

NEW YORK'S RGGI-FUNDED PROGRAMS

STATUS REPORT
QUARTER ENDING JUNE 30, 2010

SEPTEMBER 2010

NEW YORK STATE
ENERGY RESEARCH AND
DEVELOPMENT AUTHORITY

nyszerda
Energy. Innovation. Solutions.

1 Introduction

To implement the Regional Greenhouse Gas Initiative (RGGI), New York State has established its CO₂ Budget Trading Program through regulations promulgated by the Department of Environmental Conservation (DEC) and the CO₂ Allowance Auction Program through regulations promulgated by New York State Energy Research and Development Authority (NYSERDA).¹ This report is prepared pursuant to the “Operating Plan for Investments in New York under the CO₂ Budget Trading Program and the CO₂ Allowance Auction Program” (Operating Plan),² and provides an update on the progress of programs through the quarter ending June 30, 2010. It contains an accounting of program spending, an estimate of program benefits, and a summary description of program activities and implementation.

1.1 New York’s Auction Proceeds³

As of June 30, 2010, New York had sold more than 95 million CO₂ allowances and received approximately \$243 million in auction proceeds. Detailed auction results are presented in Table 1-1.

Table 1-1. New York State’s RGGI Auction Results⁴

Auction Date	Control Period	Clearing Price	New York State Allowances Sold	New York State Auction Proceeds
12/17/08	Current	\$3.38	12,422,161	\$41,986,904
3/18/09	Current	\$3.51	12,422,161	\$43,601,785
	Future	\$3.05	776,385	\$2,367,974
6/17/09	Current	\$3.23	11,861,849	\$38,313,772
	Future	\$2.06	776,385	\$1,599,353
9/09/09	Current	\$2.19	11,861,849	\$25,977,449
	Future	\$1.87	776,385	\$1,451,840
12/02/09	Current	\$2.05	11,861,850	\$24,316,793
	Future	\$1.86	571,423	\$1,062,847
3/10/10	Current	\$2.07	15,136,022	\$31,331,56
	Future	\$1.86	740,167	\$1,376,711

¹ For the DEC adopted regulations, see 6 NYCRR Part 242: CO₂ Budget Trading Program Regulations; for the NYSEDA adopted regulations, see 21 NYCRR Part 507: CO₂ Allowance Auction Program Regulations.

² On June 21, 2010, NYSEDA published an Operating Plan that provides the budgets and descriptions for the programs that would be funded by the RGGI auction proceeds. Please refer to [RGGI Use of Auction Proceeds](#) for ongoing developments.

³ See [NY Proceeds by Auction](#) for more auction result details.

⁴ New York did not offer allowances for sale in the RGGI auction held on 9/25/08, where the clearing price for 2009 vintage allowances was \$3.07.

Auction Date	Control Period	Clearing Price	New York State Allowances Sold	New York State Auction Proceeds
6/9/10	Current	\$1.88	15,136,022	\$28,455,721
	Future	\$1.86	756,801	\$1,407,650
TOTAL			95,099,460	\$243,250,365

Source: RGGI Inc.

2 Budget and Spending Status

This section presents financial data for the approved programs through June 30, 2010. Assuming a \$446 million,⁵ three-year revenue estimate described in the June 21, 2010 RGGI Operating Plan, approximately \$301 million would be available for the following five major program areas:

- Residential/Commercial/Industrial/Municipal;
- Transportation;
- Power Supply and Delivery;
- Sustainable Agriculture and Bioenergy; and
- Multi-Sector.

Anticipated available funding levels along with approved budgets, contract commitments, and spending are presented in Table 2-1.

⁵ The \$446 million estimate was based on the value of the projected auction proceeds from the fourth quarter of calendar year 2008 through the first quarter of calendar year 2012. For a more detailed explanation, please refer to the Summary Document: [Revised RGGI Operating Plan, Summary of Recommendations](#).

