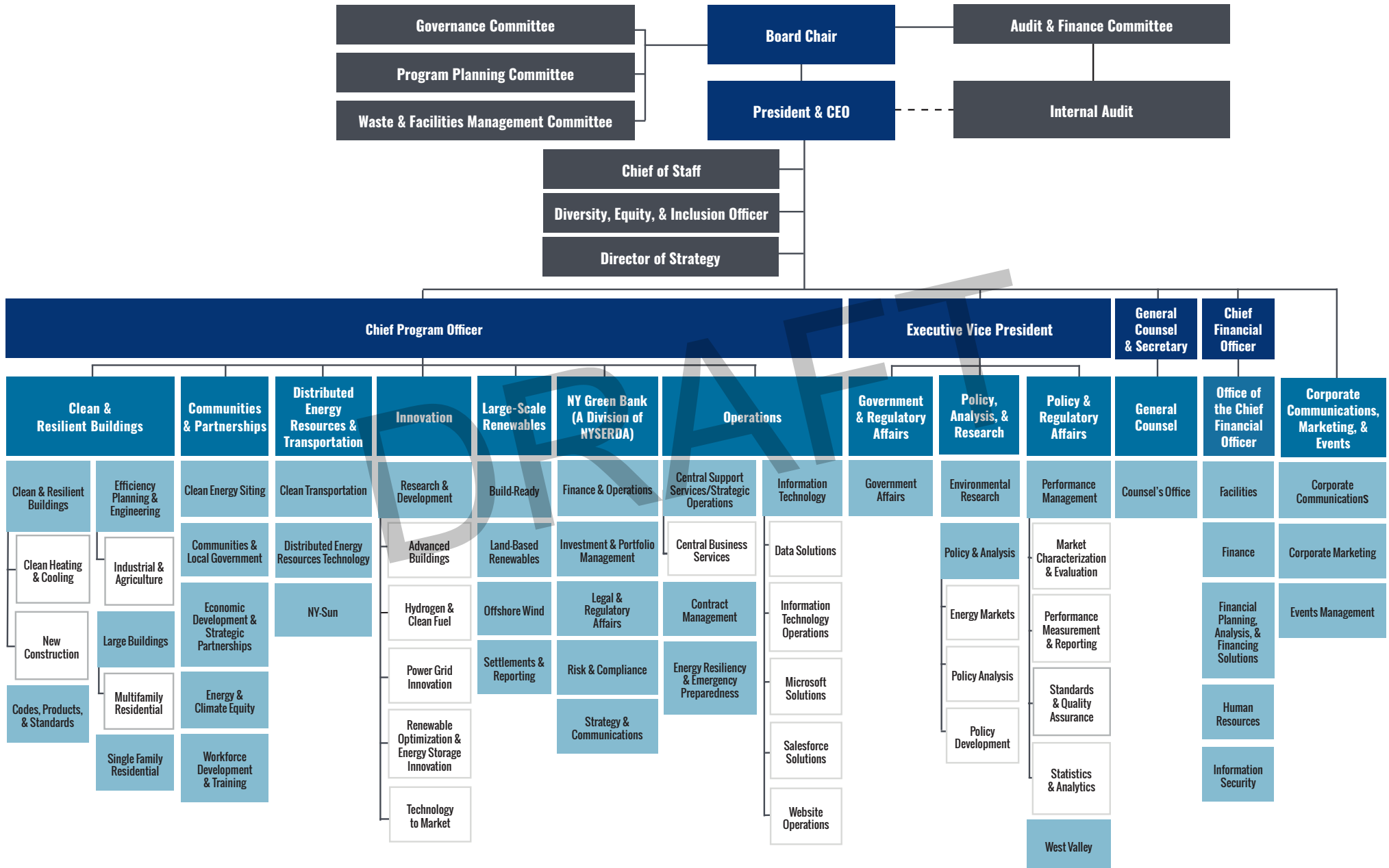
Managing Director and Founder, Lightsmith Group

**Sarah "Sadie" McKeown**

President, The Community Preservation Corporation

DRAFT

NYSERDA ORGANIZATION CHART





**State of New York**

Kathy Hochul, Governor

**New York State Energy Research and Development Authority**

Richard L. Kauffman, Chair | Doreen M. Harris, President and CEO

Resolution No. \_\_\_\_

RESOLVED, that the outlook for the Authority's energy, economic environmental program priorities and strategic vision entitled *Toward a Clean Energy Future: A Strategic Outlook 2024-2027*, submitted to the Members for consideration at this meeting with such non-substantive, editorial changes and supplementary schedules as the President, in their discretion, may deem necessary or appropriate, is adopted and approved by the Board as the Authority's updated Strategic Outlook.



**AUDIT AND FINANCE  
COMMITTEE  
(Oral Report)**

**GOVERNANCE  
COMMITTEE  
(Oral Report)**

**WASTE AND FACILITIES  
MANAGEMENT  
COMMITTEE  
(Oral Report)**

## Notice of Adoption

Energy Research and Development Authority, New York State  
(SUBMITTING AGENCY)

- This adoption will amend the NYCRR.  
 This adoption will not amend the NYCRR.

**NOTE:** Typing and submission instructions are at the end of this form. Please be sure to COMPLETE ALL ITEMS. Incomplete forms will be cause for rejection of this notice. change in text

### 1. Action taken:

Addition of Part 510 to Title 21 NYCRR.

"X" box if the rule was originally proposed as a consensus rule making.

### 2. Effective date of rule:

- Date this notice is published in the *State Register*.  
 This is a "rate making" as defined in SAPA §102(2)(a)(ii), and, is effective as follows:  
 Date of filing. \_\_\_\_\_  
 Other date (*specify*): \_\_\_\_\_  
 Other date (*specify*): \_\_\_\_\_  
 \_\_\_\_\_ days after filing.

### 3. Statutory authority under which the rule was adopted:

Energy Law, section 11-103; Public Authorities Law, sections 1854 and 1855; and State Administrative Procedure Act, Section 102.

### 4. Subject of the rule:

Cost-Effectiveness of Energy Code Updates

### 5. Purpose of the rule:

To establish a life-cycle cost methodology and define societal effects for Energy Code updates.

6. Terms and identification of rule :

A. I.D. No. of original notice of **proposed** or **emergency/proposed** rule making: ERD-52-23-00015 - P

B. Comparison of the proposed rule to the adopted rule (CHECK ALL THAT APPLY):

No changes were made to the proposed rule.

● *Text/Summary does not need to be republished in the State Register. If the last previously published RIS, RFA, RAFA or JIS remain adequate and do not require correction, SKIP ITEMS 9-12 and do NOT attach any such statements. If any of the most recently published statements were deemed inadequate or required correction, complete Item 9, 10, 11, or 12 as applicable, do NOT attach previously published statements. Be sure to complete C (if applicable), and D, as well as remaining Items 7-8 and 13-14.*

Nonsubstantive changes were made in [Parts, sections, subdivisions or paragraphs]:

[Redacted boxes for nonsubstantive changes]

● *Text/Summary is required to be republished in the State Register. Attach the original of the text as adopted (if proposed as full text, submit full text; if proposed as a summary, submit a summary) typed in scannable format. Do not skip Items 9-12; revised statements or explanatory statements are required.*

Text attached.  
 Summary attached.

This is a "rate making" as defined in SAPA §102(2)(a)(ii) and, pursuant to SAPA §202(7)(b), the agency elected to submit an original copy of a description of the substance. Substantial revisions were made in the following Parts, sections, subdivisions or paragraphs:

[Redacted boxes for rate making details]

C. List the publication date and I.D. No. of any previously published notice(s) of **revised** rule making:

Publication date: \_\_\_\_\_, I.D. No. \_\_\_\_\_ -  
Publication date: \_\_\_\_\_, I.D. No. \_\_\_\_\_ -

D. Signed certification of adoption and full text of the rule are attached:

Signed certification of adoption (scanned pdf).  
 Full text of the rule (MS Word).

7. The text of the final rule and any required statements and analyses may be obtained from:

Agency contact Chris Corcoran  
Agency name New York Energy Research and Development Authority  
Office address 17 Columbia Circle  
Albany, NY 12203-6399  
Telephone (518) 862-1090 E-mail: codes@nyserdera.ny.gov

8. Additional matter required by statute:

Yes (include below material required by statute).

[Redacted area for additional matter]

No additional material required by statute.

9. Revised Regulatory Impact Statement (RIS)

(SELECT AND COMPLETE ONE; ALL ATTACHMENTS MUST BE 2,000 WORDS OR LESS)

A. The attached Revised RIS contains:

The full text of the Revised RIS.  
 A summary of the Revised RIS.

B. A **statement is attached** explaining why a revised RIS is not required (check one box):

Changes made to the last published rule do not necessitate revision to the previously published RIS.  
 This is a technical amendment exempt from SAPA §202-a.

C.  A revised RIS is **not** attached because this rule is a “rate making” as defined in SAPA §102(2)(a)(ii).

A revised RIS is **not** attached because this rule was proposed as a consensus rule as defined in SAPA

10. **Revised Regulatory Flexibility Analysis (RFA) for small businesses and local governments**

(SELECT AND COMPLETE ONE; ALL ATTACHMENTS MUST BE 2,000 WORDS OR LESS)

A. The attached Revised RFA contains:

The full text of the Revised RFA.

A summary of the Revised RFA.

B. A **statement is attached** explaining why a revised RFA is not required (check one box):

Changes made to the last published rule do not necessitate revision to the previously published RFA.

The changes will not impose any adverse economic impact or reporting, recordkeeping or other compliance requirements on small businesses or local governments. The attached statement sets forth this agency’s findings and the reason(s) upon which the findings were made, including what measures were used to determine those findings.

C.  A revised RFA is **not** attached because this rule is a “rate making” as defined in SAPA §102(2)(a)(ii).

A revised RFA is **not** attached because this rule was proposed as a consensus rule as defined in SAPA §102(11).

11. **Revised Rural Area Flexibility Analysis (RAFA)**

(SELECT AND COMPLETE ONE; ALL ATTACHMENTS MUST BE 2,000 WORDS OR LESS)

A. The attached Revised RAFA contains:

The full text of the Revised RAFA.

A summary of the Revised RAFA.

B. A **statement is attached** explaining why a revised RAFA is not required (check one box):

Changes made to the last published rule do not necessitate revision to the previously published RAFA.

The changes will not impose any adverse impact or reporting, recordkeeping or other compliance requirements on public or private entities in rural areas. The attached statement sets forth this agency’s findings and the reason(s) upon which the findings were made, including what measures were used to determine those findings.

C.  A revised RAFA is not attached because this rule is a “rate making” as defined in SAPA §102(2)(a)(ii).

A revised RAFA is **not** attached because this rule was proposed as a consensus rule as defined in SAPA §102(11).

12. **Revised Job Impact Statement (JIS)**

(SELECT AND COMPLETE ONE; ALL ATTACHMENTS MUST BE 2,000 WORDS OR LESS)

A. The attached Revised JIS contains:

The full text of the Revised JIS.

A summary of the Revised JIS.

B. A **statement is attached** explaining why a revised JIS is not required (check one box):

Changes made to the last published rule do not necessitate revision to the previously published JIS.

The changes will not impose a substantial impact on jobs and employment opportunities. The attached statement sets forth this agency’s findings that the rule will have a positive impact or no impact on jobs and employment opportunities; except when it is evident from the subject matter of the rule that it could only have a positive impact or no impact on jobs and employment opportunities, the statement shall include a summary of the information and methodology underlying that determination.

C. A revised JIS is **not** attached because:

This rule is a “rate making” as defined in SAPA §102(2)(a)(ii).

This rule was proposed by the State Comptroller or Attorney General.

13. **Assessment of Public Comment** (includes legislative comments)

(COMPLETE ONE; ALL ATTACHMENTS MUST BE 2,000 WORDS OR LESS):

- Attached is an assessment of public comment.  
No particular form is required, and it need **only** include comments not addressed in any previously published assessment for this rule. However, the assessment must be based on any written comments received by the agency or any comments presented at any public hearing held by the agency about this rule (include legislative comment). It must contain a summary and an analysis of the issues raised and significant alternatives suggested, a statement of the reason(s) why any significant alternatives were not incorporated, and a description of any changes made as a result of such comments.
- An assessment is not attached because no comments were received.
- An assessment is not required because this action is for a “rate making” as defined in SAPA §102(2)(a)(ii).

14. **Referenced material** (check one box):

- No information is being incorporated by reference in this rule.
- This rule contains referenced material in the following Parts, sections, subdivisions or paragraphs:  

510.3(a)	510.3(c)(3)	510.3(d)(1)	510.3(d)(3)
510.3(c)(2)	510.4(b)(1)	510.4(b)(2)	

15. **Initial Review of Rule** (SAPA §207)

(SELECT AND COMPLETE ONE)

- A.  As a rule that requires a RFA, RAFA or JIS, this rule will be initially reviewed in the calendar year 2027, which is no later than the 3<sup>rd</sup> year after the year in which this rule is being adopted.
- B.  As a rule that requires a RFA, RAFA or JIS, this rule will be initially reviewed in the calendar year  which is the 4<sup>th</sup> or 5<sup>th</sup> year after the year in which this rule is being adopted. This review period, justification for proposing same, and invitation for public comment thereon, were contained in a RFA, RAFA or JIS:
  - Attached is an assessment of public comment on the issue of the 4 or 5-year initial review period; or
  - An assessment of public comment on the 4 or 5-year initial review period is not attached because no comments were received on the issue.
- C.  As a rule that does not require a RFA, RAFA or JIS, this rule will be initially reviewed in the calendar year  which is no later than the 5<sup>th</sup> year after the year in which this rule is being adopted.
- D.  Not Applicable. This is a “rate making” or a “consensus rule,” or a repeal of a rule.

**AGENCY CERTIFICATION (To be completed by the person who PREPARED the notice)**

I have reviewed this form and the information submitted with it. The information contained in this notice is correct to the best of my knowledge.

I have reviewed Article 2 of SAPA and Parts 260 through 263 of 19 NYCRR, and I hereby certify that this notice complies with all applicable provisions.

