New York's Regional Greenhouse Gas Initiative Operating Plan Amendment for 2011

Background

In New York, responsibility for developing the CO_2 Budget Trading Program is shared by three departments of state government: the Department of Environmental Conservation (DEC); the Department of Public Service, and the Energy Research and Development Authority (NYSERDA). DEC and NYSERDA are the lead agencies for implementing the program:

- DEC established New York's CO_2 Budget Trading Program and its share of the total regional cap through a new 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.

- NYSERDA set up the CO_2 Allowance Auction 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 also include a provision for creating an Advisory Group of stakeholders representing a broad array of energy and environmental interests to advise it on how to best utilize said funds to achieve the goals of the program. The Operating Plan is reviewed and revised on an annual basis, and the Advisory Group is convened to provide input.

The final proposed Operating Plan is subsequently reviewed and approved by NYSERDA's Board of Directors.

The 2010 review resulted in an updated plan that was approved in March 2010. This proposed amendment provides program descriptions and funding levels for the 2011 version of the plan. Advisory Group and stakeholder feedback is sought on this proposal, and this input will assist in the development of a final proposal that will be provided to NYSERDA's Board of Directors at its June 20, 2011 meeting.

Funding Assumptions for Operating Plan

This section provides an explanation of the funding assumptions used to prepare the Operating Plan. Generally speaking, conservative assumptions have been used. The intention is avoid overestimating the level of funds available.

First, the Operating Plan assumes that the RGGI marketplace buys exactly the number of allowances that are necessary to cover CO_2 emissions during each compliance period. The "actual emissions" values of 124 million tons and 137 million tons for 2009 and 2010, respectively, were provided by RGGI, Inc., while the emissions estimates for subsequent timeframes came from the December 2010 RGGI Program Review "reference case" modeling results.[1] The modeling output for 2011 was 132 million tons of CO_2 emissions. Altogether, this results in an estimate of 393 million tons of CO_2 emissions during the first compliance period (2009-2011).

[1] Actual emissions may deviate from modeling results for numerous reasons (*e.g.*, the economy, energy efficiency, weather, fuel prices, etc.).

Information about the overall number of allowances already in circulation in the marketplace was obtained from RGGI, Inc. Approximately 304 million allowances have been sold at auction through December 2010 and about 18 million have been distributed through other methods (*e.g.,* direct allocation) for a total of 322 million allowances. Therefore, market participants still would need to acquire 71 million allowances by the end of the first compliance period.

RGGI, Inc. estimates that 12 million allowances will be distributed to the market through direct allocation in 2011. As a result, it is estimated that 59 million current compliance period allowances would still need to be purchased at auction. Proceeds collected at the regional auction are distributed on a prorata share to the participating states, and New York typically supplies approximately 34.2% of the allowances sold during each quarterly auction. At a market clearing price of $1.89/allowance (reserve price), this translates to $38.1 million in potential proceeds related to current compliance period allowances during 2011.

In addition, New York has historically sold a limited number of "future vintage" (*i.e.,* next compliance period allowances) allowances during the quarterly auctions. During the fourth quarter of 2010, for instance, New York received $780K in proceeds related to these sales. However, the number of future vintage sales has declined steadily over time. To be conservative, it was assumed that $1.9 million would be received from these types of sales during the four auctions in 2011 bringing the total budget estimate for calendar year 2011 to $40 million, or $10 million per quarter.

Essentially the same method was used to estimate potential proceeds for the second compliance period (2012-2014). The following is a simplified summary for compliance period two:

Estimated allowances needed to cover emissions	410 million tons
Estimated number of allowances acquired through "direct allocation"[2]	31 million tons
Estimated number of "second compliance period allowances" acquired at "future vintage auctions" during the first compliance period	19 million tons
Estimated allowances that need to be purchased at auction during the second compliance period	360 million tons
Regional proceeds assuming $1.89/ton	$680.4 million
New York's prorata share (assumes 34.2%)	$232.4 million
NY average estimated quarterly proceeds from "current compliance period" allowance sales	$19.4 million

For the purpose of this budgeting exercise, it is assumed that a nominal number of third compliance period allowances will be sold at "future vintage auctions" during the second compliance period. These additional proceeds raise the average quarterly proceeds estimates for the second compliance period to approximately $20 million.

