

New York
Regional Greenhouse Gas Initiative (RGGI)
Advisory Group Meeting

Proposed RGGI Operating Plan

May 2, 2013
Public Service Commission Hearing Room
New York City

Opening Remarks

Jared Snyder
Assistant Commissioner, NYSDEC

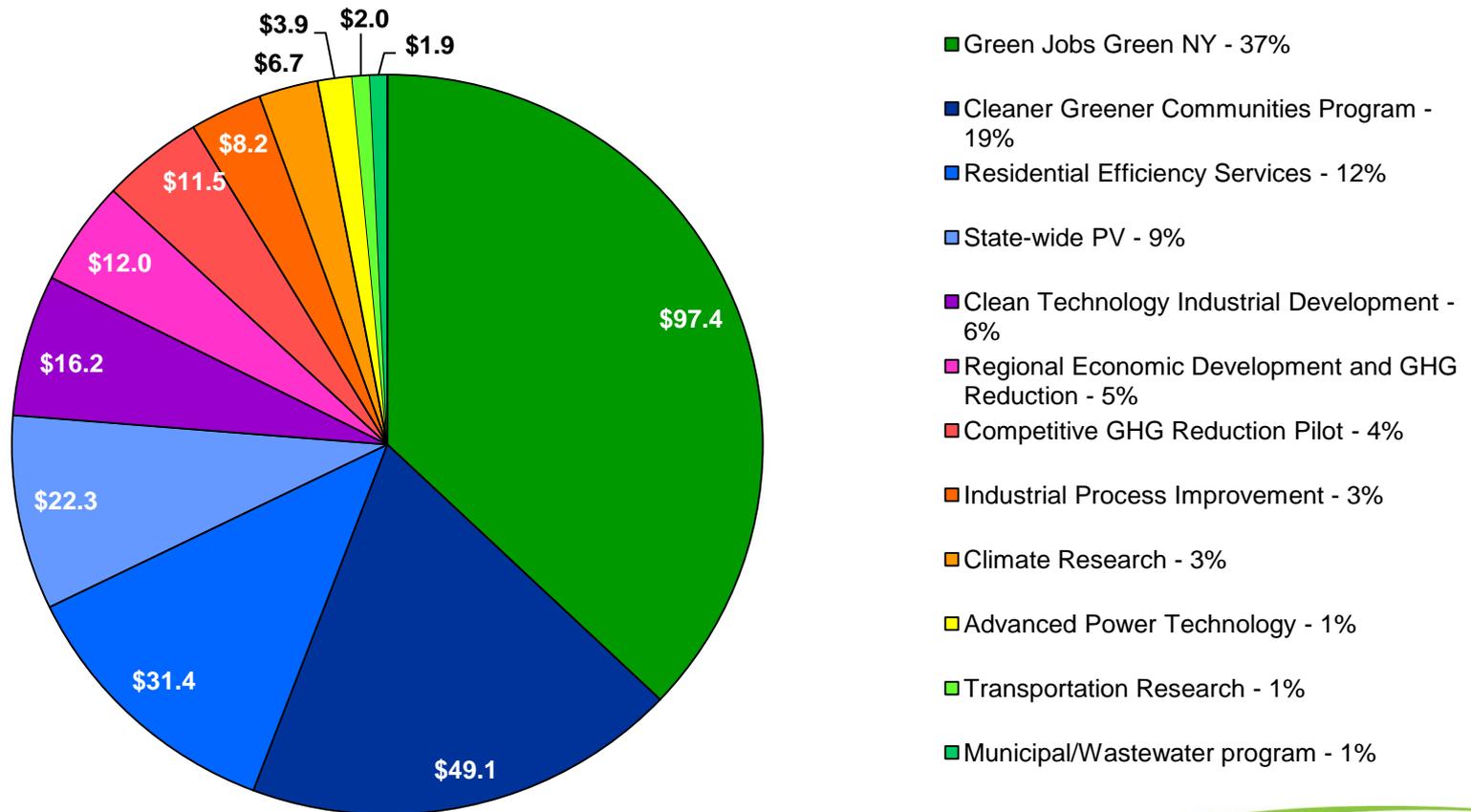
Implementation of Current Programs: Overview

David Coup
Assistant Director, Energy Analysis
NYSERDA

Overview of Current Program Implementation

Allocated* \$262.6 million to a broad spectrum of programs . . .

