New York State Energy Research and Development Authority

Green Jobs – Green New York October 2015 Monthly Update

Period ending October 31, 2015

Table of Contents

1	Workforce Development	2
	Training Program Updates	2
2	Outreach and Marketing	3
	2.1 Outreach Activities	3
	2.2 Marketing Activities	6
3	One- to Four-Family Residential Buildings Program	6
	3.1 Home Performance with ENERGY STAR® Assessments	8
	3.2 Home Performance with ENERGY STAR® Projects	10
	3.3 One- to Four-Family Residential Buildings Financing	11
4	Multifamily Energy Performance Portfolio	18
	4.1 Multifamily Energy Performance Assessments	18
	4.2 Multifamily Energy Performance Projects	19
	4.3 Multifamily Energy Performance Financing	20
5	Small Commercial Energy Efficiency Program	21
	5.1 Small Commercial Energy Efficiency Assessments	21
	5.2 Small Commercial Energy Efficiency Projects	22
	5.3 Small Commercial Energy Efficiency Financing	22
6	Evaluation	23
	Evaluation Activities Currently Underway	23

List of Figures

Figure 2-1. CBO Monthly Percentage of Overall GJGNY Completed Assessments, Quarterly	3
Figure 2-2. CBO Percentage of Monthly GJGNY Unit Completions, Quarterly	3
Figure 2-3. Percentage of CBO-initiated Projects that are Assisted Customers, Quarterly	4
Figure 3-1. Home Performance with ENERGY STAR Completions, Quarterly	13
Figure 3-2. Green Jobs-Green New York Financing Applications Received, Quarterly	14
Figure 3-3. Green Jobs-Green New York Financing Loans Issued by Type, Quarterly	14
Figure 3-4. Green Jobs-Green New York Financing Loans Issued by Tier, Quarterly	15
Figure 3-5. Green Jobs-Green New York Financing Loans Denied by Type, Quarterly	15
Figure 3-6. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio, by Region	16
Figure 3-7. Green Jobs-Green New York Financing Percentage by Applications Denied, Compara by Quarter	
List of Tables	
List of Tables	
Table 3-1. Home Performance with ENERGY STAR Assessments	
Table 3-1. Home Performance with ENERGY STAR Assessments	10
Table 3-1. Home Performance with ENERGY STAR Assessments	10 12
Table 3-1. Home Performance with ENERGY STAR Assessments	10 12
Table 3-1. Home Performance with ENERGY STAR Assessments	10 12 13
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary.	10 12 13
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary. Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy.	10 12 13 17
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary. Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy. Table 4-1. Multifamily Energy Performance Assessments.	10131718
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary. Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy. Table 4-1. Multifamily Energy Performance Assessments. Table 4-2. Multifamily Energy Performance Project.	1013171819
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary. Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy. Table 4-1. Multifamily Energy Performance Assessments. Table 4-2. Multifamily Energy Performance Project. Table 4-3. Multifamily Energy Performance Financing.	101317181920
Table 3-1. Home Performance with ENERGY STAR Assessments Table 3-2. Home Performance with ENERGY STAR Projects Table 3-3. One- to Four-Family Residential Buildings Financing Details Table 3-4. Green Jobs-Green New York Financing Summary. Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy. Table 4-1. Multifamily Energy Performance Assessments. Table 4-2. Multifamily Energy Performance Project. Table 4-3. Multifamily Energy Performance Financing. Table 5-1. Small Commercial Energy Efficiency Assessments	10131718192021

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 Green Jobs – 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 October 2015, NYSERDA's GJGNY training partners have trained over 3,800 individuals in courses including solar thermal installation, introductory photovoltaic training, advanced air sealing, pressure diagnostics, Building Performance Institute (BPI) Basic Air Sealing and Insulation, oil heat technology, and thermography. Training partnerships include public and private educators, professional associations, and not-for-profits. All of NYSERDA's GJGNY-funded training partnership agreements will conclude by the end of 2015. The Clean Energy Certifications and Accreditation Incentives Program Opportunity Notices (PON 2397), an open enrollment solicitation providing BPI exam fee reimbursement to individuals across New York, will remain open through 2016 or while funds remain available.

