

Proposed Revisions To the RGGI Operating Plan

NY RGGI Advisory Group

January 13, 2010

Opening Remarks

Francis J. Murray, Jr. President, NYSERDA

Overview of Budget Changes

John Williams Director, Energy Analysis

Comparison of Program Funding Availability

	Revised Plan 3-year (\$ millions)	Original Plan 3-year (\$ millions)
Total Revenue Estimate*	\$446.4	\$607.3
Deficit Reduction Transfer	(\$90.0)	N/A
Litigation Settlement	(\$7.6)	N/A
Repayment of SBC Funds (for RGGI Inc. Start-up Costs)	(\$1.6)	(\$3.0)
Estimated Ongoing New York Share of RGGI, Inc. Costs	(\$1.8)	(\$2.8)
Program Evaluation	(\$17.1)	(\$30.4)
Program Administration	(\$24.0)	(\$42.5)
State Cost Recovery Fee	(\$2.7)	(\$3.6)
Funds Available for Programs	\$301.6	\$525.0

* Original Plan: \$3 per ton for "current compliance period" allowances and \$1.86 per ton for "future compliance period allowances."

* Revised Plan: Current proceeds of \$180.7 million plus \$1.86 per ton for future allowance sales through 3/31/12 regardless of vintage

Program & Budget Modifications in Revised Plan Were Informed by the Following Factors . . .

- Criteria and principles from Original Plan
- The desire to offer a diverse mix of programs that still achieve a balance across the selection criteria articulated in the Original Plan
- The availability of new funding sources that didn't exist when the initial Original Plan was created (*e.g.*, American Recovery and Reinvestment Act [ARRA] funds)
- The fact that programs typically require minimum or "critical mass" funding levels to make them viable

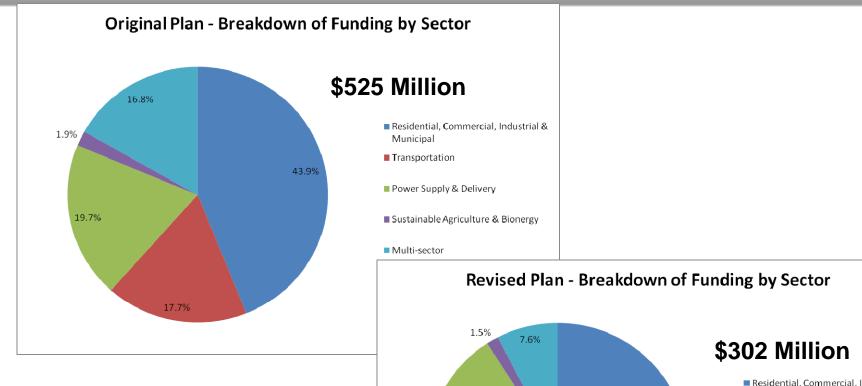
Budget Comparison: Original vs. Revised Plan

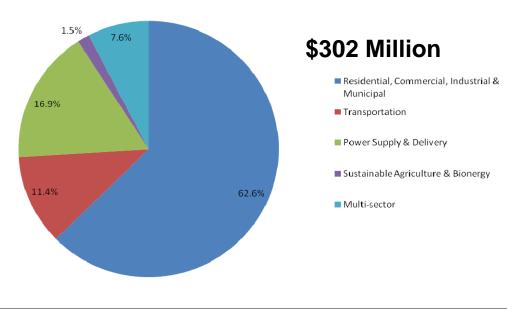
Comparison of Anticipated Funding Commitments for the Original and Revised Plans Through 3/31/2012

Sector/Programs	Revised Plan 3-yr Budget (\$ millions)	Original Plan 3-yr Budget (\$ millions)		
Residential, Commercial, Industrial and Municipal Sector				
Residential Space and Water Efficiency Program	123.0	83.9		
Commercial, Industrial, Municipal and Institutional Program	52.1	125.0		
Climate Smart Communities	6.6	6.6		
Advanced Building Systems & Industrial Process Improvements	7.0	15.0		
Transportation Sector				
Transportation Efficiency (and Electrified Rail Efficiency)	21.5	78.0		
Advanced Transportation Development	13.0	15.0		
Power Supply & Delivery Sector				
Statewide Photovoltaic Initiative	12.0	32.4		
Advanced Power Technology	39.0	71.0		
Sustainable Agriculture and Bioenergy Sector				
Sustainable Agriculture and Bioenergy Program	4.5	10.0		
Multi-sector				
Workforce Development	0.0	9.0		
Competitive Greenhouse Gas Reduction Program	0.0	41.0		
Clean Technology and Industrial Development	15.0	29.0		
Climate Research and Analysis	8.0	9.0		
Total	301.6	525.0		

Overview of Program Changes

Janet Joseph Director, Clean Energy Research and Market Development





Residential, Commercial, Industrial and Municipal Sector

Residential Efficiency Program – Funding Increased by 47%

- Increase driven by Green Jobs/Green NY Act
- Funding maintained for statutory Green Homes Incentive Program
- Multifamily Performance Program (MPP), EmPower New YorkSM, Home Performance with Energy Star[®], Solar Thermal Incentive, and Outreach and Education programs remain but with reduced funding
- Under the MPP, funding will be provided to convert oil-fired boilers and furnaces to cleaner fuels.

