

# New York’s Regional Greenhouse Gas Initiative Operating Plan Amendment for 2022

## Background

In New York, responsibility for implementing the Regional Greenhouse Gas Initiative (RGGI) is shared by the Department of Environmental Conservation (DEC) and the New York State Energy Research and Development Authority (NYSERDA). DEC and NYSERDA program responsibilities are contained in coordinated regulations:

- DEC established New York's CO2 Budget Trading Program and the State’s share of the total regional cap through a rule (6 NYCRR Part 242) and revisions to an existing rule (6 NYCRR Part 200, General Provisions). Part 242 establishes the cap-and-trade provisions, as well as program compliance responsibilities and other program aspects.
- NYSERDA set up the CO2 Allowance Auction Program through regulations (21 NYCRR Part 507). Part 507 establishes administrative procedures for the auction process and provides that proceeds from the sale of the allowances will fund projects and programs for “energy efficiency, renewable or non-carbon emitting technologies, and innovative carbon emissions abatement technologies with significant carbon reduction potential, and for reasonable administrative costs incurred by the Authority.”

The NYSERDA regulations include a provision to annually convene a group of stakeholders representing a broad array of energy and environmental interests. This group advises NYSERDA regarding strategies to best utilize RGGI funds. NYSERDA’s RGGI Operating Plan is reviewed and revised on an annual basis. NYSERDA holds an open meeting of the stakeholder group each year, inviting input on how to achieve greater scale of implementation, advance activities that realize benefits in disadvantaged communities, expand private investments and partnerships, and address barriers to program success.

The Draft 2021 Operating Plan Amendment was presented to stakeholders for comment in December 2020 and was approved by NYSERDA's Board in January 2021. The 2021 Operating Plan was then compiled based on the NYSERDA Board approval.

This document represents the 2022 Operating Plan Amendment and provides program descriptions and funding levels through March 2025. Appendix 1 provides an analysis of the revenues and program funding allocations planned for the fiscal years ending March 31<sup>st</sup>, as compared to actual/projected results.

## Review of Programs and Budgets for the 2022 Operating Plan

New York State invests RGGI proceeds to support comprehensive strategies that best achieve the RGGI greenhouse gas emissions reduction goals, through energy efficiency, renewable energy, and carbon abatement strategies, pursuant to 21 NYCRR Part 507. The programs in the portfolio of initiatives are designed to support the pursuit of the State’s greenhouse gas emissions reduction goals by:

- Deploying commercially available energy efficiency and renewable energy technologies;
- Building the State’s capacity for long-term carbon reduction;
- Empowering New York communities to reduce carbon pollution, and transition to cleaner energy;
- Stimulating entrepreneurship and growth of clean energy and carbon abatement companies in New York; and
- Creating innovative financing to increase adoption of clean energy and carbon abatement in the State.

The initiatives described below represent program activity proposed for the 2022 Operating Plan. The 2022 Operating Plan portfolio builds on the 2021 portfolio, with an increased focus on disadvantaged communities. The funding level for each program previously approved and the amounts planned for FY22-23 through FY24-25 are reflected in Table 1 on page 9.

RGGI programs have and will continue, alongside other state programs, to contribute to economy-wide greenhouse gas emissions reductions and provide benefits to New York's historically overburdened and underserved communities. NYSERDA's CO<sub>2</sub> Allowance Auction Program regulations reflect the provision of the Climate Leadership and Community Protection Act "that 40%, and no less than 35%, of the overall benefits from the investment of the [CO<sub>2</sub> Allowance Auctions] proceeds" will be realized in disadvantaged communities. Appendix 2 of this Operating Plan amendment provides an estimation of how RGGI program commitments are anticipated to result in benefits for disadvantaged communities based on an interim definition of disadvantaged communities and low-to-moderate-income investments, as the Climate Justice Working Group continues its work to arrive at a long-term definition. As such, Appendix 2 tracks post-2019 cumulative commitments, as this is the timeframe in which benefits are subject to the Climate Act. NYSERDA estimates that 42% of post-2019 commitments are expected to provide benefits to disadvantaged communities.

The funding allocation values represented in Table 1 provide an estimate of when funds will be assigned to each program. These figures do not reflect when funds will be spent or when contracts will be signed. The table also reflects cumulative funding allocations through FY20-21, original and revised funding allocations for FY21-22, and estimated allocations for FY22-23 through FY24-25.

Multi-year programs that have remaining funds available for program expenditures but are not receiving additional funding under this Plan Amendment are not described below. Those programs will continue with the planned expenditure of their previously allocated funding as outlined in the 2021 RGGI Operating Plan.

For all RGGI-funded activities, NYSERDA will provide timely progress reports utilizing best practice protocols for project tracking and evaluation.

## **Program Descriptions**

### **Residential PV Plus Storage**

The Amendment proposes \$9 million in FY23-25 to provide incentives to new and existing residential solar projects coupled with new energy storage. This program would allocate \$3 million to Long Island and \$6 million targeting the rest of the state. The program is expected to deliver 2,000 - 3,000 residential storage systems over more than two years, totaling around 10 megawatts (MW) of storage. Similar to the current offering on Long Island, the rest of state engagement is anticipated to leverage utilities by region. These storage projects will provide renewable resource integration, peak power support to the utility (e.g., virtual power plants, dynamic load management, other), with resiliency and clean power to homeowners.

### **Community Heat Pump Systems**

Heat pump technology has become a proven decarbonization solution, providing buildings with clean thermal energy for space heating, cooling and domestic hot water. Existing heat pump programs to-date have targeted customers on an individual building-by-building basis, but community heat pump systems use a network of pipes to share heating water

among a cluster of buildings. The Amendment proposes \$9.7 million in FY23-25 to implement community heat pump systems as part of a statewide program. This program will also provide support for systems in state and local government facilities, as well as Affordable Housing Developments. A community-based program will develop the infrastructure for larger-scale distribution and accelerate the deployment of heat pump systems across the state.

