

New York State Energy Research and Development Authority

# Green Jobs – Green New York August 2014 Monthly Update

Period ending August 30, 2014



# **Table of Contents**

2 Outreach and Marketing 2.1 Outreach Activities 2.2 Marketing Activities 3 One- to Four-Family Residential Buildings Program 3.1 Home Performance with ENERGY STAR® Assessments 3.2 Home Performance with ENERGY STAR® Projects 3.3 One- to Four-Family Residential Buildings Financing. 4 Multifamily Energy Performance Program 4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects 4.3 Multifamily Energy Performance Financing. 5 Small Commercial Energy Efficiency Program 5.1 Small Commercial Energy Efficiency Program 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing		Workforce Development	3
2.1 Outreach Activities  2.2 Marketing Activities  3 One- to Four-Family Residential Buildings Program  3.1 Home Performance with ENERGY STAR® Assessments  3.2 Home Performance with ENERGY STAR® Projects  3.3 One- to Four-Family Residential Buildings Financing  4 Multifamily Energy Performance Program  4.1 Multifamily Energy Performance Assessments  4.2 Multifamily Energy Performance Projects  4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Projects  5.2 Small Commercial Energy Efficiency Projects  5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	٦	Training Program Updates	3
2.2 Marketing Activities  3 One- to Four-Family Residential Buildings Program  3.1 Home Performance with ENERGY STAR® Assessments 3.2 Home Performance with ENERGY STAR® Projects 3.3 One- to Four-Family Residential Buildings Financing.  4 Multifamily Energy Performance Program 4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects 4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Assessments 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	2	Outreach and Marketing	4
3 One- to Four-Family Residential Buildings Program 3.1 Home Performance with ENERGY STAR® Assessments 3.2 Home Performance with ENERGY STAR® Projects. 3.3 One- to Four-Family Residential Buildings Financing.  4 Multifamily Energy Performance Program 4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects. 4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program 5.1 Small Commercial Energy Efficiency Assessments 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing 6 Evaluation	2	2.1 Outreach Activities	4
3.1 Home Performance with ENERGY STAR® Assessments 3.2 Home Performance with ENERGY STAR® Projects 3.3 One- to Four-Family Residential Buildings Financing  4 Multifamily Energy Performance Program 4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects 4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program 5.1 Small Commercial Energy Efficiency Assessments 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	2	2.2 Marketing Activities	5
3.2 Home Performance with ENERGY STAR® Projects.  3.3 One- to Four-Family Residential Buildings Financing.  4 Multifamily Energy Performance Program.  4.1 Multifamily Energy Performance Assessments.  4.2 Multifamily Energy Performance Projects.  4.3 Multifamily Energy Performance Financing.  5 Small Commercial Energy Efficiency Program.  5.1 Small Commercial Energy Efficiency Assessments.  5.2 Small Commercial Energy Efficiency Projects.  5.3 Small Commercial Energy Efficiency Financing.	3	One- to Four-Family Residential Buildings Program	6
3.3 One- to Four-Family Residential Buildings Financing.  4 Multifamily Energy Performance Program.  4.1 Multifamily Energy Performance Assessments.  4.2 Multifamily Energy Performance Projects.  4.3 Multifamily Energy Performance Financing.  5 Small Commercial Energy Efficiency Program.  5.1 Small Commercial Energy Efficiency Assessments.  5.2 Small Commercial Energy Efficiency Projects.  5.3 Small Commercial Energy Efficiency Financing.  6 Evaluation.	3	3.1 Home Performance with ENERGY STAR® Assessments	6
4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects 4.3 Multifamily Energy Performance Financing 5 Small Commercial Energy Efficiency Program 5.1 Small Commercial Energy Efficiency Assessments 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing 6 Evaluation	3	3.2 Home Performance with ENERGY STAR® Projects	7
4.1 Multifamily Energy Performance Assessments 4.2 Multifamily Energy Performance Projects 4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Assessments 5.2 Small Commercial Energy Efficiency Projects 5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	3	3.3 One- to Four-Family Residential Buildings Financing	8
4.2 Multifamily Energy Performance Projects  4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Assessments  5.2 Small Commercial Energy Efficiency Projects  5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	ļ	Multifamily Energy Performance Program	16
4.3 Multifamily Energy Performance Financing  5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Assessments  5.2 Small Commercial Energy Efficiency Projects  5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	4	4.1 Multifamily Energy Performance Assessments	16
5 Small Commercial Energy Efficiency Program  5.1 Small Commercial Energy Efficiency Assessments  5.2 Small Commercial Energy Efficiency Projects  5.3 Small Commercial Energy Efficiency Financing  6 Evaluation	4	4.2 Multifamily Energy Performance Projects	17
5.1 Small Commercial Energy Efficiency Assessments     5.2 Small Commercial Energy Efficiency Projects     5.3 Small Commercial Energy Efficiency Financing      6 Evaluation	4	4.3 Multifamily Energy Performance Financing	18
5.2 Small Commercial Energy Efficiency Projects     5.3 Small Commercial Energy Efficiency Financing      Evaluation	5	Small Commercial Energy Efficiency Program	19
5.3 Small Commercial Energy Efficiency Financing	5	5.1 Small Commercial Energy Efficiency Assessments	19
6 Evaluation	5	5.2 Small Commercial Energy Efficiency Projects	20
	5	5.3 Small Commercial Energy Efficiency Financing	20
Evaluation Activities Currently Underway	;	Evaluation	21
=	E	Evaluation Activities Currently Underway	21