In its budgetary process, New York uses fiscal years that end on March 31st. Therefore, the calendar year numbers described earlier in this document are translated to fiscal year values below:

<u>Estimated proceeds for NY's Fiscal Year 2011-12</u>
Q2 Calendar Year 2011 = $10 million
Q3 Calendar Year 2011 = $10 million
Q4 Calendar Year 2011 = $10 million
Q1 Calendar Year 2012 = $20 million

[2] This assumes that the ratio of allowances distributed through direct allocation during the second compliance period is similar to the proportion distributed in this manner during the first compliance period.

Total Estimated Proceeds for FY 2011-12 for Planning Purposes = $50 million

Estimated proceeds for NY's Fiscal Year 2012-2013
Q2 Calendar Year 2012 = $20 million
Q3 Calendar Year 2012 = $20 million
Q4 Calendar Year 2012 = $20 million
Q1 Calendar Year 2013 = $20 million

Total Estimated Proceeds for FY 2012-13 for Planning Purposes = $80 million

The same estimate of $20 million per quarter is used to create an estimate of $80 million for fiscal year 2013-2014.

The estimated proceeds for the three-year period covered by the Operating Plan are summarized in Table 1. The table also includes expenses related to the repayment of RGGI, Inc. start-up funds to the Systems Benefit Charge program, ongoing RGGI, Inc. costs, State Cost Recovery fees, estimated program administration and evaluation costs, and other factors to arrive at the estimated level of funding available for programs during each year. As a reference, information about proceeds collected through March 2011 is also included. It should be noted that these estimates assume that no change is made to the regional CO_2 cap as a result of the 2012 program review.

Table 1. Current Actual and Estimated Future Funding

	Proceeds through March 2011 ($ millions)	**FY 2011-12 ($ millions)**	**FY 2012-13 ($ millions)**	**FY 2013-14 ($ millions)**
Auction Proceeds	$312.3	$50.0	$80.0	$80.0
Interest Earnings	$0.9	$0.5	$0.8	$0.8
DRP Transfer	($90.0)			
Litigation Settlement*	($12.3)			
Repayment of SBC Funds (for RGGI Inc. Start-up Costs)	($1.6)			
Estimated Ongoing New York Share of RGGI, Inc. Costs	($2.3)	($0.85)	($0.85)	($0.85)
Program Evaluation	($11.1)	($2.5)	($4.0)	($4.0)
Program Administration**	($15.5)	($4.0)	($6.4)	($6.4)
State Cost Recovery Fee	($3.8)	($0.85)	($1.4)	($1.4)
Funds Available for Programs	**$176.6**	**$42.3**	**$68.2**	**$68.2**

Notes: Fiscal years begin on April 1st and end on March 31st.
The "Proceeds through March 2011" column covers auctions from December 2008 through March 2011.
* The litigation settlement value is an estimate for the first two compliance periods covering 2009 to 2014.
** 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.

Review of programs and budgets for June 2011 Operating Plan

Each initiative described below represents a continuation of an activity in the 2010 plan or represents an evolution of a current program that is designed to take advantage of important new opportunities. The funding levels shown below represent the total budgets estimated for the three fiscal years covered under the proposed 2011 plan update. Annual funding allocations are shown in Table 2. The allocation of current proceeds collected through March 2011 is also provided in the table as a reference.

NYSERDA will provide timely and transparent progress reports utilizing best practice protocols for project tracking and evaluation.