### **LIPA Energy Efficiency and Renewable Energy**

These funds enhance the portfolio of clean energy activities for energy consumers on Long Island, as approved by the Long Island Power Authority (LIPA) and administered by PSEG-Long Island. Funding and reporting requirements are established through a Memorandum of Understanding between NYSERDA and LIPA, which ensure that RGGI funds meet the requirements of the RGGI regulations that funds are used to support energy efficiency and clean energy activities, as well as advancing the goal of benefits of investments in disadvantaged communities. For this 3-year budget proposal, this operating plan amendment proposes to repurpose \$40 million in previously approved funds for energy storage projects on Long Island. LIPA has agreed to procure 200 megawatts of bulk storage or non-wires alternatives storage, allowing funds originally allocated for storage incentives on Long Island to be repurposed to support continuation of funding for LIPA's energy efficiency program. NYSERDA is working with LIPA to maintain the level of market activity designed with the previous RGGI allocations. With this funding re-allocation, as well as additional funds, the Operating Plan is proposed to maintain support for LIPA-implemented energy efficiency and clean energy activity in the amount of \$20 million each year for the calendar years 2022-2024. The LIPA Board of Trustees approves an annual energy efficiency program plan, which details the activities that these funds will support.

### **EmPower Plus: Decarbonizing Buildings for Low- and Moderate-Income Households**

To maintain statewide access to fuel neutral, whole buildings energy efficiency opportunities, these funds will maintain support for low-to-moderate-income (LMI) customers of municipal utilities and/or customers using delivered fuel, which cannot be funded through the Clean Energy Fund, to access incentives through EmPower or Assisted Home Performance with ENERGY STAR, comprehensive energy efficiency services programs for income-qualified residents in existing one-to-four family homes. An additional \$8 million in proposed funding over FY22-25 will fund high-efficiency electrification upgrades for low- and moderate- income municipal utility customers using electric resistance heating or delivered fuels.

### **Disadvantaged Communities Schools and Buildings**

The Amendment proposes an additional \$12 million through FY24-25 to fund high-performance energy efficiency and electrification in affordable housing. NYSERDA has partnerships in place with NYS Homes and Community Renewal (HCR), NYC Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) and seeks to continue supporting decarbonization projects with these agencies. In particular, this funding will allow HCR-regulated affordable housing located in non-SBC territories, including municipal electric territory or Long Island, to access building decarbonization grant funding as part of HCR's financing processes and 2) provide training, technical assistance, and strategic planning resources to support NYC HPD's development of a long-term portfolio-wide decarbonization strategy. Additionally, this initiative will support work with public housing authorities, like NYCHA, to decarbonize building with an emphasis on advancing packaged heat pump systems to develop clean heat for all.

Also, the Clean Green Schools Initiative will provide low-carbon solutions for schools located within disadvantaged communities. The Amendment proposes \$5 million of the \$12 million expansion over the three-year plan to invest in K-12 STEM, workforce activities, hands-on training, and technical training scholarships for students within disadvantaged communities. This program will meaningfully increase the number of students from within DAC schools who are trained on clean energy solutions, have on the job training and internships with companies, have scholarships for additional education including vocational training, and create family-sustaining jobs within the clean energy workforce.

## **ChargeNY**

ChargeNY has been pursuing three strategies to promote plug-in electric vehicle (PEV) adoption by consumers across New York. First, NYSERDA implemented the Drive Clean rebate program for PEVs in March 2017, accelerating purchases of PEVs by reducing higher upfront costs. Second, NYSERDA will continue to invest in marketing and awareness-building activities to build interest in PEVs among the public. A focus on building greater public knowledge and awareness of the capabilities of PEVs is essential to spur more private investment in PEV purchases and PEV charging stations. This work may also include other market development activities, such as policy and business model development studies that support new ways for critical stakeholders, such as utilities, local governments, and car dealers, to get involved in the PEV market. Third, NYSERDA will also support the installation of PEV charging stations at workplaces, municipal lots, and multi-family buildings – location types that have been seen to be effective drivers for PEV adoption based on usage data reported from previous installations. Regions of the State that have seen faster PEV adoption will be identified for additional charging station support, which ensures investments in infrastructure support areas with the greatest potential for additional PEV drivers. This Operating Plan Amendment proposes to provide additional funding of \$35 million from FY22-23 through FY24-25 to support continuation of current and additional ChargeNY strategies to ensure effective engagement with the market to build scale and ensure a focus on a just transition into future years.

## **Natural Carbon Solutions**

Achieving a net-zero carbon economy will require reducing emissions across all sectors. The agriculture and forestry sectors are looked upon to contribute carbon sequestration (i.e., negative emissions) as well as emissions reductions. The amendment proposes \$7 million over FY22-25 to catalyze technology and business solutions and lay the foundation for an economically self-sustaining bio-economy in New York State. By establishing a marketplace of natural emissions-lowering solutions the program will demonstrate pathways to support disadvantaged rural communities, economic development, existing agriculture, and forestry industries, while increasing jobs and revenue.

## **Equity and Climate Transformation Research**

The amendment proposes an allocation of \$2 million over FY22-25 to establish an Equity and Climate Transformation Research Program. While the techno-economic pathways for decarbonization have been mapped out in the literature and in analysis for the Climate Action Council, less is known about the social and institutional dimensions of this deep and rapid transformation. This program would establish an engaged, participatory research framework to study the social dimensions of an equitable and inclusive transition in a manner that centers the lived experiences of underserved and overburdened communities and prioritizes beneficial outcomes for disadvantaged communities. This initial funding would provide the investment necessary to develop both formal proposals for long-term funding as well as pilot initiatives. These pilot initiatives would aim to 1) test initial research hypotheses, 2) engage with a diverse set of

NYS communities to understand how they would most benefit from this research and how they can be most effectively engaged in the process and 3) convene academics. The creation of an Equity and Climate Transformation Research Agenda would support scientifically rigorous inquiry that also advances transformative, inclusive solutions to climate action challenges in New York State. The work would inform strategies for effective climate awareness and consumer education initiatives.