Name Chris Corcoran Signature \_\_\_\_\_

Address 17 Columbia Circle, Albany, NY 12203-6399

Telephone (518) 862-1090 E-mail codes@nyserda.ny.gov

Date \_\_\_\_\_

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**Please read before submitting this notice:**

1. Except for this form itself, all text must be typed in the prescribed format as described in the Department of State's *Register* procedures manual, *Rule Making in New York*.
2. Rule making notices, with any necessary attachments (in MS Word unless otherwise specified), should be e-filed via the Department of State website.





**NYSERDA**

**KATHY HOCHUL**  
Governor

**RICHARD L. KAUFFMAN**  
Chair

**DOREEN M. HARRIS**  
President and CEO

## CERTIFICATION

I, Richard Kauffman, Chair of the New York Energy Research and Development Authority (“NYSERDA”), having been duly authorized in writing filed with the New York Department of State, hereby certify that the attached addition to Part 510 of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York was adopted on April 29, 2024 pursuant to authority vested in NYSERDA by Energy Law section 11-103(2); Public Authorities Law sections 1854 and 1855; and State Administrative Procedures Act, section 102, by the unanimous vote of the NYSERDA Board members present at the meetings held in New York, New York on April 29, 2024. This rule shall be effective upon publication of a Notice of Adoption in the State Register.

The Notice of Proposed Rulemaking was published in the State Register on December 27, 2023, under ID No. ERD-52-23-00015-P. No other publication or prior notice was required by statute.

April 29, 2024

Date

Richard Kauffman

Name

Chair of the Authority

Title

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Signature

Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York is amended by adding a new Part 510 to read as follows:

Part 510. Evaluation Criteria for Determining the Cost Effectiveness of Proposed Changes to the Energy Conservation Construction Code of New York State

Section 510.1 Scope and Purpose

(a) The New York State Legislature has established greenhouse gas (GHG) emissions reduction mandates in New York State to 40% below 1990 levels by 2030 and then to 85% below 1990 levels by 2050. The State Energy Conservation Construction Code (Energy Code) is an important regulatory tool to assist in achieving these goals. The New York State Fire Prevention and Building Code Council (Code Council) is authorized to review and amend the Energy Code, or adopt a new Energy Code, through the promulgation of rules and regulations. To amend the Energy Code, the Code Council must determine that the Energy Code remains cost effective with respect to building construction in the State. The Code Council's cost-effective determination must include a life-cycle cost analysis; and the value of societal effects, such as reductions in GHG emissions.

(b) The purpose of this Part is to (1) establish a methodology for determining whether the life-cycle costs for a building will be recovered through savings in energy costs over the design life of the building under a life-cycle cost analysis; (2) define secondary or societal effects to be considered in the cost effectiveness determination; and (3) provide a method for quantifying the societal effects so that they can be added to the life-cycle costs. This Part implements amendments to paragraph (a) of subdivision 2 of section 11-103 of the Energy Law, as enacted by the "Advanced Building Codes, Appliance and Equipment Efficiency Standards Act of 2022."

Section 510.2 Definitions

Whenever used in this Part, unless otherwise expressly stated, the following terms shall have the meanings indicated below.

- (a) *Commercial Building*. Commercial building shall have the same meaning as set forth in 19 NYCRR section 1240.2.
- (b) *Code Council*. Code Council means the State Fire Prevention and Building Code Council, as established by section 374 of the Executive Law and enacted by the New York State Fire Prevention and Building Code Act, chapter 707 of the Laws of 1981.
- (c) *DOE*. DOE means the United States Department of Energy.
- (d) *DOE Commercial Methodology*. The DOE Commercial Methodology means the U.S. Department of Energy's *Methodology for Evaluating Cost-effectiveness of Commercial Energy Code Changes*.
- (e) *DOE Residential Methodology*. The DOE Residential Methodology means the U.S. Department of Energy's *Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes*.
- (f) *Energy Code*. Energy Code means Part 1240 of Title 19 of the Official Compilation of Codes, Rules and Regulations of the State of New York.
- (g) *Energy Code update*. Energy Code update means an amendment to the Energy Code, which may include the adoption of a new Energy Code by the Code Council.
- (h) *Effective Useful Life*. Effective useful life means the estimated, median length of time in years that an energy system, energy conservation measure, or piece of equipment is functional, prior to replacement.
- (i) *Emissions Factors*. Emissions factors mean the amount of GHGs emitted per unit of electricity or fuel used.

- (j) *Energy Price*. Energy price means the average annual retail price of electricity or fuel.
- (k) *Energy Price Escalation Rate*. Energy price escalation rate means the projected change in energy prices over time.
- (l) *Fuel*. Fuel means natural gas, propane, kerosene, diesel, or oil.
- (m) *Life-cycle Cost*. Life-cycle cost shall have the same meaning set forth in as section 11-102 of the Energy Law.
- (n) *NYSERDA*. NYSERDA means the New York State Energy Research and Development Authority.
- (o) *Prototype Building Model*. Prototype building model means the whole building energy simulations developed by U.S. Department of Energy for a series of commercial and residential building configurations, which models may be used for evaluating or comparing current Energy Code to a proposed Energy Code update.
- (p) *Residential Building*. Residential building shall have the same meaning as set forth in 19 NYCRR section 1240.2.
- (q) *Study Period*. Study period means the number of years into the future that costs and revenues are considered in this Part. The study year period as used in this Part is 30 years.
- (r) *TRM*. TRM (Technical Resource Manual) means the New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Residential, Multi-Family, and Commercial/Industrial.

(a) Life-cycle costs of an Energy Code update for commercial buildings will be analyzed by using the methodology for determining life-cycle cost net present value of savings established in the *DOE Commercial Methodology*, as incorporated by reference in section 510.7 of this Part and as modified in this section for New York State. Life-cycle costs of an Energy Code update for residential buildings will be analyzed by using the methodology for life-cycle costs established in the *DOE Residential Methodology*, as incorporated by reference in section 510.7 of this Part and as modified in this section for New York State.

(b) Building Energy Use Evaluation. For both commercial and residential buildings, whole building simulation will be used to calculate annual energy consumption for the duration of the study period for relevant end uses of buildings with construction starts that fall within a three-year period commencing on the effective date of an Energy Code update.

(1) Building Prototypes. Prototype building models developed by DOE under the Building Code Energy Program will be selected as follows:

(i) Commercial prototype building models. DOE commercial prototype building models will be modified as necessary to align with the anticipated predominant new construction system and equipment parameters in New York State. A minimum of 5 prototypes will be selected to represent not less than 75% of new construction starts by floor area in New York State.

(ii) Residential prototype building models. DOE residential building prototypes will be modified as necessary to align with anticipated predominant new construction system and equipment parameters in New York State.

(2) Building Model Cases. Two cases for each prototype building model will be analyzed. One model case will be a building that complies with the current Energy Code and other legal requirements, including Energy

Law section 11-104(6) and Executive Law section 378(19); the other model case will be an otherwise identical building that complies with the proposed Energy Code update and other legal requirements, including Energy Law section 11-104(6) and Executive Law section 378(19).

(i) Prototype building model cases will be configured to use typical and financially reasonable design parameters of each of the two cases.

(ii) Prototype building model components that are unchanged by a proposed Energy Code update are identical in prototype building model cases.

(3) Climate Zones. Each selected prototype building model will be simulated in each New York State climate zone, weighted by anticipated percentage of statewide new construction starts, to estimate the overall state average energy impact of the proposed Energy Code update. The calculated statewide impact will be weighted to account for both climate zone and building type specific differences in new construction that may be affected by the proposed Energy Code update.

(c) Costs

(1) Energy Prices. Retail energy prices will be based on the most recently-available New York State commercial or residential energy prices as of the date the analysis is performed, derived from public sources, which shall include, when available, reporting sources maintained by a federal or New York State entity authorized by law to report such information and/or an investor-owned public utility. Energy prices for delivered fuel will be based on weighted average delivered fuel cost derived from an estimate of fuel use by type in New York State. Energy prices will be escalated in accordance with the methods in this subdivision.

(i) Energy Price Escalation. Energy price escalation rates will be based on the projected change in energy costs in New York State. Energy price escalation values will be derived from public sources, which shall

include, when available, reporting sources maintained by a federal or New York State entity authorized by law to report such information, the New York Independent System Operator (NYISO), and/or an investor-owned public utilities and may use a combination of projections for the near term such as published investor-owned public utility sources. For purposes of this section, contemporaneous information reported in the U.S Department of Energy's Energy Information Administration regarding Short Term Energy Outlook and Annual Energy Outlook, and/or NYISO System & Resource Outlook may be used.

(ii) Energy Price Weighting by Climate Zone. When available, energy prices may be calculated using weighted energy prices, by climate zone, to better account for the variability of energy prices throughout the different regions of New York State. Climate zone specific energy prices are calculated by weighting the delivered energy and energy cost of utilities serving the different New York State climate zones.

(2) Effective Useful Life. The effective useful life of equipment and systems will be determined in accordance with Appendix P of the TRM, as incorporated by reference in section 510.7 of this Part. If equipment or material is not listed in the TRM, or if the value in the TRM is unreliable, an alternative source may be used. If a source alternative to the TRM is used, the source and effective useful life will be cited in reporting.

(3) Labor and Material Costs. Labor and material cost estimates will be adjusted for Albany, Buffalo, and New York City in accordance with the *DOE Commercial Methodology* and the *DOE Residential Methodology*, which are incorporated by reference in section 510.7 of this Part.

(4) Property Tax. Property tax will not be included in life-cycle cost analysis.

(d) Life-cycle Cost of Energy Code Updates for Commercial Buildings.

(1) Ownership Scenarios. Life-cycle costs for commercial buildings will be analyzed in accordance with the *DOE Commercial Methodology* for privately owned buildings, as incorporated by reference in section 510.7 of this Part.

(2) Maintenance Costs. If data is publicly available to support estimating maintenance costs, weighted by New York State climate zones, this level of analysis will be performed.

(3) Loan Interest Rate. Loan interest rate will be determined based on the most recent commercial loan rates when the analysis is performed for New York State as applied in the *DOE Commercial Methodology*, as incorporated by reference in section 510.7 of this Part.

(4) Income Tax Rate. The income tax rate will be equal to the combined federal and New York State corporate income tax rates in effect for the reporting year in which the evaluation is performed.

(5) Aggregating Results. The results will be aggregated using average weighting factors based on the most recent as of the date the analysis is performed New York State-derived disaggregated construction volume data. For purposes of this section, data obtained from Dodge Data & Analytics Construction Projects Starts Database, or equivalent commercially available a source, shall be deemed sufficient.

(e) Life-cycle Costs of Energy Code Updates to Residential Buildings

(1) Mortgage interest rate. The mortgage interest rate will be based on the ten-year historical average of a conventional 30-year real estate loan in New York State.

(2) Loan Fees. Loan fee values will be based on most recent New York State data as of the date the analysis is performed from a credible source such as the Freddie Mac Weekly Primary Mortgage Market Survey.



(3) Aggregation across foundation types. The results will be aggregated across foundation types using average weighting factors based on the most recent New York State-derived data as of the date the analysis is performed.

(4) Aggregation across Heating Equipment Types. The results will be aggregated across heating equipment types using average weighting factors based on the most recent New York-State-derived data and statutory requirements as of the date the analysis is performed.

(5) Aggregation across Building Type. The results will be aggregated across building types using average weighting factors based on the most recent census data for New York State or the best available New York State market data as of the date the analysis is performed.

(f) Statewide Life-cycle Costs. The statewide life-cycle cost will be the weighted sum of both the residential and commercial life-cycle cost analyses performed in accordance with this section. Weighting will be based on the estimated proportion of new construction starts during the three-year period commencing on the estimated effective date of an Energy Code update.

#### Section 510.4 Societal Effects

(a) Societal Effects Defined. Societal effects will include the value of avoided GHG emissions resulting from changes in electricity and fuel consumption.

(b) Estimating the value of avoided GHG emissions. Avoided GHG emissions will be calculated by multiplying the incremental annual building electricity and fuel consumption determined in accordance with section 510.3(b) of this Part by the corresponding GHG emissions factors.

(1) Emissions Factors. Emissions factors from the following reports published by NYSERDA detailing emissions factors for grid electricity, *Projected Emission Factors for New York State Grid Electricity*, as incorporated by reference in section 510.7 of this Part, and *Fossil and Biogenic Fuel Greenhouse Gas Emission Factors*, as incorporated by reference in section 510.7 of this Part will be applied.

(2) Monetary Value. The monetary value associated with avoided GHG emissions will be calculated using central values at the 2% discount rate following the New York State Department of Environmental Conservation (DEC) published guidance, *Establishing a Value of Carbon, Guidelines for Use by State Agencies*, as incorporated by reference in section 510.7 of this Part. Central values are discounted to the emissions year. Discounting from the emissions year to present will use a 2% discount rate.

#### Section 510.5 Presentation of Cost Effectiveness Analysis

(a) The cost effectiveness analysis performed in accordance with this Part will include the content described herein.

##### (1) Presentation of Life-cycle Cost Results.

(i) Commercial Buildings. The results of the life-cycle cost analysis performed for commercial buildings in accordance with section 510.3 of this Part will be presented in statewide Net Present Value, in dollars, and per square foot of floor area.

(ii) Residential Buildings. The results of the life-cycle cost analysis performed for residential buildings in accordance with section 510.3 of this Part will be presented in statewide Net Present Value, in dollars, and per square foot of floor area or by dwelling unit.

(iii) Statewide Results. The life-cycle cost of both commercial and residential buildings calculated in accordance with section 510.3(f) of this Part, will be presented in statewide Net Present Value, in dollars.

(2) Presentation of Results for Societal effects.

(i) Avoided GHG emissions. The results of the value of avoided GHG emissions calculated in accordance with section 510.4(b) of this Part, presented in statewide Net Present Value, in dollars.

(3) Total Net Present Value of Savings. The sum of the life-cycle costs from section 510.3(f) of this Part will be added to the value of avoided GHG emissions from section 510.4 of this Part, which will be presented as the Total Net Present Value of Savings.