Cumulative Allocation Through December 2012



* Represents a program's actual budget or funding allocation to-date

Overview of Current Program Implementation

(\$ million)

Program	Cumulative Allocation* Through December 2012	Committed** Through December 2012	Spent*** Through December 2012
Green Jobs - Green New York	\$97.4	\$54.9	\$43.7
Cleaner, Greener Communities Program	\$49.1	\$12.6	\$3.6
Residential Efficiency Services	\$31.4	\$24.3	\$14.0
State-wide PV	\$22.3	\$11.3	\$11.3
Clean Technology Industrial Development	\$16.2	\$10.4	\$4.5
Regional Economic Development and GHG Reduction	\$12.0	--	--
Competitive GHG Reduction Pilot	\$11.5	--	--
Industrial Process Improvement	\$8.2	\$4.3	\$0.9
Climate Research	\$6.7	\$3.4	\$2.1
Advanced Power Technology	\$3.9	\$3.9	\$3.5
Transportation Research	\$2.0	\$1.5	\$1.1
Municipal/Wastewater program	\$1.9	\$1.6	\$1.1
Total	\$262.6	\$128.2	\$85.7

* Represents a program's actual budget or allocation through that date

** Includes: 1) Value of signed contracts under competitive solicitations and 2) incentives paid under "open enrollment" programs

*** Represents paid invoices

Estimated Benefits

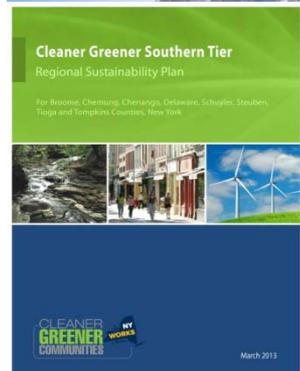
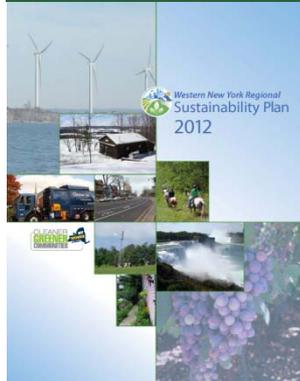
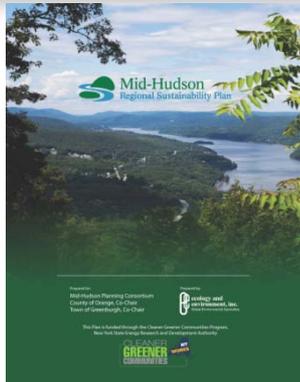
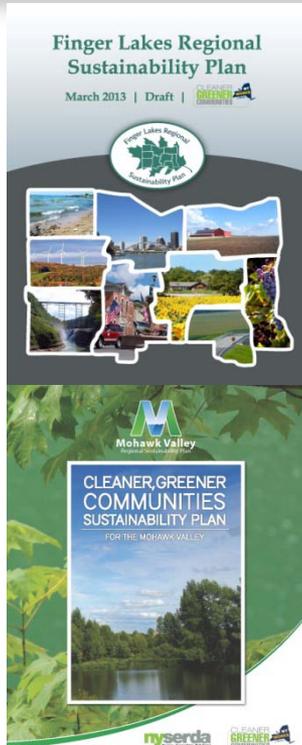
Lifetime savings associated with measures installed under “deployment” programs

Savings	Measures Installed Through December 2012
Fuel Savings	8,676,000 MMBtu
Electricity Savings	294,000 MWh
Bill Savings	\$223 million
CO ₂ Emissions Reductions	754,000 tons

Other benefits include . . .