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 October 2015, CBOs are responsible for 5,924 completed assessments resulting in 1,731 completed retrofits. Approximately 48 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 52 percent of 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.

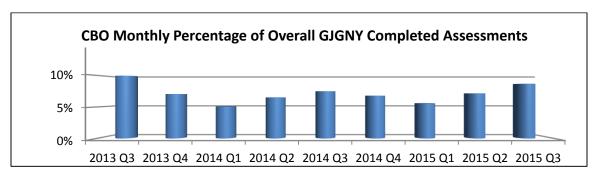


Figure 2-2. CBO Percentage of GJGNY Unit Completions.

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

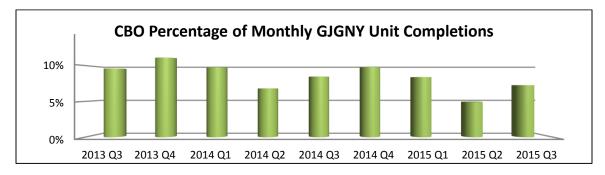
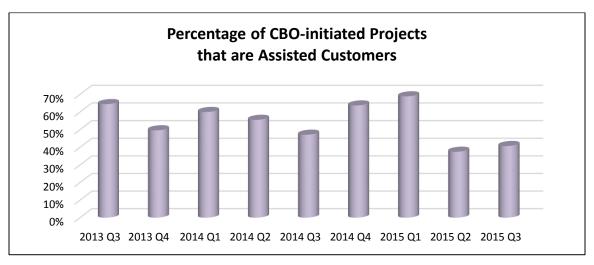


Figure 2-3. Percentage of CBO-initiated Projects that are Assisted Customers.

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



Innovative Outreach

In the past year, a number of CBOs have begun working with faith based organizations to promote energy efficiency, conservation, and renewable energy. Both Long Island Progressive Coalition (LIPC) and Adirondack North Country Association (ANCA) are utilizing the momentum of global warming concerns and Pope Francis's encyclical *Laudato Si: On Care for Our Common Home*, a moral call-to-action suggesting people and nations should come together and take the actions necessary to protect the Earth and thereby protect the world's poorest and most vulnerable people from climate change. As part of this effort, ANCA assisted in scheduling NYSERDA's small commercial contractor, L & S Energy Services, to complete a number of audits for churches in the Catholic Churches in the Diocese of Ogdenburg. In addition, they are promoting the residential GJGNY offerings to church members.

In 2015, Long Island Progressive Coalition (LIPC) developed a strategic partnership with the Long Island Presbytery Board of Trustees, the governing body of the Presbyterian churches of Long Island, to provide outreach and support to the promotion of sustainable solutions to their member churches and congregations. In the spring of 2015, TRC Solutions, energy auditor for NYSERDA's Small Commercial Energy Efficiency Program, completed assessments and workscopes for 22 project sites, with nine more in progress. In June of 2015, the Long Island Presbytery Board of Trustees in consultation with LIPC issued a Request for Qualifications (RFQ) to qualified HPwES firms to submit proposals for the design, procurement and installation of energy efficiency improvements for these project sites.

RUPCO launched a program in partnership with Hudson Heritage Federal Credit Union (HHFCU) offering free energy assessments in conjunction with a competitive 1.75 percent interest rate for their secured loan product. RUPCO assists with generating retrofits from provided leads, generating loans for HHFCU, and building customer relationships. The campaign integrates use of HHFCU's website and social media. Efforts are being made to ensure all outcomes of the campaign are documented. It will run through March 2016.

Monthly CBO Downstate Convening

The monthly CBO Downstate Convening was held on October 21, 2015 at the Pratt Institute in Manhattan. Training on the New York State Affordable Housing Corporation grant was provided. CBO's reported about the status of outreach activities and were reminded about upcoming webinars and available outreach tools.

CBO Meetings

In October 2015, five on-site meetings were held with CBOs to review outreach capability and plans as well as to discuss training needs.

