



NYSERDA

Green Jobs - Green New York 2015 Annual Report

Reporting Period Ending June 30, 2015

Final Report

NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

Advance innovative energy solutions in ways that improve New York's economy and environment.

Vision Statement:

Serve as a catalyst – advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

Green Jobs - Green New York
2015 Annual Report

Reporting Period Ending June 30, 2015

Final Report

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Summary

Ramping up the rate of participation in energy-efficiency projects is recognized as a means to boost New York State's economy by reducing energy bills and creating job opportunities. Both of these objectives are particularly important in economically distressed communities. Additionally, energy efficiency is recognized as one of the most cost-effective means to reduce greenhouse gas emissions, a benefit to the health of the environment.

On October 9, 2009, the Green Jobs-Green New York Act of 2009 (the Act) was signed into law. Pursuant to Title 9-A of New York State Public Authorities Law Section 1890 "The Green Jobs-Green New York Program" directs NYSERDA to:

- Establish a revolving loan fund to provide loans to finance the cost of approved qualified energy efficiency services for residential, multifamily, and nonresidential structures.
- Offer On-Bill Recovery Loans as a means for financing projects.
- Pursue the feasibility of other innovative financing mechanisms.
- Issue one or more competitive opportunities to solicit applications from partnerships or consortia composed of constituency-based organizations (CBOs) that can connect community members to Green Jobs-Green New York (GJGNY).
- Target communities in areas where energy costs are particularly high in relation to a measure of median household income, as determined by NYSERDA, or that have been designated as a nonattainment area for one or more pollutants pursuant to Section 107 of the federal Clean Air Act.
- Give preference in awards to applicants that include significant participation by minority- and women-owned business enterprises and/or to applications intended to serve economically distressed communities.
- Establish standards for energy assessments based on building type and other relevant considerations.
- Establish a schedule of fees for energy assessments, including a sliding scale by which assessment fees shall be waived for residential applicants based on median county income.
- Enter into contracts to provide employment and training services to support GJGNY.
- Establish an Advisory Council.
- Provide annual reports to the Governor, Senate, and Assembly.

On August 4, 2011, Governor Andrew M. Cuomo signed the Power NY Act of 2011, which established an on-bill recovery (OBR) financing mechanism for GJGNY project financing and increased the maximum loan limits for residential and small business/not-for-profit GJGNY loans, subject to certain project payback criteria. Although the legislation called for the OBR Loans to be available by May 2012, NYSERDA worked with the utilities and Department of Public Service staff to implement OBR Loans for residential consumers commencing January 30, 2012. In April 2012, an amendment to the GJGNY law (Public Authorities Law § 1896(5)) made additional changes to improve the OBR financing mechanism.

An additional amendment to the GJGNY Act of 2009 was signed into law on October 22, 2013, which extended the availability of GJGNY financing to net-metered technologies, enabling residential solar electric installations through GJGNY loans.

Section A.3008/S.2008, Part SS, of the New York State 2015-2016 Budget included requirements for NYSERDA related to GJGNY as follows:

- Provide a report to the Executive, Temporary President of the Senate, Speaker of the Assembly, the Chair of the Senate Committee on energy and telecommunications and the chair of the assembly committee on energy regarding the financial status of the Green Jobs - Green New York program.
- Continue to offer financing, pursuant to through the Green Jobs - Green New York program for qualified energy efficiency services to all applicants who were eligible on January 1, 2015, through March 31, 2016.
- Develop standards and/or criteria that will encourage and increase participation of and issuance of loans to low-to-moderate income households statewide for qualified energy efficiency services under the Green Jobs - Green New York program.
- Convene a working group to assist in developing these standards and/or criteria that includes individual representatives of constituency-based organizations.
- Consult with and solicit information and recommendations from the working group as to how to increase participation and issuance of loans to low-to-moderate income households seeking qualified energy efficiency services.
- Report the results of consultations with and solicitations of the working group to the Governor, the Senate Majority Leader and the Speaker of the Assembly within six months of the March 31, 2015 effective date of the legislation.

The status report previously referenced was submitted on May 1, 2015, and all requirements regarding GJGNY financing have been met, in accordance with the Budget. The working group was established and held its first meeting on April 28, 2015, and has continued to meet regularly on the development of the recommendations report, which will be submitted in accordance with the Budget requirements on October 1, 2015.

This sixth Annual Report submitted for GJGNY was prepared pursuant to Section 1899 of the Act, and provides an update on the progress and achievements of GJGNY through June 30, 2014. Visit nysesda.ny.gov/About/Green-Jobs-Green-New-York/GJGNY-Advisory-Council-Reports to view prior annual reports.

S.1 Stakeholder Input

NYSERDA meets with stakeholders through the Advisory Council at least biannually and provides monthly written reports to Advisory Council members, in addition to ad hoc reports as needed. The general public can participate in Advisory Council meetings, and materials and videos of Advisory Council meetings, monthly reports, and ad hoc reports are posted on NYSERDA's website.

NYSERDA works with utility representatives, Department of Public Service staff, and program implementation contractors to support the implementation of OBR financing. In addition, NYSERDA meets regularly with stakeholders in the residential energy efficiency sector by participating in the Creating an Industry Working Group to discuss program challenges and opportunities. Solutions identified by the group have been successfully implemented and have had immediate positive impacts on program delivery and participation.

S.2 Funding and Accomplishments to Date

The Act allocates \$112 million in funding from New York State's share of the Regional Greenhouse Gas Initiative (RGGI) to support GJGNY. Improvements identified through energy assessments, when implemented, reduce electricity consumption and on-site emissions due to the burning of fossil fuels. NYSERDA has further allocated the funding, which also includes interest earnings.

In August 2013, NYSERDA issued \$24,300,000 in Residential Energy Efficiency Financing Revenue Bonds (Series 2013A). The bonds were secured by pledged loan payments from certain residential energy efficiency loans issued through the program (totaling approximately \$29.2 million in aggregate principal) and available monies in the GJGNY revolving loan fund. The transaction was a success, with 34 percent of the bonds sold to funds with social responsibility mandates. The deal went on to be named the 2013 Small Issuer Deal of the Year by *The Bond Buyer* newspaper and offers a replicable model to be considered by other states.

Table S-1 provides a summary of the GJGNY budget as of June 30, 2015.

Table S-1. GJGNY Budget Summary as of June 30, 2015

Program Area	Budget	Expended*	Encumbered	Committed	Balance
Workforce Development	\$7,337,565	\$5,869,263	\$1,077,790	\$0	\$390,512
Outreach and Marketing	14,939,161	11,742,081	1,783,248	124,080	\$1,289,752
One- to Four-Family Residential Buildings	77,089,673	64,103,604	152,134	19,433,883	(\$6,599,948)
Multifamily Energy Performance	10,842,089	6,753,903	1,130,900	701,636	\$2,255,650
Small Commercial Energy Efficiency	11,435,829	6,132,380	4,677,969	0	\$625,480
Program Evaluation	5,600,000	3,305,478	1,691,792	0	\$602,730
Program Administration	9,858,137	7,957,998	0	0	\$1,900,139
NYS Cost Recovery Fee	1,904,000	1,636,376	0	0	\$267,624
Unallocated Interest Earnings	33,578				\$33,578
TOTAL	\$139,040,032	\$107,501,081	\$10,513,833	\$20,259,599	\$765,518
<p>* Expended amount is net of loan repayments made through reporting period for One- to Four-Family, Multifamily and Small Commercial sectors, and includes bond proceeds, less bond issuance cost.</p> <p>Expended: Contractor Invoices and loans processed for payment by NYSERDA.</p> <p>Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan.</p> <p>Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.</p>					

In addition to the RGGI funds, NYSERDA received a U.S. Department of Energy (DOE) Better Buildings grant in the amount of \$40 million, of which \$18.6 million will be used to support GJGNY financing or outreach. Additional details regarding funding status can be found in Sections 3 to 9 of this report.

Table S-2 provides a summary of program performance metrics. Although specific goals have been established for the number of assessments and projects completed, it is important to note that there are many other indicators of program success that are not captured in the statistics regarding projects. Some of these additional indicators include the growth of participation in the programs in underserved communities, the creation of good jobs within those same communities, and improved access to financing. Other indicators of program success are seen in new, up-skilled, and higher waged employment opportunities resulting from the GJGNY program. For example, as of the first quarter of 2013, GJGNY funding for Workforce Development initiatives resulted in 213 new and retained full-time equivalent work opportunities with associated hourly wages ranging from \$12.50 to \$50.¹ Of those 213 full-time equivalent work opportunities, 45 were developed in disadvantaged communities, representing approximately 21 percent of the overall opportunities. By 2015, GJGNY is projected to result in a total of 1,069 new and retained employment opportunities, of which 171 full-time equivalent employment opportunities are projected to be located in disadvantaged communities.²

In support of both the project and employment indicators previously referenced, the GJGNY program facilitates community-centered outreach efforts that increase the reach of GJGNY among disadvantaged populations and households not traditionally participating in energy efficiency programs. Workforce training and development funding supports career pathway development within economically challenged communities, whereas multilingual marketing and curriculum materials assist in expanding opportunities for green-building training. Complementary workforce training outreach efforts target areas with high populations of minorities, low-income individuals, and populations with barriers to employment. GJGNY Aggregation Pilot contractor participants agree to provide community benefits such as hiring local workers and providing living wages. In addition, NYSERDA has further modified loan underwriting standards in the one- to four-family sector in an effort to improve the accessibility of financing to consumers who would not qualify using traditional underwriting standards.

The impacts of program activities targeting these objectives are currently under evaluation, and initial progress is discussed in other sections of this report.

¹ NYSERDA. 2013. "Assessment of Job Impacts of the Green Jobs Green New York Program," Prepared by NMR Group, Inc. nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Evaluation-Reports/2013-gjgny-phase1.pdf.

² Ibid.

Table S-2. GJGNY Summary Performance Metrics

Metric	One- to Four-Family Residential Buildings	Multifamily Energy Performance	Small Commercial Energy Efficiency	Total
Assessment Applications Received (number)	104,030	324	2,823	107,177
Assessments Completed (number)	75,478	319	2,575	78,372
1st Year Net KWh Savings*	9,571,859	21,640,365	8,056,913	39,269,137
1st Year Net MMBtu Savings*	769,935	876,625	17,638	1,664,198
Estimated Annual Bill Savings*	\$17,889,205	\$21,622,546	\$4,691,676	\$44,203,427
Loans Issued/Closed (number)	8,210	21	25	8,256
Total Value of Loans	\$82,148,287	\$10,416,507	\$1,424,381	\$93,989,175
* Energy and bill savings represents installed to date saving for the One- to Four-Family sector, projected savings upon project completion for the Multifamily sector, and an estimated 20 percent project installation rate, based on historical performance for the Small Commercial sector.				

S.3 Workforce Training and Development

GJGNY workforce development activities are expanding New York State’s capacity to deliver training services by working with community-based training organizations and existing training centers, providing much-needed training equipment and tools and minimizing barriers to delivering field testing and certification exams. The initiative also provides direct entry, on-the-job, apprenticeship, and internship incentives to help defray costs of bringing on new hires.

Work under this initiative is closely coordinated with the New York State Department of Labor, New York State Homes and Community Renewal, New York State Office of Temporary and Disability Assistance, and others that leverage State, federal, and local funds where possible.

NYSERDA has issued a total of seven Program Opportunity Notices (PON) and Requests for Proposals (RFP) designed to advance the workforce development goals of GJGNY. Projects support the training objectives of the Act, including, but not limited to: 1) incremental occupational training to unemployed workers; 2) work readiness and entry-level technical training; 3) apprenticeship and labor-management certification training; 4) skills development for incumbent workers; 5) skills development for new workers to support advancement and improve employee retention; and 6) inventory of curriculum related to the objectives of GJGNY; and 7) qualitative research designed to assess skill gaps as identified by employers.

As a result of the solicitations, 20 contracts have been awarded for curriculum and certification/accreditation development, representing approximately \$2 million in contract funding. Sixty-six contracts, totaling in excess of \$2.7 million, have been awarded to support apprenticeships and internships. In addition, 16 contracts have been awarded to support equipment and training infrastructure, totaling \$1.9 million.

Through June 2015, NYSERDA's GJGNY training partners have trained 3,615 individuals in courses including solar thermal installation, introductory photovoltaic training, advanced air sealing, pressure diagnostics, Building Performance Institute (BPI) basic air sealing and insulation, oilheat technology, and thermography. Training partnerships include public and private educators, professional associations, and nonprofits. The GJGNY-funded portion of the on-the-job training program concluded in December 2014 and resulted in the direct hire of 265 New Yorkers for technical jobs in the energy efficiency and renewable energy fields.

Additional information on workforce development and training activities can be found in Section 4.

