New York State Energy Research and Development Authority

# New York's RGGI-Funded Programs Status Report

Quarter Ending June 30, 2012



# NYSERDA's Promise to New Yorkers: New Yorkers can count on NYSERDA for objective, reliable, energy-related solutions delivered by accessible, dedicated professionals.

Our Mission:	Advance innovative energy solutions in ways that improve New York's economy and environment.
Our Vision:	Serve as a catalyst—advancing energy innovation and technology, transforming New York's economy, and empowering people to choose clean and efficient energy as part of their everyday lives.
Our Core Values:	Objectivity, integrity, public service, and innovation.

## **Our Portfolios**

NYSERDA programs are organized into five portfolios, each representing a complementary group of offerings with common areas of energy-related focus and objectives.

#### **Energy Efficiency & Renewable Programs**

Helping New York to achieve its aggressive clean energy goals – including programs for consumers (commercial, municipal, institutional, industrial, residential, and transportation), renewable power suppliers, and programs designed to support market transformation.

### **Energy Technology Innovation & Business Development**

Helping to stimulate a vibrant innovation ecosystem and a clean energy economy in New York – including programs to support product research, development, and demonstrations, clean-energy business development, and the knowledge-based community at the Saratoga Technology + Energy Park<sup>®</sup>.

#### **Energy Education and Workforce Development**

Helping to build a generation of New Yorkers ready to lead and work in a clean energy economy – including consumer behavior, youth education, and workforce development and training programs for existing and emerging technologies.

#### **Energy and the Environment**

Helping to assess and mitigate the environmental impacts of energy production and use – including environmental research and development, regional initiatives to improve environmental sustainability, and West Valley Site Management.

#### **Energy Data, Planning and Policy**

Helping to ensure that policy-makers and consumers have objective and reliable information to make informed energy decisions – including State Energy Planning, policy analysis to support the Regional Greenhouse Gas Initiative, and other energy initiatives; and a range of energy data reporting including *Patterns and Trends*.

### NYSERDA RECORD OF REVISION

### New York's RGGI Funded Programs Status Report

Quarter Ending June 30, 2012

### Final Report October 2012

Revision Date	Description of Changes	Revision on Page(s)
10/15/12	Original Issue	Original Issue
11/28/2012	Revised the number of completed projects for GJGNY Single- Family Residential, the number of completed projects and MMBtu savings for HPwES, and the number of installations and total capacity for Statewide Photovoltaic Program.	Pages 4-3, 4-7, and 4-11 Tables 3-1 and 3-2

## Table of Contents

1. Introdu	iction	1-1
1.1 N	New York's RGGI Funds	1-1
2. Budget	and Spending Status	2-1
3. Summa	ary of Portfolio and Program Benefits	
4. Prograi	m Activities and Implementation	
4.1 F	Residential, Commercial, Industrial, and Municipal Sectors	4-1
4.1.1	Green Jobs – Green New York (GJGNY)	4-1
4.1.2	Residential Efficiency Services	4-5
4.1.3	Municipal Water and Wastewater Program	4-8
4.1.4	Industrial Process Improvement Program	4-9
4.2 1	Fransportation	4-10
4.2.1	Transportation Research	4-10
4.3 F	Power Supply and Delivery (PSD)	4-10
4.3.1	Statewide Photovoltaic Program	4-10
4.3.2	Advanced Power Technology Program	4-11
4.4 M	Multi-Sector Programs	4-12
4.4.1	Clean Technology Industrial Development	4-12
4.4.2	Climate Research and Analysis	4-12
4.4.3	Cleaner Greener Communities	4-12

# **1** Introduction

To implement the Regional Greenhouse Gas Initiative (RGGI), New York State established its Carbon Dioxide (CO<sub>2</sub>) Budget Trading Program through regulations promulgated by the Department of Environmental Conservation (DEC) and the CO<sub>2</sub> Allowance Auction Program through regulations promulgated by the New York State Energy Research and Development Authority (NYSERDA).<sup>1</sup> This report is prepared pursuant to the "Operating Plan for Investments in New York under the CO<sub>2</sub> Budget Trading Program and the CO<sub>2</sub> Allowance Auction Program" (Operating Plan),<sup>2</sup> and provides an update on the progress of programs through the quarter ending June 30, 2012. It contains an accounting of program spending, an estimate of program benefits, and a summary description of program activities and implementation. An amendment providing updated program descriptions and funding levels for the 2011 version of the plan was approved by NYSERDA's Board of Directors on June 20, 2011.<sup>3</sup>

### 1.1 New York's RGGI Funds<sup>4</sup>

As of June 30, 2012, New York State sold over 166.3 million  $CO_2$  allowances and received approximately \$378.0 million in auction proceeds. In addition, nearly \$2.0 million in interest earnings were allocated on the RGGI portfolio. These funds are reinvested for program implementation and are allocated to various RGGI programs. Detailed auction results are presented in Table 1-1, while total RGGI funds are shown in Table 1-2.

<sup>&</sup>lt;sup>1</sup> For the DEC adopted regulations, see 6 NYCRR: CO<sub>2</sub> Allowance Auction Program Regulations.

<sup>&</sup>lt;sup>2</sup> On June 21, 2010, NYSERDA Part 242:  $CO_2$  Budget Trading Program Regulations; for the NYSERDA adopted regulations, see 21 NYCRR Part 507 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 <u>RGGI Use of Auction Proceeds</u> for ongoing developments. <sup>3</sup> Please refer to the 2011 RGGI Operating Plan Amendment for details.

<sup>&</sup>lt;sup>4</sup> RGGI funds include both auction proceeds and interest earned from those proceeds. See <u>NY Proceeds by Auction</u> for more details on auction results.