On October 13, the NYSERDA's Training and Implementation Contractor (TIC) attended via conference call the 8th Capital District Regional Planning Commission Regional Solarize Meeting. Three local Solarize campaigns were in attendance. All current campaigns are in the process of wrapping the first round of the NYSERDA-funded Solarize campaigns. Currently, only Solarize Albany is considering a second round of Solarize for 2016.

On October 22, NYSERDA's TIC held a live training webinar with guest speakers Sarah Stern and Maggie O'Brien from Here/Now, Roya Kiazem from GreeNYC, and Euphemia Martin from Public Policy and Education Fund-Southern Tier. Presentations included "How to Supercharge Outreach with Storytelling & Social Media," "The Key to Success that Everyone Misses: A Strong Brand" and "CBO Student Internship Program Overview," respectively.

On October 24, NYSERDA's TIC and several representatives of GJGNY CBOs attended a GJGNY Advisory Council meeting. Updates from the meeting regarding changes to the Smart Energy and On-Bill Recovery Financing loan interest rate changes were shared with the larger CBO group at the bi-monthly webinar as well as through NYSERDA's offical memo.

To facilitate effective relationship building between CBOs and the Home Performance contracting industry, NYSERDA's TIC and Project Manager along with RUPCO's Mid-Hudson Regional Energy

Coach attended the Creating an Industry Working Group meeting on October 28 at NYSERDA's New York City office. The agenda for the meeting focused on recent proposed changes to HPwES financing, HPwES program technology enhancements, the new Quality Assurance Process and Scoring System, and the EmPower program.

Incorporating Energy Efficiency into Solarize Campaign

Adirondack North Country Association (ANCA), in partnership with the Village of Canton, First Nation Akwesasne, and the Town of Franklin launched Solarize Akwesasne, Solarize Canton, and Solarize Tri-Lakes in June of 2015. ANCA worked with each of these communities to solicit and select an installer as well as provided support setting up their campaigns. During the campaigns, ANCA supports the efforts by tabling and presenting at events. ANCA staff provides education to potential customers on solar as well as energy efficiency encouraging participation in the HPwES and the Assisted Home Performance program. ANCA's experience from this joint initiative has been positive – people in the community come to the event due to their interest in solar but gain knowledge of NYSERDA's HPwES program and often sign up for energy assessments at the event. The program will be concluding on October 31, 2016. Since lauching in June 2015 69 solar contracts were signed representing more than 487 kw of solar power contracted, with an additional 90 contracts currently under negotiation.

In the second quarter of 2015, RUPCO became a central partner in the Solarize Hudson Valley campaign and provides information about financing and energy assessments for those who are not eligible for a solar electric system. Additionally, Solarize Hudson Valley and its partners have fully integrated the promotion of home energy assessments as a first step toward installing solar power by reducing usage first and installing a right-sized solar system. In October, RUPCO attended seven Solarize outreach events and workshops.

2.2 Marketing Activities

NYSERDA continues to assist CBOs with updating their logos to be in compliance with the statewide rebranding effort. CBOs utilized the print marketing materials (i.e. the "So What's Next" brochure) to expand the reach of the Green Jobs-Green New York Program. Ongoing electronic marketing initiatives include the maintenance of a CBO Locator webpage that assists customers in finding a participating CBO in their region.

Based on conversations with the New York City based CBO's, NYSERDA's Program Manager plans to work with NYSERDA's marketing group to modify marketing pieces with pictures of homes that better reflect the building types found in the downstate region. CBO's have provided feedback that they spend

NYSERDA GJGNY Monthly Update - October 2015

too much time trying to explain to customers how they can make their home's structure energy efficient even though it looks nothing like the pitched roof wood, frame home pictured in most of the existing marketing materials

One- to Four-Family Residential Buildings Program

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.

3.1 Home Performance with ENERGY STAR® Assessments

Through October 2015, from the 108,615 approved assessment applications, 82,397 (76 percent) assessments have been completed. In the month of October, 3,281 free/reduced-cost comprehensive home energy assessment applications were received. The conversion rate from assessment to energy retrofit is 31 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.