# List of Figures

U		
	. CBO Monthly Percentage of Overall GJGNY Completed Assessments, Quarterly 4	
Figure 2-2	. CBO Percentage of Monthly GJGNY Unit Completions, Quarterly 4	
Figure 3-1	. Home Performance with ENERGY STAR Completions, Quarterly11	
Figure 3-2	. Green Jobs-Green New York Financing Applications Received, Quarterly12	)
Figure 3-3	. Green Jobs-Green New York Financing Loans Issued by Type, Quarterly12	)
Figure 3-4	. Green Jobs-Green New York Financing Loans Issued by Tier, Quarterly13	,
Figure 3-5	. Green Jobs-Green New York Financing Loans Denied by Type, Quarterly13	,
	. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio, by	+
•	. Green Jobs-Green New York Financing Percentage by Applications Denied, Comparative	
	<sup>t</sup> Tables	
Table 3-1.	Home Performance with ENERGY STAR Assessments	_
	Home Performance with ENERGY STAR Assessments	
Table 3-2.		3
Table 3-2. Table 3-3.	Home Performance with ENERGY STAR Projects	)
Table 3-2. Table 3-3. Table 3-4.	Home Performance with ENERGY STAR Projects	}
Table 3-2. Table 3-3. Table 3-4. Table 3-5.	Home Performance with ENERGY STAR Projects	3
Table 3-2. Table 3-3. Table 3-4. Table 3-5. Table 4-1.	Home Performance with ENERGY STAR Projects	3
Table 3-2. Table 3-3. Table 3-4. Table 3-5. Table 4-1. Table 4-2.	Home Performance with ENERGY STAR Projects	3
Table 3-2. Table 3-3. Table 3-4. Table 3-5. Table 4-1. Table 4-2. Table 4-3.	Home Performance with ENERGY STAR Projects	3 3
Table 3-2. Table 3-3. Table 3-4. Table 3-5. Table 4-1. Table 4-2. Table 4-3. Table 5-1.	Home Performance with ENERGY STAR Projects 8 One- to Four-Family Residential Buildings Financing Details 10 Green Jobs-Green New York Financing Summary 11 Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy 15 Multifamily Energy Performance Assessments 16 Multifamily Energy Performance Project 17 Multifamily Energy Performance Financing 18	



# **Program Description**

Green Jobs – Green New York provides funding for energy assessments, low-cost financing for energy upgrades, and technical and financial support to develop a clean energy workforce. GJGNY is a statewide effort to strengthen communities through energy efficiency and uses constituency-based organizations to support program outreach in underserved communities. GJGNY enables New Yorkers to make a significant difference in homes, businesses and neighborhoods—making them more comfortable, more sustainable, and more economically sound. GJGNY is administered by NYSERDA and made available by the <a href="Green Jobs">Green Jobs</a> – Green New York Act of 2009.



## 1 Workforce Development

The Green Jobs – Green New York Program supports a broad range of education and training programs aimed at creating an experienced green collar workforce. This workforce will have the relevant skills and credentials needed to support New York State's growing clean energy economy. The workforce training programs help meet the demand for energy efficiency and renewable energy measures and technologies. Through public-private partnerships, Workforce Development Programs fund the development and delivery of cutting-edge training programs, and provide financial support to those who wish to pursue new career training, professional certifications and critical on-the-job training.

### **Training Program Updates**

#### **Clean Energy Technical Training**

Through August 2014, NYSERDA's GJGNY training partners have trained more than 1,500 individuals in courses including solar thermal installation, advanced air sealing, pressure diagnostics, BPI Basic Air Sealing and Insulation, and thermography. Training partnerships include public and private educators, professional associations, and not-for-profits. GJGNY training will continue through 2014.

LaGuardia Community College recently delivered its first round of U.S. Green Building Council Green Professional (GPRO) training to 24 Spanish-speaking New Yorkers. The training was recently translated and is the first Spanish language GPRO course ever delivered.

#### **On-the-Job Training for Clean Energy**

NYSERDA partners with businesses seeking incentives to hire and provide on-the-job training (OJT) for green workers. On-the-job training assists in developing a workforce equipped to implement energy efficiency, weatherization, green building principles, renewable energy, and advanced technology system design and installation. This initiative is designed to advance the skills of new and existing workers, provide job-related experience, and connect new workers to employers.

NYSERDA has executed on-the-job training agreements with 42 businesses seeking to hire new employees or advance incumbent workers under GJGNY. Through July 2014, 159 people have been hired from NYS Department of Labor's (NYSDOL) New York State Career Centers (formerly NYSDOL One Stop Centers) lists, and 13 incumbent workers have been advanced due to training. Approximately \$1.33M in wage and training subsidies has been awarded. The average wage of workers hired under the program is \$16.39 per hour.