Auction Date	Control Period	Clearing Price	New York State Allowances Sold	New York State Auction Proceeds
12/17/08	First	\$3.38	12,422,161	\$41,986,904
2/10/00	First	\$3.51	12,422,161	\$43,601,785
3/18/09	Second	\$3.05	776,385	\$2,367,974
c/17/00	First	\$3.23	11,861,849	\$38,313,772
6/17/09	Second	\$2.06	776,385	\$1,599,353
0.00.000	First	\$2.19	11,861,849	\$25,977,449
9/09/09	Second	\$1.87	776,385	\$1,451,840
	First	\$2.05	11,861,850	\$24,316,793
12/02/09	Second	\$1.86	571,423	\$1,062,847
	First	\$2.07	15,136,022	\$31,331,56
3/10/10	Second	\$1.86	740,167	\$1,376,711
	First	\$1.88	15,136,022	\$28,455,721
6/9/10	Second	\$1.86	756,801	\$1,407,650
0.10.11.0	First	\$1.86	11,421,736	\$21,244,429
9/8/10	Second	\$1.86	464,418	\$863,817
10/1/10	First	\$1.86	8,678,724	\$16,142,427
12/1/10	Second	\$1.86	414,863	\$771,645
	First	\$1.89	15,153,524	\$28,640,160
3/9/11	Second	\$1.89	757,676	\$1,432,008
	First	\$1.89	4,519,648	\$8,542,135
6/8/11	Second	\$1.89	383,114	\$724,085
0 / = / 4 4	First	\$1.89	2,689,151	\$5,082,495
9/7/11	Second	n/a	-	-
10/5/11	First	\$1.89	9,621,954	\$18,185,493
12/7/11	Second	n/a	-	-
3/14/12	Second	\$1.93	8,895,733	\$17,168,765
6/6/12	Second	\$1.93	8,265,426	\$15,952,272
First Control Period Total		142,786,651	\$331,821,129	
Second Control Period Total		23,578,776	\$46,178,967	
	TOTAL		166,365,427	\$378,000,097

Table 1-1. New York State's RGGI Auction Results<sup>5</sup>

Source: RGGI Inc.

<sup>&</sup>lt;sup>5</sup> New York did not offer allowances for sale in the RGGI auction held on December 25, 2008, where the clearing price for 2009 vintage allowances was \$3.07. The first control period for fossil-fuel fired electric generators took effect on January 1, 2009 and concluded on December 31, 2011. The second control period took effect on January 1, 2012 and extends through December 31, 2014.

Fund Category	Cumulative Funds	
RGGI Auction Proceeds	\$378,000,097	
Interest Allocated to the RGGI Portfolio	\$1,998,557	
TOTAL	\$379,998,654	

Table 1-2. New York State's RGGI Funds through June 30, 2012

This section presents financial data for the approved RGGI programs through June 30, 2012. Table 2-1 reflects how the nearly \$380.0 million of current funds are allocated across the four major program areas:

- Residential/Commercial/Industrial/Municipal
- Transportation
- Power Supply and Delivery
- Multi-Sector

Table 2-1 also presents the current contract commitments and spending levels for each program.

	Allocation of		
	Cumulative	Contract	
	Funds <sup>a</sup>	Commitments <sup>b</sup>	Funds Spent
Residential/Commercial/Indu	strial/Municipal		
Residential Efficiency Services	27.7	18.5	8.0
Municipal Water and Wastewater	2.5	1.6	1.1
Industrial Process Improvement	10.1	1.6	0.4
Total Residential/Commercial/Industrial/Municipal	40.4	21.8	9.5
Transportation	ı		
Transportation Research	2.0	1.5	1.0
Total Transportation	2.0	1.5	1.0
Power Supply and D	elivery		
Statewide Photovoltaic Initiative	11.4	11.3	11.2
Advanced Power Technology	4.5	3.9	3.2
Total Electric Power Supply and Delivery	15.9	15.2	14.4
Multi-Sector			
Clean Technology and Industrial Development	17.2	10.3	2.0
Climate Research and Analysis	5.8	2.1	1.5
Regional Economic Development and GHG Reduction	9.4	-	-
Cleaner Greener Communities	44.8	6.4	0.5
Total Multi-Sector	77.2	18.7	4.0
Other Costs <sup>c</sup>			
Deficit Reduction Plan (DRP) Transfer <sup>d</sup>	90.0	90.0	90.0
Con Edison Smart Grid Program <sup>e</sup>	13.2	13.2	13.2
Program Administration <sup>f</sup>	13.0	6.4	6.4
Metrics and Evaluation	8.8	1.0	0.2
RGGI Inc. Costs <sup>g</sup>	4.3	3.9	3.6
New York State Cost Recovery Fee	3.0	1.1	1.1
OTHER COSTS TOTAL	132.5	115.6	114.6
SUBTOTAL	268.0	172.8	143.5
Green Jobs - Gree	n NY		
Green Jobs - Green NY	112.0	112.0	33.5
TOTAL	380.0	284.8	177.0

Table 2-1. Available Funding and Financial Status through June 30, 2012 (\$ million)

<sup>a</sup> Includes auction proceeds and allocated interest on the RGGI portfolio. The allocation is consistent with the three-year budget presented in the Operating Plan.

<sup>b</sup>Represents total cumulative encumbrances, i.e. funds that have been spent or legally obligated. In addition, contract commitments for Green Jobs-Green NY (GJGNY) include funds set aside in a dedicated account that are not otherwise spent or legally obligated to particular contracts. <sup>c</sup> The values for Program Administration, Metrics and Evaluation, and the New York State Cost Recovery Fee represent aggregate funds and

commitments for RGGI-funded activities, NOT including GJGNY. For information on GJGNY finances, please refer to Table 4.1.

<sup>d</sup> 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.

<sup>c</sup> 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 - 2014 is \$12.3 million and agreed to dedicate such funds for the development of smart grid technologies in the Con Edison territory. In October 2010, State Supreme Court Judge Thomas J. McNamara signed a Stipulation and Order of Discontinuance signed by all the parties, thereby formally ending the litigation.

<sup>f</sup> Includes NYSERDA's upfront administrative expenses related to the development and implementation of the CO<sub>2</sub> Budget Trading Program, the

CO<sub>2</sub> Allowance Auction program, and the Operating Plan. <sup>g</sup> 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 Portfolio and Program Benefits

Table 3-1 and Table 3-2 show the estimated cumulative annual benefits as of June 30, 2012 at the portfolio and program levels, respectively.<sup>6</sup> These metrics are estimates made by program implementation staff and have not been evaluated. When evaluation results are available, they will be presented in subsequent Annual Evaluation and Status Reports, which also will include these metrics along with macroeconomic indicators such as job creation resulting from program activity. 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 reporting of funds spent. At this time, the program benefits include some projects that are also supported by other non-RGGI funding sources administered by NYSERDA.

