## New York State Energy Research and Development Authority

# Green Jobs – Green New York May 2016 Monthly Update

Period ending May 31, 2016

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# **Program Description**

Green Jobs – Green New York (GJGNY) 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 Green Jobs – Green New York Act of 2009.

# 1 Workforce Development

GJGNY 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.

### 1.1 Training Program Updates

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

Through May 2016, NYSERDA's GJGNY training partners trained over 3,800 individuals in courses including solar thermal installation, introductory photovoltaic training, advanced air sealing, pressure diagnostics, BPI Basic Air Sealing and Insulation, oilheat technology, and thermography. The vast majority of NYSERDA's GJGNY-funded training partnership agreements concluded by December 31, 2015 with just one remaining training contract continuing through 2016; SUNY Ulster will continue to deliver energy efficiency training through December.

## 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

Constituency-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 May 2016, CBOs are responsible for 6,699 completed assessments resulting in 2,191 completed retrofits. Approximately 56 percent of those retrofits were for Assisted HPwES customers who have a household income of up to 80 percent of the county median income, which is the target market for CBOs. The remaining customers reached by CBOs are higher income households.

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 versus other sources, such as home performance contractors or online searches.

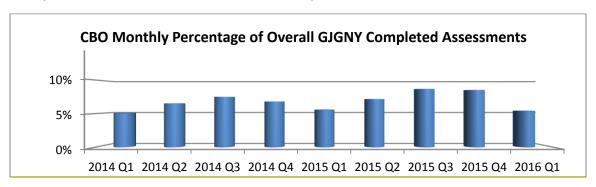


Figure 2-2. CBO Percentage of GJGNY Unit Completions.

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

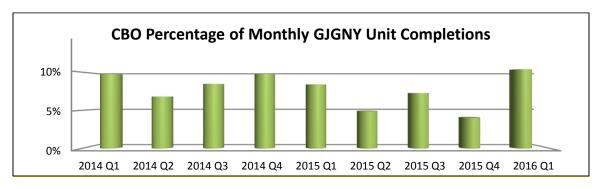
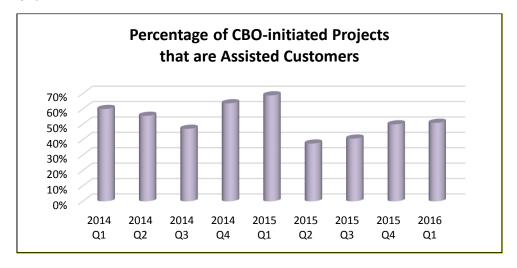


Figure 2-3. Percentage of CBO-initiated Projects that are for Assisted Customers.

Figure 2-3 provides percentages of CBO-initiated project completions for Assisted Home Performance customers by quarter.



#### **CBO Meetings**

In May, the Technical and Implementation Contractor (TIC), CLEAResult, attended the LIFE 2016 Statewide Conference in Albany along with CBO's Sustainable South Bronx, Chayya/NHSJ, RUPCO, PathStone, PUSH Buffalo, Affordable Housing Partnership and El Puente. CBO's were able to attend sessions pertaining to outreach and promoting energy efficiency among different audiences and took advantage of networking opportunities. A pre-conference meeting was coordinated by the TIC at the conference site to discuss sessions.

CBO's held several meetings in May and gave presentations to local organizations. RUPCO met with the Sustainability Director for the City of Kingston to present information about home performance and efficiency and discuss ways the city can help promote Home Performance with ENERGY STAR within its digital marketing and future campaigns. Sustainable South Bronx participated in the Morris Heights Health Fair and gained 28 leads over three days. PUSH Buffalo hosted an event at Harlem Road Community Center in coordination with the Town of Amherst. It was an effort to engage people in various NYSERDA energy efficiency programs. PathStone participated in the Village of Medina Job and Housing Fair and held an energy efficiency meeting in Parma NY.