### **Climate Mitigation and Resilience Research**

The proposed allocation of \$1.5 million over FY22-24 seeks to support additional work done by the Climate Action Council Integration Analysis team and leverage current research investment to expand on energy and environmental analyses. This would include additional sensitivity analyses on land-use and climate change impact scenarios. This research would map out the risks and vulnerabilities related to climate change impacts for both the business-as-usual energy system and the carbon neutral energy system.

### **Healthy New Home Design & Construction Challenge**

The Amendment proposes a \$7 million investment to go towards creating a healthy home builder and developer network to get builders to design and offer carbon neutral homes. Funding will also be used to run a healthy Neighborhood Design Challenge to support all electric sub-divisions and planned communities, as well as promote the benefits of healthy homes. Through this program, we can accelerate the pivot to decarbonization of residential new construction and build market capability across (i.e., focus on Long Island area to complement existing activities already using Clean Energy Funds elsewhere in the state), which will support requiring decarbonized new construction via code and regulations on an accelerated 5-year track.

### **Workforce Development Talent Pipeline & Priority Population**

The proposed allocation of \$8 million over the three-year plan focusing on the workforce development talent pipeline and priority populations. Specifically, to expand access to NYSERDA's On-the-Job Training program, will provide wage subsidies to businesses that hire new workers in clean energy positions and career pathways training to prepare new and incumbent workers for clean energy jobs. All activities will have a focus on priority populations and disadvantaged communities.

### **Clean Energy Hubs: Community and Stakeholder Engagement**

NYSERDA will continue building local capacity within disadvantaged communities and improve stakeholder engagement through this Amendment, which proposes \$10 million in additional funding from FY22-23 through FY24-25 to increase engagement of residents and communities in New York City, support the participation of community-based and advocacy organizations in stakeholder meetings, and supporting local projects. This will leverage the more than \$4 million for Clean Energy Hubs supported by the Clean Energy Fund. In 2022, NYSERDA will launch a network of Community Energy Hubs, which will build on the success of the Community Energy Engagement Program, wherein community and locally-based organizations across New York State provided outreach and education services to help low-income residents and small businesses make informed energy choices and access incentives and other resources to implement clean energy projects. The Hubs will be designed to enhance community-level engagement and capacity building by supporting clean energy concierge services. These services will be provided to

residents, small businesses, nonprofits, and multifamily building owners in disadvantaged and underserved communities to increase awareness and adoption of clean energy programs and solutions, with the focus of creating a more inclusive clean energy economy.

In addition, NYSERDA will help to increase the capacity of organizations to advance clean energy projects at the local level. NYSERDA will advance a pilot effort to increase the potential for community-based organizations to plan for and develop community-scale clean energy projects that can benefit disadvantaged communities with capacity development grants. Funds allocated in this operating plan will allow for statewide activities alongside efforts supported through the Clean Energy Fund.

NYSERDA will also seek to improve the ability for community-based organizations to actively participate, and formalize the process, for stakeholder engagement. Many local organizations often lack the resources and capacity to effectively engage on policy and initiative development, often excluding perspectives from their communities and constituents from the planning process. To ensure that community-based organizations have the resources to engage in stakeholder meetings and public comment processes, NYSERDA will allocate resources to provide stipends to offset the cost of participation as part of a pilot initiative to identify solutions for improving and increasing stakeholder engagement.

### **Climate Action Consumer Awareness & Education**

The amendment proposes \$10 million over three years to increase awareness and understanding of the critical need for and benefits of climate action in New York State. This investment will include an umbrella campaign to encourage broad engagement that is coordinated with a targeted marketing effort to impact the purchase decisions and actions that are needed to reach the State's goals. The targeted effort will address specific barriers across critical sectors and encourage adoption of new technologies that will improve quality of life and help decarbonize our buildings and economy.

### **Community Air Monitoring**

The amendment proposes \$8 million to support a program for community air monitoring. The statewide initiative will be designed to monitor air quality in 10 disadvantaged communities, home to approximately five million New Yorkers living in areas historically overburdened by environmental pollution. Using cloud-based software coupled with air monitoring technology, this initiative will be a first-of-its-kind effort to measure hyperlocal, community-based air pollution levels. The initiative will collect this hyperlocal data to inform solutions to reduce greenhouse gases and other harmful air pollutants.

### **Clean Energy Fund**

Through the Clean Energy Fund (CEF) and its portfolios, NYSERDA is advancing the goals of the Climate Leadership and Community Protection Act (Climate Act). As approved by the Commission, the CEF delivers on its primary goals to reduce greenhouse gas emissions, increase renewable energy generation, increase energy efficiency, and attract greater private investment in clean energy, with investment portfolios that are designed to achieve scale in clean energy markets. These key CEF objectives dovetail with the RGGI investment parameters, creating a unique opportunity to leverage CEF and RGGI funds to help achieve New York's broader Climate Act and clean energy

objectives. In designing the CEF, NYSERDA planned to dedicate \$250 million in RGGI funds to the CEF portfolio over 10 years, supporting the \$3.42 billion Market Development and Innovation and Research activities.

In keeping with this plan, while accounting for new revenue and commitment projections, NYSERDA will allocate to the CEF \$34 million in FY21-22 and \$22 million annually through FY24-25.