- Leveraged RGGI funds to obtain \$100 million in Federal funding to support NY-Based PV Manufacturing Consortium
- Completed world-class study of climate change impacts and response options
- Developed 10 regional sustainability plans
- Completed a series of technical analyses related to offshore wind development

Cleaner, Greener Communities Phase I: Highlights



- All 10 regional sustainability plans are expected to be completed and endorsed by their REDCs by May 10, 2013
- Each plan comprehensively addressed the issues of sustainability, smart growth, and environmental justice in nine different focus areas: Energy, Land Use, Transportation, Agriculture, Waste, Water, Economic Development, Governance, Resiliency
- The planning process successfully engaged more than 2,500 New York residents that actively participated in the development of the plans
- Plans will be under the stewardship of an appropriate sub-committee in each REDC going forward to update them, track progress towards goals over time, and incorporate the goals established by the planning process into their evaluation of regional projects and priorities

Green Jobs - Green New York: Highlights

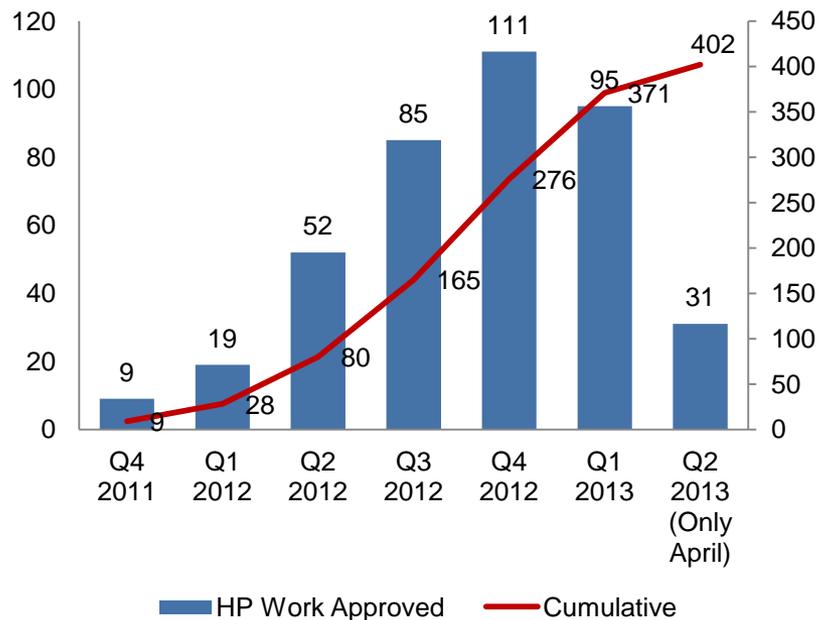
- Demand for Audits is Strong

<i>Data through 3/2012</i>	Audit Application	Audits Complete	Projects Contracted through Programs
Small Residential	42,603	33,669	9,161
Multifamily	213	162	100
Small Commercial/Not-for-Profit	n/a	1,474	tbd

- Additional work being done outside programs
- Optimizing budget to meet program needs
- On-the-Job Training success

Green Jobs - Green New York: Highlights

CBO Attributed HP Work Approved by Quarter



- Constituency Based Organizations Active throughout the State
- Reaching Target Population
- Economically Distressed
- Aggregation Pilots
- NYSERDA to issue RFP to continue outreach services through 2015

Green Jobs - Green New York: Highlights

- GJGNY Financing available across all sectors
- Alternative Credit Qualification – Tier II – opens financing to new segment of residential population

<i>Through 3/2012</i>	Loans Closed	Dollar Value
Small Residential	3,090	\$29,514,664
Multifamily	5	\$1,720,471
Small Commercial/NFP	4	\$89,849

- On Bill Recovery (OBR) immediately became option of choice in Residential Market

Residential Efficiency Services: Highlights

- Comprehensive services for single and multifamily existing buildings and new construction, including low-income households.
 - 3,000 projects to date
- Critically important for the >30% of NYS households who heat with non-electric/non-firm natural gas.
- Beyond energy savings – health & safety benefits through comprehensive testing and verification, improved air quality and improved comfort are realized.