#### **Monthly CBO Downstate Convening**

The monthly CBO Downstate Convening was combined with a webinar to create a Virtual Convening, allowing both downstate and upstate CBO's to discuss topics related to various housing types. The

session was broken into urban, suburban and rural housing segments. Held on May 18 via Webex, some topics discussed were program eligibility for modular/manufactured housing, gut rehab options, and mixed use buildings in small or large cities.

#### **Innovative Outreach**

Neighborhood Housing Services of Staten Island participated in National Grid's Customer Assistance Expo, which was held at the Staten Island Borough Hall. They were able to provide literature that converted seven leads. In addition, they gave a presentation on GJGNY during their annual Home Buyer Fair at PS 78 in Staten Island. Neighborhood Housing Services of Jamaica's subcontractor, Chayya, obtained 10 leads from energy efficiency workshops held at the Queens Library at Forest Hills and at Rego Park. Chayya also tabled at the Landlords' Resource Fair in Flushing. Long Island Progressive Coalition has begun working with the Boys and Girls Club of Long Island and will arrange a presentation. In addition, they continue to meet with Long Island Presbyterian Churches that plan to perform work in the near future, an effort that has been ongoing during 2016. El Puente attended and networked at the Block Party, resulting in 14 sign-ups for additional information on GJGNY programs. El Puente is working with Councilmember Reynoso's office to secure more information about Community Board 1 and contacting homeowners within the "Italian-American Williamsburg Quarter".

Affordable Housing Partnership (AHP) attended the LIFE 2016 Statewide Conference. They had 80 views of the AHP Energy web page resulting in 15 applications being sent to new homeowners interested in being assisted by AHP. Adirondack North Country Association strengthened its partnership with the Mohawk tribe project, Akwesane. Their Housing Authority is in the process of applying for a HUD grant to improve the living conditions in over 100 homes on the reservation. The goal is to bring the NYSERDA HPwES program and the HUD program together. The first audits are underway.

# One- to Four-Family Residential Buildings Program

GJGNY provides home assessments and financing to support energy efficiency and renewable energy improvements to one-to-four family homes.

NYSERDA's Home Performance with ENERGY STAR® (HPwES) program offers homeowners in New York State a comprehensive 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.

The GJGNY loan also supports deployment of solar photovoltaic (PV) through the NY-Sun program, solar thermal (hot water) systems, and certain wood and pellet stove replacements through Renewable Heat NY.

#### 3.1 Home Performance with ENERGY STAR® Assessments

Through May 2016, from the 125,762 approved assessment applications, 92,623 (74 percent) assessments have been completed. In the month of May, 1,805 free/reduced-cost comprehensive home energy assessment applications were received. The Program-to-date conversion rate from assessment to energy retrofit is 30 percent. The conversion rate for the period between May 2015 and May 2016 was a robust 38 percent. The average cycle time between assessment completion to project completion is 110 days.

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

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

Timeframe	2	CBO Initiated since 11/1/11 <sup>a</sup>	GJGNY Totals since 11/15/10 b					
Received Audit Applications								
May		100	1,805					
Program to D	ate	10,291	129,916					
Average # of Applications Received	l per Month	181	1,954					
	Approved Au	dit Applications						
	F	ree						
May		108	1,800					
Program to D	ate	9,869	114,479					
	Redu	ced Cost						
May		6	113					
Program to D	ate	561	9,306					
Total Approved Audit Applications		10,430	123,785					
Average # of Applications Approve	d Per Month	183	1,861					
	Schedu	led Audits						
Scheduled Audits as of End of Curr	ent Month	93	5,877					
	Comple	ted Audits						
		Free						
	May	73	1,480					
Cool. /77 F00 Audita	Program to Date	6,325	88,101					
Goal: (77,500-Audits)		Reduced Co	st					
	May	5	112					
	Program to Date	374	6,946					
Total Completed Audits		6,699	95,047					
Audit Funds Invoiced to Date			\$ 24,451,270.00					
<sup>a</sup> Round 2 CBO production as of 6/1/201 <sup>b</sup> GJGNY totals since 11/15/10 are inclus								

## 3.2 Home Performance with ENERGY STAR® Projects

Of the 27,218 projects completed through HPwES resulting from a GJGNY assessment and/or GJGNY financing, 8,976 (33 percent) projects are associated with income-qualified customers who have a household income of up to 80 percent of the county median income.