### **Green Jobs-Green New York**

The Green Jobs-Green New York (GJGNY) Program, created under the Green Jobs-Green New York Act of 2009, provides New Yorkers with access to energy assessments, installation services, low interest financing, and pathways to training for various green-collar careers. The GJGNY program was originally funded with \$112 million of RGGI funds, of which \$26 million was allocated to a residential revolving loan fund to provide low interest financing for residential energy efficiency improvements, residential solar photovoltaic (PV) systems (effective April 2014), solar thermal systems, and high efficiency pellet stove heating systems through NYSERDA's Renewable Heat NY program. Interest rate changes reviewed with the GJGNY Advisory Council and effectuated in September 2016 are resulting in a reduced level of RGGI funds required to support the financing and refinancing of GJGNY loans.

In June of 2020, as part of our pandemic economic stimulus portfolio, NYSERDA launched a 0% financing loan initiative available for up to 12 months or until \$20 million in loans were approved. Demand far exceeded estimates after only 15 days. Most of these loans were issued in FY20-21 and funded from the revolving loan fund (resulting in an increase in the funding allocation required for the program for FY20-21). Loan participation sales partially reimbursed the funding in FY21-22. The Amendment proposes RGGI funding totaling approximately \$48 million from FY22-23 through FY24-25 (an average of approximately \$16 million per year) for continuation of GJGNY residential financing, including making 3.49% 15-year unsecured financing available to consumers living in federal census block groups where more than 50 percent of households have household income less than 120% of area median income (and allowing consumers living outside of these communities to qualify for this rate if they meet this income threshold), and also offering access to financing for consumers who may not qualify for traditional unsecured loan underwriting criteria and meet NYSERDA's "Tier 2" underwriting criteria.

### **Transfer to State – Clean Energy Tax Credits**

The New York State Budget for FY21-22 directed NYSERDA to transfer \$23 million in RGGI funds to the State General Fund to support clean energy tax credits. For the purpose of developing this proposed Operating Plan Amendment, NYSERDA assumes that the annual State Budget for FY22-23 through FY24-25 will include similar directives and has therefore allocated \$69 million in funding for such transfers for FY22-23 through FY24-25.

### **Transfer to State – Environmental Protection Fund**

The New York State Budget for FY21-22 directed NYSERDA to transfer \$5 million in RGGI funds to the Environmental Protection Fund (EPF). This operating plan assumes annual funding to support EPF programs that advance New York's leadership in reducing greenhouse gas emissions such as Climate Smart Communities, Smart Growth, and Greenhouse Gas Management.

## **Anticipated Future Funding Allocations**

The projected revenues and program funding allocations are presented below in Table 1. Additionally, the table presents program administration and evaluation costs, ongoing RGGI, Inc. costs, State Cost Recovery Fees, and other factors. The table below presents an increase in program administration funding, which reflect the projected increased need to support additional activities anticipated due to new program activity. As noted, program funding allocations are equal to projected revenues on an annual basis.

## **Funding Assumptions**

This Amendment assumes that future auction proceeds are based on an auction allowance price of \$8.00 that is sustained through the end of the planning period. Relatedly, the revised auction allowance for FY21-22 is \$8.32, which is an average of the results of the two RGGI auctions already conducted this fiscal year and the \$8.00 per allowance estimate that is conservatively used going forward, based on a lookback average of the past five auctions, increased by a modest inflationary factor of 2.5% per year.

## **Opportunities for Other Allocations**

New York has some of the most ambitious clean energy and decarbonization policies in the country, and NYSERDA has planned several initiatives and programmatic activities that are commensurate with the goals put forward in those policies.

In the event that future auction proceeds exceed the budgets presented in Table 1, NYSERDA intends to allocate additional funding to the program “Community Heat Pump Systems” presented on page 2, and also for New York City Retail Storage to establish a retail storage incentive block for New York City.

Funding for NYC Retail Storage will target supporting approximately 70 to 100 MW of storage in New York City, equivalent to a full power plant. The market for retail storage in NYC shows demand remaining from previous incentive blocks and the economics of the projects show that support is still needed to bridge the gap between current system costs and a self-sustaining market. The incentives would buy down the cost to purchase and install storage systems of up to 5MW that will participate under the VDER tariff and continue the growth of an important storage market in the State, particularly with regard to system benefits.

Another funding opportunity is to support targeted low-cost financing for Disadvantaged Communities to match potential Federal Funds that may be available. This financing will stimulate energy efficiency and renewable energy upgrades to New York Residences by providing low-cost capital for residential customers. It is intentionally structured to provide low-cost loans helping low-to-moderate income households in historically underserved areas convert to cleaner, healthier heating and electrical systems.



