

Stakeholder Advisory Group Meeting

DRAFT 2022 Regional Greenhouse Gas Initiative
Operating Plan Amendment



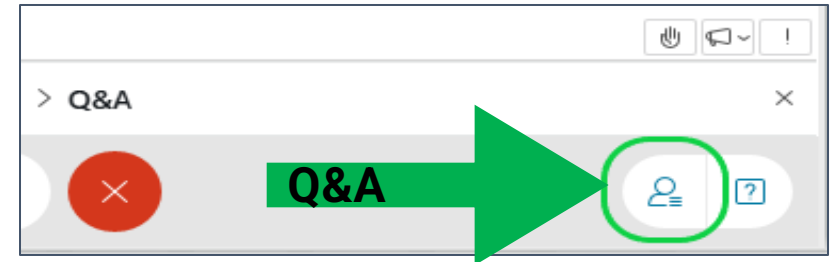
NYSERDA

December 10, 2021

Meeting Procedures

Before beginning, a few reminders:

- > This meeting is being recorded
- > For questions or comments, please use the Q&A function
- > The presentation will be made available following the meeting
- > If technical issues arise, please contact Tricia King at Tricia.King@nyserda.ny.gov



Opening Remarks

Agenda

- > Funding Assumptions
- > Proposed Budgets
- > Proposed Programs
- > Progress on Disadvantaged Communities Goal
- > Discussion
- > Next Steps

Funding Assumptions

Funding Assumptions

- > The Operating Plan for FY 22-23 through FY 24-25 assumes future auction allowance prices of \$8.00
 - This allowance price figure is conservatively estimated going forward, based on a lookback average of the past five auctions increased by a modest inflationary factor
- > The Operating Plan for FY 21-22 revised budget assumes an allowance price of \$8.32
 - This is an average of the results of the two RGGI auctions already conducted this fiscal year and the \$8.00 per allowance estimate used for go-forward planning purposes

Funding Assumptions

Estimates of proceeds for FY 22-25 for planning purposes

	FY 21-22 Budget	FY 22-23 Budget	FY 23-24 Forecast	FY 24-25 Forecast
Number of Allowances	21,502,096	20,924,243	20,043,750	19,163,257
Allowance Price	\$8.32	\$8.00	\$8.00	\$8.00
RGGI Auction Proceeds	\$178,881,539	\$167,393,942	\$160,349,998	\$153,306,054
Interest Earnings	\$217,000	\$237,000	\$224,000	\$199,000
Total Revenues	\$179,098,539	\$167,630,942	\$160,573,998	\$153,505,054

Overview of Proposed Budgets

Financial Status of RGGI Program Budgets

- > Maintains multi-year operating plan approach
- > Continues commitments in line with projected future revenue at the end of each fiscal year
- > Planned transfers to the Clean Energy Fund include \$34 million in FY21-22 and \$22 million annually through FY24-25