# 2 Outreach and Marketing

GJGNY Outreach and Marketing provides for community-based outreach, enabling one-on-one assistance with the process of participating in the GJGNY Program. This, combined with both print and electronic statewide marketing initiatives, increases the reach of the program, particularly among disadvantaged populations and those not traditionally participating in energy-efficiency programs.

#### 2.1 Outreach Activities

Community-based organizations (CBOs) continue to assist customers to access the Home Performance with ENERGY STAR program (HPwES) offered through Green Jobs-Green New York. Through August 2014, CBOs are responsible for 4,183 completed assessments resulting in 1125 completed retrofits. Approximately 49 percent of those retrofits were for Assisted HPwES customers who have a household income of less than 80 percent of the county median income.

Figure 2-1. CBO Percentage of GJGNY Completed Assessments.

Figure 2-1 provides percentages of GJGNY residential assessment completions by quarter that were initiated by CBOs.

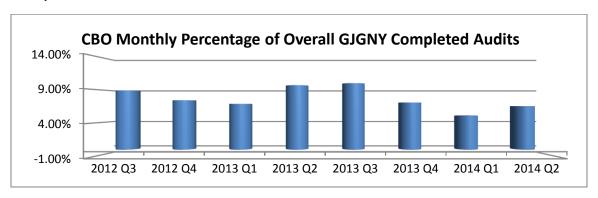
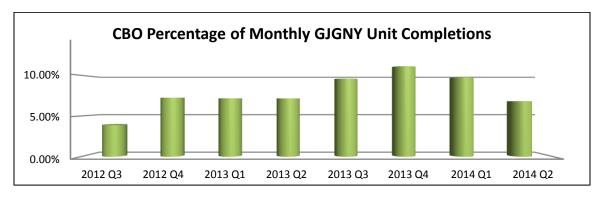


Figure 2-2. CBO Percentage of GJGNY Unit Completions.

Figure 2-2 provides percentages of project (by number of units) completions by quarter that were initiated by CBOs.





#### **Energy Champions Referral Program**

In an effort to address the New York City market for Home Performance, an Energy Champions Referral Program was developed by the NYSERDA Outreach Program. Under the program, the four NYC-based CBOs (El Puente, Neighborhood Housing Services of Jamaica, Neighborhood Housing Services of Staten Island, and Sustainable South Bronx) will allow individuals to become "Energy Champions" and nonprofits to become "Energy Champion Partner Organizations" and refer homeowners into the Home Performance with ENERGY STAR® (HPwES) Program. Energy Champions as well as Partner Organizations will receive monetary as well as non-monetary benefits from the Home Performance contractor for successfully recruiting homeowners who complete a retrofit. During August, five organizations signed up to become Energy Champion Partner Organizations and nine other organizations have expressed interest. An Energy Champions Launch Party is tentatively scheduled for October 7, 2014 at the Urban Future Lab in downtown Brooklyn, sponsored by Home Performance contractors.

#### **CBO Bonus Payment**

Per GJGNY Outreach Program, Round 2 Solicitation (Request for Proposals 2773), CBO contracts are being modified to allow for a 15 percent bonus payment. CBOs can earn up to 15 percent of their total contract award for meeting specific retrofit goals. To date, six CBOs have reached at least the first goal threshold. Those CBOs include Public Policy Education Fund of the Sothern Tier, Rural Ulster Preservation Company, Affordable Housing Corporation of the Capital District, El Puente, Neighborhood Housing Services of Staten Island, and PUSH Buffalo.

#### **CBO Meetings**

A Downstate CBO convening was held on August 14, 2014. Topics included: An Introduction to Julie Caracino, NYSERDA's new downstate liaison for the GJGNY program; Energy Champions Referral Program Check-in; and a presentation on the Green Jobs Training Center, including discussion about outreach collaboration.

On August 19, 2014, CBOs working with GJGNY met with John Rhodes, NYSERDA's president and CEO. The purpose of the meeting was to discuss the potential to develop a formal process for discussing low-income issues with NYSERDA. Several potential avenues were discussed and a follow-up meeting is planned for early November.

### 2.2 Marketing Activities

Due to recent program and NYSERDA website changes, a review of CBO websites has been conducted to ensure that all information about NYSERDA's programs is up-to-date and any related links are live.

Ongoing print marketing initiatives include the production and distribution of brochures and related promotional materials intended to expand the reach of the Green Jobs-Green New York Program. Ongoing electronic marketing initiatives include the initiation and maintenance of a CBO Locator webpage that assists customers in finding a participating CBO in their region.



# 3 One- to Four-Family Residential Buildings Program

NYSERDA's Home Performance with ENERGY STAR® (HPwES) program offers homeowners in New York State a comprehensive, whole-house approach to improving energy efficiency and home comfort while saving money. Participating Home Performance contractors accredited by the Building Performance Institute (BPI) conduct energy assessments and upgrades. Income-qualified homeowners are eligible for additional incentives to make energy improvements.

# 3.1 Home Performance with ENERGY STAR® Assessments

Through August 2014, from the 72,945 approved assessment applications, 58,417 (80 percent) assessments have been completed. The conversion rate from assessment to HPwES project is 31.4 percent. The average cycle time between assessment completion and project completion is 110 days.