S.4 Outreach, Education, and Marketing

GJGNY is designed to deliver services in targeted communities through constituency-based organizations (CBOs) that target residents, small businesses, not-for-profit organizations, multifamily building owners, and potential workforce participants in designated communities. CBOs encourage participation in energy efficiency programs, facilitate awareness of workforce training opportunities, and assist with enrollment in those efforts. As of June 30, 2015, 11 competitively solicited CBOs are currently under contract to assist with program.

CBOs are providing outreach materials and/or applications translated into Spanish, Burmese, Bengali, Nepali, and Tibetan and have demonstrated a commitment to expanding the number of languages available. Among the CBOs contracted with NYSERDA, there are 24 multilingual staff members who speak Spanish, French, Hindi, Bengali, Bassa, Kru, Urdu, Nepali Tibetan, and Farsi. Five CBOs have Spanish-language outreach materials that are presented in addition to those Spanish language materials provided by NYSERDA. Two CBOs conduct Spanish-speaking outreach events. One of the CBOs has created three video guides, available in Spanish and English, demonstrating how to complete the NYSERDA forms for the Residential Home Energy Assessment, the Assisted Home Performance with

ENERGY STAR® Program, and the Residential Credit Application. Two CBOs are implementing aggregation as part of their initiative. Aggregation is the process of identifying a group of homeowners who agree in advance to have the same contractor or contractor team perform their assessments and any resulting work. Aggregation results in more efficient use of contractor resources and reduced need for contractor marketing. Participating contractors agree to provide certain community benefits, which may include living wages and benefits for workers, local hiring, and preferential pricing.

NYSERDA's competitively selected marketing contractor, Brand Cool, has developed messaging and materials for the various sectors. Brand Cool has facilitated CBOs marketing needs by providing specific materials and placing strategic advertising oriented toward CBOs performing local outreach.

Numerous case studies have been produced to highlight successful home performance businesses, supporting additional contractor recruitment, individuals who have been trained and employed through workforce development activities, and homeowners and businesses that successfully participated in GJGNY.

Additional information on outreach and marketing activities can be found in Section 8.

S.5 Energy Retrofits and Financing

GJGNY assessments and unsecured financing for the residential sector were launched in November 2010 through NYSERDA's Home Performance with ENERGY STAR® (HPwES®) program. More than 75,400 assessments were completed through June 2015. Nearly 32 percent of the homeowners who complete an assessment move forward with completing energy efficiency work through GJGNY. OBR became available in January 2012, with customer billing first appearing on utility bills starting in June 2012. In total, 3,100 OBR Loans totaling \$37.8 million and 6,264 Smart Energy Loans (a more traditional unsecured loan) totaling \$63.9 million have been issued through June 30, 2015. Of those loans, 1,207 loans totaling \$12.7 million were for customers who qualified through NYSERDA's alternative qualification, Tier 2 criteria, expanding the reach of the loan program to consumers who otherwise would not have qualified for a loan. On February 3, 2014, NYSERDA launched GJGNY financing for residential solar electric (also known as photovoltaic or PV). Customers of Renewable Portfolio Standard-participating utilities can finance stand-alone solar electric projects, or combine solar electric with

efficiency upgrades through HPwES. Through a Memorandum of Understanding with PSEG Long Island, as agent of and acting on behalf of the Long Island Power Authority, NYSERDA extended GJGNY financing to participants in PSEG Long Island's Solar Pioneer program, who previously could not participate in GJGNY residential financing.

GJGNY assessments have been available in the multifamily sector since September 2010, while financing through participation loans was launched in June 2011. Access to the GJGNY assessments and financing for this sector is available through NYSERDA's Multifamily Energy Performance Program, a comprehensive program that serves market-rate and low- to moderate-income projects using a common process and relying on a network of participating energy service contractors. As of June 2015, 319 assessments have been completed, and work has been completed on 33,649 projects. Twenty-one loans have been issued at a value of \$10,416,507. In addition to assessments and financing, participants have access to incentives through the suite of programs offered by NYSERDA or utilities. Work being accomplished in conjunction with a utility rebate program may be eligible for GJGNY Multifamily Financing if a building assessment has been completed that meets NYSERDA standards.

NYSERDA offers eligible small business and not-for-profit customers Qualified Energy Assessments from competitively selected Qualified Energy Consultants. In accordance with the GJGNY Act of 2009, NYSERDA uses GJGNY funding to provide free energy assessments statewide for small businesses and not-for-profits with 10 employees or fewer. NYSERDA also secured a limited amount of federal American Recovery and Reinvestment Act funds to provide free energy assessments to small businesses and not-for-profits across New York State with more than 10 employees and an average electric demand of 100 kilowatts (kW) or less. In June 2011, the Small Commercial Energy Efficiency Program (formerly known as the Small Business/ Not-for-Profit Energy-Efficiency Financing Program) began offering Participation Loans to small businesses with 100 employees or fewer and not-for-profits with any number of employees that participate in Qualified Energy Assessments. In June 2012, GJGNY also began offering OBR Loans to small businesses and not-for-profits that meet GJGNY eligibility requirements. Financing may also be available to small business or not-for-profits that receive an assessment from a utility, if the assessment meets NYSERDA's standards.

In February 2012, NYSERDA launched a project expeditor pilot to provide assistance to small business and not-for-profit customers that had obtained energy assessments through GJGNY to encourage implementation of energy assessment recommendations. In addition to the assessments and financing, some participants have access to incentives through programs offered by NYSERDA or utilities. Assistance provided through the Small Commercial Expeditor Program can so far be attributed to 51 NYSERDA-approved participation loan applications and 29 NYSERDA-approved On-Bill Recovery financing loan applications. Of these, 10 participation loans were closed at an aggregate of \$618,962 in financing, and six On-Bill Recovery financing loans closed, totaling of \$146,151. Further results of the expeditor pilot will be determined over time.

As of June 2015, 2,947 Qualified Energy Assessments have been completed, of which 2,575 are funded with GJGNY funds, while 849 were funded with American Recovery and Reinvestment Act funds. Overall, 16 participation loans have been closed at a value of \$1.2 million, while eight OBR Loans have been closed at a value of \$202,205, bringing the total value of Small Commercial loans to \$1.4 million..

Details regarding program activity are included in Sections 3, 5, 6, and 7.

S.6 Program Evaluation

Since the introduction of GJGNY, NYSERDA has engaged its third-party evaluation contractors to develop and implement evaluation plans for GJGNY programs. Each evaluation activity is designed to assess the effectiveness, progress, and outcomes related to each of the GJGNY program initiatives and to provide useful feedback to program staff that can be implemented to improve program performance.

Because not all GJGNY programs were implemented concurrently, early discussions between evaluation staff, program staff, and the evaluation contractors identified the need for initial work to focus on residential one- to four-family homes. As GJGNY matured, NYSERDA and its evaluation contractors monitored the program progress and engaged staff to identify future evaluation needs and research objectives. In addition, evaluation staff received input from the Advisory Council on evaluation plans.

A jobs impacts assessment and an evaluation of the financing approach of the Small Commercial Energy Efficiency program were both completed in September 2013. In addition, a process evaluation of the CBO initiative was finalized in March 2014. Phase 1 of a process evaluation of the CBO initiative designed to examine residential efficiency activities was finalized in April 2014. Phase 2 of the same study focused on evaluating CBO's residential outreach was finalized in April 2015. In addition, a market/process evaluation of the Multifamily Energy Performance Program was finalized in October 2014.

Two evaluation activities are currently underway: an impact evaluation of the Small Commercial Energy Efficiency Program that will focus on quantifying the measure adoption rate over time, the degree of program influence on the participant decision-making, and the proportion of installed measures for which customers accessed other NYSERDA funding, and as a part of the impact evaluation of the HPwES program, evaluators are seeking to assess the energy-related impacts of GJGNY assessment-only participants.

Additional information on evaluation activities can be found in Section 9.

S.7 Improvements to Program Offerings

Beginning in 2014, NYSERDA worked with stakeholders to undertake a targeted effort to improve the customer and contractor's experience using the HPwES program. Improvements include updates to the website and consumer marketing materials, enhanced contractor profiles, a streamlined assessment application process, faster project approvals, and changes to the financing products that make them more accessible to customers. These developments have improved the program throughput and increased participation rates.

S.8. GJGNY Low to Moderate Income Working Group

As part of the requirements of Section A.3008/S.2008, Part SS, of the New York State 2015-2016 Budget NYSERDA was directed to convene a working group to develop standards and/or criteria that will encourage and increase participation of and issuance of loans to low to moderate income (LMI) households statewide for qualified energy efficiency services under the GJGNY program. The GJGNY LMI Working Group consists of 19 members who represent constituency-based organizations, LMI

consumer advocates, advocates on utility and housing issues, and stakeholders (including contractors) of the photovoltaic and home energy services industries. The group is chaired by the President and CEO of NYSERDA. Members of the GJGNY LMI Working Group are listed in Table 2-1 of this report. The group has been meeting on a regular basis and working toward a recommendations report per the legislated requirements.

S.9 Conclusion

Various aspects of GJGNY have been underway since the program's initiation and some notable accomplishments have been made:

- OBR financing continues to outpace the unsecured Smart Energy Loan in applications, on average. However, due to stricter cost-effectiveness requirements of OBR, more loans are actually closed as Smart Energy Loans.
- Participation in the Assisted Home Performance with ENERGY STAR® program continues to encompass a significant percentage of participants, 32 percent, meaning that households whose income is no more than 80 percent of the State or area median income are able to reduce their energy bills.
- More than 12 percent of the households qualifying for financing are doing so based on GJGNY's Tier 2 alternative qualification criteria, responsibly expanding the reach of GJGNY to households that likely would not have been able to participate otherwise.
- Many small businesses, not-for-profits, and multifamily building owners are learning about opportunities for reducing their energy bills.
- Many contractors, trainers, assessors, and other businesses have hired new employees, and retained and promoted existing employees, as a result of GJGNY.
- Two Aggregation Pilots have demonstrated the concept of community benefits in coordination with local contractors in underserved neighborhoods.
- Training for HPwES contractors and building operators is being delivered in multiple languages, more effectively serving disadvantaged communities.

However, some aspects of GJGNY are seeing more success than others:

- Although free and reduced-cost assessments and use of CBOs for outreach have shown to improve the reach of programs into underserved populations, program growth has been slow.
- Conversion rates from assessments to contracted work is very good compared to historic performance of free assessment programs nationally; however, not all of the work being accomplished as a result of assessments is being done through NYSERDA programs. Some consumers implement improvements themselves, or hire a non-participating contractor to perform the work. Additional data collection and follow-up are needed to better understand the market impact of the GJGNY program.

- New financing approaches have given access to many homeowners who otherwise may not have been able to obtain financing, but financing denial rates are still relatively high in some regions, preventing work from going forward. NYSERDA has adjusted the underwriting criteria five times since program inception, which has improved the program's reach but will continue to assess the performance of loans issued based on alternative underwriting criteria, and make responsible adjustments as warranted.

As suggested by the Table S-1, funding for most aspects of the GJGNY program will be fully expended within the next year. A priority for the coming year will be evaluation and analysis of the programs, learning from successes and challenges, and developing plans to transition successful strategies and activities to the proposed Clean Energy Fund.³ In addition, although funding for the GJGNY revolving loan fund will be replenished through loan repayment and bond sales, dramatically growing demand for loans from higher income households has rendered the residential loan fund unsustainable in its current form. The low (subsidized) interest rate is not adequate to cover the full cost of providing the loans (origination, servicing, defaults and financing), and the rate of capital replenishment, due in part to long loan terms of up to 15 years, is not adequate to meet the demand for new loans. NYSERDA is working with the GJGNY Advisory Council to develop strategies for maintaining a sustainable loan fund and to ensure those consumers unable to obtain loans through traditional means continue to have access to GJGNY loans.

³ The Clean Energy Fund (CEF) is a set of strategies designed to deliver on New York's commitment to reduce ratepayer collections, drive economic development, and accelerate the use of clean energy and energy innovation. Visit NYSERDA's website at www.nyserderda.ny.gov/About/Clean-Energy-Fund for more information and supporting documents.

1 Introduction

Ramping up the rate of participation in energy projects is recognized as a means to boost New York State's economy by reducing energy bills and by creating job opportunities. Both of these objectives are particularly important in economically distressed communities, where so much investment in energy efficiency and renewable energy resources is needed. Additionally, energy efficiency is recognized as one of the most cost-effective means to reduce greenhouse gas emissions, a benefit to the health of the environment.

To successfully grow the energy services industry, there needs to be investments on many fronts – homeowner and building-owner investments in property, commercial investments in cost-effective process improvements, public and private investments in creating the service delivery infrastructure in addition to public and private investments in educating consumers on the benefits of energy efficiency and related program opportunities. Public investments in the form of improving access to financing and workforce development and training are also important as the market grows. Significant public investment in energy efficiency is occurring in New York State through resources such as the System Benefits Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Renewable Portfolio Standard (RPS), Regional Greenhouse Gas Initiative (RGGI), and potentially in the future, the proposed Clean Energy Fund (CEF); and through federal resources such as the Weatherization Assistance Program (WAP). Simultaneously, New York State residents and commercial industries are making significant investments in energy efficiency and renewable energy, sometimes paying as much as 90 to 100 percent of the cost of work or products supported by public programs. The level of investment is commendable and necessary to overcome energy challenges and to attain the State's aggressive energy and environmental goals.

On October 9, 2009, the Green Jobs-Green New York Act of 2009 (the Act) was signed into law. Pursuant to Title 9-A of New York State Public Authorities Law Section 1890 "The Green Jobs-Green New York Program" directs NYSERDA to:

- Establish a revolving loan fund to provide loans to finance the cost of approved qualified energy-efficiency services for residential, multifamily, and nonresidential structures.
- Offer On-Bill Recovery loans as a means for financing projects.
- Pursue the feasibility of other innovative financing mechanism.
- Issue one or more competitive opportunities to solicit applications from partnerships or consortia composed of constituency-based organizations (CBOs) that can connect community members to GJGNY. In issuing contracts to CBOs that:

- Target communities in areas where energy costs are particularly high in relation to a measure of median household income, as determined by NYSERDA, or that have been designated as a nonattainment area for one or more pollutants pursuant to Section 107 of the federal Clean Air Act.
- Give preference in awards to applicants that include significant participation by minority- and women-owned business enterprises and/or to applications intended serve economically distressed communities.
- Establish standards for energy assessments based on building type and other relevant considerations.
- Establish a schedule of fees for energy assessments, including a sliding scale by which assessment fees shall be waived for residential applicants based on median county income.
- Enter into contracts to provide employment and training services to support the Green Jobs-Green New York Program.
- Establish an Advisory Council.
- Provide annual reports to the Governor, Senate, and Assembly.

On August 4, 2011, Governor Andrew M. Cuomo signed the Power NY Act of 2011, which established an on-bill recovery (OBR) financing mechanism for GJGNY project financing and increased the maximum loan limits for residential and small business/not-for-profit GJGNY loans, subject to certain project payback criteria. Although the legislation called for the OBR Loans to be available by May 2012, working with the utilities and Department of Public Service staff, NYSERDA was able to implement OBR Loans for residential consumers commencing January 30, 2012. In April 2012, an amendment to the GJGNY law (Public Authorities Law § 1896(5)) made additional changes to improve the OBR financing mechanism.

An additional amendment to the GJGNY Act of 2009 was signed into law on October 22, 2013, which extended the availability of GJGNY financing to net-metered technologies, which enabled residential solar electric installations through GJGNY loans.

Section A.3008/S.2008, Part SS, of the New York State 2015-2016 Budget included requirements for NYSERDA related to GJGNY as follows:

- Provide a report to the executive, temporary president of the senate, speaker of the assembly, the chair of the senate committee on energy and telecommunications and the chair of the assembly committee on energy regarding the financial status of the Green Jobs - Green New York program. This report was submitted on May 1, 2015.
- Continue to offer financing, pursuant to through the Green Jobs - Green New York program for qualified energy efficiency services to all applicants who were eligible on January 1, 2015, through March 31, 2016.
- Develop standards and/or criteria that will encourage and increase participation of and issuance of loans to low-to-moderate income households statewide for qualified energy efficiency services under the Green Jobs - Green New York program.
- Convene a working group to assist in developing these standards and/or criteria that includes individual representatives of constituency-based organizations.
- Consult with and solicit information and recommendations from the working group as to how to increase participation and issuance of loans to low-to-moderate income households seeking qualified energy efficiency services.
- Report the results of consultations with and solicitations of the working group to the governor, the senate majority leader and the speaker of the assembly within six months of the March 31, 2015 effective date of the legislation.

In April 2015, NYSERDA established the GJGNY LMI Working Group, which consists of 19 members who represent constituency-based organizations, LMI consumer advocates, advocates on utility and housing issues, and stakeholders (including contractors) of the solar electric and home energy services industries. The group is chaired by the President and CEO of NYSERDA. The group has been meeting on a regular basis and working toward a recommendations report, which will be submitted on October 1, 2015, per the legislated requirements.

This sixth Annual Report submitted for GJGNY was prepared pursuant to Section 1899 of the Act, and provides an update on the progress and achievements of GJGNY through June 30, 2015.

2 Advisory Council and Public Input

NYSERDA's initial planning process for GJGNY involved significant input from the general public, various interested parties, and program stakeholders. During the initial nine-month planning phase of the program, the GJGNY Advisory Council held meetings every three to four weeks. As the GJGNY program began its deployment phases, meetings of the Advisory Council changed to a quarterly schedule and monthly written reports were added to ensure Advisory Council members have current information on important milestones, achievements, or issues. In 2014, NYSERDA proposed a change to the regular Advisory Council meeting schedule whereby the Council will meet twice a year as opposed to quarterly. Additional special meetings are arranged to discuss significant program changes or in response to Advisory Council requests on topics that should not wait for the next scheduled meeting. Advisory Council meetings are open to the public, and documentation of the meetings is posted on NYSERDA's website. Visit nyserda.ny.gov/About/Green-Jobs-Green-New-York/Advisory-Council/Meetings to view Advisory Council meeting documentation.

The Advisory Council consists of 10 Ex-Officio Members and 22 Appointed Members who represent: constituency-based community groups; consumer advocates on utility and housing issues; community-based workforce development groups; unions, including building trades and property services; home performance contractors; large-scale construction contractors; and investment market experts. Members of the Advisory Council are listed in Table 2-1.

During the 2014 Annual Report reporting period, the Advisory Council met on September 12, 2013; December 4, 2013; and May 14, 2014. Agendas for the Advisory Council meetings are provided in Appendix A.

Table 2-1. GJGNY Advisory Council Members

Name	Organization	Term Expires
John B. Rhodes	President and CEO, NYSERDA (Chair)	n/a
Howard Zemsky	Commissioner, New York State Department of Economic Development	n/a
Samuel D. Roberts	Commissioner, New York State Office of Temporary and Disability Assistance	n/a
Audrey Zibelman	Chair, New York State Department of Public Service	n/a
John D. McMahon	Chief Operating Officer, Long Island Power Authority	n/a
Marc Gerstman	Acting Commissioner, New York State Department of Environmental Conservation	n/a
Cesar A. Percales	Secretary of State	n/a
Gil C. Quinines	President and CEO, New York State Power Authority	n/a
Mario J. Musolino	Acting Commissioner, Department of Labor	n/a
James Rubin	Commissioner, New York State Homes and Community Renewal.	n/a
James Barry	Service Employees International Union 32BJ	12/31/2016
Chuck Bell	Consumers Union	12/31/2015
Les Bluestone	Blue Sea Construction	12/31/2015
Tria Case	CUNY	12/31/2016
Richard Cherry	Community Environmental Center	12/31/2016
Sammy Chu	Suffolk County Department of Labor	12/31/2016
Stephen Edel	Center for Working Families	12/31/2016
Kate Fish	Adirondack North Country Association	12/31/2016
Clarke Gocker	People United for Sustainable Housing - Buffalo	12/31/2016
Dave Hepinstall	Association for Energy Affordability	12/31/2015
Alan Higgs	Housing Assistance Program of Essex County	12/31/2015
David Johnson	Laborers International Union of North America	12/31/2015
William Johnson	Green America Public Private Partnership	12/31/2015
Dan Kartzman	Powersmith	12/31/2016
Jennifer Keida	Standard Insulation Co. Inc.	12/31/2015
Jason Kuflik	Green Street Power	12/31/2016
Conrad Metcalf	Building Performance Contractors Assoc.	12/31/2016
Jackson Morris	National Resource Defense Council	12/31/2015
Ellen Redmond	International Brotherhood of Electrical Workers	12/31/2016
Kevin Rooney	Oil Heat Institute of Long Island	12/31/2016
Paul Shatsoff	Workforce Development Institute	12/31/2016
Hal Smith	Home Energy Performance by Halco	12/31/2015
Lisa Tyson	Long Island Progressive Coalition	12/31/2016
Michael Weisberg	Hudson Valley Commercial Bank	12/31/2016

As discussed in Section 1, in April 2015 NYSERDA established a GJGNY LMI Working Group. To facilitate consistency and inter-group communication, several members of (or organizations represented on) the GJGNY Advisory Council also serve on the GJGNY LMI Working Group. Members of the working group are listed in Table 2-2.

Table 2-2. GJGNY LMI Working Group Members

Name	Organization
John B. Rhodes	NYSERDA (Chair)
Michael Corso	New York State Department of Public Service
Stephan Edel	Center for Working Families
Bill Feldmann	Empire Clean Energy Supply
Adam Flint	Binghamton Regional Sustainability Coalition
Clarke Gocker	PUSH Buffalo
Stan Greschner	Grid Alternatives
Jeff Irish	Hudson Solar
Guy Kempe	RUPCO
Kathleen Langton	Affordable Housing Partnership Home Ownership Center
Carlo Lanza	Harvest Power
Euphemia Martin	Public Policy and Education Fund of New York – Southern Tier
Michael Murphy	All Star Energy
Ellen Redmond	International Brotherhood of Electrical Workers
Henri Rivers	Drum River Renewable Energy & Efficiency
Marriele Robinson	Long Island Progressive Coalition
Hal Smith	Home Energy Performance by Halco
Angela Tover	Sustainable South Bronx
Hubert Van Tol	Pathstone

2.1 Creating an Industry Working Group

NYSERDA is part of the Creating an Industry Working Group, a collaborative group established by the trade organization for home performance contractors. Efficiency First and including NYSERDA, PSEG-Long Island, National Grid, constituency-based organizations, and NYSERDA’s program implementation contractors. The group discusses opportunities, challenges, and mitigation strategies related to delivering GJGNY in the one- to four-family residential sector. Members of the group also review documents and program tools in addition to preparing training and information for other program participants. Through the work of this group, and in collaboration with other stakeholders, NYSERDA has been able to provide significant streamlining and improvements to program delivery in the residential sector.

During the current reporting cycle, the group provided continual feedback for improvements to NYSERDA's HPwES Program Portal, a Web-based program interface for contractors, customers, program staff, and implementation contractors launched in August 2013 to improve tracking and approval of documents and to provide improved transparency to all parties of a project's status. The Creating an Industry Working Group continues to support NYSERDA in the effort to make additional modeling software tools available for use in the program. Four new HPXML compliant tools were piloted for use in the program starting in 2015. HPXML is a standardized Home Performance data transfer protocol. These software tools will provide contractors with choice based upon their preferences and ease of use. In the upcoming months, NYSERDA will rely on the Creating an Industry Working Group to evaluate new software modeling tools. The HPXML software will allow the program to launch the first phase of Express Contract that allows for automated eligibility screening for incentive only projects in July 2015. Development work is also underway for automated screening for projects with the Assisted subsidy or financing, expected to be implemented by the end of the year.

In 2014, NYSERDA launched a Net Promoter Score (NPS) pilot, which surveys HPwES program participants on how likely they would be to recommend the program and their contractor to a friend or family member following the assessment and project completion stages of the program. Through June 2015, 2,863 assessment surveys have been returned, representing a 21 percent response rate. Satisfaction is generally positive at 51 percent for Contractors and 58 percent for the Program; 5 percent contained detracting comments that triggered the program to follow up. A total of 1,185 surveys for completed projects have been returned, a 30 percent response rate. Satisfaction is generally high at 62 percent for Contractors and 75 percent for the Program. Follow up was triggered by 3 percent of responses with detracting comments. NYSERDA will continue to work with the Creating an Industry Working Group and other stakeholders to explore how the NPS data can best be used to benefit consumers and the contractor base.

2.2 Website

To ensure transparency and to keep members of the public up-to-date about GJGNY, a section of NYSERDA's website is dedicated to GJGNY. Visit nyserda.ny.gov/About/Green-Jobs-Green-New-York for information about GJGNY. All GJGNY-related documents, including Advisory Council meeting materials and videos, operating plans, monthly updates, and annual reports are posted to the website.

3 Financing

This section provides information related to various financing activities being undertaken that aide owners of one- to four-family residential buildings, multifamily buildings, and buildings occupied by small businesses and not-for-profit organizations to invest in energy efficiency improvements.

3.1 U.S. Department of Energy Grant Award

In May 2010, NYSERDA received a competitive award from the U.S. Department Energy (DOE) Better Buildings Program Energy Efficiency Conservation Block Grant (EECBG) to leverage new and existing energy-efficiency retrofit and finance programs to create large-scale sustainable approaches to financing energy efficiency across the State. From the total award of \$40 million, New York City received a sub-award of \$21.4 million to support financing for commercial customers. An additional \$5 million was sub-granted to a coalition of Long Island towns, through Community Development Center of Long Island, to support energy efficiency outreach programs that encourage energy efficiency retrofits, with financing provided through GJGNY. Of that sub-grant money, \$2 million is being used for loan loss reserve for loans issued. NYSERDA's \$13.6 million portion of the grant is being used to support energy efficiency financing through the GJGNY program and to leverage private capital.

The DOE grant requires no less than 60 percent of the NYSERDA/State funding of \$13.6 million (equaling \$8.16 million) to be sub-granted to small municipalities that are not eligible for EECBG funding. The Bedford/Westchester Consortium Pilot Financing Program, partners in the proposal to DOE, is using \$1,267,864 of the award to administer their own pilot financing program through GJGNY. To meet DOE's grant requirements, a competitive solicitation was released in March 2011 for \$6,892,135. The solicitation resulted in eight awards: seven awards went to municipalities that will serve as host communities for the GJGNY Revolving Loan Fund, and one award went to Oswego County for \$744,825 to administer their own small commercial loan fund. The municipalities awarded as GJGNY host communities will use approximately \$614,730 for outreach and marketing efforts in their regions, and they have re-granted approximately \$5.5 million to NYSERDA: \$5,032,581 to GJGNY Revolving Loan Fund loan loss reserves and \$500,000 for system upgrades to support OBR financing.

NYSERDA has allocated \$8,512,581 of its grant funding approved by the DOE for loan loss and debt service reserves to fund a Collateral Reserve Account, associated with a guarantee provided by the New York State Environmental Facilities Corporation (EFC) through its State Revolving Fund (SRF) program of NYSERDA's \$24.3 million Residential Energy Efficiency Financing Revenue Bonds (Series 2013A) issued in August 2013, which is used to finance certain loans issued through the GJGNY program. The Collateral Reserve Account will be used to reimburse the EFC for any draws upon its guarantee and was instrumental in obtaining the guarantee from EFC (allowing the bonds to achieve a AAA-rating) and protecting the SRF program from shortfalls in pledged loan repayments.

NYSERDA and NY Green Bank also entered into a Letter of Credit Agreement with the Energy Improvement Corporation (EIC), a local development corporation located in Bedford Hills, NY, funded with \$500,000 from the DOE grant funding, to support the Energize NY Benefit Financing Program. This program offers financing for energy efficiency improvements and renewable energy system installations in commercial buildings repaid through a charge collected on property tax bills from participating municipalities, commonly referred to as Property Assessed Clean Energy (PACE) financing. NYSERDA's funding is matched with funding provided by EIC to fund loan loss reserves and debt service reserve funding to cover any shortfalls in the collections of financing repayment charges by the participating municipalities.

A breakdown of the entire budget for this grant funding is provided in Table 3-1.

Table 3-1. U.S. DOE Grant Funding Budget

Grants	New York City	Long Island Consortium	NYSERDA		Total
			Direct	Small Municipalities	
New York City Financing to Commercial Customers	\$21,400,000				\$21,400,000
Long Island Towns Outreach		3,000,000			3,000,000
Town of Bedford/Westchester Consortium Pilot Financing Program				1,267,864	1,267,864
Oswego County (Small Commercial Energy-Efficiency Loan Fund)				744,825	744,825
Outreach by local government host communities				614,730	614,730
Reserve used to fund Collateral Reserve Account to secure Guarantee from NYS Environmental Facilities Corporation for NYSERDA Residential Energy Efficiency Revenue Bonds (Series 2013A)		2,000,000	1,980,000	5,032,581	8,512,581
Loan loss and debt service reserve with Energy Improvement Corporation to support Energize NY Benefit Financing Program			500,000		500,000
GJGNY small business energy assessment subsidies			1,700,000		1,700,000
Upgrades to support on-bill recovery financing			400,000	500,000	900,000
Subtotals	21,400,000	5,000,000	4,080,000	8,160,000	38,640,000
NYSERDA administration			1,360,000		1,360,000
TOTAL	\$21,400,000	\$5,000,000	\$13,600,000		\$40,000,000

3.2 Revolving Loan Fund

NYSERDA has established a Revolving Loan Fund to support energy efficiency financing for owners of one- to four-family residential buildings, multifamily buildings, and buildings occupied by small businesses and not-for-profit organizations. The GJGNY Act requires the initial balance of the residential account to be at least 50 percent of the total balance. NYSERDA has allocated the financing across sectors as represented in Table 3-2.

Table 3-2. Revolving Loan Fund Budget by Sector

Program Area	Budget	Loans Issued and Implementation Expenses	Loan Repayments and Bond Proceeds	Encumbered	Committed	Balance
One- to Four-Family Residential Buildings	\$77,089,673	\$107,237,676	\$63,379,382*	\$152,134	\$17,435,150	\$15,644,095
Multifamily Performance	10,842,089	3,805,777	925,552	160,708	698,561	\$7,102,595
Small Commercial Energy Efficiency	11,435,829	975,436	105,852	279,855	0	\$10,286,390
TOTAL	\$99,367,591	\$112,018,889	\$64,410,786	\$592,697	\$18,133,711	\$33,033,080
* Bond proceeds are reported less bond issuance cost.						

Pursuant to the GJGNY Act, loans were initially limited to not more than \$13,000 per applicant for one- to four-family residential structures and \$26,000 per applicant for small business and not-for-profit structures. The Power NY Act of 2011 raised the maximum loan amount to \$25,000 for residential structures and \$50,000 for small business and not-for-profit structures, provided that the project payback is 15 years or less. NYSERDA has established programmatic limits for multifamily structures, not to exceed \$5,000 per unit and \$500,000 per building.

To pursue financing through the Revolving Loan Fund, a customer must have a qualified energy assessment that identifies energy services to be undertaken. Subject to the loan caps, the amount eligible for financing will be the total project cost minus any NYSERDA utility or other incentives or rebates that are available. The total cost of the project may include the removal of equipment or systems to be replaced, the purchase and installation of new systems or equipment, the purchase and installation of any required ancillary equipment and related services, including health and safety, and the customer's expense for an energy assessment.

3.2.1 Residential Financing

GJGNY offers two types of loans for one- to four-family residential energy efficiency improvements. An unsecured consumer loan financing product was launched on November 15, 2010. This loan, referred to as the Smart Energy Loan, requires the consumer to make monthly loan payments directly to NYSERDA's master loan servicer, Concord Servicing Corporation. On January 30, 2012, NYSERDA launched OBR loans, as authorized by the Power NY Act of 2011. This product was implemented four months prior to the May 30, 2012 implementation required by the statute. The OBR loan allows consumers to repay through an installment charge on a bill from one of the involved electric or gas utilities (Central Hudson, Con Edison, Long Island Power Authority, National Grid [Upstate], New York State Electric and Gas Corporation, Rochester Gas and Electric Corporation, or Orange and Rockland Utilities). The utilities then remit repayments to NYSERDA's master loan servicer, who coordinates data communications with each utility.

The residential loans are originated statewide through Energy Finance Solutions (EFS), a not-for-profit energy efficiency lending organization competitively selected by NYSERDA to provide residential financing services. EFS reviews loan applications and originates loans pursuant to loan underwriting criteria established by NYSERDA. EFS closes on the loan, disburses loan proceeds to the contractor, and submits the loan to NYSERDA's master loan servicer, Concord Servicing Corporation. Then, NYSERDA reimburses EFS for the loan disbursement from the Revolving Loan Fund. Concord Servicing Corporation is responsible for borrower billing and collections on the loan portfolio and also monitors the origination processes on a sample basis to ensure conformance to standards.

Further details of the financing available to this sector are found in Section 5.

3.2.2 Multifamily Building Energy-Efficiency Financing

Through a Participation Loan, launched in June 2011, a participating lender issues a loan for a qualifying energy efficiency project. NYSERDA participates in the funding of 50 percent of the loan (up to a maximum of \$5,000 per unit or \$500,000 per building) at zero percent interest, with the lender setting the interest rate on its share of the loan. The lender is responsible for collecting loan repayments and remitting to NYSERDA its proportionate share, and NYSERDA and the lender share pro-rata on any loan defaults.

Further details of the financing available to this sector are found in Section 6.

3.2.3 Small Commercial Energy-Efficiency Financing

GJGNY offers two types of loans for energy efficiency improvements in small business and not-for-profit structures. Through a Participation Loan, launched in June 2011, a participating lender issues a loan for a qualifying energy efficiency project. NYSERDA participates in the funding of 50 percent of the loan (up to a maximum of \$50,000) at zero percent interest, with the lender setting the interest rate on its share of the loan. The lender is responsible for collecting loan repayments and remitting to NYSERDA its proportionate share. The participating lender is responsible for loan underwriting pursuant to its standards, and NYSERDA and the lender share in a pro-rata basis on any loan defaults. In July 2012, NYSERDA launched On-Bill Recovery (OBR) Loans. This approach allows participating lenders, known as originators, to originate an OBR Loan on NYSERDA's behalf, using NYSERDA loan underwriting standards. The loans are issued at an interest rate of 2.5 percent for a maximum loan amount of \$50,000. The loan is repaid to NYSERDA through an installment charge on the participating electric/gas utility bill, remitted to NYSERDA's master loan servicer.

Further details of the financing available to this sector are found in Section 7.

3.2.4 Bond Financing

In August 2013, NYSERDA issued \$24.3 million in Residential Energy Efficiency Financing Revenue Bonds (Series 2013A). The bonds were secured by pledged loan payments from certain residential energy efficiency loans issued through the program (totaling approximately \$29.2 million in aggregate principal) and available monies in the GJGNY revolving loan fund. Approximately 65 percent of the pledged loan pool was unsecured Smart Energy Loans and the remaining 35 percent were OBR Loans. The bonds require NYSERDA to maintain future loan repayments and other pledged revenues of not less than 110 percent of the annual bond principal and interest due in each year.

As a second source of security, the New York State Environmental Facilities Corporation (EFC) provided a guarantee of the principal and interest on the bonds through its State Revolving Fund (SRF) program. EFC's SRF program provides access to AAA-rated financing for clean water and drinking water projects. EFC received concurrence from the U.S. Environmental Protection Agency to qualify the financing of the residential energy efficiency loans as an eligible SRF project. Due to the guarantee, the bonds received AAA rating by Moody's Investors Service and Standard and Poor's Ratings Services. As discussed in Section 3.1, NYSERDA funded a Collateral Reserve Account pledged to EFC.

The bonds were sold as Qualified Energy Conservation Bonds (QECCB), using a portion of the State's bond volume cap authorization, which provided a substantial interest subsidy from the U.S. Treasury. The bonds were structured with serial maturities with a weighted average term of about 6.9 years and a weighted average interest rate of about 3.2 percent. The net interest rate on the bonds, net of anticipated QECCB interest subsidies, is anticipated to be about 0.5 percent.

The transaction was a success, with 34 percent of the bonds sold to funds with social responsibility mandates. The deal was also named the 2013 Small Issuer Deal of the Year by *The Bond Buyer* newspaper and offers a replicable model to be considered by other states.

In September 2014, NYSERDA closed on a \$30 million short-term financing facility through EFC to finance additional residential energy efficiency loans. The Notes have a maturity of five years and bear interest at zero percent for the first \$15 million drawn under the facility, and 0.35 percent for the remainder. NYSERDA drew down the full amount of the facility in March 2015. The short-term notes are expected to be redeemed in August 2015 with long-term bonds issued to EFC, which will also provide funding to finance additional energy efficiency loans issued through March 2016.

NYSERDA has retained Jefferies & Co. as placement agent to secure a borrowing facility/drawdown bond structure to finance certain residential solar electric loans issued to date through the program and additional loans anticipated to be issued through March 2016.

3.3 Financing Contracts Entered Into

In 2009, NYSERDA competitively selected EFS to originate residential energy-efficiency financing through its HPwES program, and the contract was amended to provide for origination services for solar electric loans issued through the GJGNY program upon passage of the associated legislation. A competitive solicitation issued in March 2011 resulted in the selection of Concord Servicing Corporation to provide master loan servicing. NYSERDA entered into an interim contract with NY Title Research Corporation, Zodiac Title Services, and Advantage Title Agency to perform property searches and to file mortgage/declaration documents to support OBR Loans. A competitive solicitation issued in April 2013 awarded contracts on a regional basis to provide these services.

NYSERDA competitively retained a financial advisor, Lamont Financial Services, to provide services for program design and to provide advice on financial structures. NYSERDA also competitively selected Hawkins, Delafield and Wood as its bond counsel to provide legal advice on financial matters, legislation, program design, and structures for financing. Additionally, NYSERDA entered into a contract with the Energy Programs Consortium to support development of a multistate financing structure for unsecured energy efficiency financing that will facilitate the securitization of such loans in which it may participate. Funding amounts for these contracts are detailed in Table 3-3.

Table 3-3. Financing Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO- 21769	Concord Servicing Corporation	RES Master Loan Servicer for GJGNY	N/A	\$1,048,009	\$0	\$0
15518	Wisconsin Energy Conversation Corporation (Energy Finance Solutions)	Origination Fees	N/A	\$1,920,444	\$0	\$0
PO-35421	First Associates Loan Servicing	Backup Loan Servicer for GJGNY Loan Program	\$116,500	\$34,500	\$82,000	\$0
PO- 27533	NY Title Research Corp.	OBR Last Owner Searches	\$59,860	\$59,860	\$0	\$0
PO- 31684	Zodiac Title Services	OBR Last Owner Searches & Recording Services	\$100,000	\$100,000	\$0	\$0
PO- 31684-1	Zodiac Title Services	OBR Last Owner Searches & Recording Services	\$50,000	\$26,670	\$23,331	\$0
PO- 33527	Advantage Title Agency, Inc	OBR Last Owner Searches & Recording Services	\$75,000	\$75,000	\$0	\$0
PO- 36864	Advantage Title Agency, Inc	OBR Last Owner Searches & Recording Services	\$200,000	\$197,123	\$2,878	\$0
PO- 38299	Frontier Abstract & Research Services	OBR Last Owner Searches & Recording Services	\$199,999	\$186,194	\$13,805	\$0

Table 3-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
PO- 37723	Stewart Title Insurance Company	OBR Last Owner Searches & Recording Services	\$199,999	\$187,497	\$12,361	\$0
PO- 40738	Energy Improvement Corporation	Energize New York Program Support	\$50,000	\$50,000	\$0	\$0
PO- 20662	Energy Programs Consortium	Phase I	\$6,250	\$6,250	\$0	\$0
PO- 18591	Hawkins Delafield & Wood	Legal financial advisory services for GJGNY	\$319,920	\$313,998	\$5,922	\$0
PO- 19923	Lamont Financial Services Corporation	Financial Advisor Services	\$327,050	\$315,212	\$11,838	\$0
PO- 26143	Equifax Credit Marketing Services	Annual Subscription to CreditForecast.com 2011-12	\$20,000	\$20,000	\$0	\$0
PO- 30985	Fitch Ratings, Inc.	Issuance of NYSERDA 2012 GJGNY Energy Efficiency Bonds	\$45,000	\$45,000	\$0	\$0
PO- ST10743-1	Harris Beach PLLC	Bond Counsel	\$125,000	\$125,000	\$0	\$0
PO- 33119	NetRoadshow, Inc.	Establishment of portal communication between NYSERDA and bond rating agency	\$5,000	\$5,000	\$0	\$0
TOTAL FINANCING IMPLMENTATION			\$1,899,579	\$4,715,756	\$152,134	\$0
NOTE: Contract funding amounts listed in Table 3-3 are total amounts. Due to the fact that these services are provided across the One-to-Four-Family Residential, Multifamily, and Small Commercial sectors, the prorated share of these contracts is also provided in the Contracts Entered Into tables in sections 5, 6, and 7.						

3.4 On-Bill Recovery Financing

The Power Act of 2011 requires additional reporting regarding On-Bill Recovery financing. Additional information regarding On-Bill Recovery financing as of June 30, 2015, is provided as Appendix B.

4 Workforce Training and Development

The Workforce Training and Development (WFD) initiative was designed to build on existing NYSERDA and New York State Department of Labor (DOL) programs targeted at preparing individuals for energy efficiency and renewable energy careers in New York State. Specifically, WFD efforts under GJGNY were designed to expand energy-specific content in New York State Registered Apprenticeship and third-party accredited building trades programs, to increase access to technical training workshops for skills enhancement and certification, and to bridge the gap between training and employment through on-the-job training incentives for businesses seeking to hire and train new workers. Implementation of the GJGNY WFD initiative began in mid-2010 and was initially presented in the 2010 GJGNY Annual Report.

Under the GJGNY Act, a significantly increased demand for skilled labor based on consumer demand for products and services was anticipated, and WFD programs were designed around that anticipated demand and in coordination with the Workforce Development Working Group. However, demand for energy retrofits in the single-family, multifamily, and small commercial sectors was lower than anticipated. As a result, the large number of new jobs GJGNY training partners were preparing people for did not materialize. Some training providers, primarily those located in areas with high population density, were able to train a significant number of individuals and to facilitate connections to employers seeking to hire. Others have been challenged to fill classrooms and to meet enrollment projections. The on-the-job training program was designed to help bridge the gap between training and job placement and, of the 536 individuals hired to date, 265 were supported with GJGNY funding.

4.1 Workforce Training and Development Solicitations

Since the inception of the GJGNY WFD initiative, NYSERDA has issued a total of seven Program Opportunity Notices (PONs) and Requests for Proposals (RFPs) designed to support the Operating Plan and the workforce training objectives of the Green Jobs – Green New York Act.

GJGNY workforce development and training activities are expanding New York State's capacity to deliver training services through working with community-based training organizations, expanding existing training centers, providing much-needed training equipment and tools, and minimizing barriers to delivering field testing and certification examinations. The initiative is also providing direct-entry, on-the-job, and apprenticeship incentives to help defray the costs for businesses associated with bringing on new hires.

NYSERDA WFD efforts funded under GJGNY are aligned with program strategies that promote the widespread implementation of energy efficiency and renewable energy measures and provide meaningful employment opportunities for job seekers. Access to technical training, equipment, and opportunities for hands-on experiential learning opportunities is needed to master skills, pass certification exams, and enable businesses to employ newly-trained workers that must deliver a quality work product.

4.1.1 Workforce Development and Training Partnerships for Energy Efficiency and Lab Houses for Field Testing

The Workforce Development and Training Partnerships for Energy Efficiency and Lab Houses for Field Testing opportunity (PON 1816), an open enrollment solicitation issued December 2010, included several funding components: career pathways for engaging disadvantaged communities, technical training, certification reimbursement, and internships and apprenticeship support. GJGNY funds totaling \$1.65 million were added to the existing Energy Efficiency Portfolio Standard-funded PON 1816, which built on existing career pathways efforts. Upon issuance in 2010, PON 1816 included GJGNY funding for accreditations and certifications. In 2012, the accreditation and certification reimbursement components were moved to PON 2397 to align all individual incentives. Since 2011, 32 companies have received BPI accreditation with GJGNY funding awards totaling \$37,252 and 94 individuals received certifications with GJGNY funding awards totaling \$73,861.

GJGNY training partnerships under PON 1816 included the Syracuse University Southside Innovation Center, Solar One, and Northern Manhattan Improvement Corporation. All training partners have completed contracted activity and continue to monitor the retention of students placed in employment opportunities.

Also under PON 1816, NYSERDA sought proposals to establish four lab houses, also known as pressure houses, for use in connection with classroom instruction, field activities, and field testing for green job worker certifications. A “pressure house” is a small house or house-like lab facility used to teach duct testing, blower door testing, combustion appliance zone pressure testing, combustion appliance testing, and other services for the residential and small commercial market. An increased number of pressure houses throughout New York State provides greater local access to hands on field training and field testing facilities that prepare clean energy workers with certifications in support of GJGNY. NYSERDA lab houses were developed in coordination with NYS Homes and Community Renewal (HCR), which sponsored two additional training houses under the American Recovery and Reinvestment Act (ARRA). HCR houses are located at Hudson Valley Community College and Erie Community College.

Northeast Parent and Child Society (NEPCS) completed construction of their pressure house in Schenectady, NY, received their certificate of occupancy and have been hosting energy efficiency trainings and exams since June 2014. Training is targeted to at-risk and low- to moderate-income young adults between the ages of 18 and 24 in addition to college students.

Green Jobs Training Center (GJTC) completed construction of their lab house located in Howard Beach on Long Island in October 2013. To date, GJTC has trained 299 individuals in the clean energy technologies. In addition, GJTC is becoming a destination for practitioners seeking skills enhancement.

Champlain Valley-Technical Education Center (CV-TEC) of Plattsburgh, NY, utilized Earth Science Engineering (ESE)/Zebra-Tech to create project blueprints on a pro-bono basis. Upon completion, stamped blueprints were forwarded to the New York State Education Department's Office of Facilities Planning for approval. Upon receipt of NYSED project approval, CV-TEC was granted permission to begin construction. SUNY Ulster's Kelder House pressure house construction was completed August 2013. To date, SUNY Ulster has trained 322 individuals in clean energy technologies.

4.1.2 Energy Efficiency Technical Training

The Energy Efficiency Technical Training opportunity (PON 1817), a competitively bid solicitation issued June 2010, included \$600,000 in GJGNY funds to support the development of Oil Heat Efficiency training and Small Commercial Energy Assessment training. As a result, one contract for Oil Heat Efficiency and two contracts for Small Commercial Energy Assessment curriculum development and training were issued.

Oil Heat Technician Training: Community Power Network (CPN) was funded under PON 1817 to incorporate BPI-specific guidelines into the existing oil heat technician training, with an emphasis on whole building science and energy efficiency, combustion efficiency, advanced oil tank installation, and combustion and air venting. The CPN contract concluded in May 2015 after achieving a total of 784 individuals trained in National Oilheat Research Alliance (NORA) Bronze Certification; NORA Silver Certification; NORA Gold Certification; NORA Tank Certification; and Combustion Air, Venting, Efficiency and Carbon Monoxide. Additionally, CPN developed and piloted a new course incorporating the use of an American Reinvestment and Recovery Act-funded equipment trailer. This course provides oil heat technicians with the opportunity for hands-on instruction and practice in boiler installation and troubleshooting.

Small Commercial Energy Assessment Training: The City University of New York (CUNY) Building Performance Lab has developed skill enhancement training for assessors conducting small commercial assessments. The 15 training modules include classroom activity as well as assignments designed to apply skills in the field. Participants will work individually as well as in small groups to complete hands-on training sessions and presentations. In July 2014, the curriculum was updated to include content on building envelope as well as data entry through the Department of Energy's Portfolio Manager tool. The CUNY team also developed separate video resources on instrumentation including, but not limited to, light meters, data loggers, and thermal imaging. CUNY was funded only for content development and does not have any training metrics to report. A partnership between CUNY and Envirolution to deliver the training in New York City is underway.

Under a separate PON 1817 contract, the State University of New York at Stony Brook has developed specialized Small Commercial Assessment training, in cooperation with the United States Green Buildings Council, specific to building stock in New York City. Small Commercial Energy Assessment training developed under this initiative is based on existing American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) standards for Level 1 and Level 2 assessments. Stony Brook conducted three pilot training sessions in Long Island, Syracuse, and Buffalo, receiving more than 181 applications for 75 available openings in the classroom. A total of 63 individuals completed the training. The curriculum was well-received and is being adapted based upon the feedback from the group, and being used by Stony Brook.

4.1.3 Solar Thermal Training

The Solar Thermal Training opportunity (PON 2011), issued in May 2010, offered \$300,000 in GJGNY funds to develop solar thermal training or solar thermal modules to integrate with existing energy efficiency training, including curriculum development, equipment, code official training, and assistance to apply for the Interstate Renewable Energy Council Institute for Sustainable Power Quality (IREC ISPQ) accreditation. A total of four contracts were executed: Ulster County BOCES, Monroe Community College, and SUNY Canton in addition to Sullivan County BOCES, which was later cancelled due to inactivity resulting from staff changes and low enrollment. SUNY Canton has achieved IREC ISPQ accreditation for its Solar Heating Installer Program. As of June 30, 2015, 248 individuals have been trained under NYSERDA solar thermal training partnerships. Solar thermal training programs were established and continue to operate as demand for the training dictates.

4.1.4 Contractor Exchange Workshops

In August 2010, NYSERDA awarded \$150,000 to Building Performance Institute (BPI) to develop and implement five Contractor Exchange Workshops across the State. The goal of these workshops was to address business development and management skills for new and existing home performance contractors. More than 460 people attended these workshops, which not only helped educate home performance contractors, but also provided valuable feedback to program staff regarding the program's benefits and challenges.

4.1.5 Technical Workshops/Expanding BPI Field Exam Capacity/Certification Standards

The Technical Workshops/Expanding BPI Field Exam Capacity/Certification Standards opportunity (PON 2032), released in March 2012, included \$1.48 million for three funding categories: a) Hands-on Technical Workshops, b) Expanding BPI Exam Capacity, and c) Oil and Gas Furnace Installation Certification Standards.

The PON closed in December 2012. In total, seven proposals were funded under Category A resulting in contracts with the following training partners: Solar One, New York State Weatherization Directors Association (NYSWDA), Institute for Building Technology and Safety (IBTS), two with the Building Performance Contractor's Association (BPCA), Northeast Parent and Child Society, and SUNY Ulster. Energy efficiency and solar thermal training delivered includes: entry-level building science, energy modeling software, solar thermal installation, and advanced skill enhancement training such as infrared thermography. Training providers are under contract to train a total of 1,931 individuals, of which 1,361 (70 percent of the total goal) have been trained to date. A number of the training programs, including BPCA and NYSWDA, have struggled to meet enrollment goals despite NYSERDA tuition subsidies that buy down the cost of tuition to enrollees. They cite the lack of industry demand for skilled workers and lack of NYSERDA marketing support as barriers to achieving enrollment goals. Note that no NYSERDA marketing funds were provided as part of PON 2032 Workforce Development training contracts. Although no direct marketing funds were provided, NYSERDA promoted training through the website and training map. Training providers are typically required to register for NYSDOL's lists of recognized training partners which provide additional marketing opportunities through NYSDOL's website and Career Centers across the state. Trainings under PON 2032 will continue through 2015.

Under Category B, two contracts were awarded. Solar One and SUNY Ulster were awarded funds to expand their network of BPI proctors so that field exam testing capacity could be expanded. As a result, three instructors became eligible to proctor BPI Building Analyst and BPI Energy Efficient Building Operator exams. SUNY Ulster hired three new BPI test proctors.

Under Category C, a competitive component seeking proposals for Oil and Gas Furnace Installation certification standards, a number of proposals were received but none were fundable. After reviewing the proposals received and discussing further, NYSERDA reached out to DOE and other program administrators to determine interest in supporting the development of a new technical standard for the installation of oil-fired and gas-fired furnaces that would better combine building science health and safety principles into the Air Conditioning Contractor's of America Quality Installation standard. As a result, it was determined that there is no interest at this time in developing a new standard as originally envisioned in the solicitation.

4.1.6 Internships/Apprenticeships/On-the-Job Training

The Internships/Apprenticeships/On-the-Job Training opportunity (PON 2033), originally released in June 2011, to recruit entry-level workers, support businesses hiring graduates from career pathways training programs, and enhance standards for the NYS Registered Apprenticeship Programs and building trades programs, including weatherization and certified energy-efficiency technicians for GJGNY. The PON provided \$3.55 million, of which \$1.7 million was GJGNY funding.

Under PON 2033, NYSERDA contracted with a total of five training providers (LaGuardia Community College, the Urban League of Rochester, Service Employees International Union [SEIU] Local 32 BJ, Urban Green Council, and Solar One) to develop and deliver energy efficiency training ranging from basic weatherization and construction through more advanced training such as Green Professional (GPRO) for union plumbers. Training providers are under contract to train a total of 765 individuals, of which 587 (77 percent of the total goal) have been trained to date. LaGuardia Community College was under contract to translate United States Green Buildings Council GPRO training for Spanish-speaking trainees and delivered training to 120 New Yorkers beginning in September 2014. All of the training providers have completed program deliverables except SEIU Local 32 BJ who will continue offering classes, train-the-trainer webinars, and will develop building systems training videos through 2015.

In addition, NYSERDA has executed on-the-job training (OJT) agreements with 59 businesses seeking to hire new employees or advance incumbent workers under GJGNY. The GJGNY-funded component of the program ended on December 31, 2014, resulting in 265 people being hired from NYS Department of Labor's (DOL) New York State Career Centers (formerly DOL One Stop Centers) lists, and 13 incumbent workers advanced due to training. Approximately \$1.67 million in wage and training subsidies was awarded. The average wage of workers hired under the program is \$16.97 per hour.

Under the GJGNY-funded OJT incentive, businesses could receive reimbursement for 50 percent of the wages that they paid the employee during training, with a maximum award per trainee of \$15,000 for the first \$150,000 in NYSERDA incentives and 25 percent of the wages that they pay the employee for training, up to \$7,500, thereafter.

4.1.7 Green Jobs-Green New York: Curriculum Inventory, Assessment, and Curriculum Updates

The Green Jobs – Green New York: Curriculum Inventory Assessment, and Curriculum Updates opportunity (RFP 2034), issued in July 2010, offered \$475,000 to conduct a curriculum inventory, contractor needs assessment, and curriculum updates. Under the competitive solicitation, there were no fundable proposals for the curriculum update component. The curriculum inventory and contractor needs assessment were awarded to Pace University, with a final report issued in August 2013. It was decided that the curriculum inventory and contractor needs assessment report would be utilized, over the long term, to inform future curriculum development needs as they arise under GJGNY or SBC-funded workforce development initiatives.

Key findings of the study, titled “Making the Right Connections: Ways to Improve Workforce Training to Better Meet Employer Needs in the Green Jobs- Green New York Program,”⁴ focus on the need to better connect employers and training providers. Recommendations include: the formation of a more integrated network of employers and training providers; continued financial support for New Yorker's for whom cost of training is a barrier; and the need to strengthen apprenticeships and on-the-job training programs that can serve as a bridge between training and employment.

⁴ NYSERDA. 2013. “Making the Right Connections: Ways to Improve Workforce Training to Better Meet Employer Needs in the Green Jobs Green New York Program,” NYSERDA Report 13-17. Prepared by Pace Energy and Climate Center. nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Evaluation-Reports/making-the-right-connections-report.pdf

4.1.8 Solar Electric Training on Long Island

Mid-year 2014, NYSERDA added \$250,000 in GJGNY funds to the SBC funds used for solar electric (photovoltaic) balance of system training work with the NY-Sun PV Trainers Network on Long Island. The work is ongoing and demand for PV Trainers Network services on Long Island has been strong.

4.2 Coordination with New York State Department of Labor

The Clean Energy OJT Program is administered with the support of the NYSDOL and its Regional Business Service Teams (RBSTs). The RBSTs bring a wealth of experience and job placement expertise to the administration of the OJT program and have coordinated leveraging of tax credits including the VOW Hire Heroes Act of 2011, which incentivizes businesses to hire veterans, and the National Emergency Grant (NEG), which provides additional funds to businesses that hire and train dislocated workers. Another unique aspect of this partnership is the use of DOL’s Case Management System, which makes it possible for NYSERDA to obtain valuable demographic information on job seekers and track their job placement.

4.3 Workforce Training and Development Budget

Table 4-1 provides the Workforce Development budget.

Table 4-1. Workforce Development Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Equipment and Training Infrastructure					
Contracts	\$1,895,676	\$1,509,810	\$385,863	\$0	\$3
Incentives	100,000	20,608			79,392
Certifications and Company Accreditation					
Contracts	326,949	235,797	91,152	0	
Incentives	200,000	110,726		0	89,274
Apprenticeships/Internships	2,889,250	2,140,941	586,367	0	161,942
Curriculum	1,648,372	1,574,063	14,408	0	59,901
Conferences and Technical	277,318	277,318	0	0	
TOTAL	\$7,337,565	\$5,869,263	\$1,077,790	\$0	\$390,512
Expended: Contractor Invoices and loans processed for payment by NYSERDA. Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan. Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.					

4.4 Workforce Training and Development Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 4-2.

Table 4-2. Workforce Training and Development Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
25493	ASI Renovation	PON 2033 OJT Incentive	37,223	37,223	0	0
25168	Coler Natural Insulations	PON 2033 OJT Incentive	7,280	7,280	0	0
25249	True Energy Solutions	PON 2033 OJT Incentive	56,057	56,057	0	0
25250	Classic Cozy	PON 2033 OJT Incentive	12,387	12,387	0	0
25251	Energy Savers, Inc.	PON 2033 OJT Incentive	6,700	6,700	0	0
25251-1	Energy Savers, Inc.	PON 2033 OJT Incentive	4,939	4,939	0	0
25258	The Radiant Store	PON 2033 OJT Incentive	44,060	44,060	0	0
25423	Prospect Development & Construction	PON 2033 OJT Incentive	20,000	20,000	0	0
25845	K&L Green Operations, LLC	PON 2033 OJT Incentive	165,397	144,597	20,800	0
53130	K&L Green Operations, LLC	PON 2033 OJT Incentive	8,320	0	8,320	0
26200	CNY Solar, Inc.	PON 2033 OJT Incentive	7,280	7,280	0	0
25906	Apex Engineering	PON 2033 OJT Incentive	22,376	22,376	0	0
26078	Home Energy Consultants	PON 2033 OJT Incentive	5,277	5,277	0	0
26371	CNC COATIN-001	PON 2033 OJT Incentive	10,000	10,000	0	0
26642	Radiant Drywall & Insulation Corp.	PON 2033 OJT Incentive	34,808	34,808	0	0
27904	Urban League of Rochester	PON 2033 Cat. A Curriculum Development	99,796	99,796	0	0
27523	Dundon Insulation	PON 2033 OJT Incentive	11,261	11,261	0	0
27519	Halco Renewable Energy	PON 2033 OJT Incentive	59,000	59,000	0	0
27520	Kalex Energy Company	PON 2033 OJT Incentive	2,813	2,813	0	0

Table 4–2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
56345	Kalex Energy Company	PON 2033 OJT Incentive	2,560	726	1,834	
27521	NY Homeowners Construction Co.	PON 2033 OJT Incentive	16,942	16,942	0	0
27974	New Buffalo Impact, Inc.	PON 2033 OJT Incentive	30,733	30,733	0	0
27971	Opportunities for Otsego	PON 2033 OJT Incentive	5,507	5,507	0	0
28270	All Star Energy	PON 2033 OJT Incentive	9,814	9,814	0	0
28407	Foam-It Insulation	PON 2033 OJT Incentive	50,291	50,291	0	0
28269	Standard Insulating Company, Inc.	PON 2033 OJT Incentive	13,149	13,149	0	0
29403	Local 32BJ	PON 2033 Cat. A Curriculum Development	289,245	232,195	57,050	0
29437	Tech Home Electric	PON 2033 OJT Incentive	5,894	5,894	0	0
29684	Home Performance Technologies, Inc.	PON 2033 OJT Incentive	49,811	49,811	0	0
29904	Integral Building & Design, Inc.	PON 2033 OJT Incentive	49,016	49,016	0	0
29903	Ecologic Home	PON 2033 OJT Incentive	10,400	10,400	0	0
30809	Jerritt Gluck	PON 2033 OJT Incentive	14,167	14,167	0	0
30810	Ivy Lea Construction	PON 2033 OJT Incentive	34,431	34,431	0	0
30999	Energy Management Solutions, LLC	PON 2033 OJT Incentive	85,836	85,836	0	0
32119	Buffalo Energy, Inc.	PON 2033 OJT Incentive	28,181	28,181	0	0
32725	New York State Foam Energy	PON 2033 OJT Incentive	28,405	28,405	0	0
32171	New York Energy Consultants	PON 2033 OJT Incentive	4,642	4,642	0	0
33911	LaGuardia Community College	PON 2033 Cat. A Curriculum Development	124,970	121,971	2,999	0
33364	Northeast Parent and Child Society	PON 2033 OJT Incentive	17,400	17,400	0	0
33384	Pennbrook Energy	PON 2033 OJT Incentive	17,931	17,931	0	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
34356	Global Dwelling	PON 2033 OJT Incentive	22,280	15,000	7,280	0
34262	J Synergy Green INC	PON 2033 OJT Incentive	39,350	39,350	0	0
28501	Solar One	PON 2033 Cat. A Curriculum Development	121,171	121,171	0	0
35209	U.S. Green Building Council	PON 2033 OJT Incentive	45,894	45,894	0	0
33385	Solar Energy Haus	PON 2033 OJT Incentive	9,595	9,595	0	0
34852	Association for Energy Affordability	PON 2033 OJT Incentive	10,080	10,080	0	0
36669	You Save Green Inc	PON 2033 OJT Incentive	11,028	11,028	0	0
39169	American Solar Partners LLC	PON 2033 OJT Incentive	20,384	20,384	0	0
46815	Demarse Electric Inc.	PON 2033 OJT Incentive	85,280	21,245	64,035	0
46820	Tompkins Community Action	PON 2033 OJT Incentive	2,673	2,673	0	0
46909	Hawn Heating & Energy Services LLC	PON 2033 OJT Incentive	17,780	17,780	0	0
49780	SolarCity Corporation	PON 2033 OJT Incentive	188,085	0	188,085	0
49782	Upstate Spray Foam Insulation LLC	PON 2033 OJT Incentive	6,720	6,720	0	0
49783	Evoworld	PON 2033 OJT Incentive	15,719	15,719	0	0
49784	Pennbrook Energy Inc.	PON 2033 OJT Incentive	15,000	14,400	600	0
49785	Green Audit USA Inc.	PON 2033 OJT Incentive	87,720	68,736	18,984	0
50447	Home Performance Professionals Inc.	PON 2033 OJT Incentive	5,720	528	5,192	
50804	Superior Energy Innovations LLC	PON 2033 OJT Incentive	5,720	5,720	0	0
52794	IGM Holdings Inc.	PON 2033 OJT Incentive	22,382	0	22,382	0
53620	Malcarne Contracting Inc.	PON 2033 OJT Incentive	14,860	14,210	650	0
56340	Green Power Solutions Inc.	PON 2033 OJT Incentive	22,150	8,250	13,900	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
56342	OnForce Solar	PON 2033 OJT Incentive	12,480	0	12,480	
58433	Solar Project Solutions Inc	PON 2033 OJT Incentive	\$40,400	\$27,473	\$12,928	\$0
28791	Cleantech Rocks	Work for Hire Activity-Survey	14,250	14,250	0	0
32594	NYS Department of Labor	NYSDOL NY Youth Works Program	233,167	233,167	0	0
39247	Meister Consultants Group, Inc.	NY-SUN PV Balance Of System Training and Education Services	155,050	6,202	148,848	0
Vouchers	NA	Certification and Accreditation (funds reclassified)	-1,925	-1,925	0	0
TOTAL APPRENTICESHIPS/INTERNSHIPS			\$2,727,309	\$2,140,941	\$586,367	\$0
Certification and Company Accreditation						
18165	N. American Board of Certified Energy Practitioners (NABCEP)	Clean Energy Technology Training	182,000	182,000	0	0
19844	N. American Board of Certified Energy Practitioners (NABCEP)	PO for company accreditation	49,999	49,999	0	0
39247	Meister Consultants Group, Inc.	NY-SUN PV Balance Of System Training and Education Services	94,950	3,798	91,152	
Vouchers	NA	Certification and Company Accreditation	110,726	110,726	0	0
TOTAL CERTIFICATION AND COMPANY ACCREDITATION			\$437,675	\$346,523	\$91,152	\$0
Conferences and Technical						
22983	Building Performance Contractors Association (BPCA)	Contractor Exchange Workshops	150,000	150,000	0	0
ST9991-7	Interstate Renewable Energy Council (IREC)	TWOP 7 (workforce conference)	127,318	127,318	0	0
TOTAL CONFERENCES AND TECHNICAL			\$277,318	\$277,318	\$0	\$0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Curriculum						
25095	Community Power Network	PON 1816 Open Enrollment	296,368	296,368	0	0
24793	Green Light NY	PON 1816 Open Enrollment	10,875	10,875	0	0
25687	Research Foundation of SUNY	PON 1816 Open Enrollment	167,844	167,844	0	0
24917	Research Foundation of CUNY	PON 1816 Open Enrollment	119,503	119,503	0	0
32692	Building Performance Contractors Association (BPCA)	PON 2032 Technical Training	50,601	36,193	14,408	0
22987	SUNY Canton	PON 2011 Solar Thermal Training	107,238	107,238	0	0
22937	Northern Manhattan Improvement Corp.	PON 1816 Open Enrollment	50,000	50,000	0	0
22989	Solar One	PON 1816 Open Enrollment	75,574	75,574	0	0
23883	The Outsource Center	PON 1816 Open Enrollment	40,567	40,567	0	0
26392	Syracuse University	PON 1816 Open Enrollment	24,047	24,047	0	0
22504	Sullivan County BOCES	PON 2011 Solar Thermal Training	648	648	0	0
22486	Ulster County BOCES	PON 2011 Solar Thermal Training	19,917	19,917	0	0
23182	Monroe Community College	PON 2011 Solar Thermal Training	68,528	68,528	0	0
24981	Pace Energy and Climate Center	PON 2034 GJGNY Needs Assessment	275,000	275,000	0	0
33907	Arthur C. Pakatar	Curriculum Gap Assessment	24,000	24,000	0	0
31203-1	Solar One	PON 2032 Technical Training	149,436	149,436	0	0
24317	Conservation Services Group, Inc.	GJGNY Training and Implementation	108,324	108,324	0	0
TOTAL CURRICULUM			\$1,588,470	\$1,574,062	\$14,408	\$0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Equipment and Training Infrastructure						
31339	Institute for Building Technology and Safety	PON 2032 Technical Training	336,548	325,419	11,129	0
32584	Northeast Parent and Child Society	PON 2032 Technical Training	147,355	147,355	0	0
32404	NYS Weatherization Director's Association	PON 2032 Technical Training	179,934	65,759	114,176	0
32692	Building Performance Contractors Association (BPCA)	PON 2032 Technical Training	99,385	75,774	23,611	
25685	NYS Department of Labor	Smart Board Equipment & Training	46,000	46,000	0	0
25339	Meeting Industry Experts (MIE)	Meeting Planning Services	13,610	13,610	0	0
29503	Clinton Community College	PON 1816 GJGNY Lab Houses	172,045	18,232	153,813	0
30034	Green Jobs Training Center	PON 1816 GJGNY Lab Houses	109,133	109,133	0	0
29067	Northeast Parent and Child Society	PON 1816 GJGNY Lab Houses	143,117	143,117	0	0
29533	Integral Building & Design, Inc.	PON 1816 GJGNY Lab Houses	285,088	285,088	0	0
26589	Audio Video Corporation	Smart Board Equipment & Training	23,136	23,136	0	0
31203-1	Solar One	PON 2032 Technical Training	12,003	12,003	0	0
19822	Building Performance Contractors Association (BPCA)	Survey to past HPwES participants	25,000	25,000	0	0
25095	Community Power Network	career pathways tech training solicitation	43,804	43,804	0	0
35184	SUNY Ulster	GJGNY Technical Certifications	139,718	78,453	61,264	0
35211	Building Performance Contractors Association (BPCA)	GJGNY Technical Certifications	118,871	97,001	21,870	0
Reclass		Reclass GJWFD to GJWFTR	0	927	0	0
Vouchers	NA	Equipment Incentive	20,608	20,608	0	0
TOTAL EQUIPMENT AND TRAINING INFRASTRUCTURE			\$1,915,355	\$1,530,418	\$385,863	\$0
GRAND TOTAL			\$6,946,127	\$5,869,262	\$1,077,790	\$0

5 One- to Four-Family Residential Buildings Program

Consistent with the legislation, GJGNY services to the residential sector are delivered through successful existing programs. Free and reduced cost residential audits and financing are provided through NYSERDA's Home Performance with ENERGY STAR (HPwES) program, which offers homeowners in New York State a comprehensive, whole-house approach to improving energy efficiency and home comfort while saving money. Participating HPwES contractors accredited by the Building Performance Institute (BPI) conduct home energy assessments and upgrades. Income-qualified homeowners are eligible for additional incentives to make energy improvements. In addition, GJGNY residential loans are offered through NYSERDA's NY-Sun Incentive Program and Solar Thermal Incentive Program. Implementation of GJGNY program features for the residential sector began in the fourth quarter of 2010.

5.1 Target Audience

HPwES is a market transformation program that uses building science and a whole-house approach to identifying and implementing energy efficiency improvements. The program is designed to reduce the energy use in existing one- to four-family homes and low-rise multi-unit residential buildings. Improvements in building shells, and heating systems typically results in significant cost-effective fuel savings. Energy efficiency improvements through this program include building shell measures, high-efficiency heating and cooling measures, and ENERGY STAR appliances and lighting.

The target audience for the sector is owners of residential⁵ buildings who have incomes above 60 percent of State median income. Residents with lower incomes may be eligible for NYSERDA's EmPower New York program or the federally funded Weatherization Assistance Program, both of which provide services at no cost to the household. Those owners are therefore not the primary audience for GJGNY, although they will not be turned away if they choose to participate. Building owners whose incomes are equal to or less than 80 percent of the State or area median income may be eligible for a discount of 50 percent of the cost of the eligible work to be performed, up to \$5,000, or up to \$10,000 for buildings with two to four

⁵ The GJGNY Act defines a residential structure as a residential building that has four or fewer dwelling units.

units, from NYSERDA⁶ through the Assisted component of HPwES program. These owners are of particular interest for GJGNY as LMI households. Communities in areas where energy costs are high in relation to area median income or those in non-attainment for one or more designated pollutants under the federal Clean Air Act are also targeted by the 11 constituency-based organizations (CBOs) conducting outreach in selected communities across the State. Additional information about CBO activities can be found in Section 8.

5.2 Implementation Strategies

HPwES partners with BPI GoldStar contracting firms to install comprehensive energy efficient improvements. The program is complemented by an aggressive workforce development initiative that strengthens program delivery infrastructure by facilitating the training and certification of technicians. Additional information on workforce development activities can be found in Section 4.

Participating contractors complete energy assessments for all homes enrolled in the HPwES program. The energy assessments include taking an inventory of the current home energy systems and energy-related health and safety conditions, diagnostic testing of combustion appliances, blower-door testing for air-infiltration rates; and developing a work scope for proposed improvements and a cost and energy-savings estimate. The report for the energy assessment is provided to the homeowner and allows the contractor to recommend and discuss options for improvements that maximize energy savings and meet the household budget considerations. In addition to the cost-effective energy savings offered, the HPwES program addresses residential health and safety issues pertaining to indoor air pollutants, focusing on carbon monoxide and other pollutants associated with combustion appliances, ventilation, and moisture control. This effort increases the long-term durability of New York's housing stock by addressing such problems as ice damming, mold, and mildew.

The contractor also tests the house when work is complete to ensure a safe and healthy environment after installation of energy efficiency measures. The program offers low-interest financing and homeowner discounts to encourage comprehensive work scopes, including a higher incentive level for those households qualifying for the Assisted component of the HPwES program. Participating households typically reduce their total energy use by 20 percent after a participating contractor has completed work on the home.

⁶ These incentives are provided through an Energy Efficiency Portfolio Standard, System Benefit Charge, or Regional Greenhouse Gas Initiative-funded HPwES program.

The GJGNY-supported free or reduced-cost energy assessments and low-interest financing components of HPwES were launched on November 15, 2010. Owners of residential buildings seeking services from the program can participate through one of two ways: as an individual owner or as a participant in a CBO-organized aggregation.

5.2.1 Individual Owner Approach

Owners of residential buildings with four units or less interested in receiving a free or reduced-cost home energy assessment can apply online at www.nyserdera.ny.gov/home-performance, or download an application. Alternatively, they can call 1-855-838-7818 to request an assessment application be mailed or to obtain an assessment application from a participating contractor or CBO.

An applicant who is eligible for a free or reduced-cost assessment will receive a reservation number from the application processing center with an estimated level of assessment subsidy that will be paid by NYSERDA to the contractor for a completed assessment. The final amount to be paid to the contractor will be based on verification by the contractor of the number of units or square footage of the residence. The reservation number associated with an assessment is valid for a single assessment to be completed within 90 days of issuance of the reservation. If the reservation is not used within that period, it will be eligible for reissuance if assessment funds remain available.

5.2.2 Aggregation Approach

Aggregation is the process of identifying a group of homeowners who agree in advance to have the same contractor or contractor team perform their assessments and any resulting work. Participating contractors agree to provide certain community benefits, which may include living wages and benefits for workers, local hiring, and preferential pricing. Aggregation provides benefits to the homeowner, such as lower costs through standardized pricing and a simplified participation process. Aggregation also provides benefits to contractors by reducing costs associated with travel and marketing, allowing more efficient use of crews and bulk material purchases and providing a ready audience of potential leads. More information on aggregation and CBOs' role in aggregation can be found in Section 8.1.4.

5.3 Standards for Energy Assessments and Development of Work Scopes

Energy assessments and energy services for GJGNY are delivered by participating HPwES contractors possessing Participation Agreements⁷ with NYSERDA.

Contractors delivering assessments and performing services must be BPI GoldStar⁸ designated. The BPI GoldStar designation includes a review of certain business standards and practices in addition to technical certification requirements.

To qualify for HPwES program incentives and financing, eligible measures must meet the program minimum efficiency and cost effectiveness requirements. In response to the record low natural gas prices, and recognizing that energy efficiency projects also provide non-energy benefits to the household, the cost effectiveness standard was adjusted in mid-2012 for Smart Energy loans and provided customers with the ability to finance improvements when the estimated energy savings over the anticipated life of the improvements are at least 80 percent of the total loan payments. In addition, 15 percent of the project cost, up to \$2,000, related to associated health and safety measures and qualified accessories can be ignored in the cost effectiveness screening for the Smart Energy loans. To streamline the process, a project for which at least 85 percent of the cost is designated for prequalified measures is automatically eligible for the Smart Energy loan and incentives and does not go through cost effectiveness screening. For OBR Loans, the monthly loan installment payment may not exceed one-twelfth of the estimated annual energy savings from the improvements over the term of the loan. Appendix D provides additional details.

NYSERDA performs quality assurance inspections on approximately 10 to 15 percent of projects to ensure contractor work meets program and BPI standards. If projects fail to meet standards, NYSERDA follows up with the contractor to ensure remediation takes place. Failure to meet BPI and program standards may result in probation, suspension, loss of the BPI GoldStar designation and/or removal from the HPwES program, in accordance with BPI and NYSERDA's procedures.

⁷ Visit nyserdera.ny.gov/-/media/Files/EERP/Residential/Programs/Existing-Home-Renovations/Join-Program/hpwes-contractor-participation-agreement.pdf to view the 2014-2015 HPwES contractor Participation Agreement.

⁸ Visit <http://www.bpi.org/goldstar.aspx> for more information on the BPI GoldStar Contractor designation.

5.4 Energy Assessment Fees

The Act requires the program to make energy assessments available to residential buildings with one to four units. The fee for energy assessments are waived for households with income that is 200 percent of the median county household income or less. In households with income greater than 200 percent up to 400 percent of the median county household income, the applicant pays a pro rata percentage of the assessment fees. Only those households that have a county median income above 400 percent pay the full fees. HPwES makes payments directly to participating contractors.