Timefram	e	CBO Initiated since 11/1/11a	GJGNY Totals since 11/15/10 b
	Received Aud	t Applications	
October		179	3,281
Program to D	Date	9,426	114,311
Average # of Applications Rec	eived per Month	192	1,921
	Approved Aud	it Applications	
	Fr	ee	<u>, </u>
October		285	3,113
Program to D	Date	8,881	100,371
	Reduce	ed Cost	
October		19	212
Program to D	Pate	503	8,244
Total Approved Audit Applicat	ions	9,384	108,615
Average # of Applications App	roved Per Month	192	1,825
	Schedule	ed Audits	
Scheduled Audits as of End of	Current Month	102	5,959
	Complete	ed Audits	
		Free	
	October	105	1,855
Goal: (77,500-Audits)	Program to Date	5,602	76,344
Godi. (11,000-Addits)		Reduced C	Cost
	October	7	116
	Program to Date	322	6,053
Total Completed Audits		5,924	82,397
Audit Funds Invoiced to Date			\$21,196,530
 ^a Round 2 CBO production as of 6/1/201 ^b GJGNY totals since 11/15/10 are inclu 			

3.2 Home Performance with ENERGY STAR® Projects

Of the 22,907 projects completed through HPwES resulting from a GJGNY assessment and/or GJGNY financing, 7,702 (32 percent) projects are associated with income-qualified customers who have a household income of up to 80 percent of the county median income.

In October 2015, there were 596 HPwES project completions. Of the 596 HPwES project completions in October, 520 (87 percent) were associated with a GJGNY assessment or loan. Thirty-three percent of the October 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 ^a	HPwES Totals since 11/15/10 ^b				
Projects Contracted							
To Date	1,832	23,364	NA				
	Completed P	rojects/Units ^c					
	Ass	isted					
October	16 / 17	172 / 175	223 / 271				
Program to Date	834 / 993	7,321 / 7,702	12,662 / 13,214				
	Marke	et Rate					
October	18 / 22	348 / 351	373 / 375				
Program to Date	897 / 966	15,586 / 15,765	20,169 / 20,401				
Total Completed Projects/Units							
(Project Goal: 25,000)	1,731 / 1,959	22,907 / 23,467	32,831 / 33,615				

^a 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.

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 October 31, 2015, 11,310 Residential GJGNY Loans have closed, comprising of 9,184 Home Performance with Energy Star® (HPwES) loans, 2,124 Photovoltaic (PV) loans, 1 Solar Thermal (ST) loan and 1 Renewable Heat NY (RHNY) loan. Of the 11,310 total loans closed, 13.9 percent are Tier 2 customers, representing 13.7 percent of the total funds, while 86.1 percent are Tier 1 customers representing 86.3 percent of the funds.

Of the 9,184 HPwES loans closed to date, 29.3 percent are for Assisted HPwES customers, representing 21.9 percent of the total funds; while 70.7 percent are for Market Rate customers representing 78.1 percent of the total funds; 13.9 percent are Tier 2 customers, representing 13.4 percent of the total funds, while 86.1 percent are Tier 1 customers representing 86.6 percent of the funds. Of the loans closed for Assisted HPwES customers, 74 percent are Tier 1 loans, while 26 percent are Tier 2.

Since the launch of On-Bill Recovery, 29.9 percent of the Assisted HPwES customers who access financing use OBR Loans, while 36.5 percent of the Market Rate HPwES customers who access financing use OBR Loans; 30 percent of Tier 2 customers use OBR Loans while 35.3 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	13,494	9,769	6,382	\$60,781,160	644	\$6,449,247
EE On-Bill Recovery Loan	7,879	5,340	2,802	\$31,492,569	186	\$3,046,967
Total	21,373	15,109	9,184	\$92,273,729	830	\$9,496,214
PV Smart Energy Loan	2,265	2,068	1,027	\$17,773,236	411	\$6,847,920
PV On-Bill Recovery Loan	3,320	2,852	1,087	\$18,867,576	485	\$7,973,415
Total	5,585	4,920	2,114	\$36,640,811	896	\$14,821,335
EE & PV Smart Energy Loan	66	48	8	\$136,264	3	\$66,679
EE & PV On-Bill Recovery Loan	171	93	2	\$42,993	2	\$46,352
Total	237	141	10	\$179,257	5	\$113,031
RHNY Smart Energy Loan	6	6	1	\$24,850	3	\$37,450
RHNY On-Bill Recovery Loan	0	0	0	\$0	0	\$0
Total	6	6	1	\$24,850	3	\$37,450
ST Smart Energy Loan	1	1	1	5,075	0	0
ST On-Bill Recovery Loan	0	0	0	0	0	0
Total	1	1	1	\$5,075	0	\$0
Grand Total	27,202	20,177	11,310	\$129,123,722	1,734	\$24,468,029