Implementation of Current Programs

Panel Discussion

RGGI 2012 Program Review: Overview

Jared Snyder
Assistant Commissioner, NYSDEC

RGGI Program Review

- RGGI is the nation's first mandatory market based program to limit CO₂ emissions
- The states committed to a 2012 Program Review
- During the Program Review process states:
 - Conducted electricity sector, CO₂ emissions, and macro economic analyses;
 - Consulted extensively with stakeholders and market experts

RGGI Program Review Results

The states found:

- Emissions are currently approximately 40% below 2005 levels
- Investment of auction proceeds creates a variety of benefits
- To maintain a working market the cap needs to be adjusted
- Additional opportunities to make a the successful RGGI program even more effective and efficient

Model Rule Amendments

Outline:

- Size and Structure of the Cap
- Interim Adjustments for Banked Allowances
- Undistributed and Unsold Allowances
- Cost Containment Reserve (CCR)
- Flexibility Mechanisms
- Interim Control Periods
- Reserve Price
- Miscellaneous

New York State Rulemaking

SEQR

- Coordinated review, DEC is the lead agency
- Positive declaration issued April 1, 2013
- Draft scoping published April 3, 2013
- Comment period closes COB May 6, 2013
- Comments to 242co2btp@gw.dec.state.ny.us

SAPA

- Official Proposal – Express Terms, SAPA documents, Draft SGEIS
- Public Hearings
- Public Comment Period
- Assessment of Public Comments

Funding Assumptions

David Coup
Assistant Director, Energy Analysis
NYSERDA

Funding Assumptions

Conservatively assumes approximately \$65 million per year, and accounts for program uncertainty in a period of transition.

- It is assumed that New York receives proceeds of \$62.8 million in FY 13-14 and \$67.2 million in FY 14-15.
- The planning horizon for this year's Op Plan has been reduced to two years because it not possible to reliably estimate proceeds levels three years into the future during this time of market transition.

This Approach Was Taken to Create a Conservative Planning Budget It Does Not Represent Speculation About Market Behavior

Current Actual and Estimated Future Funding

	Cumulative Allocation Through December 2012	Jan-March 2013	FY 13-14 Total	FY 14-15 Total	Total
Proceeds					
RGGI Auction Proceeds	\$ 410,586,619	\$ 39,907,890	\$ 62,820,968	\$ 67,217,292	\$ 580,532,770
Interest earnings	\$ 3,026,525	\$ -	\$ -	\$ -	\$ 3,026,525
Total proceeds	\$ 413,613,144	\$ 39,907,890	\$ 62,820,968	\$ 67,217,292	\$ 583,559,295
Budget transfer***	\$ (90,000,000)	\$ -	\$ (25,000,000)	\$ -	\$ (115,000,000)
Transfer to GJGNY	\$ (112,000,000)	\$ -	\$ -	\$ -	\$ (112,000,000)
Appropriation to Cleener, Greener Communities ***	\$ -	\$ -	\$ 25,000,000	\$ -	\$ 25,000,000
Sub-total Proceeds Available	\$ 211,613,144	\$ 39,907,890	\$ 62,820,968	\$ 67,217,292	\$ 381,559,294
Administration and Evaluation Expenses and Fees					
Administration (7% through March 2011, 8% thereafter)**	\$ 15,726,208	\$ 3,192,631	\$ 5,025,677	\$ 5,377,383	\$ 29,321,900
Evaluation (5%)	\$ 9,516,376	\$ 1,995,395	\$ 3,141,048	\$ 3,360,865	\$ 18,013,684
Litigation settlement*	\$ 13,242,504	\$ -	\$ -	\$ -	\$ 13,242,504
RGGI Inc startup SBC repayment	\$ 1,598,204	\$ -	\$ -	\$ -	\$ 1,598,204
RGGI Inc pro-rata costs	\$ 2,720,544	\$ 692,047	\$ 890,000	\$ 890,000	\$ 5,192,591
State Cost Recovery (1.7%)	\$ 3,597,424	\$ 678,434	\$ 1,067,956	\$ 1,142,694	\$ 6,486,509
Subtotal Admin & Eval. Expense	\$ 46,401,260	\$ 6,558,507	\$ 10,124,682	\$ 10,770,942	\$ 73,855,391
Funds Available for Programs	\$ 165,211,884	\$ 33,349,384	\$ 52,696,286	\$ 56,446,350	\$ 307,703,903