**Table 1: Revenues and Program Funding Allocations**

Category	Program	Cumulative					Total
		FY20-21	FY21-22	FY22-23	FY23-24	FY24-25	
Proceeds	Number of allowances	412,511,868	21,502,096	20,924,243	20,043,750	19,163,257	494,145,213
	Allowance price	\$3.51	\$8.32	\$8.00	\$8.00	\$8.00	\$4.26
	RGGI Auction Proceeds	1,446,909,689	178,881,539	167,393,942	160,349,998	153,306,054	2,106,841,222
	Interest Earnings	18,156,696	217,000	237,000	224,000	199,000	19,033,696
	<b>Total Revenues</b>	<b>1,465,066,385</b>	<b>179,098,539</b>	<b>167,630,942</b>	<b>160,573,998</b>	<b>153,505,054</b>	<b>2,125,874,918</b>
Renewable Energy	NY SUN NYPA Customer Incentives	26,000,000	3,000,000	1,000,000			30,000,000
	NY SUN Community Solar/K-solar	7,500,000	-	-			7,500,000
	NY SUN Long Island incentives	55,000,000	-	-			55,000,000
	Residential PV Plus Storage	-			6,000,000	3,000,000	9,000,000
	Renewable Heat NY	10,300,083	-	-			10,300,083
	Community Heat Pump Systems	-			5,000,000	4,700,000	9,700,000
	Advanced Renewable Energy	2,837,698	-	-			2,837,698
	NYS Generation Attributes Tracking System	789,933	-	-			789,933
NYSERDA PV incentives	5,319,821	-	-			5,319,821	
Energy Efficiency	Clean Energy Workforce Opportunity Program	15,000,000	-	-			15,000,000
	LIPA Efficiency and RE	229,600,000	20,000,000	20,000,000	20,000,000	20,000,000	309,600,000
	Energy Storage (LIPA territory)	12,926,434					12,926,434
	EmPower Plus	53,975,905	1,500,000	3,000,000	3,000,000	3,000,000	64,475,905
	Pilot Projects with Municipal Utilities	-	1,000,000	1,000,000	1,000,000		3,000,000
	Disadvantaged Communities Schools/Buildings	-	13,000,000	12,600,000	17,300,000	6,500,000	49,400,000
	Multifamily Performance Program	15,046,683	-	-			15,046,683
	Multifamily Carbon Emissions Reduction	5,833,019	-	-			5,833,019
	Solar Thermal incentive	4,226,947	-	-			4,226,947
	Municipal Water/Wastewater	1,245,242	-	-			1,245,242
Green Residential Buildings	2,744,601	-	-			2,744,601	
Innovative GHG Abatement Strategies	Southern Tier Competition (76 West)	11,000,000	-	-			11,000,000
	Brookhaven National Lab- ION Collidor	25,000,000					25,000,000
	Electric Vehicle/Charge NY	23,500,000	21,500,000	42,400,000	8,000,000	15,900,000	111,300,000
	Advanced Buildings & Industrial Innovations	13,307,654	-	-			13,307,654
	Climate Research & Analysis	8,729,296	-	-			8,729,296
	Competitive GHG Reduction Pilot	972,650	-	-			972,650
	Clean Energy Business Development	5,809,987	-	-			5,809,987
	Transportation Research	3,819,311	-	-			3,819,311
	Natural Carbon Solutions	-	-	2,000,000	3,000,000	2,000,000	7,000,000
	Equity and Climate Transformation Research	-	-		1,000,000	1,000,000	2,000,000
	Climate Mitigation and Resilience Research	-	-	500,000	1,000,000		1,500,000
	PV Manufacturing consortium	8,480,000	-	-			8,480,000
Carbon Sequestration	1,000,000	-	-			1,000,000	
Community Clean Energy	Cleaner Greener Communities	94,261,895					94,261,895
	Clean Energy Communities	4,273,120	3,000,000	3,000,000	3,000,000	3,000,000	16,273,120
	Climate Smart Communities	7,674,999					7,674,999
	Community Energy Engagement	1,400,000	1,000,000	1,000,000	1,000,000		4,400,000
	Economic Development Growth Extension	5,843,047					5,843,047
	Energy to Lead	3,000,000	-				3,000,000
	Renewable/Net-Zero Energy Demonstrations	6,000,000	1,000,000	500,000	-		7,500,000
	Healthy New Homes Design & Construction Challenge	-		1,000,000	3,000,000	3,000,000	7,000,000
	Workforce Development Talent Pipeline Priority Population	-	2,000,000	2,000,000	11,000,000	4,000,000	19,000,000
	Clean Energy Hubs	-		3,000,000	3,000,000	4,000,000	10,000,000
	Climate Action Consumer Awareness & Education	-		500,000	5,000,000	4,500,000	10,000,000
	Air Monitoring	-	2,000,000	6,000,000			8,000,000
	Regional Economic Development & GHG Reduction	10,246,443	-	-			10,246,443
Directed	NYS Environmental Tax Credits	156,000,000	23,000,000	23,000,000	23,000,000	23,000,000	248,000,000
	NYS Environmental Protection Fund	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000
	Electric Generation Facility Cessation Mitigation/ Just Transition	50,000,000	-	-	-		50,000,000
	Green Jobs-Green NY- Original Legislation	112,000,000	-	-			112,000,000
	Green Jobs-Green NY- Additional Funding	142,725,275	12,000,000	29,936,974	4,370,498	14,071,993	203,104,740
	Transfer to Clean Energy Standard	719,424					719,424
	NYS Budget Transfer	90,000,000	-	-	-		90,000,000
	NYS Temporary Budget Transfer		-	-	-		-
CEF	Transfer to(from) Clean Energy Fund	130,437,540	33,789,264	22,000,000	22,000,000	22,000,000	230,226,804
Administration and Other Non-Program Costs	Program Administration	39,596,359	7,500,000	11,475,000	11,475,000	11,475,000	81,521,359
	Program Evaluation	9,155,429		1,000,000	1,000,000	1,000,000	12,155,429
	Commensurate Benefit/Litigation reserve	21,900,366	-	-	-		21,900,366
	RGGI Inc Startup Costs	1,598,204	-	-	-		1,598,204
	RGGI Inc pro-rata costs	9,183,667	825,000	825,000	825,000	825,000	12,483,667
	State Cost Recovery	14,085,353	1,204,304	1,673,939	1,603,500	1,533,061	20,100,157
<b>Total Funding Allocations</b>		<b>1,465,066,385</b>	<b>152,318,568</b>	<b>194,410,913</b>	<b>160,573,998</b>	<b>153,505,054</b>	<b>2,125,874,918</b>
Surplus/(Shortfall)		-	26,779,971	(26,779,971)	-	-	-
<b>Cumulative Surplus(Shortfall)</b>		<b>-</b>	<b>26,779,971</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Highlighted programs indicate newly funded programs or additional funding to existing programs