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 R	ecovery
Tier 1	Tier 2	Tillancing Summary	Tier 1	Tier 2
6,365	1054	Loans Closed	3,368	523
\$67,670,338	\$11,050,248	Value	\$43,736,640	\$6,666,497
\$10,632	\$10,484	Average Loan	\$12,986	\$12,747
13.0 Years	13.9 Years	Average Term	14.6 Years	14.7 Years
N/A	N/A	2.99%	24.26%	17.78%
84.41%	81.78%	3.49%	75.74%	82.22%
15.59%	18.22%	3.99%	N/A	N/A
78.3	32%	Approval Rate*	75.97%	
17.02%		Denial Rate*	19.89%	
4.6	4.66% Denied Tier 1, didn't pursue Tier 2* 4.14%			1%
* Does not include app	lications pending review			

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.

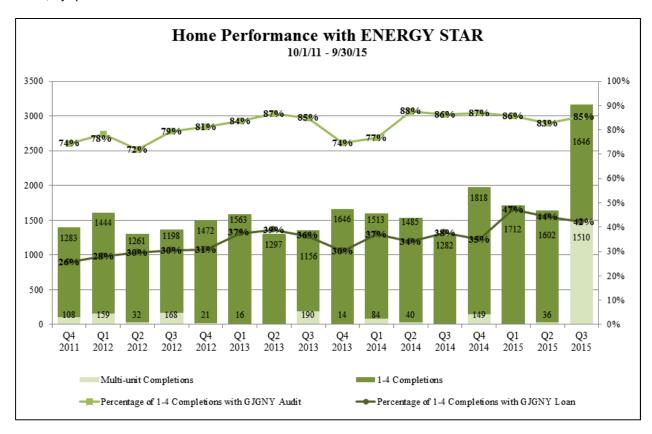


Figure 3-2. Green Jobs-Green New York Financing Applications Received, Quarterly.

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

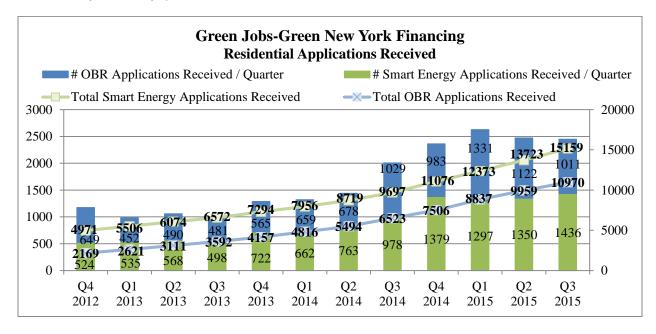


Figure 3-3. Green Jobs-Green New York Financing Loans Issued by Type, Quarterly.

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

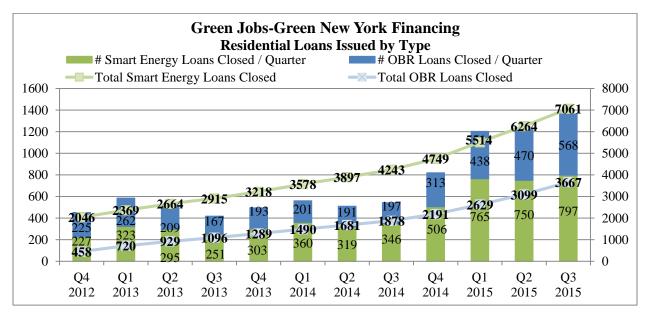


Figure 3-4. Green Jobs-Green New York Financing Loans Issued by Tier, Quarterly.