#### Section 510.6 Cost Effectiveness Presumption

(a) An Energy Code update shall be presumed to be cost effective if the Net Present Value of Life-cycle Cost Impacts as determined in section 510.3 of this Part plus the Net Present Value of Societal Effects as determined in section 510.4 of this Part is greater than or equal to zero.

(b) Existing buildings. A proposed Energy Code update will be presumed to be cost effective in existing buildings subject to the proposed Energy Code update if they are cost effective in new buildings as determined in subdivision (a) of this section.

#### Section 510.7 Reference Material

The following regulations or technical materials listed in Table RM are incorporated by reference. The documents are available from the addresses listed or, in the case of Federal publications, from the National Archives, 700 Pennsylvania Avenue, NW, Washington, DC 20408, and for inspection and copying at the offices

of the New York State Energy Research and Development Authority. For each reference, additional sources for hard copy materials and websites, where appropriate, are provided.

Table RM

Item	Website	Date
DOE Methodology for Evaluating Cost-effectiveness of Commercial Energy Code Changes prepared by Pacific Northwest National Laboratory *	<a href="https://www.energycodes.gov/sites/default/files/2021-07/commercial_methodology.pdf">https://www.energycodes.gov/sites/default/files/2021-07/commercial_methodology.pdf</a>	August 2015
DOE Methodology for Evaluating Cost-Effectiveness of Residential Energy Code Changes prepared by Pacific Northwest National Laboratory *	<a href="https://www.energycodes.gov/sites/default/files/2021-07/residential_methodology_2015.pdf">https://www.energycodes.gov/sites/default/files/2021-07/residential_methodology_2015.pdf</a>	August 2015
Appendix P of the New York Department of Public Service New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs – Residential, Multi-Family, and Commercial/Industrial**	<a href="https://dps.ny.gov/system/files/documents/2023/03/c1e1783c-c3d3-48a4-8647-a5923c39553c.pdf">https://dps.ny.gov/system/files/documents/2023/03/c1e1783c-c3d3-48a4-8647-a5923c39553c.pdf</a>	December 30, 2022
NYSERDA Projected Emission Factors for New York State Grid Electricity**	<a href="https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/Energy-Analysis/22-18-Projected-">https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/Energy-Analysis/22-18-Projected-</a>	August 2022

	<a href="#">Emission-Factors-for-New-York-Grid-Electricity.pdf</a>	
NYSERDA Fossil and Biogenic Fuel Greenhouse Gas Emission Factors**	<a href="https://www.nyserra.ny.gov/-/media/Project/Nyserda/Files/Publications/Energy-Analysis/22-23-Fossil-and-Biogenic-Fuel-Greenhouse-Gas-Emission-Factors.pdf">https://www.nyserra.ny.gov/-/media/Project/Nyserda/Files/Publications/Energy-Analysis/22-23-Fossil-and-Biogenic-Fuel-Greenhouse-Gas-Emission-Factors.pdf</a>	May 2023
New York State Department of Conservation Establishing a Value of Carbon, Guidelines for Use by State Agencies**	<a href="https://www.dec.ny.gov/regulations/56552.html">https://www.dec.ny.gov/regulations/56552.html</a>	August 2023

\* Hard copies available from US Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001.

\*\* Hard copies are available at One Commerce Plaza, 99 Washington Ave, Albany, NY 12231.

NEW YORK STATE ENERGY RESEARCH  
DEVELOPMENT AND AUTHORITY

Resolution Approving Adoption of Cost Effectiveness of Energy Code Updates Rule

WHEREAS, pursuant to the Advanced Building Codes, Appliances and Equipment Efficiency Standards Act of 2022 (the “2022 Efficiency Standards Act”), NYSERDA proposes to adopt Part 510 of Title 21 of the New York Codes, Rules, and Regulations (NYCRR) for the purpose of enacting regulations to: (1) establish a methodology for determining whether the life-cycle costs for a building will be recovered through savings in energy costs over the design life of the building under a life-cycle cost analysis; (2) define secondary or societal effects to be considered in the cost effectiveness determination; and (3) provide a method for quantifying the societal effects so that they can be added to the life-cycle costs (“Proposed Rule”).

WHEREAS, the rule making process for NYSERDA is governed by the State Administrative Procedure Act (“SAPA”); and

WHEREAS, NYSERDA, having published the Proposed Rule, as attached hereto, in the New York State Register and after considering the public comments received in response to the Notice of Proposed Rulemaking has determined that changes are not necessary to the Proposed Rules; and

WHEREAS, given that NYSERDA is not revising the Proposed Rule and did not receive public comments related to the SEQRA Negative Declaration that would warrant reconsideration of its findings, no amendments to that document or additional approvals are necessary for the Adoption.

NOW THEREFORE, BE IT RESOLVED, that NYSERDA adopts the text of the Proposed Rule, substantially in the form attached hereto; and

BE IT FURTHER RESOLVED, that NYSERDA, authorizes, approves, and directs the publication of Notice of Adoption to establish a new Part 510 of Title 21 of the Official Compilation of Codes, Rules and Regulations of the State of New York, titled **Cost Effectiveness of Energy Code Updates**, in substantially in the form attached hereto, including the summary and response to comments.

DEI  
(Oral Report)

NYCI  
(Oral Report)



# NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

## CONFLICT OF INTEREST POLICY FOR BOARD MEMBERS

(April ~~2023~~2024)

All board members shall be provided with this Conflict of Interest Policy upon their appointment to the NYSERDA Board and are required to acknowledge that they have read, understand, and are in compliance with the terms of the Policy. Board members should review, on an ongoing basis, circumstances that constitute a conflict of interest or the appearance of a conflict of interest and should abide by this policy and seek guidance when necessary and appropriate.

This policy is intended to supplement, but not replace, any applicable state and federal laws and regulations governing conflicts of interest applicable to unpaid board members of public authorities.

**Conflicts of Interest:** A conflict of interest is a situation in which the financial, familial, or personal interests of a board member come into actual or perceived conflict with their duties and responsibilities as a board member of the Authority. Perceived conflicts of interest are situations where there is the appearance that a board member can personally benefit from actions or decisions made in their official capacity, or where a board member may be influenced to act in a manner that does not represent the best interests of the Authority. The perception of a conflict of interest may occur if circumstances would suggest to a reasonable person that a board member may have a conflict. The appearance of a conflict and an actual conflict should be treated in the same manner for the purposes of this Policy.

Board members must conduct themselves at all times in a manner that avoids any appearance that they can be improperly or unduly influenced, that they could be affected by the position of or relationship with any other party, or that they are acting in violation of the public trust. While it is not possible to describe or anticipate all the circumstances that might involve a conflict of interest, a conflict of interest typically arises whenever a board member has or will have:

- A financial or personal interest in any person, firm, corporation or association which has or will have a transaction, agreement or any other arrangement in which the Authority participates;
- The ability to use their position, confidential information or the assets of the Authority, to their personal advantage;
- Any other circumstance that may or appear to make it difficult for the board member to exercise independent judgment and properly exercise their official duties.

### PROCEDURES

**Duty to Disclose:** All material facts related to the conflict of interest (including the nature of the interest and information about the conflicting transaction) shall be disclosed in good faith to the General Counsel and/or Ethics Officer. Such disclosure shall be made part of the official record of the proceedings of the Authority.

**Determining Whether a Conflict of Interest Exists:** The General Counsel and/or Ethics Officer shall advise the individual who appears to have a conflict of interest how to proceed. The General Counsel and/or Ethics Officer should seek guidance from the New York State Commission on Ethics and Lobbying in Government (Ethics Commission) when dealing with cases where they are unsure of what to do.

**Recusal and Abstention:** No board member may participate in any decision or take any official action with respect to any matter requiring the exercise of discretion, including discussing the matter and voting, when they know or have reason to know that the action could confer a direct or indirect financial or material benefit on themselves, a relative, or any organization in which they are deemed to have an interest. Board members must recuse themselves from deliberations, votes, or internal discussion on matters relating to any organization, entity or individual where their impartiality in the deliberation or vote might be reasonably questioned, and are prohibited from attempting to influence other board members in the deliberation and voting on the matter.

**Records of Conflict of Interest:** The minutes of the Authority's meetings during which a perceived or actual conflict of interest is disclosed or discussed shall reflect the name of the interested person, the nature of the conflict, and a description of how the conflict was resolved.

**Confidential Information:** Information obtained as a result of board membership, and not otherwise public, must not be disclosed, and may not be used to further your interests or the interests of a relative.

**Unwarranted Privileges:** Do not use or attempt to use your position on the board to obtain preferential treatment for yourself or others.

**Nepotism:** Do not participate in any way in a decision to hire, promote or discipline a family member paid by the Authority.

**Gifts:** Do not accept anything of value where (a) it could reasonably be inferred that it is a gift intended to influence you, in the performance of your board duties; or (b) was given to you as a sign of appreciation for board member action. Ask the General Counsel and/or Ethics Officer to determine the appropriate course of action in a particular circumstance.

**Political Activity:** Certain board members cannot do the following – please discuss with the General Counsel and/or Ethics Officer whether these prohibitions apply to you:

- a. Serve as an officer of any political party or political organization;
- b. Serve as a member of any political party committee, including serving as a political party district leader or member of the national committee of a political party; or
- c. Give or raise monetary contributions for the State of New York Governor's political campaign.

**Outside Activities:** You may not engage in outside activities that would impair your judgment or compromise or interfere with your ability to properly perform your duties. You may not engage in outside activities that create an actual conflict of interest or the appearance of a conflict of interest. You should consult with the General Counsel and/or Ethics Officer if you have any questions concerning your outside activities. You may not use NYSERDA time, materials, equipment or other assets in connection with outside activities.

**Reverse Two Year Bar:** For the first two years you serve on the NYSERDA Board, you should not participate or be involved in the decision-making process for NYSERDA in relation to any matter involving a person or business in the private sector by whom you are currently employed or by whom you were employed during the two years preceding NYSERDA service or employment.

**Reporting of Violations:** Board members should promptly report any violations of this Policy to Authority's General Counsel, Ethics Officer, or Director of Human Resources in accordance with the Authority's Whistleblower Policy and Procedures.

**Penalties:** Any board member that fails to comply with this policy may be penalized in the manner provided for in law, rules, or regulations.

# NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

## CONFLICT OF INTEREST POLICY FOR EMPLOYEES

April ~~2023~~2024

All Authority Employees shall be provided with this Conflict of Interest Policy as well as the relevant sections of Public Officers Law upon their employment with NYSERDA and are required to acknowledge that they have read, understand and are in compliance with the terms of the Policy and the relevant sections of the Public Officers Law on an annual basis. Employees should review on an ongoing basis circumstances that constitute a conflict of interest or the appearance of a conflict of interest and should abide by this Policy and seek guidance when necessary and appropriate.

This Policy is intended to supplement, but not replace, any applicable state and federal laws governing conflicts of interest applicable to Authority employees. Legal guidance and direction are available through NYSERDA's Ethics Officer, who is an attorney in Counsel's Office. Questions about a specific situation should be directed to your supervisor, the Director of Internal Audit, the Director of Human Resources, Counsel's Office or NYSERDA Officers. Additionally, you may contact the New York State Commission on Ethics and Lobbying in Government (Ethics Commission) directly about any ethics question or issue.

### **DEFINITIONS**

**"Financial Interest"** means any note or other evidence of indebtedness, stock, stock option, bond, security, wage, salary, income or other compensation or right to compensation, or other financial interest or arrangement, including but not limited to trusts. The term "financial interest" does **not** include for example: (a) an interest in a personal checking, savings, or similar account; (b) an interest in a money market fund, mutual fund, unit bond trust, regulated investment company, or similar entity the portfolio of which is widely diversified; (c) an interest in a bona fide pension or retirement plan or life, health or accident insurance plan; or (d) government bonds.

**"Gift"** means anything that has a fair market value of more than \$15.00 including, but not limited to, money, services, loans, discounts, travel, lodging, meals, refreshments, entertainment, forbearance or a promise having a monetary value.

**"Inside Information"** means information which is obtained by NYSERDA for its public, corporate purposes only, and which, if used for non-public purposes by an employee or another person or organization to whom the information is conveyed, would give that person or organization an unfair advantage in a particular matter because that information is not available to members of the general public.

**"Interested Source"** means a person or entity that: (a) has contracts with, or seeks contracts with you or NYSERDA; (b) is a registered lobbyist or client of a lobbyist that lobbies NYSERDA; (c) is the spouse or the minor child of a registered lobbyist or client of a lobbyist that lobbies NYSERDA; (d) is involved in ongoing litigation that is adverse to you or NYSERDA; (e) has received or applied for funds from NYSERDA at any time during the previous year up to and including the date of the proposed or actual receipt of the gift; or, (f) attempts to influence you or NYSERDA in an official action.

**“Participate or be involved in the decision making process”** means: ~~(a) serving as a project manager or member of a technical review committee, or having other assigned duties or responsibilities for providing scientific, technical, policy, financial, or legal review or analysis or for contracting or other procurement action; (b) serving as a program manager or program director or otherwise having assigned supervisory duties or responsibilities; (c) serving as a member of the Greenlight Review Committee; and (d) otherwise~~ having any authority or assigned duty or responsibility to provide any approval or disapproval.

## **RULES**

**Conflicts of Interest:** A conflict of interest is a situation in which the financial, familial, or personal interests of an employee come into actual or perceived conflict with the duties and responsibilities as an employee of the Authority. Perceived conflicts of interest are situations where there is the appearance that an employee can personally benefit from actions or decisions made in their official capacity, or where an employee may be influenced to act in a manner that does not represent the best interests of the Authority. The perception of a conflict of interest may occur if circumstances would suggest to a reasonable person that an employee may have a conflict. The appearance of a conflict and an actual conflict should be treated in the same manner for the purposes of this Policy.