**Table 2: RGGI Cash Flow**

Category		Cumulative 3/31/21	FY21-22	FY22-23	FY23-24	FY24-25	Thereafter
<b>Proceeds</b>	Number of allowances	412,511,868	21,502,096	20,924,243	20,043,750	19,163,257	
	Allowance price	\$3.51	\$8.32	\$8.00	\$8.00	\$8.00	
	RGGI Auction Proceeds	1,446,909,689	178,881,539	167,393,942	160,349,998	153,306,054	
	Interest Earnings	18,156,697	217,000	237,000	224,000	199,000	
	<b>Total Revenues</b>	<b>1,465,066,385</b>	<b>179,098,539</b>	<b>167,630,942</b>	<b>160,573,998</b>	<b>153,505,054</b>	
<b>Renewable Energy</b>	NY SUN NYPA Customer Incentives	4,072,420	3,000,000	8,000,000	8,000,000	3,500,000	3,427,580
	NY SUN Community Solar/K-solar	1,209,292	200,000	1,200,000	1,200,000	1,200,000	2,490,708
	NY SUN Long Island incentives	47,611,962	500,000	3,500,000	3,388,038	-	-
	Residential PV Plus Storage	-	-	-	1,000,000	3,000,000	5,000,000
	Renewable Heat NY	9,317,387	434,536	363,910	184,250	-	-
	Community Heat Pump Systems	-	-	-	1,000,000	3,000,000	5,700,000
	Advanced Renewable Energy	2,837,698	-	-	-	-	-
	NYS Generation Attributes Tracking System	585,409	102,262	102,262	-	-	-
	NYSEERDA PV incentives	5,319,821	-	-	-	-	-
<b>Energy Efficiency</b>	Clean Energy Workforce Opportunity Program	15,000,000	-	-	-	-	-
	LIPA Efficiency and RE	229,600,000	20,000,000	20,000,000	20,000,000	20,000,000	-
	Energy Storage (LIPA territory)	1,178,825	1,417,061	1,500,000	2,500,000	3,000,000	3,330,548
	EmPower Plus	53,530,393	1,500,000	1,500,000	2,500,000	2,000,000	3,445,512
	Pilot Projects with Municipal Utilities	-	-	1,000,000	1,000,000	1,000,000	-
	Disadvantaged Communities Schools/Buildings	-	50,000	3,040,000	6,360,000	13,130,000	26,820,000
	Multifamily Performance Program	14,711,711	162,752	172,220	-	-	-
	Multifamily Carbon Emissions Reduction	5,833,019	-	-	-	-	-
	Solar Thermal incentive	4,226,947	-	-	-	-	-
	Municipal Water/Wastewater	1,245,242	-	-	-	-	-
Green Residential Buildings	2,744,601	-	-	-	-	-	
<b>Innovative GHG Abatement Strategies</b>	Southern Tier Competition (76 West)	10,223,649	444,830	331,521	-	-	-
	Brookhaven National Lab- ION Collidor	24,999,638	362	-	-	-	-
	Electric Vehicle/Charge NY	22,503,073	22,878,755	21,000,000	21,000,000	21,000,000	2,918,172
	Advanced Buildings & Industrial Innovations	10,854,772	500,000	1,000,000	500,000	452,882	-
	Climate Research & Analysis	8,618,850	41,516	68,930	-	-	-
	Competitive GHG Reduction Pilot	972,650	-	-	-	-	-
	Clean Energy Business Development	5,625,889	-	184,098	-	-	-
	Transportation Research	3,773,206	46,105	-	-	-	-
	Natural Carbon Solutions	-	-	1,000,000	1,000,000	1,000,000	4,000,000
	Equity and Climate Transformation Research	-	-	-	200,000	400,000	1,400,000
	Climate Mitigation and Resilience Research	-	-	300,000	700,000	500,000	-
	PV Manufacturing consortium	8,480,000	-	-	-	-	-
	Carbon Sequestration	1,000,000	-	-	-	-	-
<b>Community Clean Energy</b>	Cleaner Greener Communities	72,584,734	2,447,830	3,710,503	7,579,029	7,761,693	178,106
	Clean Energy Communities	1,505,713	500,000	775,000	1,750,000	2,200,000	9,542,407
	Climate Smart Communities	5,003,147	500,000	768,212	644,808	529,586	229,246
	Community Energy Engagement	515,755	516,162	976,165	597,979	597,979	1,195,960
	Economic Development Growth Extension	5,562,723	-	280,324	-	-	-
	Energy to Lead	699,049	389,391	500,000	500,000	500,000	411,560
	Renewable/Net-Zero Energy Demonstrations	3,000,000	2,000,000	250,000	1,250,000	1,000,000	-
	Healthy New Homes Design & Construction Challenge	-	-	500,000	1,000,000	3,000,000	2,500,000
	Workforce Development Talent Pipeline Priority Population	-	55,868	3,029,000	4,328,000	6,058,000	5,529,132
	Clean Energy Hubs	-	-	3,000,000	3,000,000	3,000,000	1,000,000
	Climate Action Consumer Awareness & Education	-	-	500,000	3,500,000	3,000,000	3,000,000
	Air Monitoring	-	2,000,000	6,000,000	-	-	-
	Regional Economic Development & GHG Reduction	9,807,611	238,832	200,000	-	-	-
<b>Directed</b>	NYS Environmental Tax Credits	156,000,000	23,000,000	23,000,000	23,000,000	23,000,000	-
	NYS Environmental Protection Fund	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	-
	Electric Generation Facility Cessation Mitigation	45,000,000	2,500,000	2,500,000	-	-	-
	Green Jobs-Green NY- Original Legislation	112,000,000	-	-	-	-	-
	Green Jobs-Green NY- Additional Funding	142,725,275	12,000,000	29,936,974	4,370,498	14,071,993	-
	Transfer to Clean Energy Standard	719,424	-	-	-	-	-
	NYS Budget Transfer	90,000,000	-	-	-	-	-
	NYS Temporary Budget Transfer	5,012,649	(166,000)	(859,581)	(3,306,082)	(680,986)	-
<b>CEF</b>	Transfer to Clean Energy Fund	130,437,540	33,789,264	22,000,000	22,000,000	22,000,000	-
	Transfer to NY Green Bank	-	-	-	-	-	-
<b>Administration and Other Non-Program Costs</b>	Program Administration	39,380,934	7,715,425	11,475,000	11,475,000	11,475,000	-
	Program Evaluation	6,162,155	300,000	500,000	1,000,000	1,000,000	3,193,274
	Commensurate Benefit/Litigation reserve	21,900,366	-	-	-	-	-
	RGGI Inc Startup Costs	1,598,204	-	-	-	-	-
	RGGI Inc pro-rata costs	8,644,798	825,000	825,000	825,000	825,000	538,869
	State Cost Recovery	13,840,970	1,050,816	1,355,533	1,439,478	1,504,559	908,801
	<b>Total Expenses</b>	<b>1,373,177,501</b>	<b>145,940,767</b>	<b>180,485,070</b>	<b>160,485,998</b>	<b>179,025,707</b>	<b>86,759,875</b>
Cash Increase/(Decrease)	91,888,884	33,157,772	(12,854,128)	88,000	(25,520,653)	(86,759,875)	
<b>Cash Balance</b>	<b>91,888,884</b>	<b>125,046,656</b>	<b>112,192,528</b>	<b>112,280,528</b>	<b>86,759,876</b>	<b>0</b>	