Benefits	Results through June 30, 2012	
Net Greenhouse Gas Emission Savings <sup>1</sup> (Annual Tons CO <sub>2</sub> e <sup>2</sup> )	40,367	
Net Electricity Savings (Annual MWh)	13,702	
Renewable Energy Generation (Annual MWh)	4,248	
Net Natural Gas Savings (Annual MMBtu)	140,597	
Net Fuel Oil Savings (Annual MMBtu)	246,477	
Net Propane Savings (Annual MMBtu)	12,798	
Net Steam Savings (Annual MMBtu)	10,157	
Net Wood Savings (Annual MMBtu)	1,004	
Net Kerosene Savings (Annual MMBtu)	285	
Net Gasoline Savings (Annual MMBtu)	-	
Net Residual Oil Savings (Annual MMBtu)	144	
Net Diesel Savings (Annual MMBtu)	-	
Total Fuel Savings (Annual MMBtu) <sup>3</sup>	411,462	
Annual Energy Bill Savings to Participating Customers (\$ Million) <sup>4</sup>	9.4	

<sup>1</sup> 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.

 $^{2}$  CO<sub>2</sub>e stands for carbon dioxide equivalent and describes the amount of CO<sub>2</sub> 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.

<sup>3</sup> This total excludes fuel savings and new fuel usage associated with the Multifamily Carbon Emission Reduction Program. The Multifamily Carbon Emissions Reduction Program is a fuel-switching program and does not claim any energy or bill savings.

<sup>4</sup> This total excludes bill savings associated with steam for the Multifamily Performance Program, and bill savings associated with the Multifamily Carbon Emission Reduction Program. The Multifamily Carbon Emissions Reduction Program is a fuel-switching program and does not claim any energy or bill savings.

Source: NYSERDA

<sup>&</sup>lt;sup>6</sup> Cumulative annual benefits are reflective of the annual impacts from all currently operational projects installed since program inception.

Program	Net Electricity Savings or Renewable Energy Generation (Annual MWh)	Net Energy Savings (Annual MMBtu)	Net Greenhouse Gas Emission Savings <sup>1</sup> (Annual Tons CO <sub>2</sub> e <sup>2</sup> )				
Residential, Commercial, Industrial & Municipal Sectors							
Green Jobs - Green New York							
GJGNY - Single-Family Residential Audit Component <sup>3</sup>	2,014	170,819	12,034				
GJGNY - Single-Family Residential Loan Component <sup>3</sup>	1,108	91,171	6,457				
GJGNY - Multifamily Residential Audit Component <sup>3,4</sup>	7,324	73,239	8,370				
Residential Efficiency Services							
Multifamily Performance Program	3,682	129,578	12,321				
Multifamily Carbon Emissions Reduction Program <sup>5</sup>	-	-	2,909				
EmPower New York <sup>SM</sup>	-	8,257	642				
Home Performance with ENERGY STAR <sup>®</sup>	60	15,214	1,350				
Green Residential Building Program <sup>3</sup>	355	7,190	579				
Solar Thermal Incentive Program	-	1,345	94				
Power Supply & Delivery							
Statewide Photovoltaic Program	4,248	-	1,754				
Cross-Program Overlap <sup>6</sup>	842	85,351	6,144				
TOTAL	17,950	411,462	40,367				

Table 3-2. Summary of Cumulative Program Benefits through June 30, 2012

<sup>1</sup> 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.

 $^{2}$  CO<sub>2</sub>e stands for carbon dioxide equivalent and describes the amount of CO<sub>2</sub> 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.

<sup>3</sup> The benefits for this program include some projects that also have been supported by other non-RGGI NYSERDA funding sources.

<sup>4</sup> Net Electricity Savings (Annual MWh) went down from last quarter due to the installation of some new measures that resulted in an increase in electricity usage.

<sup>5</sup> The Multifamily Carbon Emissions Reduction Program is a fuel-switching program and does not claim any energy or bill savings.

<sup>6</sup> Cross-program overlap accounts for projects that received any combination of a GJGNY audit, a GJGNY loan, or a RGGI-funded incentive through the Home Performance with ENERGY STAR<sup>®</sup> Program or the Multifamily Performance Program.

Source: NYSERDA

### 4.1 Residential, Commercial, Industrial, and Municipal Sectors

### 4.1.1 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 provides 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. The most recent GJGNY Annual Report was issued on September 30, 2011<sup>8</sup>. Table 4-1 presents financial data for the approved GJGNY programs through June 30, 2012.

<sup>&</sup>lt;sup>7</sup> The metrics presented in this section are estimates made by program implementation staff and are not validated; evaluation results will be presented, as they are available, in the Annual Evaluation and Status Reports.

<sup>&</sup>lt;sup>8</sup> For more information, see the <u>Green Jobs – Green New York Annual Report</u>.

	Allocation of	Contract			
	Cumulative Funds <sup>a</sup>	Commitments <sup>b</sup>	Funds Spent		
Workforce Development, Outreach and Marketing					
Workforce Development	8.0	3.2	1.0		
Outreach and Marketing	10.3	9.9	2.9		
Total Workforce Development, Outreach and Marketing	18.3	13.1	3.8		
Residen	tial				
Energy Audit Incentive	11.6	4.9	4.9		
Implementation Costs	1.0	1.3	1.1		
Financing: Loans	-	15.6	15.6		
Financing: Loan Repayments	-	(1.2)	(1.2)		
Total Financing	26.7	14.4	14.4		
Total Residential	39.2	20.6	20.4		
Multifar	nily				
Energy Audits	3.3	1.2	0.8		
Implementation Costs	1.6	1.6	1.4		
Financing: Loans	-	0.5	0.5		
Financing: Loan Repayments	-	(0.04)	(0.04)		
Total Financing	11.1	0.5	0.5		
Total Multifamily	16.0	3.3	2.7		
Small Com	mercial				
Energy Audits	5.6	3.8	1.4		
Implementation Costs	5.0	0.5	0.2		
Total Financing	13.0	0.1	0.03		
Total Small Commercial	23.7	4.5	1.6		
SUBTOTAL	97.2	41.4	28.6		
Other Costs					
Program Administration	7.8	3.8	3.8		
Program Evaluation	5.6	1.7	0.7		
New York State Cost Recovery Fee	1.9	0.5	0.5		
OTHER COSTS TOTAL	15.3	6.0	4.9		
TOTAL	112.6	47.4	33.5		

# Table 4-1. Green Jobs – Green New York Available Funding and Financial Status through June 30, 2012 (\$ million)

<sup>a</sup> Includes auction proceeds and allocated interest on the Green Jobs-Green NY (GJGNY) funds. The allocation is consistent with the three-year budget presented in the Operating Plan.