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

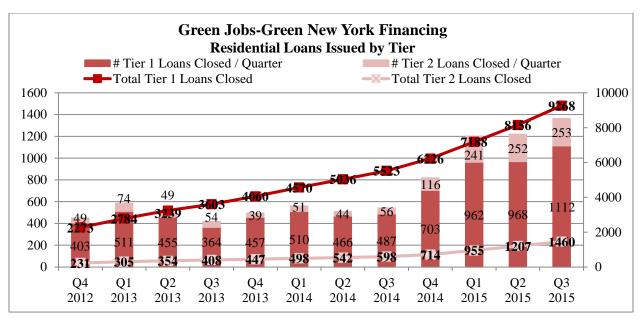


Figure 3-5. Green Jobs-Green New York Financing Loans Denied by Type, Quarterly.

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

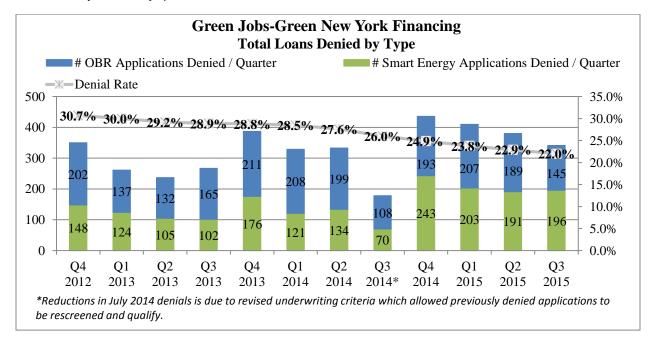


Figure 3-6. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio, by Region.

Figure 3-6 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 21.7 percent in October 2015.

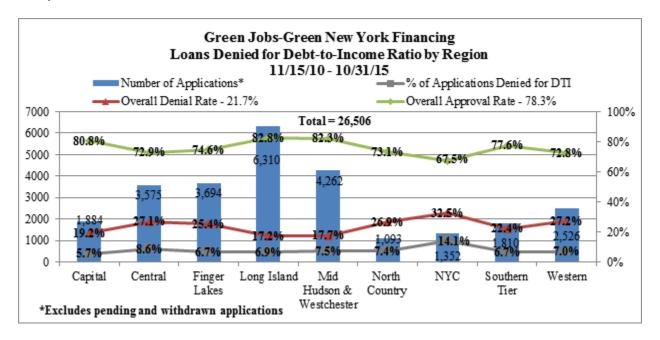


Figure 3-7. Green Jobs-Green New York Financing Percentage of Applications Denied, comparative by quarter.

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.

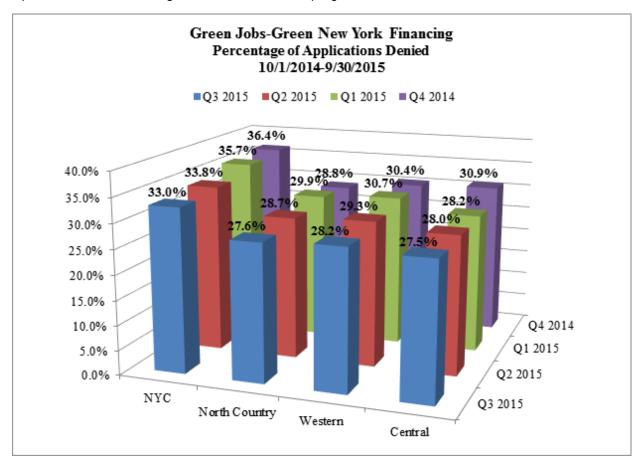


Table 3-5. Green Jobs-Green New York Financing Loans Transferred from OBR to Smart Energy.

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 October 2015, 99 loans were transferred from OBR to Smart Energy. Over the life of the program, 16.7 percent of preapproved OBR loans were transferred to Smart Energy loans.

