

New York State Energy Research and Development Authority

Green Jobs – Green New York September 2013 Monthly Update

Period ending September 30, 2013



Table of Contents

1	Workforce Development	2
	1.1 Program Opportunity Notice Activity	2
2	Outreach and Marketing	3
	2.1 Outreach Activities	3
	2.2 Marketing Activities	5
3	One- to Four-Family Residential Buildings Program	ô
	3.1 Home Performance with ENERGY STAR [®] Audits	ô
	3.2 Home Performance with ENERGY STAR® Projects	ô
	3.3 One- to Four-Family Residential Buildings Financing	3
4	Multifamily Performance Program14	4
	4.1 Multifamily Performance Audits14	4
	4.2 Multifamily Performance Projects	ō
	4.3 Multifamily Performance Financing16	ô
5	Small Commercial Energy Efficiency Program17	7
	5.1 Small Commercial Energy Efficiency Audits	7
	5.2 Small Commercial Energy Efficiency Projects	7
	5.3 Small Commercial Energy Efficiency Financing18	3
6	Evaluation19	Э
	6.1 Evaluation Activities Currently Underway	9



List of Figures

Figure 2-1. CBO Monthly Percentage of Overall GJGNY Completed Audits	3
Figure 2-2. CBO Percentage of Monthly GJGNY Unit Completions	4
Figure 3-1. Home Performance with ENERGY STAR Completions	10
Figure 3-2. Green Jobs-Green New York Financing Applications Received	11
Figure 3-3. Green Jobs-Green New York Financing Loans Issued by Type	11
Figure 3-4. Green Jobs-Green New York Financing Loans Issued by Tier	12
Figure 3-5. Green Jobs-Green New York Financing Loans Denied by Type	12
Figure 3-6. Green Jobs-Green New York Financing Loans Denied for Debt-to-Income Ratio	13

List of Tables

Table 3-1. Home Performance with ENERGY STAR Audits	6
Table 3-2. Home Performance with ENERGY STAR Projects	7
Table 3-3. One- to Four-Family Residential Buildings Financing Details	8
Table 3-4. Green Jobs-Green New York Financing Summary	9
Table 3-5. Green Jobs-Green New Financing Loans Transferred from OBR to Smart Energy	13
Table 4-1. Multifamily Performance Audits	14
Table 4-2. Multifamily Performance Projects	.15
Table 4-3. Multifamily Performance Financing	.16
Table 5-1. Small Commercial Energy Efficiency Audits	17
Table 5-2. Small Commercial Energy Efficiency Projects	18
Table 5-3. Small Commercial Energy Efficiency 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 Green Jobs – Green New York Act of 2009.



1 Workforce Development

1.1 Program Opportunity Notice Activity

On-the-Job Training for Clean Energy (PON 2033)

Through Program Opportunity Notice (PON) 2033: On-the-Job Training for Clean Energy, NYSERDA has executed on-the-job training agreements with 49 businesses seeking to hire new employees or advance incumbent workers under GJGNY. As of September 30, 2013, 144 people have been hired from New York State Department of Labor's Career Center lists, and 12 incumbent workers have been advanced due to training. Approximately \$1.2M in wage and training subsidies has been awarded. The average wage of workers hired under the program is \$16.20 per hour.



2 Outreach and Marketing

2.1 Outreach Activities

CBOs continue to assist customers to access the Home Performance with ENERGY STAR program (HPwES) offered through Green Jobs- Green NY. Through September 2013, CBOs are responsible for 2812 completed audits resulting in 630 completed retrofits. Approximately 45 percent of those retrofits were for Assisted HPwES customers.

Figure 2-1. CBO Monthly Percentage of Overall GJGNY Completed Audits.

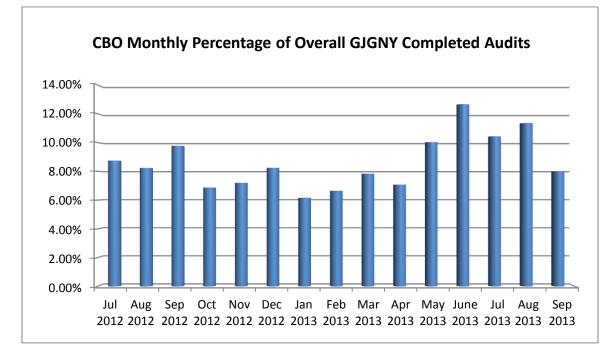


Figure 2-1 provides monthly percentages of CBO-initiated audit completions.