Overview of Proposed Programs

New York RGGI Investment Strategies

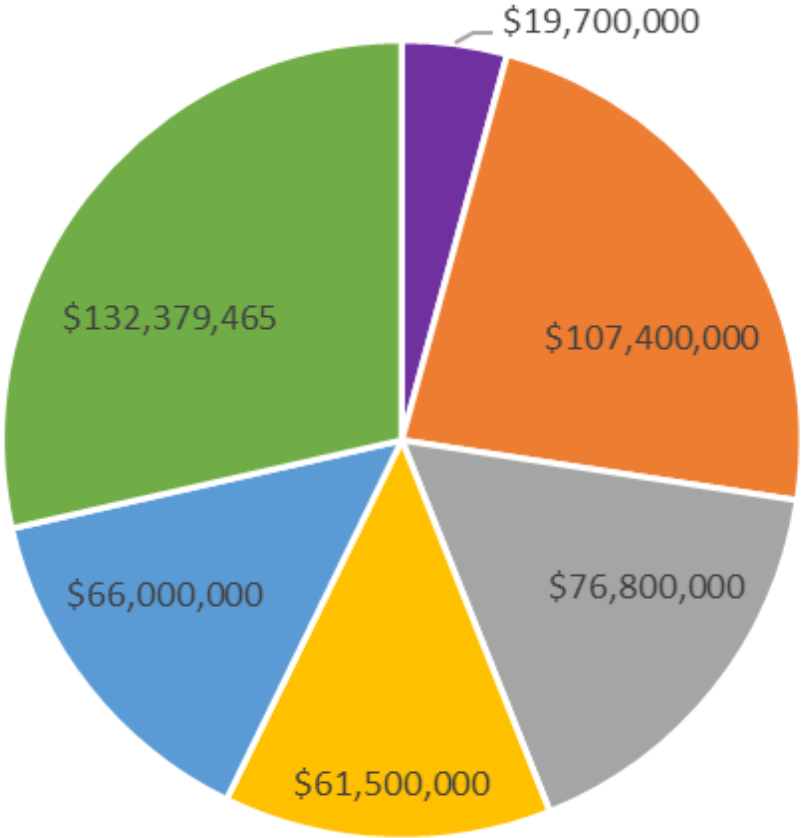
New York State invests RGGI proceeds to support comprehensive strategies that best advance the State's CO₂ emission reduction goals through investments in energy efficiency, renewable energy, and carbon abatement technologies, pursuant to 21 NYCRR Part 507.

The RGGI portfolio is designed to achieve greenhouse gas emission reductions 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 emissions and transition to cleaner energy
- Stimulating entrepreneurship and growth of clean energy and carbon abatement companies in New York
- Creating innovative financing to increase adoption of clean energy and carbon abatement in the State

Program Investments of \$464M for FY 22-25

- Renewable Energy
- Energy Efficiency
- Innovative GHG Abatement Strategies
- Community Clean Energy
- Clean Energy Fund
- Directed



New Program Investments

Residential PV Plus Storage

- > Expanding incentives for solar projects paired with energy storage
- > An estimated 2,000-3,000 residential storage systems are expected to be installed through this program

Community Heat Pump Systems

- > Focus on district heat pump systems using a piped-network to share heating among buildings
- > System installations on state and local government facilities, campuses and Affordable Housing Developments
- > Allows for larger-scale distribution and accelerated deployment of heat pump systems

New Program Investments

EmPower Plus

- > Support LMI customers of municipal utilities which cannot be funded through the Clean Energy Fund to access incentives through EmPower or Assisted Home Performance with ENERGY STAR
- > Providing comprehensive energy efficiency services for income-qualified residents in one-to-four family homes
- > Funding high-efficiency electrification upgrades to qualifying customers using electric resistance heating or delivered fuels

New Program Investments

Electric Vehicle/ChargeNY

- > Continue providing rebates for Plug-in Electric Vehicles (PEVs)
- > Support installation of PEV charging infrastructure, focusing on regions with higher PEV adoption as well as workplaces, municipal lots, and multi-family buildings

Healthy New Homes Design & Construction Challenge

- > Create a healthy home builder and developer network to get builders to design and offer carbon neutral homes
- > Support all-electric housing subdivisions and planned communities

New Program Investments

Workforce Development Talent Pipeline Priority Population

- > Expanding access to On-the-Job Training program
- > 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
- > Focused on priority populations and disadvantaged communities

New Program Investments

Clean Energy Hubs

- > Build local capacity within disadvantaged communities and improve stakeholder engagement among residents and communities in New York City
- > A network of Community Energy Hubs will provide 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

Climate Action Consumer Awareness & Education

- > Increase awareness and understanding of the critical need for and benefits of climate action in New York State
- > 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

New Program Investments

Equity and Climate Transformation Research

- > Establish a research framework to study the social dimensions of an equitable and inclusive energy transition in a manner that centers the lived experiences of underserved and overburdened communities and prioritizes beneficial outcomes for disadvantaged communities
- > Support scientifically rigorous inquiry that also advances transformative, inclusive solutions to climate action challenges in New York State and informs strategies for effective citizen engagement and outreach