On July 14, 2014, NYSERDA released a revised and streamlined version of the HPwES home energy assessment application as a result of the Early Wins for Home Performance initiative. (See the GJGNY May 2014 Monthly Update, page 5, for details.) As a result, there has been a significant increase in the number of audit applications submitted online versus hardcopy applications submitted. Online audit application submissions have increased from 50 percent of total applications received to 70 percent of total applications received. The time it takes for a customer to obtain a reservation number after an application submission has decreased from a couple of days to a couple of hours.



Table 3-1. Home Performance with ENERGY STAR Assessments.

Table 3-1 provides HPwES monthly and cumulative assessment figures.

Timefra	me	CBO Initiated since 11/1/11	GJGNY Totals since 11/15/10 <sup>a</sup>		
	Received Assessment A	Applications			
Augus	t	156	2,379		
Program to	Date	6,406	76,833		
Average # of Applications Re	ceived per Month	188	1,689		
	Approved Assessment	Applications			
	Free				
Augus	t	175	2,160		
Program to	Date	5,741	67,320		
	Reduced Cos	t			
Augus	t	6	161		
Program to	Date	331	5,625		
Total Approved Assessment	Applications	6,072	72,945		
Average # of Applications Ap	proved Per Month	179	1,603		
	Scheduled Assess	ments			
Scheduled Assessments as o	of End of Current Month	496	3,877		
	Completed Assess	sments			
	Free				
	August	93	1,275		
Goal: (77,500-Audits)	Program to Date	3,957	54,078		
Budget: (\$19,396,000)		Reduced Cost			
	August	2	98		
	Program to Date	226	4,339		
Total Completed Assessment	ts	4,183	58,417		
Assessment Funds Invoiced	to Date		\$14,830,900		
<sup>a</sup> GJGNY totals since 11/15/10 are inc.	lusive of CBO initiated activities				

# 3.2 Home Performance with ENERGY STAR® Projects

Of the 15,864 projects completed through HPwES resulting from a GJGNY assessment and/or GJGNY financing, 10,899 (69 percent) units are associated with market rate customers and 4,965 (31 percent) units are associated with income-qualified customers who have a household income of less than 80 percent of the county median income.

In August 2014, there were 401 HPwES project completions. Of the 401 HPwES project completions, 365 (91 percent) were associated with a GJGNY assessment or loan. Thirty-three percent of the August GJGNY HPwES project completions were for income-qualified customers who have a household income of less than 80 percent of the county median income.



Table 3-2. Home Performance with ENERGY STAR Projects.

Table 3-2 provides HPwES monthly and cumulative project figures.

Timeframe	CBO Initiated since 11/1/11	GJGNY Totals since 11/15/10a	HPwES Totals since 11/15/10b						
	Projects Contracted								
To Date	1,169	15,983	NA						
	Completed Projects/Units <sup>c</sup>								
	Ass	isted							
August	9 / 12	120 / 127	133 / 140						
Program to Date	455 / 551	4,965 / 5,271	8,277 / 8,690						
	Marke	et Rate							
August	10 / 10	245 / 246	268 / 270						
Program to Date	533 / 574	10,899 / 11,034	15,094 / 15,283						
Total Completed Projects/Units (Project Goal: 25,000)	988 / 1125	15,864 / 16,305	23,371 / 23,973						

<sup>&</sup>lt;sup>a</sup> Projects completed resulting from a GJGNY Assessment and/or GJGNY Financing.

## 3.3 One- to Four-Family Residential Buildings Financing

GJGNY provides two loan options for consumers: On-Bill Recovery (OBR) loans, which enable customers to make payments through their utility bills; and Smart Energy loans, unsecured loans that are paid back directly to NYSERDA's loan servicing contractor. Both loans offer expanded credit qualification criteria (Tier 2) enabling some applicants who would not qualify for a loan based on more traditional criteria (Tier 1) to qualify for GJGNY loans.

On August 1, 2014, NYSERDA launched GJGNY Residential Financing to support solar electric projects in PSEG-Long Island's Solar Pioneer Program. A webinar was held on August 6 by PSEG-Long Island, Energy Finance Solutions and NYSERDA solar program and financing staff to introduce contractors to the financing process and materials. On August 13, the NY-Sun Incentive Program began and combined NYSERDA's existing solar electric solicitation (Program Opportunity Notice 2112) with PSEG-Long Island's Solar Pioneer Program under a single statewide offering using the Megawatt (MW) block structure.

Of the 5,952 Residential GJGNY Loans closed to date, 28 percent are for Assisted HPwES customers, representing 21.4 percent of the total funds; while 72 percent are for Market Rate customers representing 78.6 percent of the total funds; 9.7 percent are Tier 2 customers, representing 9.3 percent of the total funds, while 90.3 percent are Tier 1

b Total HPwES including GJGNY Projects.

c Projects completed and units served resulting from GJGNY.



customers representing 90.7 percent of the funds. Of the loans closed for Assisted HPwES customers, 79.9 percent are Tier 1 loans, while 20.1 percent are Tier 2.

Since the launch of On-Bill Recovery, 32.6 percent of the Assisted HPwES customers who access financing use OBR Loans, while 38.9 percent of the Market Rate HPwES customers who access financing use OBR Loans; 32.9 percent of Tier 2 customers use OBR Loans while 38 percent of Tier 1 customers use OBR Loans.