<sup>b</sup>Represents total cumulative encumbrances, i.e. funds that have been spent or legally obligated.

*Financing: Single-Family Residential.* NYSERDA launched the residential component of On-Bill Recovery (OBR) on January 30, 2012, approximately four months ahead of the schedule required by the Power NY Act of 2011. OBR originally required the filing of a mortgage, which limited the ability of strategic program partners<sup>9</sup> to assist customers in the loan application process. An amendment to OBR was approved in Governor Cuomo's budget, replacing the mortgage with a declaration to notify prospective future buyers of a home that a NYSERDA installment charge exists on the home's meter

<sup>&</sup>lt;sup>9</sup> The strategic program partners are the contractors and the Constituency Based Organizations (CBOs) that assist OBR applicants in filling out the paperwork necessary to access this program.

(utility bill). This amendment is expected to dramatically increase the uptake of OBR as the market adapts to this new, innovative financing approach.

OBR Loan Installment charges began to appear on utility bills in June for customers who received an OBR Loan. A Long Island Power Authority (LIPA) incentive advance fund will be created shortly to enable Home Performance with ENERGY STAR<sup>®</sup> (HPwES) customers who also receive a GJGNY loan and an incentive through LIPA to assign their utility incentive to NYSERDA, who then assigns the utility incentive funds directly to the contractor upon project completion. This arrangement seeks to improve the cash flow position of HPwES Contractors on those LIPA projects also involving GJGNY loans.

GJGNY financing, a vital component of the GJGNY program, continues to expand and offer additional services to participants. Through June 30, 2012, a total of 1,698 Residential loans have been closed. These loans provided \$15.7 million in funding enabling the completion of NYS GJGNY energy efficiency projects that, without financing, may never have been started. The financed energy-efficiency projects are anticipated to save 1,107,813 kWh and 91,171 MMBtu per year.

*Financing: Multifamily Residential.* The Multifamily initial financing program is currently underway with the Multifamily team working on the development of an OBR financing program for projects under GJGNY. This financing method will allow building owners to finance a project and pay the debt service as part of the monthly utility bill. The advantage to this approach is that if the property is sold, the debt stays with the property. The financing program was launched on July 31, 2012.

The GJGNY financing program for multifamily building owners is underway. Through June 30, 2012, one project closed a loan through the MPP.<sup>10</sup>

*Financing: Small Business and Not-for-Profit.* In June 2012, the Small Business/ Not-for-Profit Energy Efficiency Financing Program made OBR financing available to eligible small businesses and not-for-profits that have a utility account with one of the following participating utilities: Central Hudson, Con Edison, Long Island Power Authority, National Grid (upstate NY customers only), New York State Electric and Gas Corporation, Orange & Rockland, and Rochester Gas and Electric Corporation. Customers who take advantage of OBR financing can receive a NYSERDA loan of up to \$50,000 at 2.5 percent interest to pay for energy-efficiency improvements. Customers can then repay their loan through a charge on their utility bill.

The Small Business/Not-For-Profit Energy-Efficiency Financing Program was launched in June 2011. As of June 30, 2012, 11 lending institutions have signed up to be listed as participating lenders on the NYSERDA website, four customer applications have been received, three applications have been approved for financing, one application is pending, and two loans have been issued.

*Single-Family Residential*. Contractors continue to report strong demand for free/reduced-cost comprehensive home assessments with the program receiving 29,348 audit applications through June 2012. Program staff re-evaluated the method of calculating the conversion rate from audit to energy retrofit project. The calculation now takes into account the lag time from completed audit to energy retrofit project completion. The average cycle time between audit completion and project approval/completion is 90-120 days. The result of incorporating this average cycle time frame from audit to project completion, results in a conversion rate of 39 percent. There have been 4,649 completed projects through June 2012 that have resulted from GJGNY audits. These projects are anticipated to save 2,014,022 kWh and 170,819 MMBtu annually.

<sup>&</sup>lt;sup>10</sup> Building owners participating, or who have participated in the MPP, may be eligible for the GJGNY reduced interest financing. For more information, please visit the <u>GJGNY Multifamily Building Owner Financing</u> section of NYSERDA's website.

*Multifamily Residential*. GJGNY provides funding for Multifamily Performance Program (MPP) audits and financing. Through June 30, 2012, the MPP GJGNY audit program completed 88 audits. Thirty-three projects are under contract to have measures installed. Energy savings associated with measures installed through June 30, 2012 total 7,323,845 kWh and 73,239 MMBtu per year.

*Small Business and Not-for-Profit.* GJGNY energy audits are offered statewide at no charge to small businesses and not-for-profits with an average electric demand of 100kW or less and ten employees or less. For participants ineligible for GJGNY audit funding, NYSERDA uses American Recovery and Reinvestment Act (ARRA) funding to provide free energy audits to any small business or not-for-profit with an average electric demand of 100 kW or less. As of June 30, 2012 989 GJGNY audits and 482 ARRA audits have been completed.

*Workforce Development*. The Workforce Development team continues to manage existing GJGNY curriculum development and training contracts and has several new agreements under negotiation. Under PON 1817, Community Power Network (CPN) developed training to increase the potential for success for oil heat technicians in completing and passing the certification exams for the National Oil Heat Research Alliance (NORA) Bronze, Silver and Gold certifications and the North American Technician Excellence (NATE) certification. Under PON 2033, the Urban League of Rochester has enhanced their building trades program to include a module on energy efficiency and has trained 50 disadvantaged youth for entry-level careers in the clean energy sector. Under PON 1816, the Southside Innovation Center of Syracuse University, has successfully implemented energy training for socioeconomically disadvantaged residents in one of Syracuse's most hard hit neighborhoods. Other Worker Readiness training programs awarded under PON 1816 have struggled to meet enrollment goals and have been cancelled; unused funds will be reprogrammed to better serve clean energy trainees in New York State.