Employees must conduct themselves at all times in a manner that avoids any appearance that they can be improperly or unduly influenced, that they could be affected by the position of or relationship with any other party, or that they are acting in violation of the public trust. While it is not possible to describe or anticipate all of the circumstances that might involve a conflict of interest, a conflict of interest typically arises whenever an employee has or will have:

- A financial or personal interest in any person, firm, corporation or association which has or will have a transaction, agreement or any other arrangement in which the Authority participates;
- The ability to use their position, confidential information or the assets of the Authority, to their personal advantage;
- Solicited or accepted a gift of any amount under circumstances in which it could reasonably be inferred that the gift was intended to influence them, or could reasonably be expected to influence them, in the performance of their official duties or was intended as a reward for any action on their part; or
- Any other circumstance that may or appear to make it difficult for the employee to exercise independent judgment and properly exercise their official duties.

**Financial Interests:** No employee may participate or be involved in the decision-making process or take any official action with respect to any matter requiring the exercise of discretion, when they know or has reason to know that the action could confer a direct or indirect financial or material benefit on them, a relative, or any organization in which they are deemed to have an interest. An employee should not retain or obtain a financial interest in any person or organization that does business with NYSERDA if the employee is, or is likely to be, participating in the decision-making process at NYSERDA in a matter involving that person or organization.

**Gifts:** No gift of any value may be accepted if it would constitute a substantial conflict with the proper discharge of your duties. Additionally, Public Officers Law prohibits you from directly or indirectly soliciting, accepting, or receiving any gift that has a fair market value of more than \$15.00 where the circumstances would reasonably permit the inference that the gift was (a) intended to influence you, or

could reasonably be expected to influence you, in the performance of your duties; or (b) was intended as a tip, reward, or sign of appreciation for your official duties. If you receive or are offered a gift, contact the Ethics Officer so they can decide whether you may accept it.

**Political Activity:** Employees are under no obligation to contribute to any political fund or perform any political service. Employees may not use job-related influence to force political activity on the part of others nor may others make the demand on them. You may not require employees or potential employees and contractors or potential contractors to reveal information on party affiliation or campaign contributions. Additionally, state offices may not be used for soliciting or collecting any political contributions. Should you intend to run for political office, you should obtain your supervisor's and Counsel's Office concurrence that the public office to be sought will not interfere with your official NYSERDA duties and is allowed under State and Federal law. Policymakers seeking public office for which more than nominal compensation will be paid must first obtain Ethics Commission approval.

**Outside Activities:** You may not engage in outside activities that would conflict with scheduled work hours or that would impair your judgment or compromise or interfere with your ability to properly perform your duties. You should consult with the Ethics Officer prior to engaging in any outside activity relating to the energy field or involving a NYSERDA contractor or potential contractor. You should consult with the Ethics Officer if you have any questions concerning potential conflicts of interest arising from other outside activities. You may not use NYSERDA time, materials, equipment or other assets in connection with outside activities.

NYSERDA employees who are designated policymakers must obtain approval before engaging in any outside activity if the amount to be earned exceeds \$1,000 annually. If the amount to be earned exceeds \$5,000 annually, Ethics Commission approval is also required. Designated policymakers must also obtain NYSERDA and Ethics Commission approval prior to serving as a director or officer of a for-profit entity, regardless of compensation. Additionally, designated policymakers must notify the Ethics Officer prior to serving as a director or officer of a not-for-profit entity if annual compensation will be between \$0 - \$999.

**Reverse Two Year Bar:** For the first two years you work at NYSERDA, you should not participate or be involved in the decision-making process for NYSERDA in relation to any matter involving a person or business in the private sector by whom you were employed during the two years preceding NYSERDA service or employment.

**Use of Inside Information and Confidential Information:** You should not use inside information, non-public information, or information designated as confidential, proprietary or trade-secret to benefit yourself or another person or organization. You should not provide such information to any other person or organization, except in carrying out NYSERDA's corporate purposes. You should not give advice or make recommendations or suggestions to another person or organization based upon such information. Confidential, proprietary and trade-secret information acquired by you in the course of your official duties may not be disclosed to further your or another's personal interests, including financial interests. If NYSERDA executes a non-disclosure agreement (NDA) with an outside entity or individual, you, as an employee of NYSERDA, are required to comply with its terms. Records in the possession of NYSERDA that are labeled confidential, proprietary or trade-secret shall be treated as such by all NYSERDA employees. Any unauthorized disclosure of such information will result in disciplinary action and may result in termination.

**Endorsements:** No employee, in their capacity as an employee of NYSERDA, should endorse any product or process of a specific manufacturer or the service of any specific firm. This limitation does not preclude NYSERDA, as an institution, from making such an endorsement in carrying out its corporate purposes. (Use of materials, products or services by NYSERDA or an employee does not constitute an endorsement.) No employee should engage in any outside employment or outside activity which results or gives the appearance of the identification of NYSERDA with any product, process, or service for advertising, publicity, or sales purposes.

**Solicitation of Future Employment:** Employees are prohibited from discussing possible future employment with any entity that has had a specific matter pending before them unless 30 days or more has passed since the matter closed or since the employee was recused from the matter. Employees are required to notify their supervisor or the Ethics Officer if they intend to solicit a job offer, or if they receive an unsolicited job offer, from an entity or individual that has a specific matter pending before them.

**Post -Employment Restrictions:**

**Two-Year Bar Restriction:** Applies for two years after you leave the Authority for a non-governmental job and contains two different types of prohibitions:

**(1) Appearance/Practice Prohibition**

- a. Prohibits a former State employee from interacting (in person, on the phone, or via written or electronic correspondence) in their new job with any employee in their former agency in an attempt to influence an agency decision.
- b. Examples of prohibited work: (i) negotiating a contract with a former agency; (ii) submitting a response to a Request for Proposal from a former agency; (iii) requesting that the former agency take any action on a current or proposed project; (iv) submitting reports or filings to a former agency; (v) seeking information from a former agency that is not available to the public.
- c. Applies to both paid and unpaid (*pro bono*) work.

**(2) Backroom Services Prohibition**

- a. Prohibits a former State employee from working “behind the scenes” on a matter that is before their former agency.
- b. Examples of prohibited work: (i) helping to prepare a Request for Proposal in response to a former agency; (ii) working on any reports or other submissions to a former agency; (iii) helping to prepare another person for a meeting with, or presentation to, a former agency.
- c. Applies to paid work only. (In other words, unpaid backroom services work is permissible.)

**Lifetime Bar Restriction:** Applies for your lifetime after you leave the Authority for a non-governmental job.

- (1) Prohibits a former State employee from providing services in relation to any case, matter, proceeding, project, application, or transaction with which they were personally involved.
- (2) If the matter is before a New York State agency, you are prohibited from providing any type of services.
- (3) If the matter is before any other entity, you may only provide services if you receive no compensation.

## **PROCEDURES**

**Duty to Disclose:** All material facts related to the Rules listed above shall be disclosed in good faith to the Ethics Officer as soon as an employee becomes aware of them so that an ethics opinion can be rendered. Actual or potential conflicts of interest with individuals or entities doing business with NYSERDA should be disclosed to supervisory personnel immediately (*See Personnel Handbook Whistleblower Policy*).

**Determining Whether a Conflict of Interest Exists:** The Ethics Officer shall advise individuals who appear to have a conflict of interest on how to proceed. The Ethics Officer should seek guidance from the Ethics Commission when dealing with cases where they are unsure of what to do.

**Reporting of Violations:** You should remain alert to possible violations of law, policy, or public trust everywhere in NYSERDA. Section 55 of Article 4-A of the Executive Law requires all state officers and employees to promptly report to the State Inspector General any information concerning corruption, fraud, criminal activity, conflicts of interest or abuse by both another state officer or employee relating to their employment or by a person having business dealings with a covered agency relating to those dealings. You must also report such violations to the Internal Controls Officer, the Director of Human Resources, the Director of Internal Audit, the Fraud and Abuse Hotline, or a member of Counsel's Office. You must cooperate in any official investigation of a violation. Retaliation against any employee who in good faith reports a violation of law, policy, or public trust is prohibited. (*See Personnel Handbook Summary of Employee Responsibilities.*)

**Interpretation or Clarification:** An employee may submit a written request to the Ethics Officer for an interpretation or clarification of the provisions of this Policy.

**Penalties:** Any employee that fails to comply with this Policy may be penalized in the manner provided for in law, rules or regulations. This can include fines, suspension or removal from employment for knowing and intentional violations.

### **Resources Available:**

#### Internal

Director of Internal Audit

Internal Controls Officer

General Counsel (and all other Counsel's Office Staff)

#### External

Fraud and Abuse Hotline 1-866-219-1122

NYS Commission on Ethics and Lobbying in Government: 518-408-3976

NYS Office of the Inspector General 1-800-367-4448

Authorities Budget Office (518) 474-1932 (Albany and Capital District); 1-800-560-1770 (For use outside the 518 area code only)



Resolution No. \_\_\_\_\_

RESOLVED, that the Employee Conflict of Interest Policy and Board Member Conflict of Interest Policy as presented at this April 29, 2024 meeting, is hereby approved by the Board.

Resolution No. \_\_\_\_\_

WHEREAS, pursuant to special act of the Legislature of the State of New York (Title 9 of Article 8 of the Public Authorities Law of New York, as from time to time amended and supplemented, herein called the “Act”), the New York State Energy Research and Development Authority (the “Authority”) has been established as a body corporate and politic, constituting a public benefit corporation; and

WHEREAS, pursuant to the Act, the Authority is authorized to issue bonds and notes to provide sufficient moneys for achieving the Authority’s corporate purposes, including the establishment of reserves to secure the bonds and notes and the payment of interest on bonds and notes; and

WHEREAS, pursuant to the Act, the Authority is also empowered to extend credit and make loans from bond proceeds to any person for the construction, acquisition, installation of, or for the reimbursement to any person for costs in connection with, any special energy project, including, but not limited to, any land, works, system, building, or other improvement, and all real and personal properties of any nature or any interest in any of them which are suitable for or related to the furnishing, generation, production, transmission, or distribution of energy or energy resources; and

WHEREAS, pursuant to special act of the Legislature of the State of New York (Title 9-A of Article 8 of the Public Authorities Law of New York, as from time to time amended and supplemented, herein called the “Green Jobs – Green New York Program”), the Authority has been authorized to use innovative financing mechanisms to finance energy efficiency improvements and technologies eligible for net metering through energy cost savings; and

WHEREAS, the Authority will issue bonds in one or more series not later than April 29, 2025, in an aggregate principal amount not to exceed \$50,000,000 to be designated “Residential Clean Energy and Energy Efficiency Financing Green Revenue Bonds, Series 2024A” (the “Bonds”) and with such additional or different designations as may be set forth in the Indenture (hereinafter defined) for the purpose of financing loans through the Green Jobs – Green New York Program for the installation of residential energy efficiency measures, photovoltaic (“PV”) systems, air source heat pumps (“ASHP”) or ground source heat pumps (“GSHP”), (collectively “Loans”); and

WHEREAS, the Bonds are to be issued pursuant to an Indenture of Trust (the “Indenture”), between the Authority and The Bank of New York Mellon, as trustee (the “Trustee”), pursuant to which the Authority will pledge principal and interest payments on, and prepayments of, Loans as security for the Bonds and

WHEREAS, the Authority has entered into an agreement with Slipstream Group Incorporated d/b/a Energy Finance Solutions, a not-for-profit corporation, to serve as a loan originator under the Green Jobs – Green New York Program; and

WHEREAS, the Authority has entered into an agreement with Concord Servicing Corporation who will act as the loan servicer and will be the custodian of the original promissory notes for the Loans issued under the Green Jobs – Green New York Program; and

WHEREAS, the proceeds of the Bonds will be used to reimburse the Green Jobs-Green New York Program revolving loan fund for Loans heretofore originated and outstanding and to provide funding for new Loans originated and to be originated thereafter; and

WHEREAS, Ramirez & Co., Inc., acting as underwriter (the "Underwriter"), pursuant to the terms of a Bond Purchase Agreement among the Authority and the Underwriter (the "Purchase Contract"), propose to purchase the Bonds from the Authority and offer the Bonds to the public pursuant to the terms of such Purchase Contract; and

WHEREAS, it is expected that the Bonds will be offered by the Underwriter pursuant to a Preliminary Official Statement, as may be approved by an Authorized Representative (hereinafter referred to) of the Authority and an Official Statement to be approved by an Authorized Representative; and

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY AS FOLLOWS:

Section 1. The offering, issuance, sale, and delivery of the Bonds upon the terms and conditions and for the purposes described in this resolution are hereby authorized. The Bonds shall be issued in one or more series in an aggregate principal amount not to exceed \$50,000,000 and shall bear interest at rates determined by the Chair, the Vice Chair, the President and CEO, the Chief Financial Officer, the Executive Vice President, the Chief Program Officer, or the Secretary of the Authority (collectively, the "Authorized Representatives"). The Bonds shall bear interest at a weighted average fixed rate of interest not to exceed 7.5%. The Bonds shall mature no later than twenty years after the date of issuance. The Bonds shall be dated, have the final maturity, have the designation or designations, be subject to redemption, be payable as to principal, premium, if any, and interest, and have such other provisions all as set forth in the Indenture. The form of the Bonds and all other provisions with respect thereto shall be as set forth in the Indenture or determined in the manner set forth therein. No Bonds shall be issued pursuant to this resolution after April 29, 2025. Any bonds issued under this Resolution must have upon issuance a rating of A or higher, as assigned by a nationally recognized statistical rating organization.

Section 2. Subject to the limitations set forth in Section 1 hereof, the Authorized Representatives are each hereby authorized to determine on behalf of the Authority with respect to the Bonds: the aggregate principal amount, the interest rates the Bonds shall bear and the particular redemption and purchase provisions of the Bonds. Any such determination shall be conclusively evidenced by the execution and delivery by an Authorized Representative of an indenture or other document setting forth such determination.