In May 2016, there were 979 HPwES project completions, of which 515 (53 percent) were associated with a GJGNY assessment or loan. Forty-three percent of the May GJGNY HPwES project completions were for income-qualified customers who have a household income of up to 80 percent of the state or 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 11/15/10 <sup>a</sup>	HPwES Totals since 11/15/10 <sup>b</sup>							
	Projects Contracted									
To Date	2,215	26,679	NA							
Completed Projects/Units <sup>c</sup>										
	Assi	sted								
Month	8/9	220 / 226	651 / 660							
Program to Date	1029 / 1218	8,976 / 9,400	15,492/ 16,098							
	Marke	et Rate								
Month	7/7	295 / 295	328 / 328							
Program to Date	1064 / 973	18,242 / 18,441	23,082 / 23,333							
Total Completed Projects/Units (Project Goal: 25,000)	2093 / 2191	27,218 / 27,841	38,574 / 39,431							

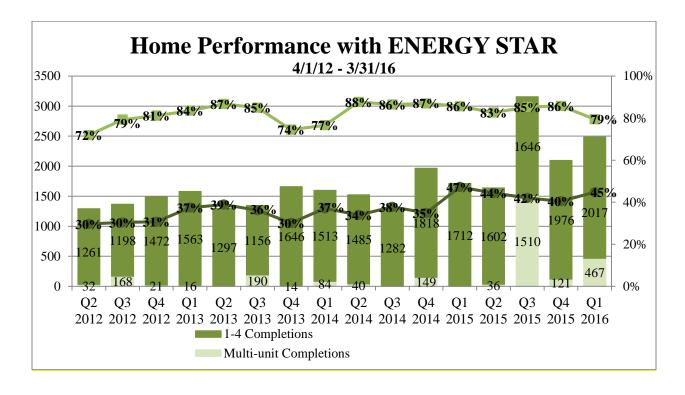
<sup>&</sup>lt;sup>a</sup> Projects completed resulting from a GJGNY Audit and/or GJGNY Financing.

b Total HPwES including GJGNY Projects.

c Projects completed and units served resulting from GJGNY.

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

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



## 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.

As of May 31, 2016, 15,350 Residential GJGNY Loans have closed to date, comprising of 11,239 Home Performance with Energy Star® (HPwES) loans, 4,098 Photovoltaic (PV) loans, 6 Solar Thermal (ST) loans and 7 Renewable Heat NY (RHNY) loans. Of the 15,350 total loans closed, 15.3 percent are Tier 2 customers, representing 14.9 percent of the total funds, while 84.7 percent are Tier 1 customers representing 85.1 percent of the funds.

Of the 11,239 HPwES loans closed to date, 30.8 percent are for Assisted HPwES customers, representing 23.0 percent of the total funds; while 69.2 percent are for Market Rate customers representing 77.0 percent of the total funds; 15.8 percent are Tier 2 customers, representing 15.2 percent of the total funds, while 84.2 percent are Tier 1 customers representing 84.8 percent of the funds. Of the loans closed for Assisted HPwES customers, 71.9 percent are Tier 1 loans, while 28.1 percent are Tier 2.

Since the launch of On-Bill Recovery, 27.2 percent of the Assisted HPwES customers who access financing use OBR Loans, while 33.9 percent of the Market Rate HPwES customers who access financing use OBR Loans; 27.4 percent of Tier 2 customers use OBR Loans while 32.7 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. EE= energy efficiency only. PV = PV only. EE & PV = a loan incorporating both energy efficiency and PV. RH = renewable heat (pellet or wood stoves).