Smart Energy Loan Status	Cumulative Number of Loans
Pre-Approved	166
Loan Approved	141
Loan Sold	1,179
Loan Withdrawn	118
Loan Denied	17
No Loan - Subsidy Only	448
Total Number of Loans Transferred	1,669

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 October 2015, 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		October		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	

^{*}MPP Projects must achieve a minimum of 15 percent 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.

4.2 Multifamily Energy Performance Projects

Through October 2015, 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		October		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

^{*}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.

^{**}The projects in pipeline program total includes all projects that are part of GJGNY, inclusive of those projects that dropped out.

4.3 Multifamily Energy Performance Financing

As of October 2015, the Multifamily Performance Program has closed 16 loans with a total value of \$10,416,508. NYSERDA's share of that total loan value is \$3,289,451.

Table 4-3. Multifamily Energy Performance Financing.

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

Loan Status	October			Cumulative			
	NYSERDA Share of Total Loan Number Value		Total Loan Value	Number	NYSERDA Share of Total Loan Value	Total Loan Value	
Participation Agreements Approved	0	\$0	\$0	21	\$4,403,520	\$9,243,688	
Loans Closed	0	\$0	\$0	16	\$3,438,883	\$10,520,238	

4 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 October 2015, the Small Commercial Energy Efficiency Program has received 3,910 assessment applications. Of those received applications, 3,560 (91 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	October			Program Cumulative		
	GJGNY	ARRA*	Monthly Total	GJGNY	ARRA*	Program Total
Received Assessment Applications	54	0	54	2,976	934	3,910
Completed Assessments	59	0	59	2,711	849	3,560

^{*}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 October 2015, the Small Commercial Energy Efficiency Program estimates 712 project completions as a result of GJGNY funded assessments.

Table 5-2. Small Commercial Energy Efficiency Projects.

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

Metric	October	GJGNY Program Cumulative				
Estimated Projects Completed*	12	712				
*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 those that used ARRA funds referenced in Table 5-1 above						

5.3 Small Commercial Energy Efficiency Financing

Through October 2015, the Small Commercial Energy Efficiency Program has closed 28 loans with a total value of \$1,478,401. NYSERDA's share of that total loan value is \$790,072.

Table 5-3. Small Commercial Energy Efficiency Financing.

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

Loan Status	October			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	\$17,810	\$35,610	85	\$1,982,471	\$4,237,119
On-Bill Recovery	0	\$0	\$0	48	\$1,614,649	\$2,235,782
Loans Closed						
Participation Loans	1	\$11,802	\$23,603	19	\$599,815	\$1,288,144
On-Bill Recovery	1	\$47,068	\$47,068	11	\$260,928	\$260,928
Total**	2	\$58,870	\$70,671	28	\$790,072	\$1,478,401

The Small Commercial Energy Efficiency Financing Program has 13 participating lenders.

^{*} 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.

^{**}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.

5 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

Three evaluations are in various stages of implementation and nearing completion.

- The evaluation of the Home Performance with ENERGY STAR (HPwES), which includes a process evaluation, market characterization, and an analysis of CBO efforts is nearing completion. Preliminary results were presented to program staff for review and comment. Comments received will be addressed in the final report. NYSERDA anticipates finalizing the report in November 2015.
- As a part of the impact evaluation of the HPwES program, the evaluators are seeking to assess the
 energy-related impacts of GJGNY audit-only participants. Results of the pre- and postconsumption billing analysis, which assessed the energy saving impacts associated with
 homeowners who received a GJGNY audit and did not pursue participation in the NYSERDA
 residential programs, were presented to program staff for review and comment. NYSERDA is
 working toward having the evaluation results available in November 2015.
- The evaluation of the Small Commercial Energy Efficiency Program seeks to quantify the impacts of the program by measuring the adoption rate over time, assessing the degree of program influence on the participant decision making and the proportion of installed measures for which customers accessed other NYSERDA funding. The draft report assessing the results of this evaluation were presented to program staff and feedback received is being incorporated into the final report. NYSERDA is working toward having the final report available in November 2015.