Section 3. The Authorized Representatives are each hereby authorized to execute, acknowledge, and deliver the Indenture as such Authorized Representative shall approve. Execution of such documents by an Authorized Representative shall be conclusive evidence of

any approval required by this Section. The Authorized Representatives are also authorized to secure a second party opinion that the Bonds meet the Green Bond Principles as set by International Capital Market Association and to execute any agreement required in order to secure such opinion. The Authorized Representatives are each further authorized to obtain bond insurance or other credit enhancement for the Bonds to the extent that such Authorized Representative determines that such credit enhancement would facilitate the sale of the bonds on a cost effective basis or lower the debt service on the Bonds and to enter into agreements with the providers of such credit enhancement.

Section 4. The Authority authorizes each Authorized Representative to enter into the Purchase Contract. The Authorized Representatives of the Authority are each hereby authorized to determine the purchase price of the Bonds and are further authorized to execute, acknowledge, and deliver the Purchase Contract as may be approved by any such Authorized Representative. The execution of a Purchase Contract by any Authorized Representative shall be conclusive evidence of any determination or approval required or authorized by this Section. The purchase price to the Underwriters of the Bonds shall not be less than 97% of the principal thereof. In no event shall the compensation paid to the Underwriter in connection with the initial offering of the Bonds exceed 1% of the principal amount thereof whether such compensation is paid directly by the Authority or in the form of discount to the Underwriters. As an alternative to the execution of the Purchase Contract, the Authorized Representatives are authorized to execute a private placement agreement with a third party purchaser, with Ramirez & Co., Inc. acting as placement agent, should such a method of sale for the Bonds be determined by the Authorized Representatives to be a superior method of selling the Bonds.

Section 5. The Authority authorizes the Authorized Representatives to approve the Preliminary Official Statement and the Authority approves the use in accordance with the applicable legal requirements of one or more Preliminary Official Statements and Official Statements in connection with the offering and sale of the Bonds by the Underwriter, as may be approved by an Authorized Representative. Any Authorized Representative of the Authority is hereby authorized and directed to execute the final Official Statements in the name and on behalf of the Authority, and thereupon cause such final Official Statements to be delivered to the Underwriters. Any such approval shall be conclusively evidenced by such Authorized Representative's execution and delivery thereof. The Authorized Representatives are hereby authorized to provide any appropriate disclosure as part of the Preliminary Official Statements and Official Statements, including but not limited to the use of the Authority's financial statements. The foregoing approvals shall not be deemed to constitute an acknowledgment by the Authority of any responsibility for information contained therein which has been furnished by the Underwriters, The Depository Trust Company, or any other party. In the event that the Authorized Representatives determine that a sale of the Bonds through a private placement is a superior method of sale, the Authorized Representatives are hereby authorized to use a placement memorandum to facilitate such a sale, in accordance with the disclosure requirements outlined in this section for preliminary official statements and official statements.

Section 6. Slipstream Group Incorporated d/b/a Energy Finance Solutions has been authorized to serve as loan originator for the pledged loans. Concord Servicing Corporation has been authorized to serve as loan servicer for the pledged loans and Vervent Inc. has been

authorized to serve as backup loan servicer for Loans pledged to all bond series issued prior to Series 2023A Bonds. Carmel Solutions LLC has been authorized to serve as back up loan servicer for all other portfolio loans. The Authorized Representative are hereby authorized to enter into any other agreements, documents, or amendments to existing agreements relating to the origination and servicing of the loans as necessary. The Authorized Representatives are hereby authorized to approve the appointment of a successor loan originator, loan servicer and backup loan servicer for the pledged loans as necessary.

Section 7. The Authorized Representatives are each hereby authorized to execute, acknowledge, and deliver any other agreements, documents, or certificates, including certificates confirming on behalf of the Authority the accuracy and completeness of information relating to the Bonds, the Authority, the Loans and the Green Jobs – Green New York Program, and to do and cause to be done any such other acts and things and to make such other changes, omissions, insertions, revisions, or amendments to the documents referred to in Sections 1 through 6 of this resolution as they may determine necessary or proper for carrying out, giving effect to, and consummating the transactions contemplated by this resolution. Execution of such documents by an Authorized Representative shall be conclusive evidence of any approval required by this Section. Any Authorized Representative, the Assistant Treasurer, and the Acting Secretary of the Authority are each hereby authorized to affix the seal of the Authority on such documents and attest the same.

Section 8. The Bonds shall not be general obligations of the Authority, and shall not constitute an indebtedness of or a charge against the general credit of the Authority. The Bonds will not constitute a debt of the State of New York and the State of New York will not be liable thereon. No owner of the Bonds will have any right to demand payment of the principal and interest on the Bonds out of any funds to be raised by taxation. As shall be more particularly set forth in the Indenture and the Bonds, the liability of the Authority under the Bonds shall be enforceable only to the extent provided in the Indenture, and the Bonds shall be payable solely from the revenues and other funds pledged and available for the payment of the Bonds under the terms of the Indenture.

Periodic Contracts Approvals

Contracts executed or modified during the period - 12/16/2023 to 3/15/2024

	Count of Contracts	Committed this Period
Procurement Contracts > 1year	75	\$15.9M
Competitive Program Contracts > \$3M	6	\$37.0M
Non-competitive Program Contracts > \$1M	1	\$0.4M
Grand Total	82	\$53.4M

**NYSERDA PERIODIC CONTRACTS APPROVAL REPORT:**  
**Section 1 Summary - 12/16/2023 to 3/15/2024**

<b>Category</b>	<b>Report Type</b>	<b>Type</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>PCMT</b>	Procurement	Competitive	62	\$15,156,156
		Discretionary	8	\$517,403
		Non-Competitive	5	\$272,187
	<b>Total</b>		75	\$15,945,746
<b>PGRM</b>	Procurement	Competitive	6	\$37,022,719
		Non-Competitive	1	\$449,826
	<b>Total</b>		7	\$37,472,545
<b>Grand Total</b>			82	\$53,418,291

NYSDA PERIODIC CONTRACTS APPROVAL REPORT - 12/16/2023 to 3/15/2024

Category	Initiative	Type	Term > 1 Year	Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT		Competitive	Y	152999	Foley & Lardner LLP	RFP 12: NYGB Legal Services	03/30/2020	\$27,500	\$27,500		
		Competitive	Y	219450	Energy and Environmental Economics Inc.	TWO #5 CPRG Support	10/26/2023	\$350,000	\$750,000	\$135,743	\$135,743
		Competitive	Y	219804	Center for Sustainable Energy	TWO #3 - School Bus Incentive	11/01/2023	\$1,500,000	\$1,540,000		
		Competitive	Y	225173	TRC Environmental Corporation	SA.005_TWO# 1_AES_PM1	02/08/2024	\$424,740	\$424,740		
		Competitive	Y	226106	TRC Environmental Corporation	SA.003_TWO# 2_NY-SUN_PM1	02/27/2024	\$529,800	\$529,800		
Capital Planning		Discretionary	Y	224422	Mzansi Clean Energy LLC	Federal Funding Strategy	01/24/2024	\$50,000	\$50,000	\$8,450	\$8,450
CI Engy Siting & Soft Cost Red		Competitive	Y	226137	Frontier Energy, Inc.	Clean Energy Siting	02/28/2024	\$50,000	\$50,000		
CLEAN TRANSPORTATION		Competitive	Y	140105	Industrial Economics, Incorporated	TWO 2 New York State Truck – V	05/09/2019	\$100,000	\$2,112,767	\$51,122	\$1,300,015
Cleantech Ignition		Competitive	Y	151220	Mintz, Levin, Cohn, Ferris, Glovsky and	RFP 12 - NYGB Legal Services	02/11/2020	\$1,951	\$111,325	\$8,114	\$109,263
Consumer Ed and Market Support		Discretionary	Y	224859	Amazon Capital Servies, Inc.	Amazon Connect SFR Call Center	02/02/2024	\$12,000	\$12,000	\$1	\$1
ENERGY ANALYSIS		Competitive	Y	161130	The Cadmus Group, LLC	TWO #10 Climate Facilitation	11/19/2020	\$300,000	\$3,012,389	\$227,537	\$2,131,567
		Competitive	Y	182702	The Cadmus Group, LLC	TWO #1 BEEM Revision	03/15/2022	\$150,000	\$600,000	\$37,844	\$487,843
		Competitive	Y	222358	ICF Resources, LLC	TWO 13 - Support for PAR Dept	12/13/2023	\$100,000	\$100,000		
		Non-Competiti..	Y	128474-1	Bloomberg Finance LP	Bloomberg Datafeed Access	01/11/2019	\$26,248	\$130,812		\$104,564
ENVIRONMENTAL RESEARCH		Competitive	Y	175937	Abt Associates Inc.	TWO #3 Pathways Health Phase 2	10/22/2021	\$100,000	\$590,000	\$22,821	\$401,341
Equitable Engagement		Competitive	Y	221613	Illume Advising LLC	EEC Implementation	11/29/2023	\$859,982	\$859,982	\$35,631	\$35,631
ESTOR: Implementation Support		Competitive	Y	225002	Integrated Staffing Corporation	SA.002_TWO# 1_SQA_PM1	02/06/2024	\$361,034	\$361,034	\$1,772	\$1,772
Eval MCDC Cross Cutting		Discretionary	Y	225252	Attom Data Solutions, LLC	MF Building Data Renewal	02/13/2024	\$15,000	\$15,000		
Eval MCDC: MF Building Stock		Competitive	Y	160541	The Cadmus Group, LLC	Statewide Multifamily Baseline	11/05/2020	\$451,697	\$5,148,942	\$319,171	\$5,009,634
GJGNY REVOLVING LOAN FUND		Competitive	Y	34250A	Vervent Inc.	GJGNY REVOLVING LOAN FUND	11/04/2019	\$350,000	\$646,555	\$3,421	\$278,596
Industrial Process Effic		Competitive	Y	121104	CHA Consulting Inc.	Umbrella Agreement	11/29/2017	\$424,000	\$2,384,060	\$18,519	\$1,901,154
Intelligent Buildings		Discretionary	Y	224723	Frontier Energy, Inc.	Review/Evaluate PON 3519	01/31/2024	\$49,198	\$49,198		
LMI Marketing		Competitive	Y	198804	Kelliher Samets LTD	TWO 19 - NY Energy Advisor	11/28/2022	\$923,580	\$2,357,965	\$270,902	\$1,096,403
Market Support Tools &Activity		Competitive	Y	225762	C Hazard Consulting LLC	SFR market engagement	02/22/2024	\$600,000	\$600,000		
Net Zero Energy for Eco Dev		Competitive	Y	178795	NYS Office of Parks, Recreation and	CNCED 2021 - Frederic Church	12/21/2021	\$1,868,776	\$1,868,776		
New Construction Housing		Competitive	Y	198801	Kelliher Samets LTD	TWO 16 - Bldgs of Excellence	11/28/2022	\$60,000	\$420,712	\$850	\$315,176
		Competitive	Y	219040	Passive House Accelerator LLC	Reimagine Festival Event 2024	10/19/2023	\$75,000	\$75,000		
NEW YORK GREEN BANK		Competitive	Y	152910	Guidehouse Inc.	TWO #1 - Price Forecast	03/25/2020	\$225,000	\$1,142,784	\$91,713	\$892,579
		Non-Competiti..	Y	164915	West Publishing Corporation	Westlaw Core Plan platform	02/25/2021	\$90,376	\$145,156	\$6,826	\$59,623



NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 12/16/2023 to 3/15/2024

Category	Initiative	Type	Term > 1 Year	Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	NYCH: Comfort Home	Competitive	Y	221990	Opinion Dynamics Corporation	TWO # 1 RFQL 4162	12/07/2023	\$464,777	\$464,777		
	NYCH: Talent Ppin:CE and OJT	Competitive	Y	166881	Social Finance Inc.	Social Finance Contract	04/11/2021	\$526,477	\$966,129	\$114,425	\$441,770
	NYSERDA ADMINISTRATION	Competitive	Y	109917	BDO USA LLP	Background Investigation Servi	02/07/2017	\$15,600	\$262,770	\$8,200	\$246,170
		Competitive	Y	152608	Marshall & Sterling, Inc.	RFP 4301 Insurance	03/16/2020	\$5,000	\$1,243,193	\$19,688	\$1,230,907
		Competitive	Y	185454	KPMG LLP	NYSERDA Audit Services	05/06/2022	\$12,752	\$708,240	\$12,752	\$301,740
		Competitive	Y	202633	Software People, Inc.	TWO #2 .Net Software Developer	01/26/2023	\$195,000	\$390,000	\$18,500	\$189,650
		Competitive	Y	203478	DONNELLY & MOORE, Inc	TWO 1 Web Content Editor	02/13/2023	\$63,375	\$190,125	\$8,288	\$96,395
		Competitive	Y	219598	It's About Time Events LLC	LGBTQ+ Inclusivity	10/30/2023	\$84,500	\$84,500	\$10,000	\$10,000
		Competitive	Y	222600	Oracle America, Inc.	Oracle Peoplesoft Enterprise	12/15/2023	\$54,308	\$54,308	\$13,577	\$13,577
		Competitive	Y	223302	Bond, Schoeneck & King, PLLC	TWO 14 - DHR Response	01/02/2024	\$15,000	\$15,000		
		Competitive	Y	223589	Dell, Inc.	KEMP Enterprise Plus 1yr	01/09/2024	\$5,129	\$5,129	\$5,129	\$5,129
		Competitive	Y	223657	SHI, Inc.	Embarcadero ER/Studio Support	01/09/2024	\$12,499	\$12,499	\$12,499	\$12,499
		Competitive	Y	225715	Carahsoft Technology Corporation	UiPath Software (2024-2025)	02/21/2024	\$100,352	\$100,352		
		Competitive	Y	225915	Microsoft Corporation	Microsoft Unified Support	02/23/2024	\$77,188	\$77,188	\$20,000	\$20,000
		Competitive	Y	226351	Bond, Schoeneck & King, PLLC	TWO 15 - Antidiscrimination	03/01/2024	\$5,000	\$5,000		
		Discretionary	Y	215093	Salary.com, LLC	HR Data Subscription	08/15/2023	\$6,000	\$21,300		
		Discretionary	Y	225913	ThunderCat Technology LLC	Seamlessdocs Licensing 24 - 25	02/23/2024	\$72,205	\$72,205		
		Non-Competiti..	Y	125834	Level 3 Communications, LLC	Century Link_Extend Level 3	04/17/2018	\$7,563	\$712,377		\$704,498
		Non-Competiti..	Y	224115	Meltwater News US Inc.	NYSERDA ADMINISTRATION	01/18/2024	\$73,000	\$73,000		
		NYSERDA Fixed Asset	Competitive	Y	226543	Ferrario Ford Inc	2024 Dodge Hornet PHEV OGS	03/06/2024	\$35,134	\$35,134	
	OREC: Technical Support	Competitive	Y	163481	Consensus Building Institute, Inc.	TWO #2 A-TWG Facilitator	01/20/2021	\$334,136	\$690,231	\$31,493	\$311,527
		Competitive	Y	181347	Holland & Knight LLP	TWO 1 - ORECRFP22-1	02/16/2022	\$75,000	\$175,000	\$60,729	\$139,182
		Competitive	Y	182699	Karp Strategies, LLC	NYS OSW Training Efforts	03/15/2022	\$15,000	\$415,000	\$22,691	\$374,808
		Competitive	Y	196178	Kearns & West, Inc.	Facilitation Support LSR-OREC	10/18/2022	\$100,000	\$306,000	\$23,299	\$202,355
		Competitive	Y	197059	Holland & Knight LLP	TWO 3 - IRA Tax Advice	11/02/2022	\$75,000	\$95,000	\$9,235	\$25,039
		Competitive	Y	203699	Holland & Knight LLP	TWO 5 - ORECRFP22-1 Reviewer	02/16/2023	\$25,000	\$75,000	\$46,292	\$73,096
		Competitive	Y	210233	Holland & Knight LLP	TWO 7 - OREC Agreement advisin	06/06/2023	\$25,000	\$125,000	\$34,993	\$58,672
		Competitive	Y	221776	BVG Associates LLC	BVG TWO 5 IE Mike Blanch_OSW20	12/05/2023	\$85,000	\$85,000		
		Competitive	Y	221779	Power Advisory LLC	TWO 4 IE Michael Killeavy_OREC	12/05/2023	\$85,000	\$85,000		