**Table 2-1. Anticipated Available Funding and Financial Status through June 30, 2010
(\$ million)**

	Total Three-Year Anticipated Available Funding	Contract Commitments ^a	Funds Spent
Residential/Commercial/Industrial/Municipal			
Green Jobs/Green NY	98.6	81.2	0.0
Residential Space and Water Heating Efficiency	53.0	1.8	0.2
Commercial, Industrial, Municipal and Institutional	25.5	1.2	0.5
Climate Smart Communities	6.6	-	-
Advanced Building Systems and Industrial Process Improvements	7.0	-	-
Total Residential/Commercial/Industrial/Municipal	190.7	84.2	0.7
Transportation			
Transportation Efficiency (and Electrified Rail Efficiency)	20.5	-	-
Advanced Transportation Development	12.0	-	-
Total Transportation	32.5	-	-
Power Supply and Delivery			
Statewide Photovoltaic Initiative	12.0	11.9	0.7
Advanced Power Technology	39.0	1.3	0.2
Total Electric Power Supply and Delivery	51.0	13.2	0.9
Sustainable Agriculture and Bioenergy			
Sustainable Agriculture and Bioenergy Program	4.5	-	-
Total Sustainable Agriculture and Bioenergy	4.5	-	-
Multi-Sector			
Clean Technology and Industrial Development	15.0	-	-
Climate Research and Analysis	8.0	1.20	0.002
Total Multi-Sector	23.0	1.20	0.002
PROGRAM AREA TOTAL	301.6	98.7	1.8
Other Costs			
Deficit Reduction Plan (DRP) Transfer ^b	90.0	90.0	90.0
Con Edison Smart Grid Program ^c	7.6	7.6	7.6
Program Administration ^d	24.0	2.7	2.7
Metrics and Evaluation	17.1	0.005	0.005
RGGI Inc. Costs ^e	3.4	3.0	2.2
New York State Cost Recovery Fee	2.7	0.1	0.1
OTHER COSTS TOTAL	144.8	103.5	102.8
TOTAL	446.4	202.2	104.5

^a "Contract Commitments" presents the total cumulative encumbrances; *i.e.*, funds that have been spent, legally obligated, or set aside in a dedicated account.

^b On December 4, 2009, New York State enacted numerous deficit reduction measures that included the transfer of \$90 million in RGGI auction proceeds to the General Fund.

^c On December 22, 2009, NYSERDA's Board approved a proposed consent decree that resolves the legal challenge to the State's RGGI program. The parties to the consent decree estimate that the total commensurate benefit for years 2009-2011 is \$7,658,707, and agreed to dedicate such funds for development of smart grid technologies in the Con Edison service territory.

^d The Program Administration row includes the Authority's upfront administrative expenses related to the development and implementation of the CO₂ Budget Trading Program, the CO₂ Allowance Auction Program, and the Operating Plan.

^e The first year budget includes RGGI Inc. start-up costs and New York State's share of ongoing RGGI Inc. expenses. RGGI Inc. is a non-profit corporation created to support development and implementation of the CO₂ Budget Trading Program.

Totals may not sum exactly due to rounding.

Source: NYSERDA

3 Summary of Program Benefits

Table 3-1 shows the estimated cumulative annual program benefits as of June 30, 2010.⁶ These metrics are estimates made by program implementation staff and have not been validated; evaluation results will be presented in the Annual Evaluation and Status Report, which will also include these metrics along with macroeconomic indicators, such as job creation, and the geographic distribution of program funding and benefits across the State. NYSERDA begins tracking program benefits once projects have been installed. The reporting of fund transfers may lag behind the installation date such that program benefits are reported prior to the financial report of funds spent.

Table 3-1. Summary of Cumulative Program Benefits

Benefits	Results through June 30, 2010
Net Greenhouse Gas Emission Savings ¹ (Annual Mt-CO ₂ e ²)	2,100
Net Electricity Savings from Energy Efficiency and On-Site Generation (Annual MWh)	4,371
Renewable Energy Generation (Annual MWh)	---
Net Natural Gas Savings (Annual MMBtu)	---
Net Fuel Oil Savings (Annual MMBtu)	3,409
Net Propane Savings (Annual MMBtu)	---
Net Gasoline Savings (Annual MMBtu)	---
Net Diesel Savings (Annual MMBtu)	---
Annual Energy Bill Savings to Participating Customers (\$ Million)	0.7

Source: NYSERDA

¹ These emission reductions are associated with both electric and fossil-fuel saving measures. Under a cap-and-trade system, the total number of emission allowances is determined by regulation. Regulated entities can purchase allowances and collectively emit up to the cap that is currently in place. Therefore, in the near term, electric efficiency projects may not decrease the overall amount of emissions going into the atmosphere. Nevertheless, electric efficiency projects will reduce end-users' responsibility or footprint associated with emissions from electricity production.