Notes: Fiscal years begin on April 1st and end on March 31st.

The "Cumulative Allocation Through December 2012" column covers auctions from December 2008 through December 2012.

* The litigation settlement value in the "Cumulative Allocation Through December 2012" is an estimate for the first two compliance periods covering 2009 to 2014.

** Administration is based upon program administration budget rate approved by the Public Service Commission for public benefit energy efficiency and technology and market development programs funded through the System Benefits Charge.

*** Pursuant to the State FY13-14 budget, this proposal accounts for a \$25 million transfer of operating revenue to the General Fund as well as a \$25 million capital program increase in the Cleaner, Greener Communities program.

Funding Assumptions

Discussion

Proposed Program and Budget Review

Janet Joseph
Vice President for Technology & Strategic Planning
NYSERDA

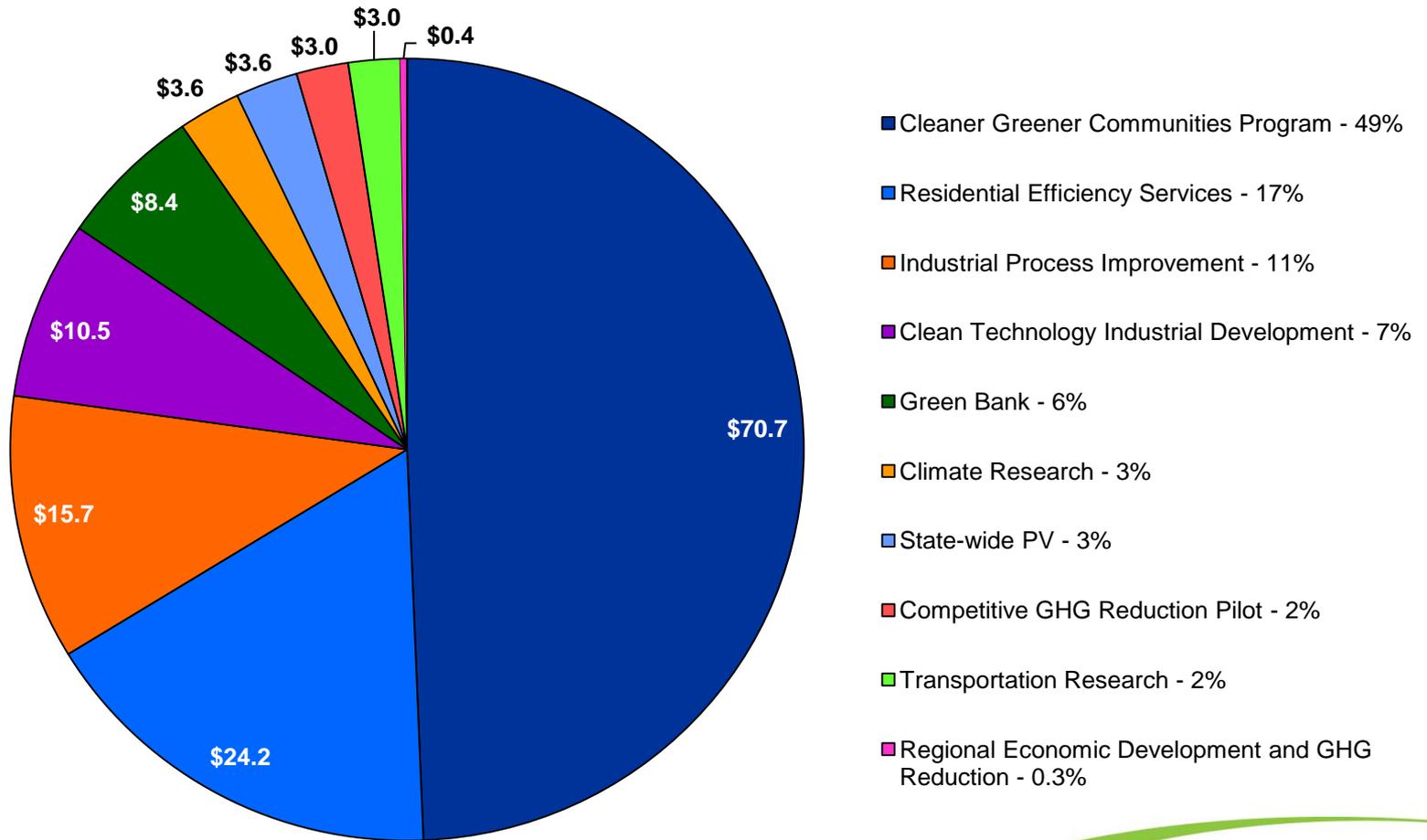
Revised Operating Plan – Guiding Priorities