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT - 12/16/2023 to 3/15/2024

Category	Initiative	Type	Term > 1 Year	Contract ID	Contractor	Contract Description	Date	Committed this period	Committed to Date	Amt Paid this Period	Amt Paid to Date
PCMT	OREC: Technical Support	Competitive	Y	222772	Ventolines B.V.	TWO #4 MP2.0 Cost Reduction	12/20/2023	\$150,000	\$150,000		
		Competitive	Y	222773	Henningson, Durham & Richardson PC	TWO#7 Ports&Supply Chain only	12/20/2023	\$216,000	\$216,000		
		Competitive	Y	222774	Henningson, Durham & Richardson PC	TWO#8 Empowering Pot MP2.0	12/20/2023	\$150,000	\$150,000		
		Competitive	Y	222775	The Renewables Consulting Group, LLC	TWO#4 Vessel Analysis DeepH2O	12/20/2023	\$75,000	\$75,000		
		Competitive	Y	222776	DNV Energy Insights USA Inc.	TWO#3 Ocean Conditions MP2.0	12/20/2023	\$249,230	\$249,230		
		Competitive	Y	224915	Hodgson Russ LLP	TWO 9 - OSW Litigation	02/05/2024	\$25,000	\$25,000		
		Competitive	Y	225089	Holland & Knight LLP	TWO 9 - ORECRFP23-1 OSW Solici	02/07/2024	\$150,000	\$150,000	\$31,940	\$31,940
		Competitive	Y	225091	Holland & Knight LLP	TWO 10 - Transmission Planning	02/07/2024	\$50,000	\$50,000	\$15,273	\$15,273
		Discretionary	Y	222778	Overbite Productions	OSW EJTWG website dev	12/21/2023	\$50,000	\$50,000		
		REC:CES REC System Dev Costs		Competitive	Y	163482	Tech Valley Talent, LLC	TWO 1 Salesforce Dev. Rajesh K	01/20/2021	\$191,139	\$741,117
Competitive	Y			222511	BVG Associates LLC	RESRFP23-1 TEP IE - TWO#7	12/14/2023	\$40,500	\$40,500		
Competitive	Y			222677	Industrial Economics, Incorporated	TWO #7 LSR Support Inflation	12/18/2023	\$50,000	\$50,000		
Non-Competiti..	Y			217985	The Bonadio Group	LSR Proposal Eval & Award Proc	10/02/2023	\$75,000	\$125,000	\$24,453	\$48,148
Talent Pipeline: Internship Pgm	Discretionary	Y	180120	Singlebrook Technology Inc.	CJF Program Support	01/20/2022	\$263,000	\$493,000	\$32,190	\$215,456	
Tech Assistanc Multifamily LMI	Competitive	Y	224674	22nd Century Technologies, Inc.	SA.006_TWO# 1_EPE_APM	01/30/2024	\$510,000	\$510,000			
Technical Services	Competitive	Y	225172	Indotronix International Corporation	SA.007_TWO# 1_EPE_PM-1	02/08/2024	\$945,000	\$945,000			
ZEC:CES ZEC System Dev Costs	Competitive	Y	205837	Holland & Knight LLP	TWO 6 - Amendment to ZEC Agr.	03/27/2023	\$30,000	\$55,000	\$11,116	\$26,171	
PGRM	CI Carbon Challenge	Competitive	Y	221173	University of Rochester	Accelerated Efficiency & Elect	11/21/2023	\$3,875,471	\$3,875,471		
		Competitive	Y	221441	RED-Rochester LLC	Accelerated Efficiency & Elect	11/27/2023	\$5,000,000	\$5,000,000	\$3,500,000	\$3,500,000
	ENVIRONMENTAL RESEARCH	Non-Competiti..	Y	48971	The Research Foundation for the State	EMEP Air Quality Research	10/01/2014	\$449,826	\$4,404,352	\$90,686	\$3,915,733
	NYCH: Technical Assistance	Competitive	Y	186723	West Monroe Partners, LLC	RFP4886 RES Market Engagement	05/25/2022	\$6,900,000	\$8,055,000	\$180,915	\$1,335,915
		Competitive	Y	186724A	110 Holdings LLC	RFP4886 RES Market Engagement	12/14/2023	\$4,305,992	\$4,305,992		
		Competitive	Y	219354	CLEAResult Consulting, Inc.	Program Ops & Tech Support SFR	10/25/2023	\$15,941,256	\$15,941,256		
	REVConnect	Competitive	Y	149371A	G uidehous Inc.	REVConned Initiative	04/16/2024	\$1,000,000	\$3,930,000	\$158,588	\$2,805,808
Grand Total							\$53,418,291	\$83,247,870	\$5,804,560	\$31,186,838	

**NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 12/16/2023 to 3/15/2024**

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
22nd Century Technologies, Inc.	220 Davidson Ave., Ste 118	Somerset	NJ	08873	FSBE				
110 Holdings LLC	15400 SE 30th Pl Suite 202	Bellevue	WA	98007	FSBE				
Abt Associates Inc.	6130 Executive Boulevard	Rockville	MD	20852	FSBE				
Amazon Capital Servies, Inc.	410 Terry Avenue North	Seattle	WA	98109	FSBE				
Attom Data Solutions, LLC	1 Venture Suite 300	Irvine	CA	92618-7416	FSBE				
BDO USA LLP	PO Box 642743	Pittsburgh	PA	15264-2743	FSBE				
Bloomberg Finance LP	731 Lexington Avenue	New York	NY	10022	NYSBE				
Bond, Schoeneck & King, PLLC	22 Corporate Woods Blvd., Ste 501	Albany	NY	12211-2503	NYSBE				
BVG Associates LLC	28411 Northwestern HWY Suite 800	Southfield	MI	48034	FSBE				
C Hazard Consulting LLC	5924 Northern Cout	Elkridge	MD	21075	FSBE				
Carahsoft Technology Corporation	11493 Sunset Hills Road	Reston	VA	20190	FSBE				
Center for Sustainable Energy	3980 Sherman St., Ste 170	San Diego	CA	92110	FSBE				
CHA Consulting Inc.	3 Winners Circle	Albany	NY	12205	NYSBE				
CLEARresult Consulting, Inc.	4301 Westbank Dr., A-150	Austin	TX	78746	FSBE				
Consensus Building Institute, Inc.	100 Cambridgepark Drive	Cambridge	MA	02140	FSBE				
Dell, Inc.	1 Dell Way, RR8, Box 8716	Round Rock	TX	78682	FSBE				
DNV Energy Insights USA Inc.	1400 Ravello Drive	Katy	TX	77449	FSBE				
DONNELLY & MOORE, Inc	70 Havermill Road, Suite 101	New City	NY	10956	NYSBE	X	X		
Energy and Environmental Economics Inc.	2401 E Katella Ave.	Anaheim	CA	92806	FSBE				
Ferrario Ford Inc	d/b/a Ferrario Ford Lincoln	Elmira	NY	14903	NYSBE				
Foley & Lardner LLP	3000 K Street, NW, Suite 600	Washington	DC	20007	FSBE				
Frontier Energy, Inc.	2695 Bingley Rd	Cazenovia	NY	13035	NYSBE				
Guidehouse Inc.	150 N Riverside Plz Ste 2100	Chicago	IL	60606-1528	FSBE				
Henningson, Durham & Richardson PC	PO Box 74008202	Chicago	IL	60674-8202	FSBE				
Hodgson Russ LLP	140 Pearl Street, Suite 100	Buffalo	NY	14202	NYSBE				
Holland & Knight LLP	PO Box 864084	Orlando	FL	32886	FSBE				
ICF Resources, LLC	1902 Reston Metro Plaza	Reston	VA	20190	FSBE				
Illume Advising LLC	440 Science Dr., Suite 202	Madison	WI	53711	FSBE	X			
Indotronix International Corporation	331 Main Mall	Poughkeepsie	NY	12601-3145	NYSBE				
Industrial Economics, Incorporated	2067 Massachusetts Avenue	Cambridge	MA	02140	FSBE				

**NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 12/16/2023 to 3/15/2024**

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
Integrated Staffing Corporation	99 Woodlawn Avenue	Saratoga Springs	NY	12866	NYSBE	X			
It's About Time Events LLC	Equality Institute	Forest Park	IL	60130	FSBE				
Karp Strategies, LLC	833 President Street	Brooklyn	NY	11215	NYSBE	X			
Kearns & West, Inc.	1990 K Street Inc	Washington	DC	20006	FSBE				
Kelliher Samets LTD	d/b/a KSV	Burlington	VT	05401	FSBE	X			
KPMG LLP	PO Box 120001	Dallas	TX	75312-0511	FSBE				
Level 3 Communications, LLC	1025 Eldorado Blvd	Broomfield	CO	80021	FSBE				
Marshall & Sterling, Inc.	125 High Rock Ave., Ste 206	Saratoga Springs	NY	12866	NYSBE				
Meltwater News US Inc.	465 California Street	San Francisco	CA	94104	FSBE				
Microsoft Corporation	One Microsoft Way	Redmond	WA	98052-6399	FSBE				
Mintz, Levin, Cohn, Ferris, Glovsky and	One Financial Center	Boston	MA	02111	FSBE				
Mzansi Clean Energy LLC	289 Convent Avenue	New York	NY	10031	NYSBE				
NYS Office of Parks, Recreation and	Empire State Plaza	Albany	NY	12238	NYSBE				
Opinion Dynamics Corporation	1000 Winter St	Waltham	MA	02451	FSBE				
Oracle America, Inc.	500 Oracle parkway	Redwood City	CA	94065	FSBE				
Overbite Productions	43 Oak Street	Central Islip	NY	11722	NYSBE				
Passive House Accelerator LLC	16 3rd Place	Brooklyn	NY	11231	NYSBE				
Power Advisory LLC	212 Thoreau Street	Concord	MA	01742	FSBE				
RED-Rochester LLC	1060 Lee Road	Rochester	NY	14606	NYSBE				
Salary.com, LLC	610 Lincoln Street, North	Waltham	MA	02451	FSBE				
SHI, Inc.	P.O. Box 952121	Dallas	TX	75395	FSBE				
Singlebrook Technology Inc.	700 Cascadilla Street	Ithaca	NY	14850	NYSBE	X			
Social Finance Inc.	2 Atlantic Avenue, 5th Floor	Boston	MA	02110	FSBE				
Software People, Inc.	738 Smithtown Bypass, Suite #202	Smithtown	NY	11787	NYSBE	X	X		
Tech Valley Talent, LLC	20 Prospect St. Suite 200, Building 1	Ballston Spa	NY	12020	NYSBE	X			
The Bonadio Group	171 Sully's Trail	Pittsford	NY	14534	NYSBE				
The Cadmus Group, LLC	410Totten Pond Road	Waltham	MA	02451	FSBE				
The Renewables Consulting Group, LLC	433 Broadway, 6th Floor	New York	NY	10013	NYSBE				
The Research Foundation for the State	SUNY-ESF, ESF Open Academy	Syracuse	NY	13210	NYSBE				
ThunderCat Technology LLC	1925 Isaac Newton Square	Reston	VA	20190	FSBE			X	

**NYSDA PERIODIC CONTRACTS APPROVAL REPORT: Contractor Addresses - 12/16/2023 to 3/15/2024**

Contractor	SupplierAddress	SupplierCity	SupplierState	SupplierZipCode	Business Type	WBE	MBE	SDVOB	SBE
TRC Environmental Corporation	d/b/a TRC Advance Energy	New York	NY	10018	NYSBE				
University of Rochester	515 Hylan Building	Rochester	NY	14627	NYSBE				
Ventolines B.V.	WTC Almere, 25th floor	Almere		1314 CH	FSBE				
Vervent Inc.	10182 Telesis Court	San Diego	CA	92121	FSBE				
West Monroe Partners, LLC	311 West Monroe Street, 14th Floor	Chicago	IL	60606	FSBE				
West Publishing Corporation	DBA Thomas Reuters	Eagan	MN	55123	FSBE				