Cleaner, Greener Communities - $94.7 million[3]

This program was announced by Governor Cuomo in his 2011 State of the State address. It will build on the Climate Smart Communities program, providing enhanced support for development and implementation of regional sustainability plans to help ensure that the State's ongoing and substantial investments in infrastructure help to move communities and New York as a whole toward a more environmentally sustainable future. The program will encourage communities to use public-private partnerships and develop regional sustainable growth strategies in areas such as emissions control, energy efficiency, renewable energy, low-carbon transportation, and other carbon reductions. The program will emphasize activities such as revitalizing urban areas through smart growth, creating green jobs, building green infrastructure, and strengthening environmental justice and protection.

The program will have two primary components: (1) development of, and updating to, regional sustainable growth plans; and (2) implementation of the sustainability plans. At least 10 region-specific plans will be competitively selected, one for each of the 10 Regional Economic Development Council regions. Support for additional plans will be considered for unique regions within, or that span multiple, Regional Economic Development Council regions (*e.g.,* the Adirondacks). For each regional plan, the corresponding Regional Economic Development Council(s) will provide an advisory role to assist in coordination of the municipalities contained within. Approximately 90% of the budget will be used to support the implementation component of the program.

Implementation of the regional sustainable growth plans will also be a competitive program. Support will be provided for project proposals that address specific items within the regions' sustainability plan. Projects that have garnered community buy-in, as well as those that include public-private partnerships, will be encouraged. Consideration will be given to support implementation projects in multiple types of communities (*i.e.,* rural, suburban, and urban communities). RGGI proceeds can be used for the implementation of plan elements that fall within the scope of the permissible use of RGGI proceeds (energy efficiency, renewable energy and innovative carbon reduction programs).

Outreach and community support for the overall Cleaner, Greener Communities initiative will be provided in part through Climate Smart Communities and Energy Smart Communities.

Industrial Process Improvements and Development - $36 million

These funds will be targeted for three industrial initiatives that are an evolution of the existing industrial programs. The project selection process will take into consideration fuel cycle greenhouse gas emissions. The activities will also

[3] The three-year Operating Plan budget is $94.7 million, however, and additional $12.2 million was also allocated to the program at the end of fiscal year 2010-11 (see Table 2).

help 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. Funds will be used in a manner consistent with the regulations governing use of RGGI proceeds. The initiatives will be coordinated with the Regional Economic Development Councils.

The first program component will focus on accelerating the adoption of emerging and underutilized technologies that will improve the energy efficiency of industrial processes and data center operations in New York. The projects will focus on technical innovations that have high replication potential in New York and are likely to be cost effective.

The second component will provide assistance for development of manufacturing methods and tools to enable the efficient mass production of clean energy technologies (*e.g.,* PV or energy storage) in New York State.

Funds will also be used to provide financial support to leverage private investment in early-stage and expansion-stage clean energy companies in New York State and accelerate the market introduction of innovative energy efficiency, renewable energy, or carbon abatement technologies.

Residential Space and Water Efficiency Program - $33 million

Funding for the Residential Space and Water Efficiency Program will be spent in a manner consistent with that described in the June 2010 plan for the Multifamily Performance Program (MPP), Home Performance with ENERGY STAR (HPwES), and EmPower New York℠ (EmPower). RGGI funds will be used primarily to mitigate the high cost of heating oil, with special emphasis through targeted marketing on providing services to low and moderate income households. Households that heat with other fuels (such as propane and wood) will also be eligible to receive services through these programs. These fuels are generally not eligible under programs supported by other funding sources (*e.g.,* EEPS funding). Households and buildings receiving incentives through the MPP and HPwES may be able to fund the balance of eligible work using financing offered through Green Jobs – Green New York.

In addition, consistent with the Recharge New York Power Program Act[4], NYSERDA will establish the Recharge New York Energy Efficiency Program for residential electric customers of National Grid, NYSEG and RG&E, who no longer receive the benefit of reduced electricity costs related to purchases of hydroelectric power. NYSERDA will provide incentives to eligible households for advanced electric-saving products, such as light emitting diode (LED) bulbs and fixtures or advanced power strips, providing ongoing electric savings for years to come. NYSERDA will work with the utilities to perform outreach to their customers so they may participate in the program.