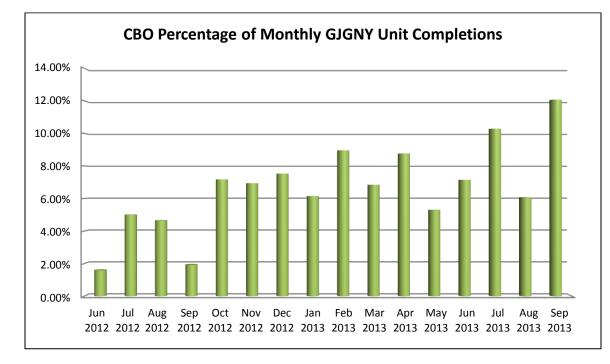


Figure 2-2. CBO Percentage of Monthly GJGNY Unit Completions.

Figure 2-2 provides monthly percentages of CBO-initiated unit completions.

CBO monthly webinars continue as scheduled, covering a variety of topics essential for outreach and marketing success such as program updates, sales training, financing clarification, and web-based portal training. September 2013 webinar topics included:

- The Bainbridge/RePower Program Yvonne Kraus, Conservation Services Group Washington State.
- BlocPower/Green City Force Donnel Baird.
- Low-rise Electric Condo Increased Incentive Offering Erik Gilbert, NYSERDA.
- Review of CBO resources available on the SharePoint site document library.
- Review of tax incentives, utilizing the Database of State Incentives for Renewables and Efficiency (www.dsireusa.org).



2.2 Marketing Activities

NYSERDA marketing staff participated in a conference call with the Community Environmental Center (CEC) and GJGNY marketing contractor Brand Cool to discuss outreach and marketing materials for the EcoHouse, a traveling exhibition space and interactive learning center designed to raise awareness of energy efficiency in the downstate market. CBOs will continue to access the EcoHouse in 2014, and several marketing items are being considered for development.

Several marketing pieces are in development for the Small Commercial Energy Efficiency Program including:

- A brochure for lenders that outlines NYSERDA's Small Commercial financial products and process for partnering.
- Interviews were held with several small business owners who are in the process of or have completed retrofits as a result of NYSERDA's program. These interviews will be crafted into case studies.
- A case study of a Long Island lender that has issued both Participation Loans and On-Bill Recover Loans through the program.



3 One- to Four-Family Residential Buildings Program

3.1 Home Performance with ENERGY STAR[®] Audits

Through September 30 2013, the One- to Four-Family Residential Buildings Program has received 55,269 free/reduced-cost home audit applications associated with GJGNY. Of the received audit applications, 52,147 (94.4 percent) applications have been approved. From those approved applications, 41,452 (79.5 percent) audits have been completed. The conversion rate from audit to energy retrofit is 33%. The average cycle time between audit completion to project completion is 110 days.

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

Timef	rame	CBO Initiated since 11/1/11 ^a	GJGNY Totals since 11/15/10 ^b
	Received Au	dit Applications	
Septer	mber	109	1,736
Program	to Date	4,427	55,269
Average # of Application	s Received per Month	192	1,602
	Approved Au	dit Applications	
	F	ree	
Septer	mber	193	1,983
Program	to Date	3,925	48,222
	Redu	ced Cost	
Septer	mber	16	179
Program	to Date	230	3,925
Total Approved Audit Ap	plications	4,155	52,147
Average # of Application	s Approved Per Month	181	1,512
	Schedu	led Audits	
Scheduled Audits as of I	End of September	262	2,433
	Comple	ted Audits	
		Free	
	September	85	1,055
Goal: (58,000-Audits)	Program to Date	2,655	38,433
Budget: (\$14,596,000)		Reduced Cost	
	September	6	86
	Program to Date	157	3,019
Total Completed Audits	•	2,812	41,452
Audit Funds Invoiced to	Date	<u>MIIIIIIIII</u>	\$10,446,370
^a Round 2 CBO production as of ^b GJGNY totals since 11/15/10 a		ctivities.	

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



3.2 Home Performance with ENERGY STAR[®] Projects

Of the 11,245 completed units served through HPwES resulting from a GJGNY audit and/or GJGNY financing, 7,825 (70 percent) units are associated with market rate customers and 3,420 (30 percent) units are associated with assisted customers.