Climate Mitigation and Resilience Research

- > Expand on Integration Analysis carried out for the Climate Action Council Integration Analysis to map out climate changes risks and vulnerabilities for both the business-as-usual energy system and the carbon neutral energy system
- > Conduct additional sensitivity analyses on land-use and climate change impact scenarios

New Program Investments

Natural Carbon Solutions

- > Catalyzing technology and business solutions to lay the foundation for a self-sustaining bio-economy in New York State
- > Establishing a marketplace of natural emissions-lowering products and demonstrate pathways to support disadvantaged rural communities, economic development, existing agriculture, and forestry industries, while increasing jobs and revenue

New Program Investments

Air Monitoring

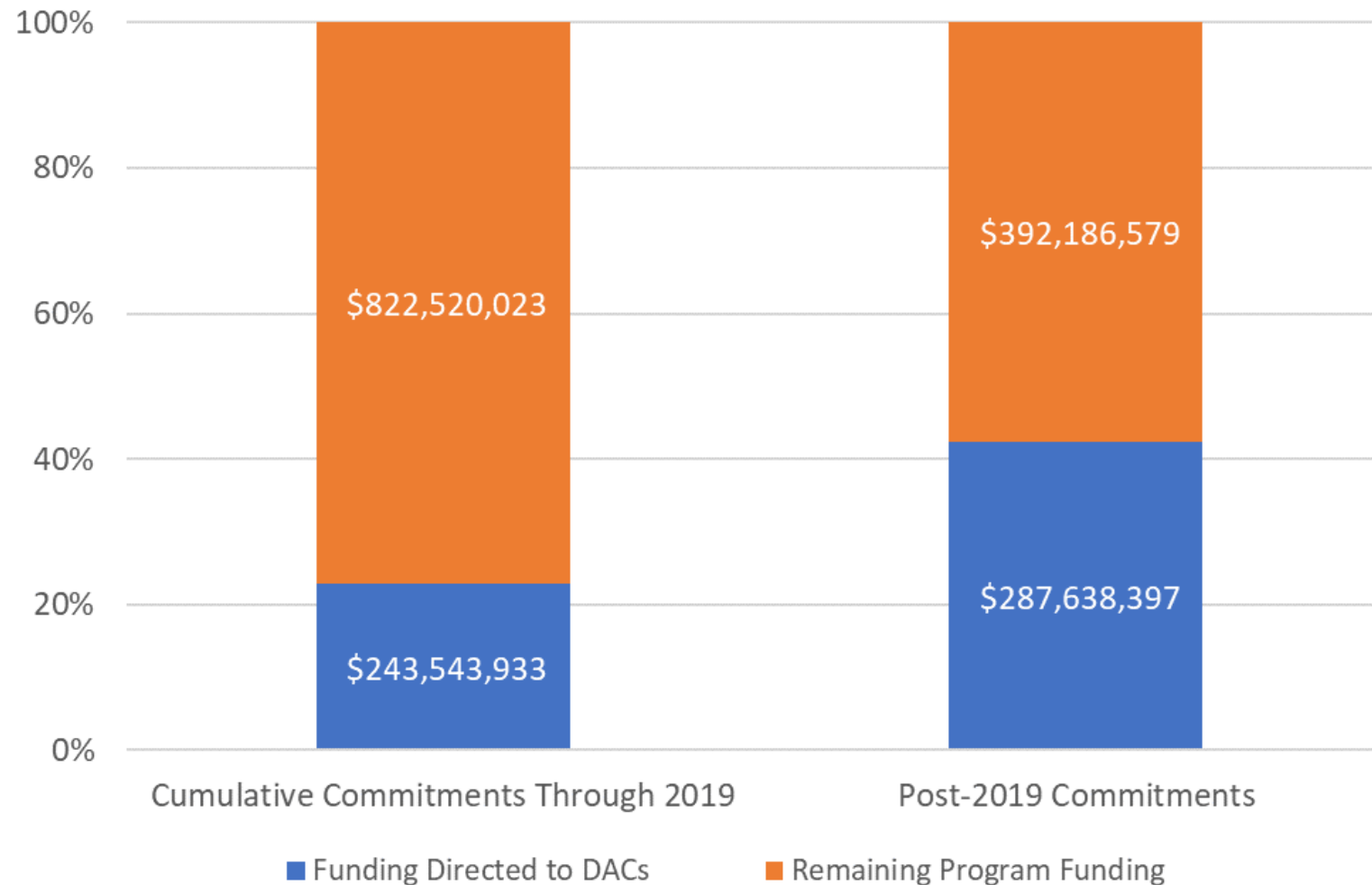
- > Monitor air quality in 10 disadvantaged communities, home to approximately five million New Yorkers living in areas historically overburdened by environmental pollution
- > Using cloud-based software coupled with air monitoring technology, this initiative will collect hyperlocal data to inform solutions to reduce greenhouse gases and other harmful air pollutants