Competitive Greenhouse Gas Reduction (CGGR) Pilot - $15.0 million

These funds will be used to conduct a Competitive Greenhouse Gas Reduction (CGGR) Pilot. Under this program, a competitive solicitation(s) will be developed and issued for market-ready projects that reduce greenhouse gas emissions in New York. Projects will be selected based on a combination of technical merit/replication potential and cost of delivering greenhouse gas reductions. It is anticipated that projects could include, but not be limited to, supply-side energy efficiency and advanced controls that will reduce GHG emissions cost effectively. The power sector would be the focus of the initial solicitation. If additional funds become available, the scope of subsequent solicitations could be broader to include other sectors. NYSERDA will work with the Regional Economic Development Councils on program outreach.

[4] Chapter 60 of the Laws of 2011, Part CC, Section 4.

Table 2. Current Actual and Anticipated Future Funding Allocations

Sector/Programs	Funding Allocation Through March 2011 ($ millions)	Proposed Allocation FY 2011-12 ($ millions)	Proposed Allocation FY 2012-13 ($ millions)	Proposed Allocation FY 2013-14 ($ millions)
Residential, Commercial, Industrial and Municipal Sector				
Residential Space and Water Efficiency Program	**90.2**	**11.0**	**11.0**	**11.0**
Green Jobs/Green NY - Residential	67.6			
Green Residential Building Program	2.0			
Multifamily Performance	7.0	3.25	3.25	3.25
Multifamily Carbon Emission Reduction Program	7.0			
Home Performance with Energy Star	3.1	3.25	3.25	3.25
EmPower NY	3.0	3.50	3.50	3.50
Solar Thermal Incentives	0.5			
Recharge New York Energy Efficiency Program	0.0	1.0	1.0	1.0
Commercial, Industrial, Municipal and Institutional Program	**32.6**	**12.0**	**12.0**	**12.0**
Industrial Process Improvements and Development	0.0	12.0	12.0	12.0
Green Jobs/Green NY -Small Business	29.1			
Municipal/Wastewater	3.5			
Advanced Building Systems & Industrial Process Improvements	**2.0**			
Cleaner, Greener Communities	**12.2**	**19.3**	**30.2**	**45.2**
Core Planning and Implementation Grants	10.5	16.3	27.2	42.2
Community Outreach and Support	1.7	3.0	3.0	3.0
Transportation Sector				
Transportation Efficiency (and Electrified Rail Efficiency)	**0.0**			
Advanced Transportation Development	**2.0**			
Power Supply & Delivery Sector				
Statewide Photovoltaic Initiative	**11.8**			
Advanced Power Technology	**4.5**			
Advanced Power Delivery	0.0			
Advanced Renewable Energy	3.5			
Carbon Capture & Sequestration	1.0			
Sustainable Agriculture and Bioenergy Sector				
Sustainable Agriculture and Bioenergy Program	**0.0**			
Multi-sector				
Clean Technology Industrial Development	**12.8**			
Competitive GHG Reduction Pilot	**0.0**		**15.0**	
Climate Research and Analysis	**8.6**			
Total	**$176.6**	**$42.3**	**$68.2**	**$68.2**

Totals may not sum exactly due to rounding.

Program Expansion Plan

Allowance auction proceeds over the next year may exceed the estimates being used to develop this proposal for the updated Operating Plan. Absent unforeseen circumstances, if additional revenue should be available, the following potential funding opportunities could be considered:

- Provide funds, not to exceed $2 million per year, to the Green Residential Building Program
- Accelerate/expand funding for the Competitive Greenhouse Gas Reduction (CGGR) program
- Accelerate the funding of Cleaner, Greener Communities
- Increase funding for residential oil heat efficiency programs
- Provide funds to support the deployment of electric vehicle infrastructure