² CO₂e stands for carbon dioxide equivalent and describes the amount of CO₂ that would have the same global warming potential as a given mixture of gases based on factors published by the Intergovernmental Panel on Climate Change.

⁶ Cumulative annual benefits are reflective of the annual impacts from all currently operational projects installed since program inception.

4 Program Activities and Implementation⁷

4.1 Residential, Commercial, Industrial and Municipal Sectors

4.1.1 Residential Space and Water Heating Efficiency

NYSERDA currently offers a suite of programs providing comprehensive energy efficiency services for single and multifamily existing buildings and new construction, including low-income households. In addition to energy savings, these programs provide significant health and safety benefits through comprehensive testing and verification, improved air quality, and improved comfort. NYSERDA has been able to use limited funds for gas efficiency measures, primarily for low-income consumers, in select gas utility service territories.

The Residential Space and Water Heating Efficiency programs will allow NYSERDA to use RGGI funds for fossil-fuel based measures and renewable energy measures not eligible for SBC and EEPS incentives. Coordination of these funding sources will expand the number of households served and ensure that opportunities for carbon reduction measures are not lost. The Residential Space and Water Heating Efficiency programs will seek to address environmental justice issues by directly targeting outreach to environmental justice communities, and working with community-based organizations that address environmental justice issues by referring them to appropriate programs.

Multifamily Performance Program. The Multifamily Performance Program (MPP) serves residential buildings with five or more units. RGGI funds are used to supplement the program's current System Benefits Charge (SBC) and Energy Efficiency Portfolio Standard (EEPS) funding streams. Specifically, RGGI funds are used reduce oil and propane energy use in the multi-unit residential buildings by increasing the efficiency and performance of space and domestic water heating systems, ventilation systems, and building enclosures through system replacement and optimization.

All buildings receive program support for energy audits to determine what measures are cost effective, their expected energy savings, and the costs to install them. Projects also receive implementation incentives. Sixty percent of the program funds are targeted to low-income and affordable housing. NYSERDA will coordinate closely with the Weatherization Assistance Program (WAP) to ensure the most effective use of RGGI funds. NYSERDA will consider providing gas efficiency services through RGGI funds once EEPS funding targeting gas measures has been exhausted.

Through June 30, 2010, RGGI funds supported one completed energy efficiency project, saving a total of 2,995 MMBtu per year or the equivalent of approximately 20,000 gallons of fuel oil annually. An additional 18 projects are currently in-progress.

⁷ The metrics presented in this section are estimates made by program implementation staff and have not been validated; evaluation results will be presented in the Annual Evaluation and Status Report.

EmPower New YorkSM. EmPower New YorkSM (EmPower) provides cost-effective energy reduction services to households with incomes at or below 60 percent of the State Median Income. RGGI funding will permit cost-effective oil and propane efficiency measures such as insulation, blower-door assisted air sealing, and heating systems repair and replacements. All households meeting the income eligibility requirements, regardless of electric service provider, will be eligible to apply for heating efficiency assistance. NYSERDA will continue to coordinate closely with the WAP to ensure effective use of RGGI funds.

Through June 30, 2010, 15 energy efficiency projects were completed, saving a total of 414 MMBtu per year or the equivalent of 2,985 gallons of fuel oil annually. An additional 26 projects are currently in-progress.

Green Residential Building Program. Public Authorities Law (PAL) 1872 directs NYSERDA to create and administer a green residential building program in New York. The Green Residential Building Program (GRBP) is a market transformation initiative designed to change the building practices of the residential construction industry for single-family and multifamily homes up to 12 units. Financial incentives will be provided to owners for both new green and extensively renovated residential buildings. Green buildings will reduce energy and greenhouse gas production and preserve natural resources. Other benefits are the use of sustainable building materials, reduced waste, improved indoor air quality, and reduced indoor and outdoor pollution. The proposed final regulations promulgated under PAL 1872 were approved by NYSERDA's Board of Directors on March 1, 2010 and will be filed with the Department of State in the next quarter.