Progress to Disadvantaged Communities Goal

Disadvantaged Communities Approach

- > The 2022 Operating Plan portfolio builds on the 2021 portfolio, with an increasing focus on disadvantaged communities
- > NYSERDA's CO₂ Allowance Auction Program regulations reflect the provision of the Climate Leadership and Community Protection Act that disadvantaged communities receive no less than 35% of overall benefits of spending on clean energy and energy efficiency programs, with a goal of 40%
- > NYSERDA estimates that **42% of post-2019 commitments** are expected to provide benefits to Disadvantaged Communities, an increase from the estimate of 34% from last year's portfolio

Investments Benefiting Disadvantaged Communities



Post-2019 Commitments Benefiting LMI/ DAC

Program	Post-2019 Commitments	Estimated Investments Benefiting LMI/DAC	%
NY Sun NYPA Customer Incentives	\$20,293,954	\$7,102,884	35%
Residential PV Plus Storage	\$9,000,000	\$3,600,000	40%
Community Heat Pump Systems	\$9,700,000	\$6,402,000	66%
LIPA Efficiency and EE	\$105,000,000	\$31,500,000	30%
EmPower Plus	\$11,617,934	\$11,617,934	100%
Pilot Projects with Municipal Utilities	\$3,000,000	\$1,050,000	35%
Disadvantaged Communities Schools/Buildings	\$49,400,000	\$49,400,000	100%
EV/Charge NY	\$100,111,601	\$23,766,740	24%
Natural Carbon Solutions	\$7,000,000	\$3,500,000	50%
Equity and Climate Transformation Research	\$2,000,000	\$2,000,000	100%
Clean Energy Communities	\$14,186,157	\$4,539,570	32%
Community Energy Engagement	\$3,724,270	\$3,000,000	81%
Priority Population Workforce Development	\$19,000,000	\$10,350,000	54%
Clean Energy Hubs	\$10,000,000	\$10,000,000	100%
Climate Action Consumer Awareness	\$10,000,000	\$5,000,000	50%
Air Monitoring	\$8,000,000	\$8,000,000	100%
NYS Env. Tax Credits	\$115,000,000	\$17,250,000	15%
NYS Env. Protection Fund	\$25,000,000	\$8,750,000	35%
Elec. Gen. Facility Cessation Mitigation/Just Transition	\$20,000,000	\$20,000,000	100%
Green Jobs – Green NY – Additional Funding	\$98,079,465	\$60,809,268	62%
Remaining program funding (<i>see Appendix 2 for more detail</i>)	\$39,711,595	--	--
Subtotal	\$679,824,976	\$287,638,397	42%

Discussion

Next Steps

- > Submit written comments to rggiprograms@nyserda.ny.gov by close of business on **January 5, 2022**
- > The Operating Plan Amendment will be provided to NYSERDA's Board of Directors for consideration at its January 25 meeting