Residential, Commercial, Industrial and Municipal Sector

Commercial, Industrial, Municipal, & Institutional – Funding Decreased by 58%

- Incorporates small business portion of the Green Jobs/Green NY Act
- Municipal Water/Wastewater Program is maintained but with reduced funds
- Fossil fuel Industrial Energy Efficiency program is maintained at the Original Plan funding level
- Technical Support, Existing Facilities Implementation, New Construction, Loan Fund, Solar Thermal Systems, College and University Competition, Grade School Education, and Recognition programs have been removed because "critical mass" funding was no longer available.
- ARRA funding for municipalities, schools, hospitals

Residential, Commercial, Industrial and Municipal Sector

Climate Smart Communities – Funding Level and Scope Unchanged

Advanced Building Systems and Industrial Process Improvements – Funding Decreased by 53% but scope unchanged

Transportation Sector

Transportation (and Electric Rail) Efficiency – Funding Decreased 72%

- Two areas have been merged as one Transportation Efficiency program
- Electrified rail component of program now has a more narrow scope:
 - Demonstration-scale initiatives
 - regenerative braking energy recovery (a top MTA objective)
 - third-rail insulator cleaning systems for minimizing electricity leakage, will depend on leveraging other major funding sources
- Transportation efficiency activities have been trimmed to include only the most cost-effective CO₂e reduction measures:
 - > electric trailer refrigeration units
 - ➤ traffic signal improvements
 - > medium and heavy duty hybrid electric vehicles
- ARRA funding

Transportation Sector

Advanced Transportation Development – Funding Decreased 13%

- No other major funding source exists for these activities, and this sector has a large carbon footprint (~35% of New York's CO₂e emissions)
- Transportation technology industry in New York is well poised to expand and serve the growing market demand for new low-carbon transportation technology – offering significant economic development potential
- This funding will allow NYSERDA to advance a wide range of applicable technologies closer to product implementation. Funds will be used to leverage federal funds and/or private investment for commercial deployment.

Power Supply & Delivery Sector

State-wide Photovoltaic Initiative – Funding Decreased by 63%

- It is anticipated that PV funding in New York will be supported in the future through the Renewable Portfolio Standard and other State programs
- Scope of RGGI PV incentive program was reduced to provide only critical "bridge" funding to support PV under existing programs:

Long Island Power Authority program

> NYSERDA's RPS Customer-sited Tier

• Eliminated:

Solar Schools Program

PV Distribution System Integration

Power Supply & Delivery Sector

Advanced Power Technology – Funding Decreased by 45%

- <u>Advanced Renewable Energy</u>
 - Generally same scope/reduced funding
 - Will have lesser impact on off-shore wind pre-development work
- <u>Advanced Power Delivery</u>
 - Targeted RFPs will be issued (*e.g.*, energy storage, distribution automation, advanced metering and dynamic pricing, and reactive power management to reduce system losses)
 - Coordinate with NY Smart Grid Consortium to fund projects that fill gaps consistent with RGGI portfolio objectives
- <u>Carbon Capture and Sequestration</u>
 - Focus on assessing and demonstrating carbon capture, reuse, compression, and transport technologies, and characterizing and testing the state's geological sequestration potential
 - Support of large-scale demonstration projects is not viable with reduced level of available funding
 - Leveraging will be critical

Sustainable Agriculture & Bioenergy Sector

Sustainable Agriculture & Bioenergy Program – Funding Decreased by 55%

- Objectives: reduce the lifecycle carbon intensity of bioenergy choices; reduce emissions derived from the agriculture, forestry and waste management sectors; and, characterize the potential for carbon sequestration in New York's terrestrial ecosystem.
- Priorities will be guided by findings and recommendations from the ongoing Renewable Fuels Roadmap and Sustainable Biomass Feedstock Supply Study for New York
 - > Yr 1: demonstrations of climate-friendly farming
 - Yr 2/3: feedstock supply development; market, policy, and institutional issues identified in the Roadmap.
- With the reduction in funding, activities in product development and demonstrations will be delayed.

Multi-sector

Workforce Development – Incorporated into Other Programs

- These initiatives will now be pursued as part of the Energy Efficiency Portfolio Standard and the new Green Jobs/Green NY component of the plan.
- Emphasis will be placed on working with community-based training organizations, New York State Department of Labor and DHCR to advance "pathways out of poverty." Training initiatives will target underserved markets, veterans and other displaced workers to provide new career paths in the green economy.

Competitive Greenhouse Gas Reduction Program - Removed

 "Critical mass" funding is no longer available to attract a robust set of proposals that would reveal new information on CO₂e abatement costs from a cross-section of applications and sectors.

Multi-sector

Clean Technology & Industrial Development – Funding Decreased by 48%

- Funds will also be used for clean energy business development and manufacturing
- Rather than establishing <u>new</u> Clean Energy Applied Research Centers, funds will be used to build upon NY's existing technology innovation assets and leverage federal funding for, among other things, "Innovation Hubs," which are expected to be established by the U.S. Department of Energy.

Climate Research and Analysis - Funding Decreased by 11%

- Scope of the program has not been changed relative to the Original Plan
- Key element will be the development of a New York State Climate Action Plan, pursuant to Executive Order #24
- Program will be designed and managed in cooperation with the Department of Environmental Conservation.

Program Expansion Plan

If auction proceeds exceed estimates in the plan, options for expansion include:

- Providing additional funding for the measures described in the Transportation Efficiency and Advanced Transportation programs
- Restoring the Competitive Greenhouse Gas Reduction Program (would require that substantial additional funding be available)
- Increasing the level of funding for the fossil fuel efficiency measures described in the Residential Space and Water Efficiency Program
- Providing additional funding for clean energy business development
- Increasing the level of funding for industrial energy efficiency

Remarks

Alexander "Pete" Grannis Commissioner, NYSDEC

Next Steps

John Williams Director, Energy Analysis



- Submit written comments by January 25th to rggiprograms@nyserda.org
- A revised Summary Document provided to NYSERDA's Board for approval – target late February/early March
- Program roll-out
- Full Operating Plan available target April/May
- Progress reports provided on a quarterly basis