The Workforce Development team continues to collaborate with the statewide network of Constituency-Based Organizations (CBOs) in providing consumer workforce outreach under GJGNY. NYSERDA is working with the New York State Department of Labor (DOL) to facilitate CBO access to DOL's One Stop Operating System (OSOS) in order to connect qualified job seekers with employers in the clean energy field. The ability for staff to enter data directly in the OSOS facilitates worker connections and allows for more accurate tracking of workforce leads as they are placed in training and employment opportunities. PUSH Buffalo is the first CBO to gain access to the system and is able to match candidates to job openings. After a pilot period, access will be expanded to all CBOs performing workforce outreach. Better coordination with DOL will support NYSERDA in improved tracking of energy-efficiency training and job placement outcomes.

NYSERDA's On-the-Job Training, PON 2033, program has received 60 "intent to apply" notifications from NYS businesses. This is the first step in a process that will ultimately result in a NYSERDA partner or contractor hiring a candidate for on-the-job training and employment. After the initial emailed 'intent to apply', if the applicant is eligible and in good standing, DOL will perform due diligence and work with the applicant to match company needs with the skills of the employees on the DOL One-Stop lists. Candidates are then interviewed, and job offers are made. To date, 62 people have been hired from NYSDOL's One-Stop Lists with NYSERDA subsidizing a portion of their salaries and training.

*GJGNY Outreach and Marketing*. NYSERDA's Outreach staff continues to work with the 19 competitively selected Community Based Organizations (CBOs) and NYSERDA's implementation contractor, Conservation Services Group (CSG), to get CBO programs up and running to integrate their outreach efforts with NYSERDA's operational infrastructure to facilitate running and tracking of Outreach Programs. Efforts are being made to reach out to

underserved communities, including developing and offering GJGNY program materials in non-English languages.

The CBOs are now actively running outreach events in their communities and scheduling audits. Through June 30, 2012, 32 retrofits have been completed through their efforts. Additionally, CBOs have been referring clients to the DOL for training, and working with engineering firms and unions to recruit contractors to the GJGNY program to develop additional training materials.

The annual CBO Training Conference was held on June 29, 2012 by video conference at NYSERDA's Albany and New York City offices. The conference offered sessions on: database reconciliation; changes in CBO reporting requirements; CBO progress to date; regional customer role playing, the NYSERDA Multifamily Performance Program; and customer relationship management tools.

The Aggregation pilots are underway. PUSH Green held their contractor lottery on June 11th and assigned the first three bundles of projects. There are eight participating contractors in the PUSH pilot. Staff continues to work with all the CBO's conducting the Aggregation pilots to refine the process.

The GJGNY marketing program focused on contractor recruitment and promotion of core programs and services to residential, small business/ not-for-profit, and multifamily customers. Marketing was used to build awareness and participation statewide, support the face-to-face grassroots activities necessary to effectively penetrate challenging-to-reach communities and populations, and deliver the education and support necessary to secure audits and convert to retrofits. Marketing also supported the recruitment of prospective Building Performance Institute (BPI)-contractors, particularly in priority geographies with an insufficient number of certified contractors to meet consumer demand.

*Evaluation.* The GJGNY Evaluation Operating Plan was approved by NYSERDA's Officers during the third quarter of 2010.<sup>11</sup> One of the first tasks outlined in the GJGNY Evaluation Operating Plan, development of a program theory and logic model report, is now complete. The program theory and logic model report was developed by NYSERDA's evaluation contractors and presented to the Advisory Council by Energy Analysis staff on December 14, 2011. The logic model work was summarized in the October 2011 GJGNY Annual Report and the full program theory and logic model report is posted on NYSERDA's website.<sup>12</sup> The program theory and logic model report identifies program inputs, activities, outputs and outcomes. It also lists indicators and research issues to help guide and focus future evaluations of the program.

Evaluation contractors completed the primary data collection for the initial GJGNY Combined Process and Market Characterization and Assessment of the residential One- to Four-Family sector in late March 2012. Analysis of the primary data collected through the completed surveys continues and results of this evaluation are ongoing. Evaluation staff finalized the report in September 2012.

Outreach staff met with NYSERDA's Energy Analysis team during the second quarter of 2012 to discuss plans for conducting a process evaluation of the CBO Outreach effort.

### 4.1.2 Residential Efficiency Services

NYSERDA currently offers a suite of programs that provide comprehensive energy 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

<sup>&</sup>lt;sup>11</sup> For more information, see the <u>Green Jobs – Green New York Operating Plan for Program Evaluation</u>.

<sup>&</sup>lt;sup>12</sup> For more information, see the <u>Green Jobs – Green New York Program Logic Model Report.</u>

testing and verification, improved air quality, and improved comfort. Historically, NYSERDA has been able to use limited funds for gas efficiency measures, primarily for low-income consumers, in select gas utility service territories.

The addition of the Residential Efficiency Services programs allows NYSERDA to use RGGI funds for fossil-fuel based measures and renewable energy measures not eligible for System Benefits Charge (SBC) and Energy Efficiency Portfolio Standard (EEPS) incentives. Coordination of these funding sources expands the number of households served and ensures that opportunities for carbon reduction measures are not lost. The Residential Efficiency Services program seeks to address environmental justice issues by directly targeting outreach to environmental justice communities and by referring CBOs that address environmental justice issues 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 SBC and EEPS funding streams. Specifically, these funds are targeted at reducing oil, non-firm natural gas, steam, and propane energy use in multi-unit residential buildings and 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, 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.

Through June 30, 2012, RGGI funds supported 28 completed energy-efficiency projects that are expected to save a total of 3,682,286 kWh and 129,578 MMBtu per year.

*Multifamily Carbon Emission Reduction Program.* The Multifamily Carbon Emissions Reduction Program (MCERP) is currently providing financial assistance and technical support to owners of multifamily buildings converting their heating systems from #6 fuel oil to cleaner fuel alternatives. Less carbon-intensive fuels include #2 fuel oil, biodiesel and biodiesel blends, natural gas, and renewables (geothermal, solar thermal). This program was positioned to help encourage early adoption of the City of New York's phase-out of #6 fuel oil and early compliance with city-level legislation (Int. 194-2010), that requires all buildings that burn #6 fuel oil to switch to #4 oil or a cleaner equivalent (based on particulate parts per million). Converting #6 fuel oil heated buildings to cleaner fuels will reduce carbon emissions, improve air quality, and produce positive public health benefits.