Of the 402 HPwES project completions in September, 343 were associated with a GJGNY audit or loan. Thirtyeight percent of the September GJGNY HPwES project completions were GJGNY Assisted HPwES customers.

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

Timeframe	CBO Initiated since 11/1/11	GJGNY Totals since 11/15/10 ^a	HPwES Totals since 11/15/10 ^b					
	Projects Cor	ntracted						
To Date	673	11,239	NA					
Completed Projects/Units ^c								
Assisted								
September	27 / 31	131 / 136	159 / 177					
Program to Date	241 / 285	3,204 / 3,420	6,112 / 6,421					
	Market F	Rate						
September	11 / 11	212 / 212	243 / 244					
Program to Date	318 / 345	7,706 / 7,825	11,644 / 11,800					
Total Completed Projects/Units (Project Goal: 15,000)	559 / 630	10,910 / 11,245	17,756 / 18,221					
(Project Goal: 15,000) ^a Projects completed resulting from a GJGNY Audit and/or GJGNY Financing. b Total HPwES including GJGNY Projects.								

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

c Projects completed and units served resulting from GJGNY.



3.3 One- to Four-Family Residential Buildings Financing

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

Table 3-3 provides details of the Green Jobs–Green New York financing program monthly for September 2013 and cumulatively for the program.

1- to 4- Family Homes		Loan Product	Applications Received	Applications Approved	Loans Closed				
					Value	Total	Market Rate	Assisted	
		Smart Energy	156	207	\$532,645	57	41	16	
Tier	September	On-Bill Recovery	171	180	\$435,194	40	32	8	
1	Program to	Smart Energy	6,729	3,971	\$24,086,547	2,620	1,955	665	
	Program to Date	On-Bill Recovery	3,983	2,164	\$10,458,239	981	785	196	
	September	Smart Energy	10	12	\$74,392	10	1	9	
Tier		On-Bill Recovery	9	1	\$0	0	0	0	
2	Program to Date	Smart Energy	462	397	\$2,808,652	295	124	171	
		On-Bill Recovery	310	202	\$1,086,963	113	49	64	
		Smart Energy	166	219	\$607,036	67	42	25	
	September	On-Bill Recovery	180	181	\$435,194	40	32	8	
	Total		346	400	\$1,042,230	107	74	33	
		Smart Energy	6,729	4,368	\$26,895,199	2,915	2,079	836	
Pro	ogram to Date	On-Bill Recovery	3,983	2,366	\$11,545,203	1,094	834	260	
	Total		10,712	6,734	\$38,440,402	4,009	2,913	1,096	



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

Smart E	Energy	Financing Summary	On-Bill Recovery		
Tier 1	Tier 2		Tier 1	Tier 2	
2,620	295	Loans Closed*	981	113	
\$24,086,547	\$2,808,652	Value*	\$10,458,239	\$1,086,963	
\$9,193	\$9,521	Average Loan*	\$10,661	\$9,619	
12.2 Years	13.4 Years	Average Term*	14.5 Years	14.3 Years	
N/A	N/A	2.99%	79.51%	76.11%	
81.30%	78.64%	3.49%*	20.49%	23.89%	
18.70%	21.36%	3.99%*	N/A	N/A	
69.9	7%	Approval Rate**	68.42%		
22.17%		Denial Rate**	enial Rate** 25.48%		
7.88	3%	Denied Tier 1, didn't pursue Tier 2**	6.10%		

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

* Refers to loans originated and closed by EFS. The number and value of OBR Loans varies from Concord's report due to treatment of successor loans.

** Does not include applications pending review or withdrawn.

On September 10, NYSEREDA filed a petition with the Public Service Commission to reallocate approximately \$165 million in uncommitted funds to establish the New York Green Bank, an idea first presented by Governor Andrew M. Cuomo in the State of the State Address. The Green Bank utilizes a public-private partnership approach, and is intended to provide a revolving capital base that drives investment in New York's clean energy economy. Financial products are anticipated to include credit enhancement, loan loss reserves, and loan bundling to support securitization and build secondary markets. If the petition is approved, it is anticipated that the Green Bank can be operational by early 2014, with an additional petition for more funding to follow. When fully capitalized, the Green Bank is expected to have a \$1 billion balance sheet. NYSERDA Residential Energy Services staff is exploring Green Bank opportunities to support residential energy efficiency.