Table 3-3. Green Jobs-Green New York Financing Details.

Table 3-3 provides cumulative details of the Green Jobs-Green New York financing program.

GJGNY Loan Type	Applications Received (number)	Applications Approved (number)	Loans Closed (number)	Loans Closed (dollars)	Loans Awaiting Closing (number)	Loans Awaiting Closing (dollars)
EE Smart Energy Loan	9,140	6,226	4,113	\$38,135,806	325	\$3,455,792
EE On-Bill Recovery Loan	6,261	3,723	1,801	\$19,441,568	240	\$3,167,506
Total	15,401	9,949	5,914	\$57,577,374	565	\$6,623,297
PV Smart Energy Loan	374	328	28	\$481,792	105	\$1,915,034
PV On-Bill Recovery Loan	443	333	10	\$150,809	44	\$603,930
Total	817	661	38	\$632,600	149	\$2,518,963
EE & PV Smart Energy Loan	28	21	0	\$0	2	\$31,392
EE & PV On-Bill Recovery Loan	108	61	0	\$0	7	\$96,813
Total	136	82	0	\$0	9	\$128,204
Grand Total	16,354	10,692	5,952	\$58,209,974	723	\$9,270,465



Table 3-4. Green Jobs-Green New York Financing Summary.

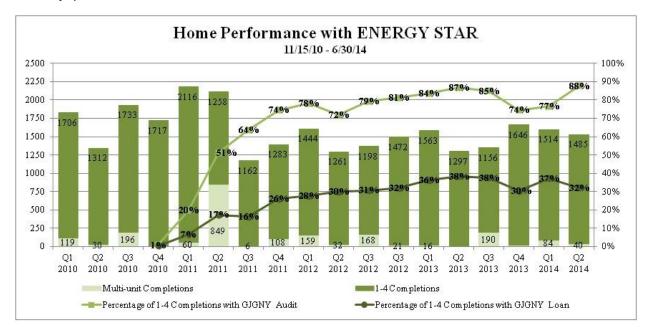
Table 3-4 provides a cumulative summary of Smart Energy Loan and On-Bill Recovery Loan activity.

Smart E	Energy	Financing Summary	On-Bill R	ecovery
Tier 1	Tier 2	i mancing Summary	Tier 1	Tier 2
3,734	407	Loans Closed*	1,641	170
\$34,872,622	\$3,744,975	Value*	\$17,935,566	\$1,656,811
\$9,339	\$9,201	Average Loan*	\$10,930	\$9,746
12.6 Years	13.6 Years	Average Term*	14.6 Years	14.4 Years
N/A	N/A	2.99%	52.41%	51.76%
82.83%	79.36%	3.49%*	47.59%	48.24%
17.17%	20.64%	3.99%*	N/A	N/A
73.8	73.84% Approval Rate**		70.0	6%
19.34%		Denial Rate**	23.93%	
6.82	2%	Denied Tier 1, didn't pursue Tier 2**	6.0	1%

<sup>\*</sup> Refers to loans originated and closed by EFS (loan originator). The number and value of OBR Loans varies from Concord's (loan servicer) report due to timing issues and the treatment of successor loans.

Figure 3-1. Home Performance with ENERGY STAR Completions, Quarterly.

Figure 3-1 illustrates trends in HPwES project completions associated with GJGNY assessments and loans, by quarter.



<sup>\*\*</sup> Does not include applications pending review or withdrawn.



Figure 3-2. Green Jobs-Green New York Financing Applications Received, Quarterly.

Figure 3-2 illustrates the rate of applications received for GJGNY Smart Energy Loans and GJGNY On-Bill Recovery Loans, by quarter.

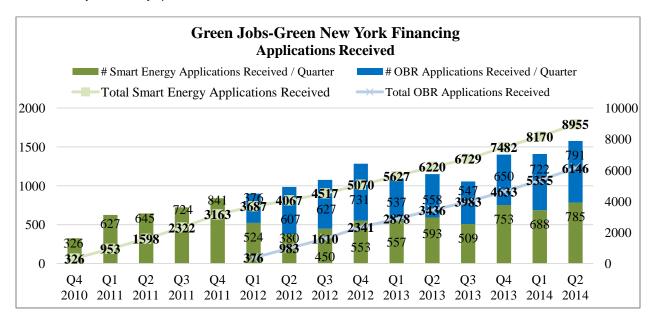


Figure 3-3. Green Jobs-Green New York Financing Loans Issued by Type, Quarterly.

Figure 3-3 illustrates the rate of loans issued for GJGNY Smart Energy Loans and GJGNY On-Bill Recovery Loans, by quarter.

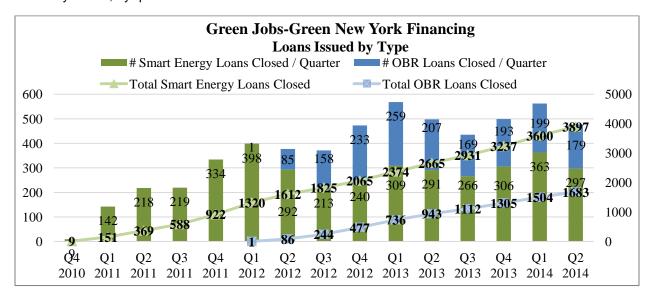




Figure 3-4. Green Jobs-Green New York Financing Loans Issued by Tier, Quarterly.