MCERP launched on April 4, 2011. By June 30, 2011 nearly all of the total \$6.5 million in RGGI funding was allocated to 190 conversion projects. This funding is anticipated to serve over 30,000 multifamily units in over 300 buildings. This program was available to the entire state, but only five applications came from areas outside of the five boroughs of New York City; four from Westchester County and one from Nassau County.

Through June 30, 2012 MCERP provided almost \$700,000 to 23 projects that completed their conversion processes. These funds helped to offset the 29,090 tons of  $CO_2$  that otherwise would have been emitted over a ten year period if these buildings had not switched from #6 oil to a cleaner burning alternative.

*EmPower New York*<sup>sm</sup>. EmPower New York<sup>SM</sup> (EmPower) provides cost-effective energy reduction services to households with incomes at or below 60 percent of the State Median Income. RGGI funding

permits 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 will be eligible to apply for heating efficiency assistance. NYSERDA will continue to coordinate closely with the Weatherization Assistance Program (WAP) to ensure effective use of RGGI funds.

Through June 30, 2012, 418 energy efficiency projects were completed and are projected to save a total of 8,257 MMBtu per year.

*Home Performance with ENERGY STAR*<sup>®</sup>. Home Performance with ENERGY STAR (HPwES) is a comprehensive energy efficiency services program for existing one-to-four family homes. The program uses a network of service providers accredited by the Building Performance Institute (BPI) to perform diagnostic testing on the home, recommend improvements, determine the payback period for those improvements, and install improvements selected by the homeowner.

The HPwES Program uses RGGI funds for cost-effective oil and propane efficiency measures, such as replacing inefficient oil and propane heating equipment and other measures that have a direct impact on reducing oil and propane consumption. Through June 30, 2012, 668 energy efficiency projects were completed, and are projected to save approximately 60,468 kWh and 15,214 MMBtu per year.

*Green Residential Building Program.* The Green Residential Building Program (GRBP)<sup>13</sup> is a market transformation initiative designed to change the building practices of the residential construction industry for single-family homes and multifamily homes with up to 11 dwelling units. The GRBP offers incentives to building owners for certifying buildings to meet or exceed Leadership in Energy and Environmental Design (LEED) or National Green Building Standard guidelines, as well as other program-specific energy-efficiency and health and safety requirements. Buildings meeting GRBP requirements will help to reduce energy use and greenhouse gas emissions, save water and other natural resources, use sustainable building materials, reduce waste, and improve indoor air quality. The GRBP provides an innovative approach to program design and is one of the first statewide program in the country to offer direct financial incentives to building owners for certified green residential buildings.

Through June 30, 2012, the GRBP has received incentive applications for 223 residential buildings; 137 of these buildings received incentives paid with RGGI funds. These figures are cumulative since program inception in September 2010.<sup>14</sup> Most projects that receive GRBP funding also receive incentives through NYSERDA's New York ENERGY STAR Homes Program, such that the projects' energy savings may not be solely attributable to the GRBP. The GRBP is an important addition to NYSERDA's suite of residential programs, and has helped effectuate energy savings of approximately 6,017 MMBtus of natural gas, 1,172 MMBtus of propane, and 355,009 kWh of electricity through June 30, 2012.

Integral to the GRBP's market transformation approach is the need to increase the awareness of, and demand for, comprehensive building performance services while simultaneously building a network of trained, certified technicians. Through June 30, 2012, 19 technicians have been approved for program participation to verify GRBP building eligibility.

<sup>&</sup>lt;sup>13</sup> Public Authorities Law Section 1872(4) directs NYSERDA to create and administer a green residential building program in New York.

<sup>&</sup>lt;sup>14</sup> Energy savings associated with these incentives and projects are currently captured in the System Benefits Charge and Energy Efficiency Portfolio Standard progress reports and are not represented within this report.

*Solar Thermal Incentive Program.* RGGI funds will support incentives for the installation of solar thermal systems to replace fossil-fuel domestic hot water systems. Incentives will be available for new and existing multifamily and single-family buildings. Incentives also will be fully coordinated with the MPP, HPwES, the New York ENERGY STAR Homes Program, and the Solar Thermal Incentive Program funded by the Renewable Portfolio Standard.

The Program Opportunity Notice for the Solar Thermal Program (PON 2149) was released on December 10, 2010. Currently there are 77 approved installers. NYSERDA has received a total of 76 incentive applications, six of which have since cancelled. The remaining 70 total \$527,738 for RGGI-funded projects. PON 2149 has a total of \$780,935 available for funding incentives. This amount increased from the previous total of \$562,035 due to an additional \$218,900 in unspent funding for PV projects becoming available. This funding will be used for solar thermal units that can displace between 50 and 80 percent of the fossil fuels used to produce domestic hot water.

As of June 30, 2012, 56 solar thermal projects were installed and are anticipated to save a total of 1,345 MMBtu annually.

### 4.1.3 Municipal Water and Wastewater Program

The purpose of the Municipal Water and Wastewater program is to reduce energy use through energyefficiency and process improvement measures. The Municipal Water and Wastewater program offers coordinated assistance designed to achieve cost-effective  $CO_2$  reductions by providing technical support and implementation assistance to existing facilities and new construction projects.

*Wastewater Energy Efficiency Program (WWEP).* The Wastewater Energy Efficiency Program (WWEP) provides a unique opportunity to coordinate RGGI climate change goals and funding with US Environmental Protection Agency (EPA) goals as well as funding while installing infrastructure that will improve the environment and keep New York State waters clean and healthy. This program is comanaged by the New York State Environmental Facilities Corporation (EFC) and NYSERDA. EFC has secured Green Project Reserve Funds offered by the EPA that will bolster efforts to finance water and wastewater infrastructure via the Clean Water State Revolving Fund (SRF) Program. Plants financed through the Green Project Reserve will be constructed energy efficiently, thus minimizing carbon emissions and improving their economic and environmental performance.

WWEP reviews likely Green Project Reserve projects on the SRF Intended Use Plan, and identifies candidates for energy-efficiency and carbon abatement opportunities. Selected projects receive RGGI-funded technical analysis to identify costs and savings associated with energy efficiency, process improvement, and carbon abatement opportunities, as well as Green Project Reserve grants to cost share plant upgrades. WWEP was selected as one of five national recipients of the States Stepping Forward Program Award for excellence by the American Council for an Energy-Efficient Economy.