Highlighted programs indicate newly funded programs or additional funding to existing programs

Appendix 1

January 2021 Operating Plan Revenues and Program Funding Allocations Compared to Actuals/Projections

Category	Program	FY20-21 Revised Plan	FY20-21 Actual
<b>Proceeds</b>	Number of allowances	20,308,920	20,323,443
	Allowance price	\$6.70	\$6.92
	RGGI Auction Proceeds	136,141,216	140,560,177
	Interest Earnings	199,000	235,000
	<b>Total Revenues</b>	<b>136,340,216</b>	<b>140,795,177</b>
<b>Renewable Energy</b>	NY SUN NYPA Customer Incentives	6,000,000	6,000,000
	NY SUN Community Solar/K-solar	-	-
	NY SUN Long Island incentives	-	-
	Renewable Heat NY	-	-
	Advanced Renewable Energy	-	-
	NYS Generation Attributes Tracking System	-	-
	NYSERDA PV incentives	-	-
<b>Energy Efficiency</b>	Clean Energy Workforce Opportunity Program	-	-
	LIPA Efficiency and RE	25,000,000	25,000,000
	Energy Storage (LIPA territory)	(40,000,000)	(40,000,000)
	EmPower NY	200,000	300,000
	Assisted Home Performance with Energy Star	300,000	200,000
	Multifamily Performance Program	(115,633)	(115,633)
	Multifamily Carbon Emissions Reduction	-	-
	Solar Thermal incentive	(115,730)	(115,730)
	Municipal Water/Wastewater	-	-
Green Residential Buildings	-	-	
<b>Innovative GHG Abatement Strategies</b>	Southern Tier Competition (76 West)	-	-
	Brookhaven National Lab- ION Collidor	-	-
	Electric Vehicle/Charge NY	-	-
	Advanced Buildings & Industrial Innovations	(1,308,384)	(1,308,384)
	Climate Research & Analysis	(84)	(84)
	Competitive GHG Reduction Pilot	(40,883)	(40,883)
	Clean Energy Business Development	-	-
	Transportation Research	-	-
	PV Manufacturing consortium	(20,000)	(20,000)
Carbon Sequestration	-	-	
<b>Community Clean Energy</b>	Cleaner Greener Communities	-	-
	Clean Energy Communities	-	-
	Climate Smart Communities	-	-
	Community Energy Engagement	-	-
	Economic Development Growth Extension	-	-
	Energy to Lead	-	-
	Renewable/Net-Zero Energy Demonstrations	-	-
	Regional Economic Development & GHG Reduction	(43,502)	(43,502)
<b>Directed</b>	NYS Environmental Tax Credits	23,000,000	23,000,000
	NYS Environmental Protection Fund	5,000,000	5,000,000
	Electric Generation Facility Cessation Mitigation/ Just Transition	20,000,000	20,000,000
	Green Jobs-Green NY- Original Legislation	-	-
	Green Jobs-Green NY- Additional Funding	37,700,000	37,700,000
	Transfer to Clean Energy Standard	-	-
	NYS Budget Transfer	-	-
<b>CEF</b>	Transfer to(from) Clean Energy Fund	52,338,026	56,646,608
<b>Administration and Other Non-Program Costs</b>	Program Administration	6,500,000	6,500,000
	Program Evaluation	-	-
	Commensurate Benefit/Litigation reserve	-	-
	RGGI Inc Startup Costs	-	-
	RGGI Inc pro-rata costs	825,000	825,000
	State Cost Recovery	1,121,406	1,267,785
<b>Total Funding Allocations</b>		<b>136,340,216</b>	<b>140,795,177</b>
Surplus/(Shortfall)		-	-
<b>Cumulative Surplus(Shortfall)</b>		-	-