**Contracts anticipated to be executed or modified during the period - 12/16/2023 to 3/15/2024**

	<b>Count of Contracts</b>	<b>Anticipated Amount</b>
<b>Procurement Contracts &gt; 1year</b>	42	\$14.2M
<b>Competitive Program Contracts &gt; \$3M</b>	11	\$101.7M
<b>Non-competitive Program Contracts &gt; \$1M</b>	0	\$0.0M
<b>Grand Total</b>	53	\$115.9M

**NYSDERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 12/16/2023 to 3/15/2024**

Category	Type	Term > 1 Year	Contract ID	Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
PCMT	Competitive	Y	104544A	Opinion Dynamics Corporation	RFQ3183 Umbrella Agreement	Extend Contract Term	04/03/2019	\$15,285	\$1,144,740
	Competitive	Y	152608	Marshall & Sterling, Inc.	RFP 4301 Insurance	Added New Tasks	03/16/2020	\$498,000	\$1,741,193
	Competitive	Y	156225	Fund for Public Health in New York, Inc.	Assessment for Energy Policy	Added New Tasks	07/27/2020	\$98,356	\$409,056
	Competitive	Y	159691	CVENT, Inc.	Event Management/Virtual Event	Added New Tasks	10/19/2020	\$8,789	\$249,734
	Competitive	Y	168219	Harris Beach PLLC	TWO 6 - Real Estate Issues	Added New Tasks	05/11/2021	\$5,000	\$16,506
	Competitive	Y	172317	Battelle Memorial Institute	TWO #3 NYStretch Res Modeling	Added New Tasks	08/04/2021	\$73,000	\$249,324
	Competitive	Y	180121	Bond, Schoeneck & King, PLLC	TWO 5 Cybersecurity Counsel	Added New Tasks	01/20/2022	\$5,000	\$15,000
	Competitive	Y	195973	AECOM USA INC.	CGSI Program Strategic Guide	New Agreement	10/14/2022	\$100,000	\$100,000
	Competitive	Y	195974	TRC Engineers, Inc.	CGSI Program Strategic Guide	Added New Tasks	10/14/2022	\$100,000	\$100,000
	Competitive	Y	195975	The Cadmus Group, LLC	CGSI Program Strategic Guide	New Agreement	10/14/2022	\$100,000	\$100,000
	Competitive	Y	198808	Kelliher Samets LTD	TWO 22 - Website User Exp	Added New Tasks	11/28/2022	\$49,980	\$140,643
	Competitive	Y	202371	Carter Ledyard & Milburn LLP	TWO 5 - Empire Wind 1 DEIS	Added New Tasks	01/23/2023	\$37,000	\$37,000
	Competitive	Y	209890	New York Power Authority,	NYPANYCHA 120V Induction Stove	New Agreement	05/31/2023	\$757,000	\$757,000
	Competitive	Y	212481	Hawkins Delafield & Wood LLC	TWO 1 - Build Ready	New Agreement	07/10/2023	\$25,000	\$25,000
	Competitive	Y	213476	High Bridge Manor LLC	HPD Pilot 511 project	New Agreement	07/20/2023	\$1,000,000	\$1,000,000
	Competitive	Y	225541	Kearns & West, Inc.	RESRFP23-1 Bid Facilitation_KW	New Agreement	02/20/2024	\$30,000	\$30,000
	Competitive	Y	226937	SHI, Inc.	Adobe Acrobat licenses - 1 yea	New Agreement	03/12/2024	\$118,765	\$118,765
	Competitive	Y	227026	22nd Century Technologies, Inc.	SA.001_TWO# 2_LSR_PM2	New Agreement	03/13/2024	\$229,680	\$229,680
	Competitive	Y	227031	Guidehouse Inc.	SFR Fraud risk analysis	New Agreement	03/13/2024	\$198,000	\$198,000
	Competitive	Y	227086	Integrated Staffing Corporation	SA.016_TWO# 2_SQA_Coordinator	New Agreement	03/14/2024	\$185,870	\$185,870
	Competitive	Y	227087	Eclaro International	SA.012_TWO# 1_Communities_PM2	New Agreement	03/14/2024	\$318,680	\$318,680
	Competitive	Y	227090	Mintzer Mauch PLLC	TWO 5 - Agency Preservation Of	New Agreement	03/15/2024	\$5,000	\$5,000
	Discretionary	Y	181602	Pace University	ATWG Tech Services	Added New Tasks	02/25/2022	\$20,000	\$120,000
	Discretionary	Y	184448	Rise to Equity Excellence, LLC	DEI Training Plan	Added New Tasks	04/19/2022	\$38,000	\$199,270
	Discretionary	Y	190923	Employee Leasing of Greater NY	TS.029-SO_Training Specialist	New Agreement	07/27/2022	\$120,900	\$277,269
	Discretionary	Y	211530	Inclusive Prosperity Capital, Inc	Hubs financing strategy	New Agreement	06/25/2023	\$50,000	\$50,000
	Discretionary	Y	216068	Eckholm Studios	Climate Technology Solutions	New Agreement	08/31/2023	\$302,000	\$500,000
	Discretionary	Y	219171	BW Research Partnership	Economic Impact Analysis	New Agreement	10/23/2023	\$49,300	\$49,300
	Discretionary	Y	220865	Arctic Air Mechanical Corp	HVAC Preventative Maintenance	New Agreement	11/17/2023	\$11,200	\$11,200

NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Anticipated Contracts - 12/16/2023 to 3/15/2024

Category	Type	Term > 1 Year	Contract ID	Contractor	Contract Description	Reason	Date	Anticipated Amount	Total Contract Amount
PCMT	Discretionary	Y	221683	Karpman Consulting, LLC	MWBE Direct Award to Karpman C	New Agreement	11/30/2023	\$190,000	\$190,000
	Discretionary	Y	225235	CommentManagement.com LLC	NYCI Comment Management	New Agreement	02/09/2024	\$7,650	\$7,650
	Discretionary	Y	226037	LaBella Associates, P.C.	Bldg Condition Assessment 15CC	New Agreement	02/26/2024	\$23,200	\$23,200
	Discretionary	Y	227088	Robin Powered, Inc.	Hoteling Software	New Agreement	03/14/2024	\$49,000	\$49,000
	Non-Competitive	Y	125834	Level 3 Communications, LLC	Century Link_Extend Level 3	Added New Tasks	04/17/2018	\$7,563	\$719,940
	Non-Competitive	Y	181271	Taitem Engineering, P.C.	M&V - Arthaus	Added New Tasks	02/15/2022	\$16,247	\$48,818
	Non-Competitive	Y	195899	Terri Hartwell Easter Consulting LLC	DEI Consultant - TH Easter		10/12/2022	\$200,000	\$392,000
	Non-Competitive	Y	199431	New York Power Authority,	NYPA GEMINI	New Agreement	12/05/2022	\$9,000,000	\$9,000,000
	Non-Competitive	Y	219041	National Grid	BR Facility 5 - Witmer 2	New Agreement	10/19/2023	\$25,000	\$25,000
	Non-Competitive	Y	219042	National Grid	BR Facility 4 - Witmer 1	Added New Tasks	10/19/2023	\$25,000	\$25,000
	Non-Competitive	Y	224189	Aon Risk Consultants, Inc.	Tier 4 Insurance Support - Aon	New Agreement	01/19/2024	\$30,000	\$30,000
	Non-Competitive	Y	224676	AIA - New York Chapter	BoE Rnd. 4 Award Event	New Agreement	01/31/2024	\$50,000	\$50,000
	Non-Competitive	Y	224777	National Grid	BR Facility 3 - Vincent Welch	Added New Tasks	02/01/2024	\$16,000	\$16,000
PGRM	Competitive	Y	135614	L&S Energy Services, Inc.	L&S GJGNY Energy Audits	Added New Tasks	12/28/2018	\$43,693	\$3,938,641
	Competitive	Y	155907	Capital District Regional Planning Comm.	Clean Energy Communities	Extend Contract Term	07/17/2020	\$2,330,000	\$7,630,000
	Competitive	Y	155908	Central New York Regional Planning and	Clean Energy Communities	New Agreement	07/17/2020	\$2,140,000	\$7,440,000
	Competitive	Y	178792	Holcim US Inc	C&I Carbon Challenge	New Agreement	12/21/2021	\$5,000,000	\$5,000,000
	Competitive	Y	181889	Troy Local Development Corporation	City of Troy PH 1A	New Agreement	03/01/2022	\$4,000,000	\$4,000,000
	Competitive	Y	188000	E Source Companies LLC	IEDR Development	Extend Contract Term	06/15/2022	\$25,124,137	\$31,624,077
	Competitive	Y	193635	Revel Transit, Inc.	Red Hook Recharge Zone	Extend Contract Term	09/07/2022	\$5,929,428	\$7,000,000
	Competitive	Y	218565	EONY Generation Limited	RESRFP22-1	New Agreement	10/11/2023	\$9,429,797	\$9,429,797
	Competitive	Y	220565	The Trustees of Columbia University	CTV ClimateTech Expertise Net	New Agreement	11/13/2023	\$4,500,000	\$4,500,000
	Competitive	Y	223301	Trevertine Technologies, Inc.	Clean Hydrogen Innovation		01/02/2024	\$3,170,033	\$3,170,033
	Competitive	Y	225238	Long Island Power Authority	LIPA RGGI MOU		02/09/2024	\$40,000,000	\$40,000,000
<b>Grand Total</b>								\$115,856,553	\$142,687,386



**NYSERDA PERIODIC CONTRACTS APPROVAL REPORT: Section 1**  
**Summary - 12/16/2023 to 3/15/2024**

<b>Category</b>	<b>Report Type</b>	<b>Type</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>PGRM</b>	Program	Competitive	752	\$154,775,450
		Discretionary	4	\$126,000
		Non-Competitive	5	\$5,523,255
<b>Total</b>			761	\$160,424,705
<b>Grand Total</b>			761	\$160,424,705

**Section 1 Summary - Percentages**

**% Contract Counts Competitively**

**% of \$Committed this period Competitively**

99.34%	96.55%
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## NYSERDA PERIODIC PROGRAM REPORT

12/16/2023 to 3/15/2024

**Table: All Market Focus Committed this Period**

<b>MarketFocus</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>Agriculture</b>	12	\$1,242,704
<b>Building Innovation</b>	2	\$1,673,112
<b>Clean Heating and Cooling</b>	4	\$3,007,887
<b>Clean Trans (Innov &amp; Research)</b>	43	\$16,928,217
<b>Clean Transportation (Mkt Dev)</b>	2	\$232,318
<b>Commercial</b>	87	\$8,752,676
<b>Communities and Local Governme</b>	12	\$673,200
<b>Energy &amp; EnvironmentalAnalysis</b>	7	\$2,249,822
<b>Energy Storage</b>	34	\$2,066,211
<b>Energy-Reltd Environmental Res</b>	1	\$35,000
<b>Evaluation</b>	1	\$167,964
<b>Gas Innovation</b>	1	\$60,000
<b>Grid Modernization</b>	4	\$3,376,587
<b>Industrial</b>	4	\$11,382,100
<b>Innovation</b>	1	\$12,250
<b>Large Scale Renewables</b>	13	\$3,836,911
<b>LMI</b>	47	\$3,883,440
<b>Low Income</b>	1	\$523,464
<b>Mkt Char &amp; Design (Mkt Dev)</b>	1	\$298,877
<b>Moderate Income</b>	3	\$563,000
<b>Multifamily (Mkt Rate Only)</b>	97	\$4,981,292

## NYSERDA PERIODIC PROGRAM REPORT

12/16/2023 to 3/15/2024

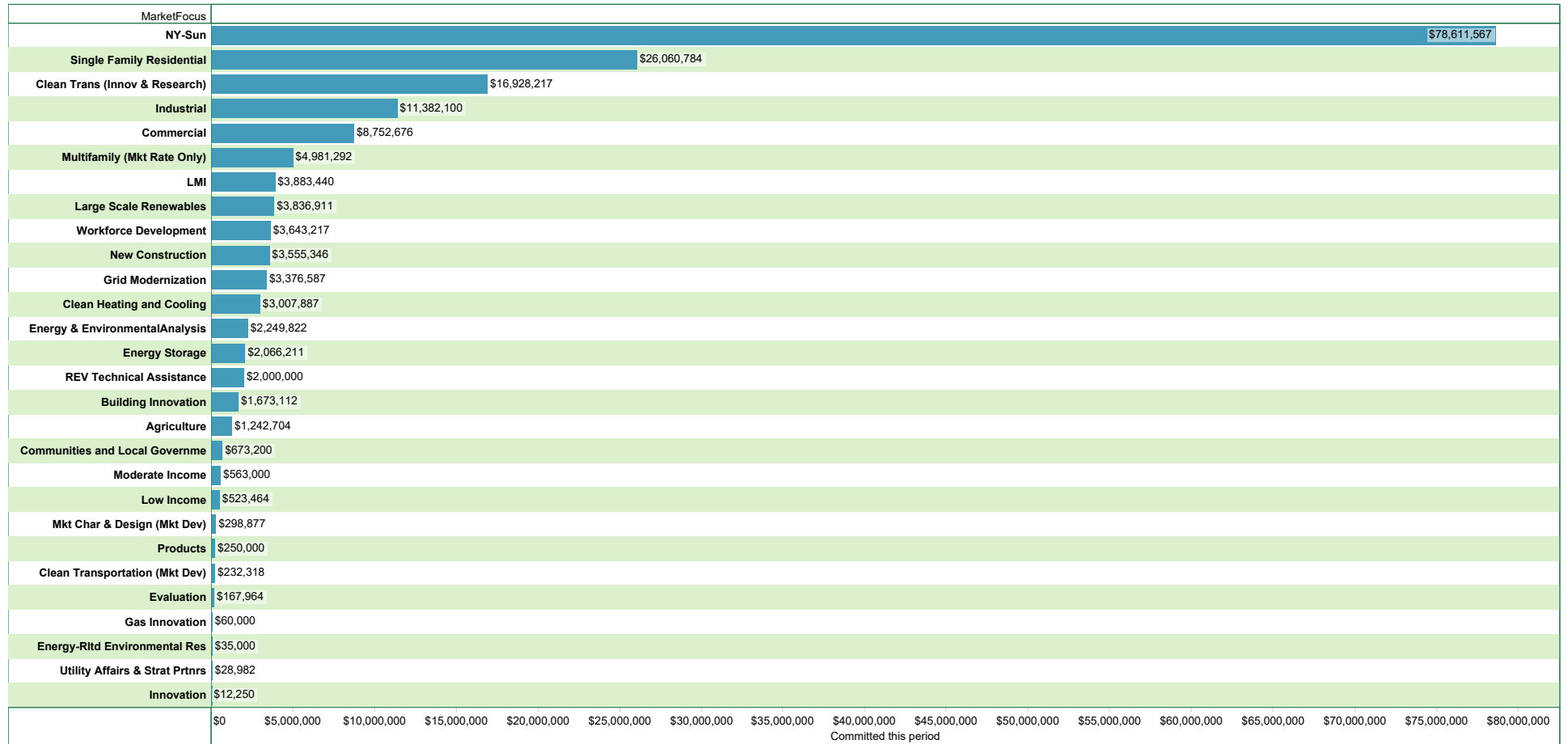
Table: All Market Focus Committed this Period