Appendix: Interim Approach to Disadvantaged Communities

Disadvantaged Communities

“Disadvantaged communities shall be identified based on geographic, public health, environmental hazard, and socioeconomic criteria, which shall include but are not limited to:

- a) Areas burdened by cumulative environmental pollution and other hazards that can lead to negative public health effects.*
- b) Areas with concentrations of people that are of low income, high unemployment, high rent burden, low levels of home ownership, low levels of educational attainment, or members of groups that have historically experienced discrimination on the basis of race or ethnicity.*
- c) Areas vulnerable to the impacts of climate change such as flooding, storm surges, and urban heat island effects.”*

- > Minimum of 35% of benefits of clean energy investments and goal of 40% of benefits of broader set of investments to Disadvantaged Communities (DACs)
 - Clean energy and energy efficiency programs, projects or investments in the areas of housing, workforce development, pollution reduction, low-income energy assistance, energy, transportation and economic development
- > Criteria developed by Climate Justice Working Group (CJWG) based on input from 6 public statement hearings and published for public comment on DEC website
 - Considerations include available data and methodology for defining and applying Disadvantaged Communities criteria
- > Expect criteria and definition to be established in 6 months – Spring 2022 – so requires some interim approach for CEF in the near-term to make progress

Disadvantaged Communities Criteria

- > The Climate Justice Working Group (CJWG) has identified approximately 170 indicators for potential inclusion and has prioritized 45 indicators for the final scenario after analyzing applicability and data availability.
- > The CJWG is currently working on a way to composite the scoring to finalize scenarios for public comment and is addressing the overall allocation of census tracts within the State that will be defined as a DAC (currently aligning around 35% of state-coverage).
- > Draft Criteria Expected Early January 2022 for 120-day Public Comment Process
- > Final Criteria Expected in May 2022 following Public Comment Process
- > Developing these criteria has included:
 - Evaluation of indicators for responsiveness to CLCPA objectives, availability and granularity of data, as well as frequency of updates
 - Methodological considerations for developing a composite through the scoring or indexing of indicators
 - Addressing the weighting of downstate/upstate
 - Stakeholder engagement

Interim Approach to Disadvantaged Communities

- > Near term need to direct investments (geo-based eligibility) by NYSERDA and utilities (e.g., EV Make-Ready, NY-Sun)
- > Need to create consistency across NYS programming and in establishing eligibility for the market
- > Use criteria that is likely to be incorporated into a final definition of a Disadvantaged Community
- > Criteria used creates categorical eligibility for projects; already familiarity among developers, financiers, contractors
- > Traditional program eligibility for LMI and affordable housing remains unchanged
- > Additional considerations for addressing DACs may be necessary depending on the initiative (e.g., workforce development, innovation, etc.)
- > In place until definition finalized by CJWG and DEC public comment process

Interim DAC Criteria

HUD 50% AMI Census Block Groups	Potential Environmental Justice Areas		NYS Opportunity Zones
<ul style="list-style-type: none"> • Top quartile of census block groups where the majority of population has an annual income at or below 50% of AMI, as defined by HUD. • Top quartile selected to target areas with highest concentrations of poverty. 	<ul style="list-style-type: none"> • Established by NYS DEC • U.S. Census block groups of approximately 250 to 500 households each that, had populations that met or exceeded at least one of the following statistical thresholds: <ul style="list-style-type: none"> • At least 52.42% of the population in an urban area are members of minority groups; or • At least 26.8% of the population in a rural area are members of minority groups; or • At least 22.82% of the population in an urban or rural area had household incomes below the federal poverty level. • With updated income and race/ethnicity metrics 	<p>or</p>	<ul style="list-style-type: none"> • Tracts were selected by ESD based on recommendations from the REDCs, local input, prior public investment and the ability to attract private investment • Federal program approved low-income census tract (ind. poverty rate of at least 20%, med. family income no greater than 80% area med.) • NY has 2000+ low-income census tracts • NY was able to designate 25% (514 tracts) of its low-income census tracts as Opportunity Zones