Figure 3-4 illustrates trends in GJGNY loans issued, distinguished between Tier 1 and Tier 2 loans, by quarter.

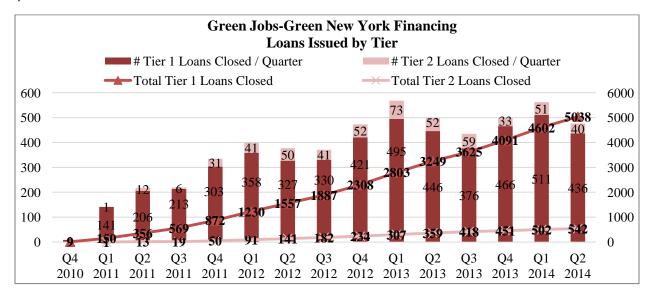


Figure 3-5. Green Jobs-Green New York Financing Loans Denied by Type, Quarterly.

Figure 3-5 illustrates trends in GJGNY loan denials, distinguished between Smart Energy Loans and On-Bill Recovery Loans, by guarter.

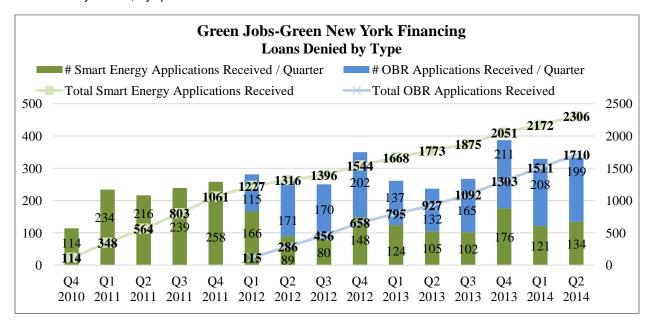




Figure 3-6. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio, by Region.

Table 3-6 illustrates regional differentiation for received GJGNY loan applications and loan denial rates.

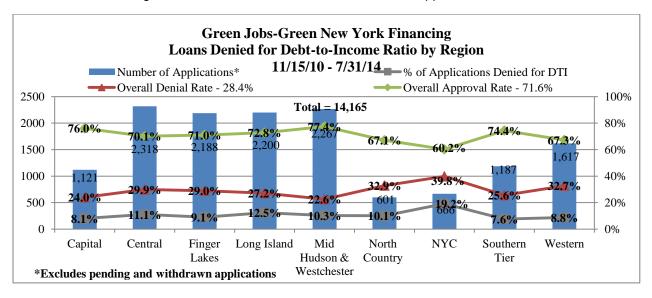
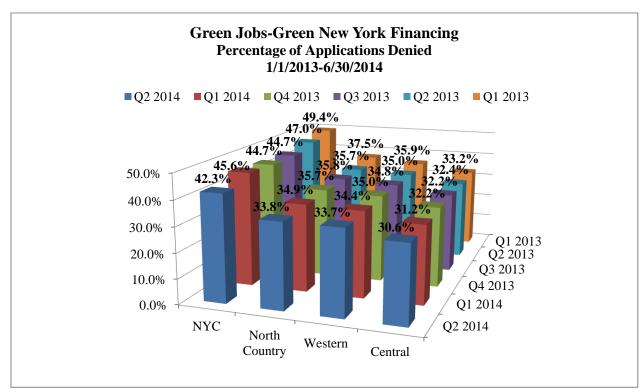


Figure 3-7. Green Jobs-Green New York Financing Percentage of Applications Denied, comparative by quarter.

Figure 3-7 illustrates comparative quarterly changes in loan denial rates. The four regions displayed represent those with the highest denial rates in the program.





#### Table 3-5. Green Jobs-Green New York Financing Loans Transferred from OBR to Smart Energy.

NYSERDA allows applicants whose projects are unable to meet the cost-effectiveness requirements of the On-Bill Recovery (OBR) loan product transfer to the Smart Energy loan product. Table 3-5 illustrates the transfer activity between the On-Bill Recovery and Smart Energy loan products. In August 2014, 48 loans were transferred from OBR to Smart Energy. Over the life of the program, 14.9 percent of preapproved OBR loans were transferred to Smart Energy loans.

Smart Energy Loan Status	Cumulative Number of Loans
Pre-Approved	65
Loan Approved	90
Loan Sold	502
Loan Withdrawn	59
Loan Denied	7
No Loan - Subsidy Only	24
Total Number of Loans Transferred	747



# 4 Multifamily Energy Performance Portfolio

NYSERDA offers a portfolio of programs and incentives for owners, facility managers, developers, and condo/coop boards of multifamily buildings with five or more units in New York State. NYSERDA's programs make it easier to assess, fund, implement, and measure energy efficiency upgrades that improve building performance and save money.

### 4.1 Multifamily Energy Performance Assessments

Through August 2014, from the 333 approved assessment applications, 304 (91 percent) assessments have been completed.