4.1.2 Green Jobs – Green New York (GJGNY)

GJGNY is a statewide program to promote energy efficiency and the installation of clean technologies to reduce energy costs and greenhouse gas emissions. GJGNY will provide subsidized energy audits to single family, multifamily, small business, and not-for-profit building owners as well as financing options for completing the energy efficiency services. GJGNY is also designed to support sustainable community development and create opportunities for green jobs.

Second quarter developments include presentation of the draft operating plan for the small commercial/not-for-profit sector to the GJGNY Advisory Council. Full GJGNY activities will be reported in the upcoming Annual Report, which will be posted on the NYSERDA website after review and comment from the Advisory Council. The plan is expected to be approved by NYSERDA officers, and the program launched, in the next quarter.

4.1.3 Commercial, Industrial, Municipal and Institutional (CIMI) Programs

The purpose of CIMI programs is to reduce energy use through energy efficiency measures and improved maintenance practices. CIMI programs offer a set of coordinated initiatives designed to achieve cost-effective CO₂ reductions by providing technical support and implementation assistance to existing facilities and new construction projects.

The Water and Wastewater Efficiency Program (WWEP) provides an opportunity to initiate integration and coordination of climate change goals, capture federal economic-stimulus funds, and install infrastructure that will help to improve the environment and keep New York waters clean and healthy. New York has secured federal economic stimulus funds that will bolster efforts to finance a new generation of water and wastewater infrastructure via the Clean Water State Revolving Fund (SRF)

Program. Selected plants financed with SRF monies will be constructed to high energy-efficiency standards, thus minimizing carbon emissions and improving economic and environmental performance.

This program is co-managed by the New York State Environmental Facilities Corporation (EFC) and NYSERDA. WWEP reviews selected projects on the SRF Intended Use Plan, including likely recipients of Green Project Reserve funds, and identifies candidates for technical analysis to identify costs and savings associated with energy efficiency, process improvements, and carbon-abatement opportunities, as well as cost share for plant upgrades.

During the second quarter, NYSERDA worked closely with EFC to initiate outreach to municipalities that were selected under the 2010 Intended Use Plan, identify projects with energy efficiency opportunities, and discuss the benefits of participation in the program.

4.2 Transportation

4.2.1 Advanced Transportation and Development

The goal of the Advanced Transportation Development Program is to commercialize technologies, products, systems, and services that provide superior GHG reduction performance and cost-per-ton values. Activities include product development, field testing, performance validation, policy development, and business assistance associated with emerging products that provide verified GHG benefits.

During the second quarter of 2010, NYSERDA completed a competitive Program Opportunity Notice (PON) for Advanced Transportation Technology (PON 1520) and selected projects for RGGI funding. Fifty-three proposals were received and RGGI funding was approved for nine projects that requested a total of \$1,456,600. Project contracting is currently underway.

4.3 Power Supply and Delivery (PSD)

The objective of the two PSD programs is to help reduce greenhouse gas (GHG) emissions from the electric power sector in New York. The initiative has both near-term and long-term components that will support a portfolio of diverse projects relating to electric power generation, transmission, and distribution systems. These projects will reduce GHG emissions throughout the sector, including implementation of an integrated strategy enabling smart-grid functionality and maintenance of a diverse portfolio of efficient generation resources. The PSD programs are designed to simultaneously maintain system reliability, safety, and security.

4.3.1 Statewide Photovoltaic Program

The Statewide Photovoltaic Program focuses on reducing GHG emissions in the short term by helping establish a sustainable market for solar energy throughout New York that includes targeted financial incentives. The program supports end-use solar installations for commercial, industrial, and residential customers as well as electric utility applications to improve the performance of distribution circuits and reduce peak electric load in critical load pockets.

During the second quarter, the Statewide Photovoltaic Program supported the installation of 383 solar photovoltaic systems with a total capacity of approximately 3,710 kW. It is estimated that these systems will annually produce 4,371 MWh of electricity annually.

4.3.2 Advanced Power Technology Program

The Advanced Power Technology Program (APTP) is designed to reduce GHG emissions in the long term. The program will focus on three primary areas — advanced renewable energy, advanced power delivery, and carbon capture, recycling, and sequestration — and will provide support activities to yield substantial GHG reductions. Other advanced power generation systems and technologies may be explored in the future.