Initiatives represent the advancement of current programs to meet evolving priorities . . .

- Reduce CO₂ emissions
- Empower communities through regional greenhouse gas reduction activities
- Stimulate economic growth
- Reduce the use of petroleum fuels

Overview of Planned Programs

Approximately \$143 million in Program Funding March 2013 - March 2015



Cleaner, Greener Communities

\$70.7 million budget for March 2013 – March 2015

- Selection of Implementation Contractor
- First Round Funding - \$30M (out of a total of \$90M) Through the CFA
- Coordination With Other Agencies on Phase II Development
- Proposed Program Structure:
 - Streamlined Permitting ~\$1M (Open Enrollment)
 - Planning ~\$4M (Competitive)
 - Projects ~\$25M (Competitive)
- Evaluation Criteria



Residential Efficiency Services

\$24.2 million budget for March 2013 – March 2015

- Critically important for the >30% of NYS households who heat with non-electric/non-firm natural gas.
- Primary focus is on carbon reduction by targeting oil heated households. Due to the high cost of oil heat these services provide much needed bill reductions to low and moderate income households.
- Future allocation to continue comprehensive services for single and multifamily existing buildings and new construction, including low-income households with no significant changes.

Industrial Process Improvement

\$15.7 million budget for March 2013 – March 2015

- Two programmatic Components seek to:
 - Accelerate the adoption of emerging and underutilized technologies that improve the energy efficiency of industrial processes and data centers
 - Provide assistance for development of manufacturing methods and tools especially for efficient mass production of clean energy technologies
- The initiatives will continue to be coordinated with the REDCs

Clean Technology Industrial Development

\$10.5 million budget for March 2013 – March 2015

- Seeks to create, attract, and grow industries in New York that can exploit emerging business opportunities in clean energy and environmental technologies while supporting the goal of carbon mitigation
- Two components:
 - Leverage private investment in early stage and expansion stage clean energy companies in New York, accelerating market introduction of new technologies
 - Advance transition of clean energy products from development/demonstration to launch of commercial scale manufacturing

Planned Programs & Budgets

Discussion

Competitive Greenhouse Gas Reduction Pilot

\$14.5 million budget for March 2013 – March 2015

Pilot initiative aimed at reducing GHG emissions from the power sector in New York

- Market-ready projects that reduce GHG emissions in New York will be sought through a competitive solicitation(s) with a performance oriented structure
- Eligible projects could include, but not limited to, supply-side energy efficiency, advanced controls, and/or integration of renewables into plant operations
- Evaluation criteria may include:
 - Total tons of CO₂ equivalent reduced,
 - Cost per ton of CO₂ reduced,
 - Technical merit including replication potential & innovation
- Pre RFP planning May/June 2013, RFP planned for 3Q 2013