Table 4-1. Multifamily Energy Performance Assessments.

Table 4-1 provides Multifamily Performance monthly and cumulative assessment figures.

Metric		August		Cumulative			
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	Budget/ Goal
Received Assessment Applications**	-2	-1	-3	193	140	333	
Approved Assessment Applications**	-2	-1	-3	193	140	333	500
Assessment Funds Encumbered (\$)**	-\$9,500	-\$6,720	-\$16,220	\$2,342,960	\$1,120,987	\$3,463,947	
Assessment Funds Invoiced (\$)	\$31,650	\$107,900	\$139,550	\$1,291,100	\$694,930	\$1,986,030	\$3,000,000
Completed Assessments	0	1	1	170	134	304	400
Number of Projects withdrawing from MPP after assessment*	0	0	0	17	29	46	

<sup>\*</sup>MPP Projects must achieve a minimum of 15% in energy savings. Projects may choose to proceed outside MPP. Some may chose smaller work scopes which will not achieve program standard and thus not be eligible for MPP and some may elect to access utility incentives. If energy efficiency projects are completed, building owners that have an authorized assessment would still be eligible to apply for GJGNY financing. \*\*Decreases reported in received assessment applications, approved assessment applications, and assessment funds encumbered are due to projects that have dropped out of the program.



### **4.2 Multifamily Energy Performance Projects**

Through August 2014, the Multifamily Energy Performance Program has completed 32,894 housing units with installed measures. Of those units with installed measures, 15,539 (47 percent) are associated with affordable housing.

**Table 4-2. Multifamily Energy Performance Projects.** 

Table 4-2 provides Multifamily Performance monthly and cumulative project figures.

Metric	August			Cumulative			
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	
Projects in Pipeline* **	-2	-1	-3	193	140	333	
Projects Contracted to have Measures Installed**	-2	-1	-3	193	140	333	
Households Associated with Projects Contracted**	-150	-128	-278	32,785	32,817	65,602	
Projects with Installed Measures (units)	3,822	7,016	10,838	15,539	17,355	32,894	
kWh Savings of Installed Measures**	-47,508	-429,696	-477,204	13,810,878.6	4,103,148.2	17,914,027	
MMBtu Savings of Installed Measures**	-145	4,207	4,062	198,280.1	177,455.9	375,736	
Dollar Savings of Installed Measures	\$3,537,501	\$4,176,675	\$7,714,176	\$9,611,178	\$7,147,540	\$16,758,718	

<sup>\*</sup>Projects that receive GJGNY-supported assessments and/or financing may also receive incentives through the System Benefits Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Regional Green House Gas Initiative (RGGI), and/or utility programs, such that the projects' energy savings may not all be attributable solely to GJGNY.

<sup>\*\*</sup> Decreases reported in projects in pipeline, projects contracted to have measures installed, households associated with projects contracted, and installed savings are due to projects that have dropped out of the program.



## 4.3 Multifamily Energy Performance Financing

As of August 2014, the Multifamily Performance Program has closed 16 loans with a total value of \$10,520,238. NYSERDA's share of that total loan value is \$3,438,883.

#### Table 4-3. Multifamily Energy Performance Financing.

Table 4-3 provides Multifamily Performance monthly and cumulative financing figures.

Loan Status	August			Cumulative			
	Number	NYSERDA Share of Total Loan Value	Total Loan Value	Number	NYSERDA Share of Total Loan Value	Total Loan Value	
Participation Agreements Approved	0	\$0	\$0	21	\$4,403,520	\$9,243,689	
Loans Closed	1	\$463,275	\$926,550	16	\$3,438,883	\$10,520,238	



# 5 Small Commercial Energy Efficiency Program

NYSERDA's Small Commercial Energy Efficiency Program offers financial and technical assistance to help small businesses and not-for-profit organizations improve their energy efficiency and reduce their energy costs. This program offers free assessments to help identify economically viable improvements, (e.g. lighting, motors or thermostats) that may yield substantial annual energy savings and two low-interest loan options to finance energy efficiency projects. The first one is On-Bill Recovery Financing, which makes it possible for small businesses and nonprofits to use the savings on their energy bills to pay for their energy efficiency upgrades. The second one is the Participation Loan, where NYSERDA partners with lenders across New York State to help small businesses and nonprofits access low-interest financing for energy efficiency improvements.

The Small Commercial Energy Efficiency Program continues to improve processes and services that enable Program participants to increase project installations resulting from energy assessments. This includes improving the communication of energy assessment results to small business and nonprofit customers, providing additional follow-up services to support implementation, and increasing outreach to lenders in order to raise lender awareness and increase lender participation in Small Commercial Energy Efficiency Financing made available by GJGNY. In addition, eligible small business and not-for-profit customers participating in NYSERDA's NY-Sun Solar PV Incentive Program can now access low-interest GJGNY financing to install solar PV systems of up to 200 kW.

### 5.1 Small Commercial Energy Efficiency Assessments

Through August 2014, the Small Commercial Energy Efficiency Program has received 3,342 assessment applications. Of those received applications, 3,018 (90 percent) have resulted in completed assessments.