Interim DAC Population and Geographic Coverage

Population	5,447,090/ 19,618,453 27.8%
Census Block Groups	4,145/ 15,463 26.8%
Geographic Splits (pop/blocks as % of State Population):	
NYC	19.2%/ 17.1%
Downstate (Excluding NYC)	3.3%/ 2.8%
Upstate	5.3%/ 6.8%
Geographic Splits (pop/blocks as % of Interim Criteria):	
NYC	69.1%/ 63.9%
Downstate (Excluding NYC)	11.8%/ 10.6%
Upstate	19.1%/ 25.5%

REDC	Total State Population	% of REDC Pop within DAC
Capital Region	5.5%	12.5%
Central New York	4.0%	17.0%
Finger Lakes	6.2%	17.4%
Long Island	14.5%	6.8%
Mid-Hudson	11.8%	19.5%
Mohawk Valley	2.5%	18.6%
New York City	43.0%	44.6%
North Country	2.2%	13.8%
Southern Tier	3.3%	19.9%
Western New York	7.1%	20.6%

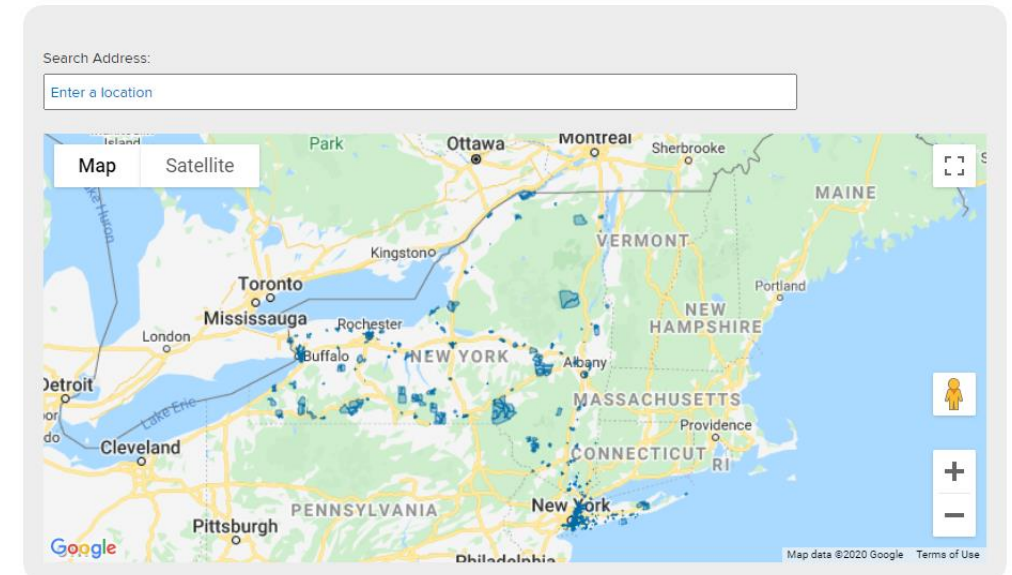
Resources

Available as an interactive map here:

<https://www.nyserda.ny.gov/ny/Disadvantaged-Communities>

The Climate Leadership and Community Protection Act (CLCPA) requires state agencies, authorities, and entities to direct funding in a manner designed to achieve a goal for disadvantaged communities to receive forty percent of overall benefits of spending on clean energy and energy efficiency programs. The CLCPA directs the [CJWG](#) to establish criteria for defining disadvantaged communities, however until the criteria is established, New York State has identified interim criteria for disadvantaged communities, which includes communities:

- Located within census block groups that meet the HUD 50% AMI threshold* (see below), that are also located within the [DEC Potential Environmental Justice Areas](#); and
- Located within [New York State Opportunity Zones](#)



**HUD 50% Threshold: Top quartile of census block groups in New York, ranked by the percentage of LMI Households in each census block. LMI Households are defined as households with annual incomes at or below 50% of the Area Median Income of the County or Metro area where the Census Block Group resides.*