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

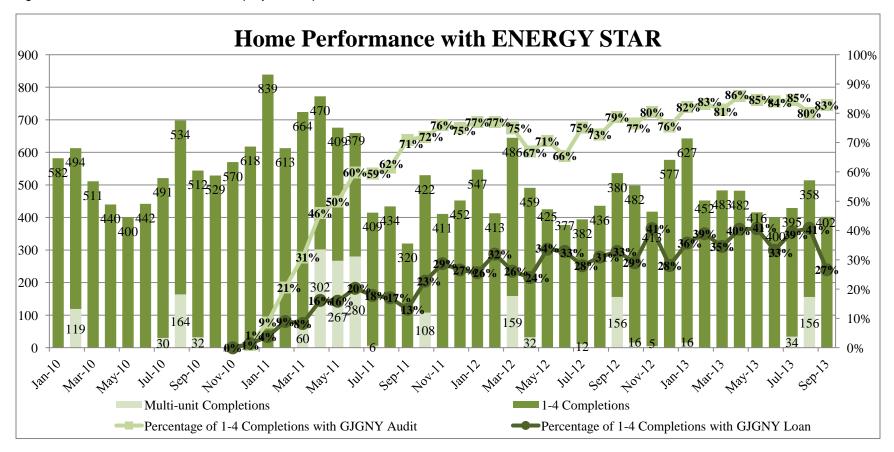


Figure 3-1 illustrates trends in HPwES project completions associated with GJGNY audits and loans.



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

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

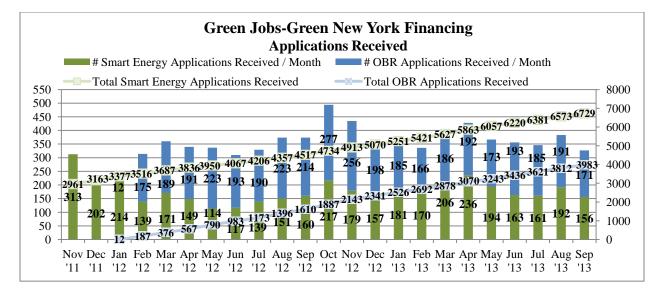


Figure 3-3. Green Jobs–Green New York Financing Loans Issued by Type.

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

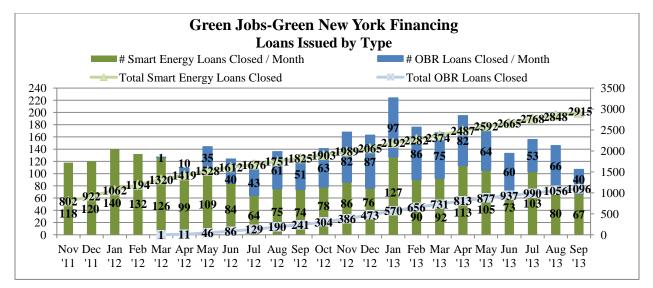




Figure 3-4. Green Jobs–Green New York Financing Loans Issued by Tier.

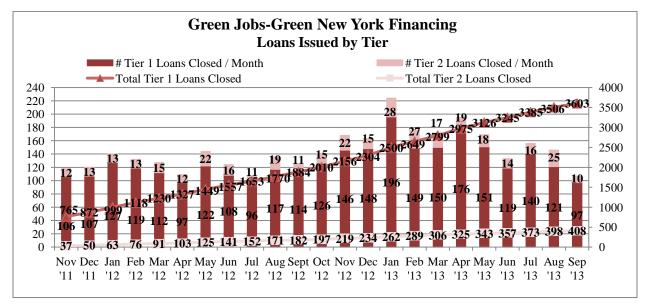


Figure 3-4 illustrates trends in GJGNY loans issued, distinguished between Tier 1 and Tier 2 loans.

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

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

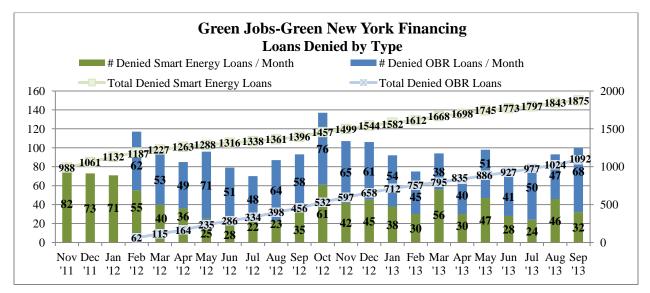




Figure 3-6. Green Jobs–Green New York Financing Loans Denied for Debt-to-Income Ratio, by Region.