Table 5-1. Small Commercial Energy Efficiency Assessments.

Table 5-1 provides Small Commercial Energy Efficiency monthly and cumulative assessment figures.

Metric		August			Program Cumulative		
	GJGNY	ARRA*	Monthly Total	GJGNY	ARRA*	Program Total	
Received Assessment Applications	26	0	26	2,408	934	3,342	
Completed Assessments	36	0	36	2,169	849	3,018	

<sup>\*</sup>The GJGNY Act of 2009 restricts the provision of GJGNY-funded energy assessments to small business and not-for-profit organizations with 10 employees or less. American Recovery and Reinvestment Act of 2009 (ARRA) funds were used for eligible small business and not-for-profit organizations that have more than ten employees. ARRA funding expired on September 30, 2013.



### 5.2 Small Commercial Energy Efficiency Projects

Through August 2014, the Small Commercial Energy Efficiency Program estimates 604 project completions as a result of GJGNY funded assessments.

#### Table 5-2. Small Commercial Energy Efficiency Projects.

those that used ARRA funds referenced in Table 5-1 above.

Table 5-2 provides Small Commercial Energy Efficiency monthly and cumulative project figures.

Metric	August	GJGNY Program Cumulative					
Estimated Projects Completed*	7	604					
*NYSERDA conservatively estimates that twenty percent of energy efficiency improvements recommended on energy assessments are implemented by small business and not-for-profit customers. Estimated projects completed are inclusive of							

### 5.3 Small Commercial Energy Efficiency Financing

Through August 2014, the Small Commercial Energy Efficiency Program has closed 11 loans with a total value of \$577,225. NYSERDA's share of that total loan value is \$300,883.

#### Table 5-3. Small Commercial Energy Efficiency Financing.

Table 5-3 provides Small Commercial Energy Efficiency monthly and cumulative financing figures.

Loan Status	August			Program Cumulative		
	Number	NYSERDA Share of Total Loan Value	Total Loan Value**	Number	NYSERDA Share of Total Loan Value	Total Loan Value**
Applications Approved*						
Participation Loans	1	\$46,600	\$93,200	31	\$613,996	\$1,238,996
On-Bill Recovery	1	\$50,000	\$50,000	19	\$614,834	\$614,834
Loans Closed						
Participation Loans	0	\$0	\$0	9	\$237,563	\$513,905
On-Bill Recovery	0	\$0	\$0	2	\$63,320	\$63,320
Total	0	\$0	\$0	11	\$300,883	\$577,225

The Small Commercial Energy Efficiency Financing Program has 11 participating lenders.

<sup>\*</sup> Customer applications are assessed for both Participation Loan and On-Bill Recovery Loan eligibility prior to approval. Approved application values are inclusive of loans that have moved forward to closure.

<sup>\*\*</sup>The total loan value represents the total value of the loan issued by the lender to the borrower. The total loan value may include financing for non-energy efficiency projects. NYSERDA's share of the total loan value represents 50 percent of the total energy efficiency project cost or \$50,000, whichever is less.



### 6 Evaluation

The overarching goals of Evaluation are to provide objective and credible information that supports optimum program operation and outcomes, as well as program accountability. Three major types of evaluation are implemented for the GJGNY program. Process evaluation provides information to support program operations by addressing program efficiency and effectiveness, satisfaction and barriers to participation, among other issues. Impact evaluation provides information to help understand actual program impact and improve energy impact estimates, including economic, environmental, and non-energy benefits; in doing so it supports program accountability. Market evaluation also provides information to support program operations and accountability by characterizing and assessing target markets for programs.

### **Evaluation Activities Currently Underway**

The process evaluation/market characterization and assessment (PE/MCA) evaluation of the Multifamily Energy Performance Program is in the final stage of completion. This evaluation includes interviews with participating owners, managers, and developers regarding knowledge of GJGNY financing options and decision making. The results of this evaluation were presented to program staffs, feedback received incorporated, and the final report is under review. Staff is finalizing the formatting and will work toward having the final report available in September 2014.

Other evaluations are in early stages of planning or implementation. These studies are described below.

- The Home Performance with ENERGY STAR (HPwES) PE/MCA includes an analysis of CBO-related activities and is included in the larger HPwES evaluation. In addition, planning and coordination with the impact evaluation team is currently underway. Data collection instruments are developed and being reviewed by program and New York State Department of Public Services staffs. The survey efforts are targeted to commence in August 2014.
- As part of the impact evaluation of the HPwES program, NYSERDA is planning an assessment of the GJGNY assessment-only participant impacts resulting from homeowners who received a GJGNY assessment and did not pursue further program support through incentive programs. The HPwES impact evaluation work plan is in the final stage of development. The impact evaluation of this program aligns with and will be coordinated with the process/market and impact evaluation described above. The HPwES impact evaluation work plan is final and survey development is currently underway. Data collection efforts are targeted to commence in September 2014.
- NYSERDA is working on an impact evaluation of the Small Commercial Energy Efficiency Program that
  focuses on quantifying the measure adoption rate over time, the degree of program influence on the
  participant decision making, and the proportion of installed measures for which customers accessed
  other NYSERDA funding. The program evaluation sample is under development and project file requests
  are underway.