MarketFocus	Count of Contracts	Committed this period
New Construction	12	\$3,555,346
NY-Sun	423	\$78,611,567
Products	1	\$250,000
REV Technical Assistance	2	\$2,000,000
Single Family Residential	3	\$26,060,784
Utility Affairs & Strat Prtnrs	2	\$28,982
Workforce Development	117	\$3,643,217
Grand Total	937	\$180,096,928

**NYSERDA PERIODIC PROGRAM REPORT**

12/16/2023 to 3/15/2024

Graph: All Market Focus Committed this Period



**NYSERDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Table: By REDC Region and County**

<b>REDC Region</b>	<b>County</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
	<b>Total</b>	1	\$73,500
<b>Capital Region</b>	Albany	5	\$370,048
	Columbia	10	\$2,572,465
	Greene	2	\$10,832
	Rensselaer	10	\$2,064,592
	Saratoga	8	\$4,620,784
	Schenectady	10	\$481,803
	Warren	4	\$922,786
	Washington	2	\$1,289,824
	<b>Total</b>	51	\$12,333,134
<b>Central New York</b>	Cayuga	3	\$1,280,573
	Cortland	2	\$1,331,019
	Madison	2	\$49,450
	Onondaga	16	\$3,519,135
	Oswego	5	\$5,255,043
	<b>Total</b>	28	\$11,435,219
<b>Finger Lakes</b>	Livingston	3	\$935,850
	Monroe	18	\$12,026,715
	Ontario	12	\$6,214,575
	Seneca	2	\$3,613,917

**NYSERDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Table: By REDC Region and County**

<b>REDC Region</b>	<b>County</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>Finger Lakes</b>	Wayne	14	\$3,195,838
	Wyoming	2	\$11,997
	Yates	2	\$18,240
	<b>Total</b>	53	\$26,017,131
<b>Long Island</b>	Nassau	30	\$259,035
	Suffolk	44	\$323,266
	<b>Total</b>	74	\$582,301
<b>Mid-Hudson</b>	Dutchess	7	\$1,355,632
	Orange	12	\$6,036,852
	Putnam	3	\$30,599
	Rockland	6	\$69,480
	Ulster	12	\$2,247,506
	Westchester	35	\$5,601,426
	<b>Total</b>	75	\$15,341,495
<b>Mohawk Valley</b>	Fulton	1	\$181,511
	Herkimer	4	\$1,433,995
	Montgomery	3	\$60,315
	Oneida	8	\$1,909,879
	Otsego	1	\$40,000
	<b>Total</b>	17	\$3,625,700
<b>New York City</b>	Bronx	69	\$5,362,567

**NYSERDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Table: By REDC Region and County**

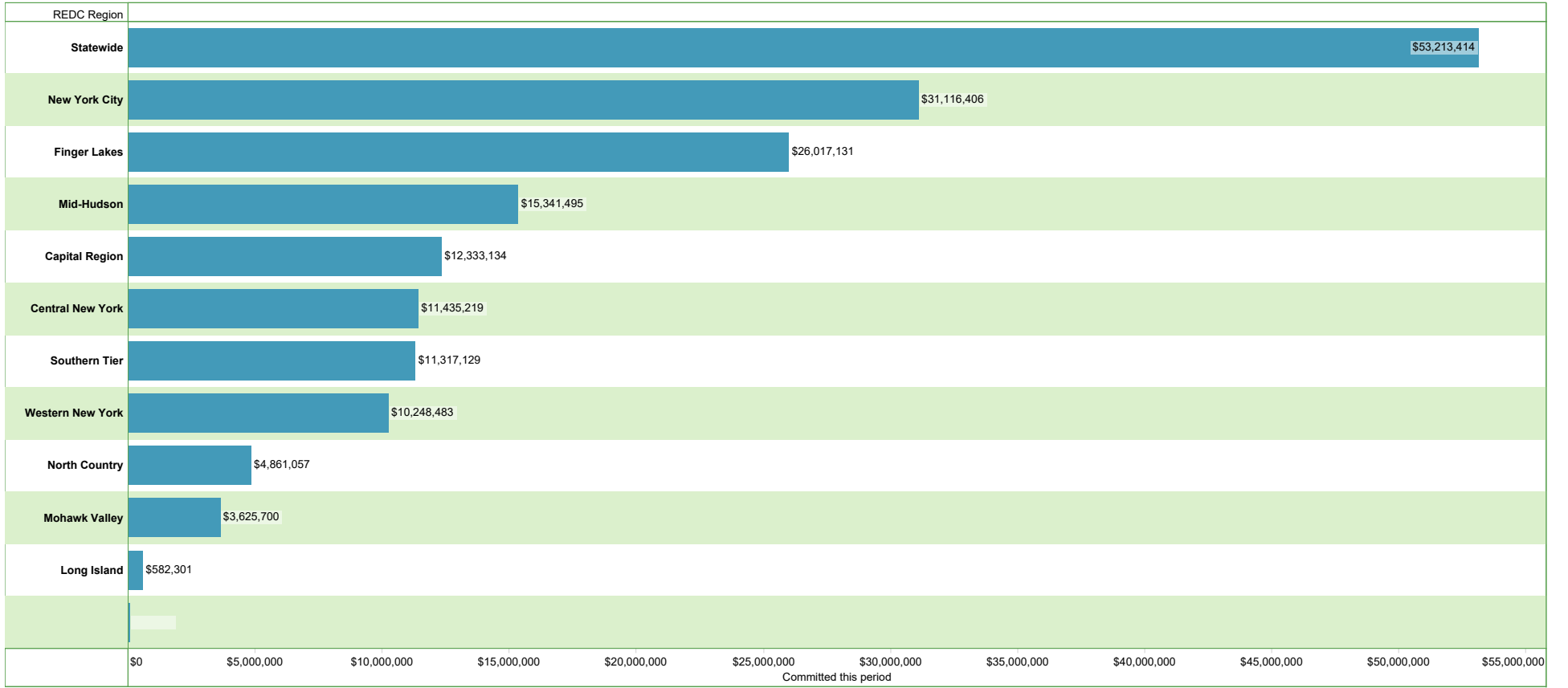
<b>REDC Region</b>	<b>County</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>New York City</b>	Kings	88	\$6,909,940
	New York	166	\$12,341,601
	Queens	94	\$ 5,309,164
	Richmond	40	\$1,266,654
	<b>Total</b>	456	\$31,116,406
<b>North Country</b>	Clinton	3	\$522,500
	Essex	1	\$111,646
	Franklin	4	\$1,690,967
	Jefferson	4	\$926,063
	Lewis	1	\$257,250
	St. Lawrence	3	\$1,352,630
	<b>Total</b>	16	\$4,861,057
<b>Southern Tier</b>	Broome	6	\$3,288,067
	Chenango	4	\$863,947
	Delaware	1	\$392,000
	Schuyler	4	\$4,893,753
	Steuben	1	\$85,500
	Tompkins	5	\$1,793,862
	<b>Total</b>	21	\$11,317,129
<b>Statewide</b>	STATEWIDE	64	\$53,139,914
	<b>Total</b>	64	\$53,213,414



**NYSERDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Table: By REDC Region and County**

<b>REDC Region</b>	<b>County</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>Western New York</b>	Allegany	1	\$42,490
	Cattaraugus	4	\$1,312,952
	Chautauqua	8	\$6,407,136
	Erie	50	\$2,229,974
	Niagara	3	\$255,930
	<b>Total</b>	66	\$10,248,483
<b>Grand Total</b>		922	\$180,091,469

**NYSERDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Graph: By REDC Region**



**NYSDA PERIODIC PROGRAM REPORT**  
**12/16/2023 to 3/15/2024**  
**Table: By Electric Utility**

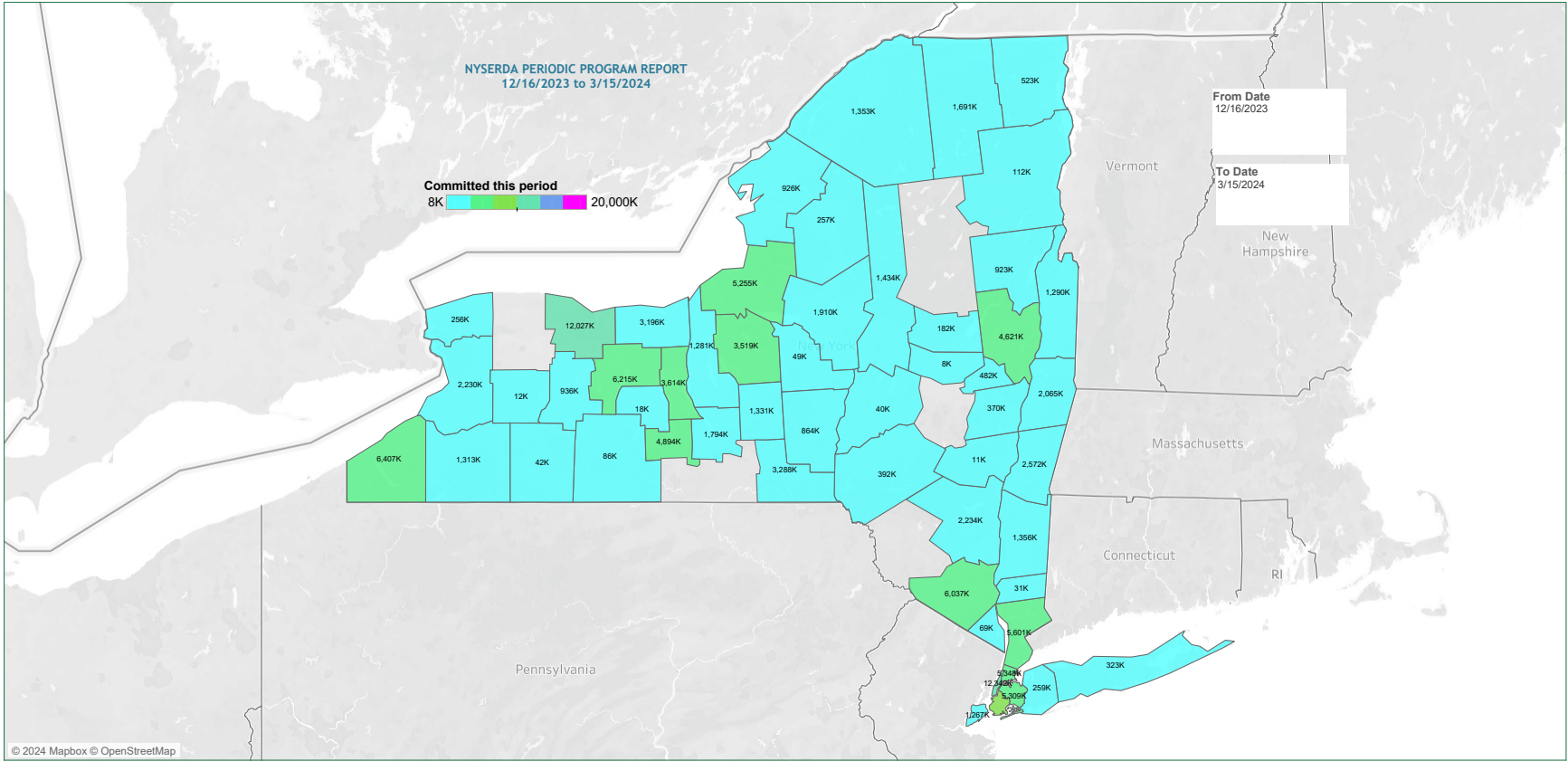
<b>Electric Utility</b>	<b>Count of Contracts</b>	<b>Committed this period</b>
<b>Central Hudson Gas and Electric</b>	27	\$6,823,259
<b>Consolidated Edison</b>	489	\$36,469,028
<b>Long Island Power Authority</b>	73	\$570,051
<b>Municipal Utilities</b>	4	\$68,833
<b>National Grid</b>	144	\$36,542,120
<b>NYS Electric and Gas</b>	88	\$31,258,147
<b>Orange and Rockland Utilities</b>	12	\$2,906,514
<b>Rochester Gas and Electric</b>	20	\$12,313,602
<b>Statewide</b>	64	\$53,139,914
<b>Grand Total</b>	921	\$180,091,469

NYSERDA PERIODIC PROGRAM REPORT  
12/16/2023 to 3/15/2024

Committed this period  
8K 20,000K

From Date  
12/16/2023  
To Date  
3/15/2024

Report Type  
 Procurement  
 Program



Resolution No. \_\_\_\_

RESOLVED, that the Periodic Contracts Report, covering the period December 16, 2023 through March 15, 2024, as presented at this meeting, including but not limited to the contracts identified therein which have been, or are expected to be, executed and which do have, or are expected to have, a period of performance in excess of one year, is hereby approved in accordance with Public Authorities Law Section 2879.