Green Bank

\$8.4 million budget for March 2013 – March 2015

- Mission: address financial market barriers that are impeding the flow of private capital into the clean energy sector
- Outcome: By dedicating funds to financing, the State will provide a needed additional tool for growth and scale
 - Example: Green Jobs - Green New York has allowed us to reach market segments we otherwise would not
- Products and services that the Green Bank will likely provide include: risk mitigation, credit enhancement, aggregation for solar and efficiency projects, contract standardization
- The Green Bank will target projects involving only mature, bankable technologies and applications
- Market research efforts will inform us on specific Green Bank offerings and strategies

Transportation Research Program

\$3.0 million budget for March 2013 – March 2015

Used to reduce greenhouse gas emissions from the transportation sector by reducing petroleum use and increasing the efficiency of electric mass transit.

Achieved by:

- improving the efficiency of vehicles and transportation infrastructure,
- expanding the use of electricity and renewable fuels in the sector,
- technical assistance and education to encourage new purchases and practices that reduce greenhouse gas emissions,
- smart growth policies that reduce vehicle miles traveled and encourage efficient freight transport.

Key elements of the program include:

- Electrified rail improvements
- Advance emission-reducing freight technologies and energy efficient freight improvements

Climate Research Program

\$3.6 million budget for March 2013 – March 2015

Provides support for research studies, demonstrations, policy research and analyses, and outreach and education efforts to:

- Inform decisions related to reducing the cost of achieving the emission reduction goals of local, state and regional programs
- Evaluate and document health and environmental impacts and opportunities
- Identify cost-effective climate strategies
- Guide initiatives designed to reduce the disproportionate cost burden and environmental impacts on low-income families and environmental justice communities.

Statewide PV Program

\$3.6 million budget for March 2013 – March 2015

- Recognizing the continued benefit of investing in Long Island's rapidly growing PV market, additional funds will be allocated to support the continuation of LIPA's solar program

Expansion Plan

- Conservative estimate of allowance proceeds are being used
- If additional revenue should become available, proceeds could be used to expand funding for the existing portfolio of RGGI programs including the Green Bank as well as for climate resiliency and sustainability initiatives

Evaluation Plan (Deployment)

RGGI Program Area	Evaluation Activities and Plans
Green Jobs - Green New York	Residential Process/Market Evaluation complete Multifamily, Small Business/Not-for-Profit and CBO Process/Market Evaluation underway Jobs Quantification Study underway
Residential Energy Services	Multifamily Impact/Process/Market Evaluation underway* Residential Impact/Process/Market Evaluation underway** Statewide Residential Baseline Study underway Non-Energy Impact Evaluation planned
Muni Water & Wastewater Cleaner, Greener Communities	Impact Evaluation planned for late 2013 - early 2014 Plans under development
Regional Econ Dev GHG Reduction	Plans under development

*Includes both Carbon Emission Reduction Program and fuel efficiency incentive participants.

**Current impact evaluation covers GJGNY participants broadly. Impact evaluation of fuel efficiency incentive activity, Specifically, will be evaluated in 2014.

Evaluation Plan (Research & Development)

RGGI Program Area	Evaluation Activities and Plans
Clean Technology & Industrial Development	Logic Model completed in 2013 Process Evaluation planned for 2014
Advanced Power Technology	Process/Impact Evaluation planned for 2014
Climate Research & Analysis	Process/Impact Evaluation planned for 2014
Transportation Research	Plans under development
Industrial Process Improvement	Plans under development

Proposed Program and Budget Review

Discussion

Next Steps

- Submit written comments to rggiprograms@nyserda.ny.gov by close of business on May 16th
- A revised Operating Plan document will be provided to NYSERDA's Board of Directors for review at the June 17th meeting