Advanced Renewable Energy

The Advanced Renewable Energy component of the APTP will support site-specific, pre-development activities that will foster the market introduction of a broad range of promising renewable energy technologies in New York, including advanced biomass, tidal, and off-shore wind technologies. During the second quarter, a PON for Environmentally Preferred Power Systems (PON 1670) was issued and seven renewable power generation technology projects were selected for funding. RGGI funding has been approved to support the projects, which include advanced wind, solar, and hydropower technologies.

A series of technical analyses that characterize and establish, on a preliminary basis, the suitability of an ocean site area for a wind energy project have been conducted on behalf of a collaboration between the New York Power Authority, the Long Island Power Authority and Con Edison to procure energy from a 350-700 MW offshore wind farm located in the New York City-Long Island harbor-bay area (also known as the NY Bight). These studies are intended to establish a baseline of knowledge of geophysical features, meteorology, climatology and natural resources/biota in the affected ocean tract and will provide some basis for supporting future leasing applications as well as project siting and development activities.

Advanced Power Delivery

The Advanced Power Delivery initiative of the APTP will focus on applied demonstrations of advanced technologies that promote statewide interconnection of renewable resources, smart-grid capability, advanced meters, energy storage systems, innovative demand-side management strategies, and high efficiency power delivery technologies.

A PON for the Electric Power Transmission and Distribution Smart Grid Program (PON 1913) was issued during the second quarter. The program seeks to support demonstration projects and engineering studies that ensure grid reliability, efficiency, power quality, safety, and security as the delivery network accommodates low-carbon technologies such as renewable power generation, plug-in hybrid electric vehicles, and efficient combined heat and power distributed generation systems. Funding will be limited to \$15.5 million for demonstration projects and \$1 million for engineering studies.

Carbon Capture, Recycling, and Sequestration

The Carbon Capture, Recycling, and Sequestration component of the APTP will focus on assessing and demonstrating carbon capture, reuse, compression, and transport technologies, characterization and testing the State's geological sequestration potential, as well as support the development of carbon capture and sequestration demonstration projects in New York.

The TriCarb Consortium for Carbon Sequestration began its project to identify potential sequestration targets in Rockland County. The project, which is also supported by the USDOE, will complete detailed geological analysis of Rockland County's Newark Basin bedrock. During this quarter the TriCarb team and members of the Lamont Doherty Earth Observatory of Columbia University collected data and identified potential sites and field work.

4.4 Multi-Sector Programs

4.4.1 Clean Technology Industrial Development

The Clean Technology Industrial Development program 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. Key elements of the program include advanced industrial research and development of innovative technologies, providing risk capital and business assistance, and development of advanced research centers.

During the second quarter of 2010, NYSERDA received seven proposals in response to a competitive solicitation for the Renewable, Clean Energy and Energy Efficiency Product Manufacturing Incentive Program (PON 1176). Up to \$4,500,000 in RGGI funds are available for eligible projects, with a maximum award of \$1,500,000 per project.

4.4.2 Climate Research and Analysis

The Climate Research and Analysis Program will support research studies, demonstrations, policy research and analyses, and outreach and education efforts to address critical climate change-related problems facing the State and the region, including the needs of environmental justice communities.

Current efforts for the Climate Research and Analysis Program include the development of the State's Climate Action Plan, as called for by Governor Paterson's Executive Order 24. This Order established a goal to reduce greenhouse gas emissions in New York State to 80% below levels emitted in 1990 by the year 2050, and included a directive to assess how all economic sectors can adapt to climate change. During the second quarter, the project continued the extensive stakeholder process to identify policies and strategies that could assist the State in meeting the stated greenhouse gas emissions reduction goal.

For information on other
NYSERDA reports, contact:

New York State Energy Research
and Development Authority
17 Columbia Circle
Albany, New York 12203-6399

toll free: 1 (866) NYSERDA
local: (518) 862-1090
fax: (518) 862-1091

info@nysesda.org
www.nysesda.org

NEW YORK'S RGGI-FUNDED PROGRAMS

STATUS REPORT QUARTER ENDING JUNE 30, 2010
SEPTEMBER 2010

STATE OF NEW YORK
DAVID A. PATERSON, GOVERNOR

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
VINCENT A. DEIORIO, ESQ., CHAIRMAN
FRANCIS J. MURRAY, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER