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	15,810	11,469	8,003	\$74,954,698	638	\$6,020,893
EE On-Bill Recovery Loan	9,000	5,887	3,236	\$36,573,018	167	\$2,701,425
Total	24,810	17,356	11,239	\$111,527,716	805	\$8,722,319
PV Smart Energy Loan	3,313	3,065	2,002	\$33,512,971	478	\$8,087,872
PV On-Bill Recovery Loan	4,598	3,954	2,075	\$35,989,337	612	\$10,257,978
Total	7,911	7,019	4,077	\$69,502,308	1,090	\$18,345,850
EE & PV Smart Energy Loan	68	50	16	\$295,153	2	\$44,170
EE & PV On-Bill Recovery Loan	175	87	5	\$110,783	2	\$41,277
Total	243	137	21	\$405,936	4	\$85,446
RHNY Smart Energy Loan	11	11	6	\$108,503	3	\$14,715
RHNY On-Bill Recovery Loan	1	1	1	\$13,445	0	\$0
Total	12	12	7	\$121,948	3	\$14,715
ST Smart Energy Loan	6	6	5	24,165	1	16,552
ST On-Bill Recovery Loan	1	1	1	4,830	0	0
Total	7	7	6	\$28,995	1	\$16,552
Grand Total	32,983	24,531	15,350	\$181,586,903	1,903	\$27,184,882

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 Energy		Financing Summary	On-Bill Recovery					
Tier 1	Tier 2	Tillancing Summary	Tier 1	Tier 2				
8,445	1587	Loans Closed	4,554	764				
\$92,096,474	\$16,799,017	Value	\$62,374,540	\$10,316,873				
\$10,905	\$10,585	Average Loan	\$13,697	\$13,504				
13.2 Years	14 Years	Average Term	14.7 Years	14.7 Years				
N/A	N/A	2.99%	18.07%	12.30%				
85.23%	83.11%	3.49%	81.93%	87.70%				
14.75%	16.89%	3.99%	N/A	N/A				
79.3	31%	Approval Rate*	76.31%					
15.5	53%	Denial Rate*	19.66%					
5.1	7%	Denied Tier 1, didn't pursue Tier 2*	4.03%					
* Does not include	* Does not include applications pending review or withdrawn.							

Figure 3-2. Green Jobs-Green New York Financing Loans Issued by Type, Quarterly.

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

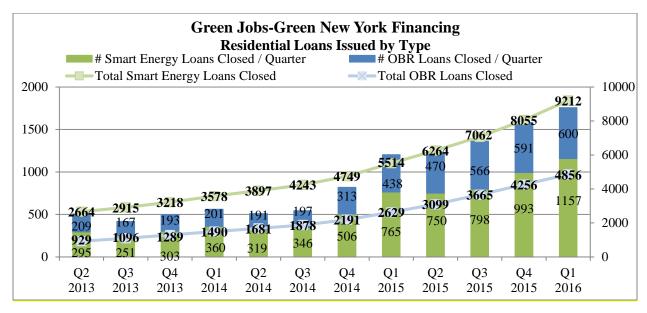


Figure 3-3. Green Jobs-Green New York Financing Loans Issued by Tier, Quarterly.

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

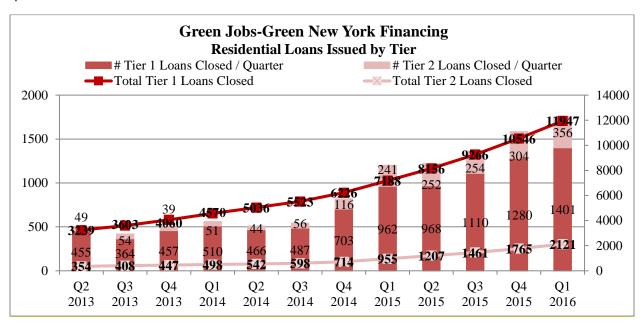
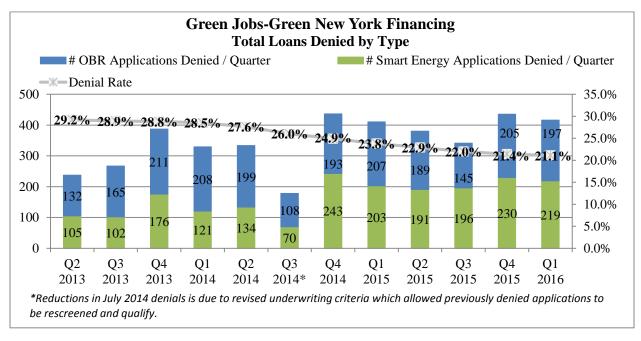


Figure 3-4. Green Jobs-Green New York Financing Loans Denied by Type, Quarterly.

Figure 3-4 illustrates trends in GJGNY loan denials, distinguished between Smart Energy Loans and On-Bill Recovery Loans, by quarter.



# Figure 3-5. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio, by Region.

Figure 3-5 illustrates regional differentiation for received GJGNY loan applications and loan denial rates. Over time, the loan denial rate across all regions has dropped from 39.8 percent in November 2010 to 20.9 percent in May 2016.

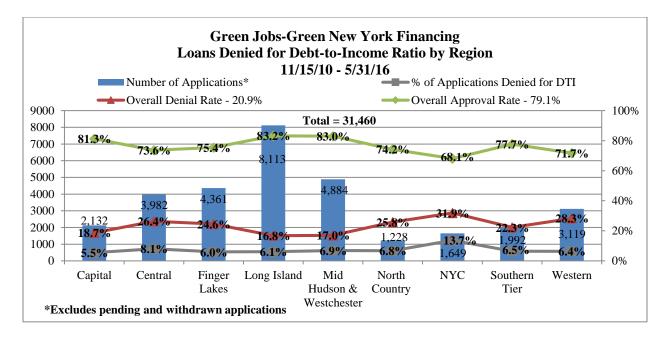
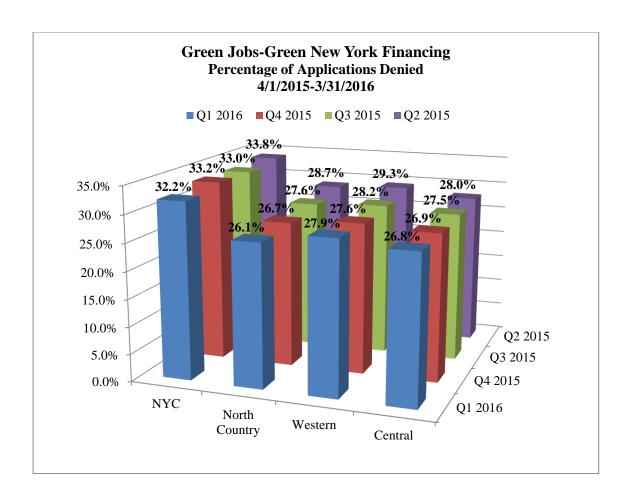


Figure 3-6. Green Jobs-Green New York Financing Percentage of Applications Denied, comparative by quarter.

Figure 3-6 illustrates comparative quarterly changes in loan denial rates. The four regions displayed represent those with the highest denial rates in the program.



# 3 Multifamily Energy Performance Portfolio

NYSERDA offers a portfolio of programs and incentives for owners, facility managers, developers, and condo/co-op 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 May 2016, 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	May			Cumulative			
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	Budget/ Goal
Received Assessment Applications	0	0	0	193	140	333	
Approved Assessment Applications	0	0	0	193	140	333	500
Assessment Funds Encumbered (\$)	0	0	0	2,342,960	1,120,987	3,463,947	
Assessment Funds Invoiced (\$)	0	0	0	1,291,100	\$694,930	1,986,030	3,000,000
Completed Assessments	0	0	0	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 percent in energy savings. Projects may choose to proceed outside MPP. Some may choose 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.

# 4.2 Multifamily Energy Performance Projects

Through May 2016, 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		May		Cumulative			
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	
Projects in Pipeline*	0	0	0	193	140	333	
Projects Contracted to have Measures Installed	0	0	0	193	140	333	
Households Associated with Projects Contracted	0	0	0	32,785	32,817	65,602	
Projects with Installed Measures (units)	0	0	0	15,539	17,355	32,894	
kWh Savings of Installed Measures	0	0	0	13,810,878.6	4,103,148.2	17,914,027	
MMBtu Savings of Installed Measures	0	0	0	198,280.1	177,455.9	375,736	
Dollar Savings of Installed Measures	0	0	0	\$9,611,178.24	\$7,147,540.00	\$16,758,718.24	

<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.