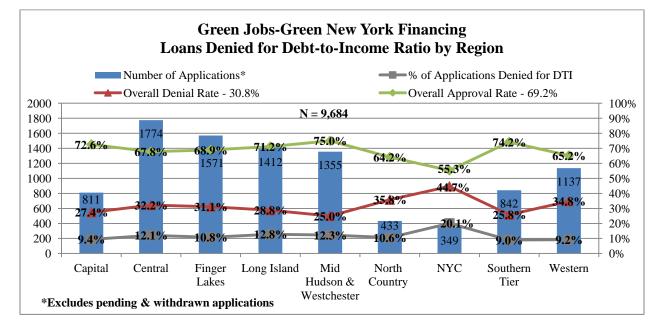


Table 3-6 illustrates regional differentiation for received GJGNY loan applications and loan denial rates.

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

NYSERDA allows applicants who are unable to meet the cost-effectiveness requirements of the On-Bill Recovery 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 September 2013, 14 loans were transferred from OBR to Smart Energy. Over the life of the program, 13.6% of pre-approved OBR loans were transferred to Smart Energy loans.

Smart Energy Loan Status	Number of Loans
Pre-approved	22
Loan Approved	58
Loan Sold	270
Loan Withdrawn	20
Loan Denied	4
No Loan - Subsidy Only	12
Total Number of Loans Transferred	386



4 Multifamily Performance Program

4.1 Multifamily Performance Audits

The Multifamily Performance Program continues to grow. The program reached over the 250 mark in approved audit applications. Through September 30, 2013, the Multifamily Performance Program has received 319 audit applications associated with GJGNY. Of the received audit applications, 272 (85.3 percent) have been approved. From those approved applications, 205 (75.4 percent) audits have been completed.

Table 4-1. Multifamily Performance Audits.

Metric	Se	eptember		Р	rogram C	umulative	
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	Budget/ Goal
Received Audit Applications	3	30	33	163	156	319	
Approved Audit Applications	3	5	8	152	120	272	500
Audit Funds Encumbered (\$)	52,655	32,540	85,195	1,900,510	868,313	2,768,823	
Audit Funds Invoiced (\$)	49,565	0	49,565	1,013,485	512,528	1,526,013	3,000,000
Completed Audits	3	0	3	106	99	205	400
Number of Projects withdrawing from MPP after audit*	0	0	0	17	24	41	

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

*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 audit would still be eligible to apply for GJGNY financing.



4.2 Multifamily Performance Projects

The Multifamily Performance Program has completed 15,377 projects with installed measures. Of those projects with installed measures, 6,174 (40 percent) are associated with market rate housing and 9,203 (60 percent) are associated with affordable housing.

Table 4-2. Multifamily Performance Projects.

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

Metric		September		Program Cumulative			
	Affordable Housing	Market Rate Housing	Monthly Total	Affordable Housing	Market Rate Housing	Program Total	
Projects in Pipeline	5	7	12	152	120	272	
Projects Contracted to have Measures Installed	73	30	103	134	91	225	
Households Associated with Projects Contracted	13,414	7,571	20,985	24,058	22,154	46,212	
Projects with Installed Measures (units)	548	1,041	1,589	9,203	6,174	15,377	
kWh Savings of Installed Measures*	777,301	47,274	824,575	12,881,218	1,228,694	14,109,912	
MMBtu Savings of Installed Measures*	8,507	10,644	19,151	137,395	108,037	245,432	
Dollar Savings of Installed Measures (\$)*	226,090	135,675	361,765	4,361,334	1,616,376	5,977,709	
Charge (SBC), En	ergy Efficiency P	ortfolio Standard (I	EEPS), Region		ives through the System System (RGGI), GNY.		



4.3 Multifamily Performance Financing

GJGNY Multifamily Financing is growing. As of September 30, 2013, the Multifamily Performance Program has closed 9 loans with a total value of \$7,557,989. NYSERDA's share of that total loan value is \$2,012.369. There is continued interest in financing by building owners at the Energy Reduction Stage of their projects.

Table 4-3. Multifamily Performance Financing.