Appendix 2

RGGI Commitments Benefiting Disadvantaged Communities

RGGI Commitments		Cumulative Commitments 12/31/19	SUBJECT TO CLCPA			Total	
Category	Program		Post-2019 Commitments	Estimated LMI/ Disadvantaged Community Benefit	%		
SUBJECT TO CLCPA	Renewable Energy	NY SUN NYPA Customer Incentives	9,706,046	20,293,954	7,102,884	35%	30,000,000
		NY SUN Community Solar/K-solar	1,249,272	6,250,728	-	0%	7,500,000
		NY SUN Long Island incentives	51,200,565	3,799,435	-	0%	55,000,000
		Residential PV Plus Storage	-	9,000,000	3,600,000	40%	9,000,000
		Renewable Heat NY	9,634,826	665,257	-	0%	10,300,083
		Community Heat Pump Systems	-	9,700,000	6,402,000	66%	9,700,000
		Advanced Renewable Energy	2,837,698	-	-	0%	2,837,698
		NYS Generation Attributes Tracking System	789,933	-	-	0%	789,933
		NYSEEDA PV incentives	5,319,821	-	-	0%	5,319,821
	Energy Efficiency	Clean Energy Workforce Opportunity Program	15,000,000	-	-	0%	15,000,000
		LIPA Efficiency and RE	204,600,000	105,000,000	31,500,000	30%	309,600,000
		Energy Storage (LIPA territory)	301,575	12,624,859	-	0%	12,926,434
		EmPower Plus	52,857,971	11,617,934	11,617,934	100%	64,475,905
		Pilot Projects with Municipal Utilities	-	3,000,000	1,050,000	35%	3,000,000
		Disadvantaged Communities Schools/Buildings	-	49,400,000	49,400,000	100%	49,400,000
		Multifamily Performance Program	15,046,683	-	-	0%	15,046,683
		Multifamily Carbon Emissions Reduction	5,833,019	-	-	0%	5,833,019
		Solar Thermal incentive	4,226,947	-	-	0%	4,226,947
		Municipal Water/Wastewater	1,245,242	-	-	0%	1,245,242
		Green Residential Buildings	2,744,601	-	-	0%	2,744,601
Innovative GHG Abatement Strategies	Southern Tier Competition (76 West)	10,262,850	737,150	-	0%	11,000,000	
	Brookhaven National Lab- ION Collider	25,000,000	-	-	0%	25,000,000	
	Electric Vehicle/Charge NY	11,188,399	100,111,601	23,766,740	24%	111,300,000	
	Advanced Buildings & Industrial Innovations	13,307,654	-	-	0%	13,307,654	
	Climate Research & Analysis	8,729,296	-	-	0%	8,729,296	
	Competitive GHG Reduction Pilot	972,650	-	-	0%	972,650	
	Clean Energy Business Development	5,809,987	-	-	0%	5,809,987	
	Transportation Research	3,819,311	-	-	0%	3,819,311	
	Natural Carbon Solutions	-	7,000,000	3,500,000	50%	7,000,000	
	Equity and Climate Transformation Research	-	2,000,000	2,000,000	100%	2,000,000	
	Climate Mitigation and Resilience Research	-	1,500,000	-	0%	1,500,000	
	PV Manufacturing consortium	8,480,000	-	-	0%	8,480,000	
	Carbon Sequestration	1,000,000	-	-	0%	1,000,000	
Community Clean Energy	Cleaner Greener Communities	94,261,895	-	-	0%	94,261,895	
	Clean Energy Communities	2,086,963	14,186,157	4,539,570	32%	16,273,120	
	Climate Smart Communities	5,321,157	2,353,842	-	0%	7,674,999	
	Community Energy Engagement	675,730	3,724,270	3,000,000	81%	4,400,000	
	Economic Development Growth Extension	5,562,723	280,324	-	0%	5,843,047	
	Energy to Lead	3,000,000	-	-	0%	3,000,000	
	Renewable/Net-Zero Energy Demonstrations	3,000,000	4,500,000	-	0%	7,500,000	
	Healthy New Home Design & Construction Challenge	-	7,000,000	-	0%	7,000,000	
	Workforce Development Talent Pipeline Priority Population	-	19,000,000	10,350,000	54%	19,000,000	
	Clean Energy Hubs	-	10,000,000	10,000,000	100%	10,000,000	
	Climate Action Consumer Awareness & Education	-	10,000,000	5,000,000	50%	10,000,000	
	Air Monitoring	-	8,000,000	8,000,000	100%	8,000,000	
	Regional Economic Development & GHG Reduction	10,246,443	-	-	0%	10,246,443	
	Directed	NYS Environmental Tax Credits	133,000,000	115,000,000	17,250,000	15%	248,000,000
NYS Environmental Protection Fund		-	25,000,000	8,750,000	35%	25,000,000	
Electric Generation Facility Cessation Mitigation/ Just Transition		30,000,000	20,000,000	20,000,000	100%	50,000,000	
Green Jobs-Green NY- Original Legislation		112,000,000	-	-	35%	112,000,000	
Green Jobs-Green NY- Additional Funding		105,025,275	98,079,465	60,809,268	62%	203,104,740	
Transfer to Clean Energy Standard		719,424	-	-	0%	719,424	
NYS Budget Transfer		90,000,000	-	-	0%	90,000,000	
<b>SUBTOTAL</b>		<b>1,066,063,956</b>	<b>679,824,976</b>	<b>287,638,397</b>	<b>42%</b>	<b>1,745,888,932</b>	
Excluded	Administration and Other Non-Program Costs	Transfer to(from) Clean Energy Fund	73,790,932	156,435,872	-	230,226,804	
		Program Administration	31,931,071	49,590,288	-	81,521,359	
	Program Evaluation	5,999,519	6,155,910	-	12,155,429		
	Commensurate Benefit/Litigation reserve	21,900,366	-	-	21,900,366		
	RGGI Inc Startup Costs	1,598,204	-	-	1,598,204		
	RGGI Inc pro-rata costs	7,746,048	4,737,619	-	12,483,667		
	State Cost Recovery	12,606,619	7,493,538	-	20,100,157		
	<b>SUBTOTAL</b>	<b>155,572,759</b>	<b>224,413,227</b>	<b>-</b>	<b>379,985,986</b>		
<b>TOTAL</b>	<b>1,221,636,715</b>	<b>904,238,203</b>	<b>287,638,397</b>	<b>42%</b>	<b>2,125,874,918</b>		