# 4.3 Multifamily Energy Performance Financing

As of May 2016, the Multifamily Performance Program has closed 22 loans with a total value of \$12,099,798. NYSERDA's share of that total loan value is \$3,834,685.

Table 4-3. Multifamily Energy Performance Financing.

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

Loan Status		May			Cumulative	
	NYSE Share o Number Loan		Total Loan Value	Number	NYSERDA Share of Total Loan Value	Total Loan Value
Participation Agreements Approved	0	\$0	\$0	22	\$3,834,685	\$12,099,798
Loans Closed	0	\$0	\$0	22	\$3,834,685	\$12,099,798

# 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 May 2016, the Small Commercial Energy Efficiency Program has received 4,202 assessment applications. Of those received applications, 3,873 (92 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	May			Program Cumulative			
	GJGNY ARRA*		Monthly Total	GJGNY	ARRA*	Program Total	
Received Assessment Applications	55	0	55	3,268	934	4,202	
Completed Assessments	37	0	37	3,024	849	3,873	

<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 May 2016, the Small Commercial Energy Efficiency Program estimates 1,688 project completions as a result of GJGNY funded assessments.

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

referenced in Table 5-1 above.

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

Metric	May	<b>GJGNY Program Cumulative</b>					
Estimated Projects Completed*	16	1704					
*The 2015 Small Commercial Energy Efficiency Program Impact Evaluation found that 44 percent of the energy savings recommended through program audits were reported to be implemented. Estimated projects completed are inclusive of those that used ARRA funds							

### 5.3 Small Commercial Energy Efficiency Financing

Through May 2016, the Small Commercial Energy Efficiency Program has closed 47 loans with a total value of \$2,510,743. NYSERDA's share of that total loan value is \$1,482,169.

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

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

Loan Status		Мау		Program Cumulative					
	NYSERDA Share of Total Number Loan Value		Total Loan Value**	Number	NYSERDA Share of Total Loan Value	Total Loan Value**			
		Applic	ations Approve	d*					
Participation Loans	5	\$104,288	\$220,144	110	\$2,305,144	\$4,961,700			
On-Bill Recovery	3	\$75,764	\$75,764	68	\$2,074,979	\$2,751,835			
	Loans Closed								
Participation Loans	\$23,861	\$47,722	27	\$868,998	\$1,844,416				
On-Bill Recovery	1	\$30,417	\$30,417	22	\$667,449	\$744,466			
Total	2	\$54,278	\$78,139	49	\$1,536,447	\$2,588,882			

The Small Commercial Energy Efficiency Financing Program has 13 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% of the total energy 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**

Two evaluations are nearing completion and one is currently underway.

- An evaluation of the Home Performance with ENERGY STAR (HPwES) program, which includes a process evaluation, market characterization, and an analysis of CBO efforts is in the final stages of review and NYSERDA is working toward finalizing this report in mid-2016. Additionally, an impact assessment of the HPwES program is underway. In this study, evaluators assessed the energy-saving impacts associated with homeowners who received a GJGNY audit but did not pursue participation in the NYSERDA residential programs. NYSERDA is working toward having the evaluation results available in mid-2016.
- An evaluation of the GJGNY Jobs impacts is currently underway. This study is designed to update the GJGNY Jobs analysis that was conducted in 2013. This GJGNY Jobs assessment will be conducted using a phased approach. Phase 1 involves primary data collection via telephone and web-based surveys of various GJGNY market actors and the Phase 2 component of the evaluation includes an update to the 2013 macroeconomic assessment of indirect jobs. This evaluation is currently in the Phase 1 stage; surveys and in-depth interviews of program associates are underway. Primary data collection with program participants launched late April 2016 and is planned to continue through July 2016. Phase 2 analysis, utilizing primary data collected in Phase 1, is planned to begin August 2016. NYSERDA will work toward a final report in November of 2016.