Through June 30, 2012, NYSERDA and EFC continued to initiate outreach to municipalities in order to discuss the WWEP and the benefits of participation in the program. Cumulatively, RGGI funds supported the technical energy analyses of 53 municipal wastewater treatment plants. Once installed, the measures currently recommended by the analyses are projected to save a total of 38,379 MWh and 54,355 MMBtu annually. One technical energy analysis is ongoing.

### 4.1.4 Industrial Process Improvement Program

The Industrial Process Improvement program is a longer-term initiative that will support development and demonstration of technologies with substantial greenhouse gas (GHG) reduction potential and technologies that are relevant to New York State manufacturing industries and building systems. Funded projects will focus mainly on innovations that reduce the use of fossil fuels, have high replication potential for New York State's manufacturing base, are likely to be cost effective, and are presently not supported under SBC programs. For Industrial Process Improvements, projects will focus on technical innovations, including thermal-efficiency improvements for fossil-fuel based processes and alternative processes that eliminate the use of fossil fuels directly and indirectly for technologies that bring about thermal destruction of byproducts. Projects also may include changes in material input and development of advanced controls provided they directly bring about GHG reductions.

NYSERDA completed a competitive PON for Ultraviolet Light and Electron Beam Process Innovation and Market Transformation (PON 1641) and selected projects for RGGI funding. Twelve proposals were received and RGGI funding was approved for three projects that requested a total of \$888,610. While project contracting was ongoing, two proposers retracted their projects. Consequently, NYSERDA has contracted with the remaining project in the amount of \$547,487.

NYSERDA completed a competitive solicitation (RFP 2413, issued in January of 2012) using a newlyrefined strategy for Accelerating the Commercialization of Industrial Technologies (ACIT) focusing specifically on innovative technologies that have high replication potential for New York's manufacturing base. The program is funded at a \$5 million level, \$3.04 million of which is RGGI funded. Several NYSERDA Research and Development contractors' technologies have been successfully demonstrated, and have existing business and marketing plans, but are not yet accepted by the marketing place. RFP 2413 invited these contractors to conduct multiple full-scale demonstrations of their proposals, with the intention of helping that technology establish a fleet of installations to get its "initial toe hold" in the marketplace, while capturing important lessons learned that will help encourage further replication. To maximize potential benefits to NYS, contractors' technologies are selected competitively based on a range of factors, including, but not limited to: energy and CO<sub>2</sub> reduction potential, technical integrity, economic potential, and replicability. The program requires each industrial demonstration site to involve a NYS engineering consultant, who will serve as a "commissioning agent," involved with the demonstration from start to finish. This requirement is expected to increase project success rate and enhance education and replication opportunities. All commissioning agents and demonstration site staff associated with a specific technology will meet regularly to share lessons learned and develop a "best practices" guidebook to accelerate transition of the technology to NYSERDA deployment programs and direct market uptake. The fleet of demonstrations for a given technology will have staggered starts, thus providing critical opportunity for knowledge to pass from demonstration to demonstration and into the wider marketplace. Aggressive technology transfer that includes testimonials from site personnel and commissioning agents will help establish credibility, minimize risk, and encourage the industrialcustomer base to adopt innovative technologies. Four proposals were received and RGGI funding has been recommended for one project that requested \$1,848,637.

NYSERDA completed the first of two rounds of a competitive solicitation (PON 2414, issued in March 2012) for Innovation in the Manufacturing of Clean Energy Technologies (IMCET) focusing specifically on developing improvements to manufacturing processes that are used to mass-produce clean energy products. IMCET is a strategic companion to NYSERDA's vast efforts to improve performance of clean energy products because it improves their manufacturability in order to produce them in the most efficient manner and thereby lower the cost of goods sold, which improves their market acceptance. The program was initially funded at a \$2.5 million level, and a supplemental fund, consisting of \$1,013,760 of RGGI

funds has been added to support meritorious projects from the first round. Twenty proposals were received for the first round, eight of which were approved for funding, including three that were approved to receive RGGI funds. Approval is based on their associated reductions in GHG emissions, either at the factory where the clean energy product is made, or due to the project's influence on increasing the availability and affordability of the clean energy product and the resultant benefits that accrue when that product is used by customers.

NYSERDA also completed a competitive PON for the Next Generation of Technologies for End-Use Efficiency (PON 1772). PON 1772 sought proposals to develop and demonstrate emerging and innovative technologies or systems that increase the efficiency of end-use energy consumption in buildings, reduce GHG emissions in buildings, reduce energy demand in New York State, or are of strategic importance to the state's energy and environmental future. Nineteen proposals were received, and RGGI funding was approved for four projects that requested a total of \$1,042,381. Project contracting is underway.

### 4.2 Transportation

### 4.2.1 Transportation Research

The goal of the Transportation Research 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.

RGGI funding was used for ten contracts in the transportation arena. These projects range from electric vehicle infrastructure, vehicle components and new fuels, as well as transportation optimization systems for both roadways and airports. Anti-idling systems for NYC ferry boats are also under development. Our most recent contract commercializes a rail car thermal imaging system. Such a system will improve the efficiency and safety of rail by early detection of worn breaks and wheel bearings. NYSERDA has contracted a combined \$1.5 million toward these efforts, and has paid out \$1.0 million to date.

Projects include electric vehicle charging infrastructure, development of products for the management of aircraft departures and taxiing for fuel reduction, biofuels, traffic light control, and fuel reduction in commercial fleets.

## 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 State. 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 and include the 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 State 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.

Through June 30, 2012, the Statewide Photovoltaic Program supported the installation of 363 solar photovoltaic systems with a total capacity of approximately 3,398 kW. It is estimated these systems will produce 4,248 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 has two RGGI-funded focus areas: (1) advanced renewable energy, and (2) carbon capture, recycling, and sequestration. Other advanced power generation systems and technologies may be explored in the future.

Advanced Renewable Energy. The Advanced Renewable Energy component of the APTP supports projects that foster the market introduction of a broad range of promising renewable energy technologies in New York State, including advanced biomass, tidal and off-shore wind technologies.

Five ongoing contracts are assessing renewable power generation technologies, including anti-reflective coatings and nano-conductors for photovoltaic sources, solar thermal generation, and a wind plant analyzer. A completed study has taken stock of small scale hydro sites for NYS with recommendations for further development. \$1.4 million of the approved \$1.7 million has been invoiced in this effort.