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

Loan Status		September		Program 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	10	\$2,454,869	\$8,442,989	
Loans Closed	0	0	0	9	\$2,012,369	\$7,557,989	



5 Small Commercial Energy Efficiency Program

5.1 Small Commercial Energy Efficiency Audits

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 not-for-profit customers, providing additional follow-up services to support implementation, assisting in the development of an independent evaluation of the Program, 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, the Small Commercial Energy Efficiency Program is currently selecting firms to provide GJGNY energy assessments, beginning in 2014, with expanded and streamlined implementation assistance services for small business and not-for-profit customers.

Through September 30, 2013, the Small Commercial Energy Efficiency Program has received 3,135 audit applications. Of those received applications, 2,646 (84 percent) have resulted in completed audits.

Table 5-1. Small Commercial Energy Efficiency Audits.

Metric		September			Program Cumulative			
	GJGNY ARRA* Total		GJGNY	ARRA*	Program Total			
Received Audit Applications	33	15	48	2,201	934	3,135		
Completed Audits	38	45	83	1,797	849	2,646		
*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. ARRA funds are used for eligible small business and not-for-profit organizations that have more than ten employees.								

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

5.2 Small Commercial Energy Efficiency Projects

As of September 30, 2013, the Program has completed 529 projects.

Table 5-2. Small Commercial Energy Efficiency Projects.

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

Metric	September	Program Cumulative		
Projects Completed	17	529		



5.3 Small Commercial Energy Efficiency Financing

As of September 30, 2013, the Small Commercial Energy Efficiency Program has closed 7 loans with a total value of \$242,668. NYSERDA's share of that total loan value is \$114,054.

Table 5-3. Small Commercial Energy Efficiency Financing.

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

Loan Status	September			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	\$12,180	\$24,360	20	\$357,887	\$726,777		
On-Bill Recovery	1	\$24,360	\$24,360	13	\$398,038	\$398,038		
Loans Closed								
Participation Loans	1	\$5,248	\$10,496	6	\$100,734	\$229,348		
On-Bill Recovery	0	0	0	1	\$13,320	\$13,320		
Total	1	\$5,248	\$10,496	7	\$114,054	\$242,668		
The Small Commercial Energy Efficiency Financing Program has 6 participating lenders.								
* Customer applications are assessed for both Participation Loan and On-Bill Recovery Loan eligibility prior to approval. **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 efficiency project cost or \$50,000, whichever is less.								



6 Evaluation

6.1 Evaluation Activities Currently Underway

Three major evaluation projects are currently underway: a jobs impacts assessment, a market/process evaluation of the CBO initiative, and a market/process evaluation of the Small Commercial initiative. The status of each project is described below.

The job impacts assessment is using a two-phased approach. Phase 1 involves primary data collection via telephone surveys of various GJGNY market actors and Phase 2 is a macroeconomic assessment of indirect jobs and other impacts. The evaluation contractors have completed the data collection, analysis, and modeling and will work toward a final report in November 2013. NYSERDA presented the preliminary results of Phases 1 and 2 of the job impact assessment to the GJGNY Advisory Council on September 12, 2013. Feedback received during the presentation will be considered when finalizing the Phase 1 and 2 reports.

The Small Commercial evaluation is also a phased approach. As a part of Phase 1, in-depth interviews were conducted with five of the six participating lenders. The preliminary results of this qualitative analysis of lender interviews are provided in the GJGNY 2013 Annual Report. Telephone surveys of participants were completed in July 2013 and data analysis is underway. Telephone surveys of participating auditors commenced in October 2013. Secondary research to characterize the small commercial and not-for-profit programs offered in New York and other jurisdictions continues under Phase 1. NYSERDA will work toward having comprehensive results of the Phase 1 evaluation available in late 2013. The scope of Phase 2 is under development and is planned to include research with non-participating small commercial and not-for-profit organizations, lenders, and loan originators.

Evaluation of the CBO initiative includes case studies and in-depth interviews of the CBOs. It will explore various program objectives and assess the successes and barriers experienced by CBOs. Analysis of data collected during the in-depth interviews is complete and the evaluation contractors are preparing the draft report. Expanding on the data collected during the interviews with CBOs, the evaluators are preparing case studies of a select group of CBOs. NYSERDA will work toward having the results available in late-November 2013. CBO-related activities will also be evaluated as a part of the Home Performance with ENERGY STAR (HPwES) process evaluation planned for later in 2013. Data collection through the HPwES evaluation will allow CBOs additional time to generate retrofit projects and will limit the survey burden on HPwES participants and contractors.