Five million dollars of additional funding was approved in June for a new Photovoltaic Manufacturing Consortium (PVMC). A kick off meeting and two technical meetings have already occurred.

In addition, 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 were conducted on behalf of a collaboration among 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 and project siting and development activities.

*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; characterizing and testing the state's geological sequestration potential; and supporting the development of carbon capture and sequestration demonstration projects in New York State.

The TriCarb Consortium for Carbon Sequestration continued project work to identify potential sequestration targets in Rockland County. The project, which is also supported by the U.S. Department of Energy (DOE), is performing a detailed geological analysis of Rockland County's Newark Basin bedrock. Analysis of data and cores taken from the borehole drilling is ongoing.

### 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 State 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.

NYSERDA contracted with five companies for awards through the Renewable, Clean Energy and Energy-Efficiency Product Manufacturing Incentive Program (PON 1176). The program provided a total of \$7.5 million, with the majority of funding tied to manufacturing the defined products in New York State. In addition, NYSERDA selected nine companies to receive targeted business development funds, a total of \$750,000, to support activities such as business plan development, go-to-market strategy, freedom-to-operate analysis, capital raising, supply chain development, quality management system development, or channel development. Also, a small project was contracted to provide linkages between the global investment community and early-stage clean energy technology companies in New York State.

### 4.4.2 Climate Research and Analysis

The Climate Research and Analysis Program supports research studies, demonstrations, policy research and analyses, and outreach and education efforts. Through these activities, the program addresses critical climate change related problems facing the State and the region, including the needs of environmental justice communities.

In the second quarter of 2012 the project entitled, "Responding to Climate Change in New York State" (aka ClimAID) continued to receive significant press, in part because New York State and much of the nation have been experiencing many of the climate-related events identified in the ClimAID report as more likely to occur as a result of a changing climate (extended droughts, higher temperatures, more intense precipitation events). Thirty seven proposals were received this quarter in response to a Program Opportunity Notice issued in the first quarter of 2012 that focused on research related to climate adaptation. Eleven projects have since been approved to proceed to contract. Climate-related research also continues in support of the New York State Energy Plan, and the State's Climate Action Plan<sup>15</sup>.

A research planning meeting was conducted with 20 stakeholders to identify research needs associated with climate change mitigation. A competitive solicitation targeting the identified research needs is planned to be issued in early 2013. A solicitation for a New York State climate change clearinghouse is planned to be issued before the end of 2012.

### 4.4.3 Cleaner Greener Communities

The Cleaner Greener Communities Program was announced by Governor Cuomo in his 2011 State of the State address. It builds on the Climate Smart Communities Program, which provides enhanced support for development and implementation of regional sustainability plans. This ensures that the State's ongoing and substantial investments in infrastructure help to move New York State as a whole, toward a more environmentally sustainable future. The program encourages communities to use public-

<sup>&</sup>lt;sup>15</sup> For more information, see the <u>New York State Climate Action Plan Interim Report</u>

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 emphasizes activities such as revitalizing urban areas through smart growth, creating green jobs, building green infrastructure, and strengthening environmental justice and protection.

The program has two primary components: (1) development of, and updating to, regional sustainable growth plans; and (2) implementation of the sustainability plans. Ten region-specific planning teams have been competitively selected to develop Regional Sustainability Plans, one for each of the ten Regional Economic Development Council regions. Seven regions received awards in the first round of planning grant funding in December 2011 and the remaining three regions received awards in the second round of funding in May 2012. The first regions that were awarded grants began work on their regional sustainability plans in April 2012 and their plans are expected to be completed by the end of 2012. The remaining three regions are expected to complete their plans by the end of the first quarter of 2013. Each team will work closely with their corresponding Regional Economic Development Council(s) to ensure that the region's sustainability goals are coordinated with their Regional Economic Development Plans.

The implementation component of the program is currently being designed and is expected to launch in 2013 after the regional plans have been completed. Support will be provided for competitively selected 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 (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). Approximately 90 percent of the incentives budget will be used to support the implementation component of the program.

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

To date, all ten regions have been awarded grants for the development of, and updating to, regional sustainability plans.

*Climate Smart Communities*. The Climate Smart Communities (CSC) Program was established in 2009 by the State Departments of Environmental Conservation (DEC) and State (DOS), the Public Service Commission (PSC), and NYSERDA. It operates under the joint management of DEC and NYSERDA. The CSC Program was designed to strengthen and enhance the participating agencies' outreach to local governments (counties, towns, villages, and cities). NYSERDA has six firms under contract to provide technical assistance services through the CSC Regional Coordinators Pilot Program. These firms engage local communities in climate action planning, greenhouse gas emissions inventories, energy conservation, use and encouragement of low-carbon energy, improved waste management, reduction of transportation emissions, and adaptation to climate change through land-use and other planning. The technical assistance services kicked off in the second quarter of 2012 and will continue for a contract period of up to three years.

*Energy \$mart Communities.* The Energy \$mart Communities (E\$C) Program has established partnerships throughout the State, facilitated by E\$C Coordinators to perform outreach and education, as well as to promote program opportunities to residents, businesses, institutions and governments within their region. The E\$C network has been successful in educating New Yorkers about the role that energy efficiency and renewable power can play in reducing energy costs and providing clean, reliable energy for homes, schools and workplaces. The emphasis of the program will shift to support Governor Cuomo's

Regional Economic Development Council initiative by aligning the program territories geographically and providing direct support to advance the strategic priorities and regionally significant projects identified in the region. Through this new alignment with the Regional Councils, NYSERDA can provide a greater level of education and adoption of energy-efficiency practices at the community level. Through June 30, 2012, the E\$C network has facilitated over 600 meetings, referrals or projects; created 89 partnerships; and participated in 251 community events that have resulted in increased awareness and participation. E\$C is supported jointly with RGGI and SBC funds. NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce their reliance on fossil fuels. NYSERDA professionals work to protect our environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975.

To learn more about NYSERDA programs and funding opportunities visit nyserda.ny.gov

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State of New York Andrew M. Cuomo, Governor

## New York's RGGI-Funded Programs Status Report

Quarter Ending June 30, 2012

**New York State Energy Research and Development Authority** Francis J. Murray, Jr., President and CEO