Table 5-1 outlines assessment fees for residential buildings with single dwelling units under 3,500 square feet of above-grade conditioned space.

Table 5-1. Assessment Fee for Single Unit Buildings Under 3,500 Square Feet

Single Unit HPwES Assessment Fees (under 3,500 square feet of above grade conditioned space)		
Household Income	Cost to Customer	NYSERDA Payment to Contractor
≤200% Average Median Income (AMI)	\$0	\$250
>200 – 250% AMI	\$50	\$200
>250 – 300% AMI	\$100	\$150
>300 – 350% AMI	\$150	\$100
>350 – 400% AMI	\$200	\$50
>400% AMI	Market Rate	\$0

Table 5-2 outlines assessment fees for residential buildings with two to four dwelling units and single units over 3,500 square feet of above-grade conditioned space.

Table 5-2. Assessment Fee for 2-4 Units and Single Unit Buildings Over 3,500 Square Feet

HPwES Assessment Fees for 2-4 Units and Single Units (over 3,500 square feet of above-grade conditioned space)		
Household Income	Cost to Customer	NYSERDA Payment to Contractor
≤200% Average Median Income (AMI)	\$0	\$400
>200 – 250% AMI	\$80	\$320
>250 – 300% AMI	\$160	\$240
>300 – 350% AMI	\$240	\$160
>350 – 400% AMI	\$320	\$80
>400% AMI	Market Rate	\$0

5.5 Assessment Completions and Conversion to Project Completions

The GJGNY free or reduced-cost energy assessment has proven to be very popular with consumers and contractors. Through June 30, 2015, there have been a total of 104,030 applications with 98,489 approved, which corresponds to an average of more than 1,890 per month. More than 75,478 assessments have been completed, resulting in 22,950 contracts for HPwES energy upgrades. From those contracts for HPwES energy upgrades, 20,892 projects are associated with a GJGNY assessment or loan. The average time lag from assessment completion to completed work is 110 days. After accounting for the lag between completion of the assessment and completion of work, the conversion rate from assessment to work through the HPwES program is more than 31 percent and in 2014 alone the assessment to project conversion rate exceeded 40 percent. A 2012 evaluation indicated some of the recommended work proceeds outside the program, some with the benefit of utility rebates and some by the homeowner on their own. Among those assessment-approved and assessment-completed participants surveyed in the evaluation, nearly two-fifths (38 percent) of respondents reported that they installed program eligible energy efficient measures outside of the program.⁹ Another 31 percent of customers who received an assessment complete work in the program, resulting in an estimated overall conversion rate of nearly

⁹ NYSERDA. 2012. "Process Evaluation and Market Characterization and Assessment: Green Jobs – Green New York Residential Program," <http://www.nyserda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2012ContractorReports/2012-GJGNY-MCA-Report.pdf>

70 percent. The success of this effort is attributed in large part to the experience and knowledge of the HPwES contractors. NYSERDA's HPwES program is one of the largest and longest-running programs of its kind in the United States, and participating contractors have developed effective approaches to completing sales.

NYSERDA continues to work closely with HPwES contractors and implementation contractors to streamline program processes, including project approvals and financing. As indicated in Section 2, NYSERDA program staff meet regularly with stakeholders to identify opportunities, challenges, and mitigation strategies.

In July 2014, NYSERDA launched a Web-based program management tool that has improved the process of reviewing and approving applications and work scopes, providing information to all parties regarding the status of any application or project. This platform also uses a standard data transfer protocol that will provide contractors with more options for modeling software, which is moving out of pilot phase and will be made available to all contractors in the third quarter of 2015.

In 2014, NYSERDA worked with stakeholders in a targeted effort to improve the customer and contractor's experience using the HPwES program. Improvements included updating the website and consumer marketing materials, enhanced contractor profiles, a streamlined assessment application process, faster project approvals, and changes to the financing products that make them more accessible to customers. These developments support an increasing demand in the program, with project completions increasing 10 percent in first quarter 2015 over the same time period in 2014.

5.6 Financing

A significant volume of work is supported by the GJGNY financing options. More than 40 percent of projects completed in the 12 months ending on June 30, 2015, included a GJGNY loan. An unsecured consumer loan financing product for energy efficiency improvements for one- to four-family buildings was launched on November 15, 2010. Loan terms are offered for five, 10, and 15 years. The amount of the loan cannot be in excess of \$13,000. (The Power NY Act of 2011 increased this amount to \$25,000 for projects that meet higher cost-effectiveness standards.) Effective January 8, 2013, the name "Unsecured Loan" was changed to "Smart Energy Loan" based upon feedback from participating contractors using survey results of their preferred replacement name. The OBR Loan was launched in

January 2012, four months ahead of the launch date required by the Power NY Act of 2011. Effective January 1, 2013 OBR loan applications are processed at an interest rate of 3.49 percent, which is a modest increase from the original rate of 2.99 percent. The rate increase provides rate parity between the OBR and Smart Energy loans and enables NYSERDA to more fully recoup the costs for origination, servicing, and financing of OBR Loans.

An additional amendment to the GJGNY Act of 2009 was signed into law on October 22, 2013, which extended the availability of GJGNY financing to residential solar electric installations. Effective February 3, 2014, in addition to the federal and State income tax credits and existing NYSERDA incentives through the NY-Sun Solar Electric Incentive Program (Program Opportunity Notice 2112), NYSERDA began offering the two low-interest financing options through GJGNY. Through June 30, 2015, 1,152 solar electric loans have closed valued over \$19.6 million dollars with an additional 930 loans pending and completion valued over \$15.9 million dollars. Furthermore, effective October 17, 2014, financing options through GJGNY became available through the Solar Thermal Incentive Program (Program Opportunity Notice 2149) and through June 30, 2015, one solar thermal loan has closed valued over \$5,000.

Although the OBR Loan initially represented the majority of GJGNY loan applications in the program, on average per month over time, it only varies moderately from the number of Smart Energy Loan applications. Due to the more restrictive cost-effectiveness requirements of the OBR Loan, some customers who would have preferred to use the OBR Loan have had to use the Smart Energy Loan instead. Therefore, the Smart Energy Loan continues to represent the majority of loans closed on average per month, and over the last 12 months OBR loans represented 27 percent of loans closed.

Figure 5-1 and Figure 5-2 illustrate the growth in OBR Financing applications and loans issued since its introduction.

Figure 5-1. Unsecured (Smart Energy Loans) and OBR Financing Applications

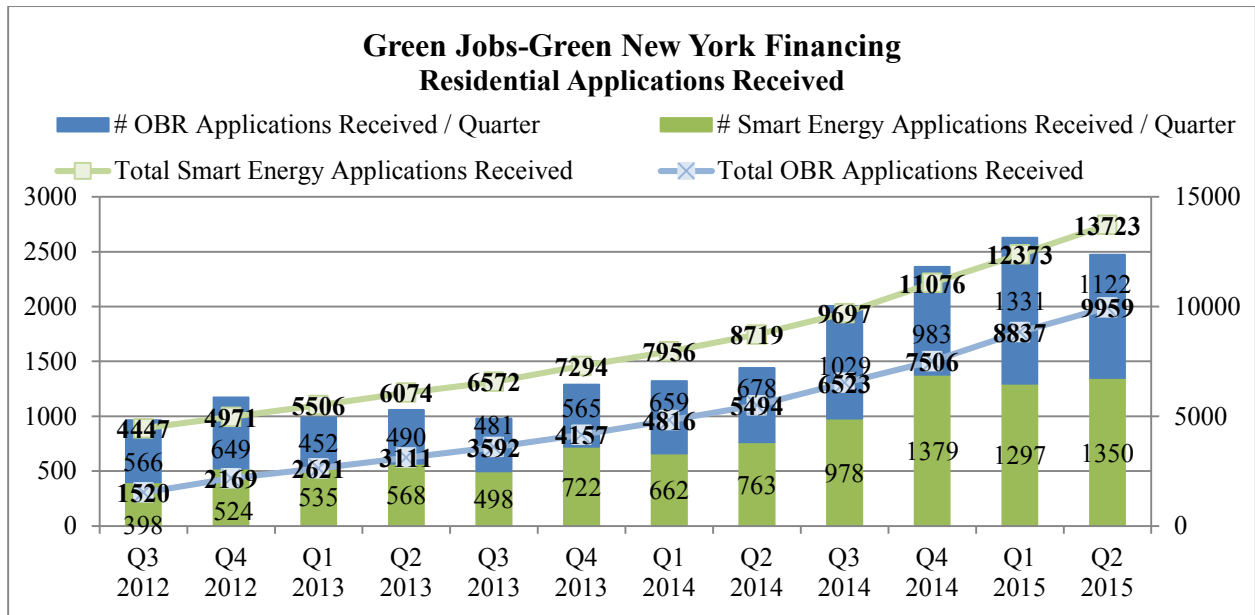


Figure 5-2. Unsecured (Smart Energy Loans) and OBR Loans Issued by Financing Type

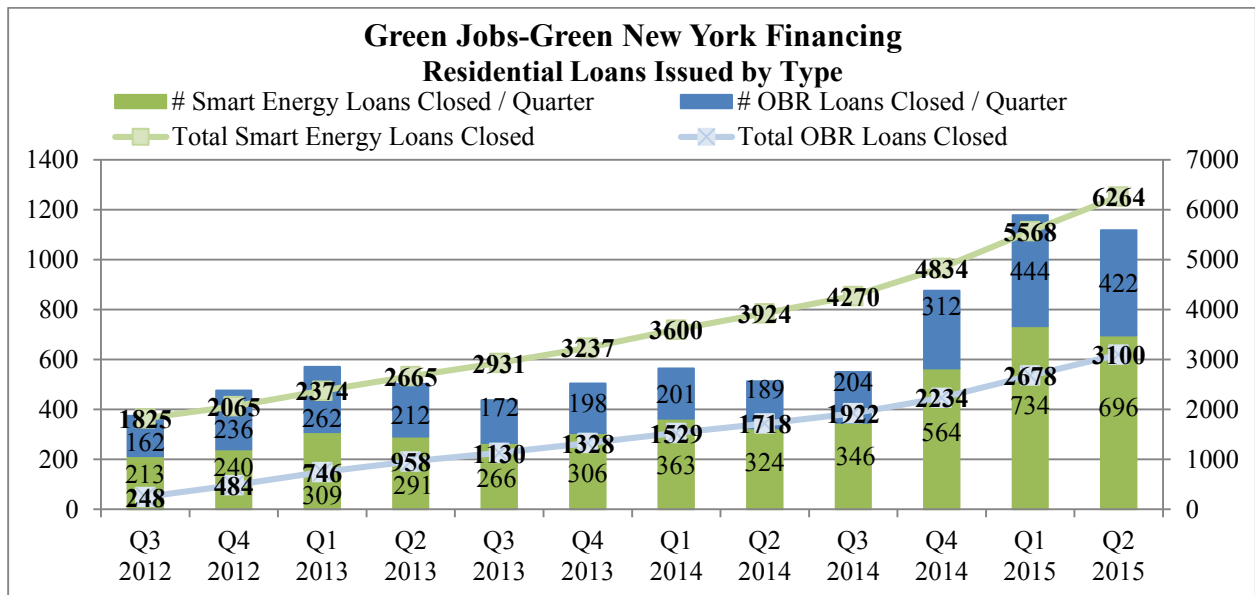


Table 5-3 summarizes loan underwriting standards used for both the Smart Energy and OBR Loans. NYSERDA has modified loan underwriting standards seven times since the launch of the program in an effort to address loan application denials and to responsibly improve the penetration of financing to consumers who would not qualify using traditional underwriting standards.

The Tier 1 loans use standard underwriting criteria relying primarily on FICO scores and debt-to-income ratios. Tier 2 expands the number of people who can qualify by substituting mortgage payment history for FICO score as a primary qualifier. In addition, Tier 2 provides alternative debt-to-income ratio requirements in recognition that the households energy costs are reduced, addressing what is currently the most common cause of loan denials. Figure 5-3 illustrates the impact of modifying the Tier 2 standards, enabling more individuals to qualify for financing. Tier 2 loans now consistently make up over 12 percent of loans issued on a monthly basis. Table 5-4 summarizes metrics surrounding loan applications and loans closed through June 30, 2015.

Table 5-3. GJGN Y Loan Underwriting Standards as of June 30, 2015

LOAN UNDERWRITING STANDARDS		
Standard	Tier 1 Loans	Tier 2 Loans
Minimum FICO	640 (680 if self-employed for 2yrs+) (720 if self-employed < 2yrs)	540
Mortgage payment history	None	Current on all mortgage payments, if any (as reported on the credit report), for the past 12 months. No mortgage payments more than 60 days late during the past 24 months.
Max Debt-to-Income Ratio	Up to 50%	Up to 70% for FICO 540-599
		Up to 75% for FICO 600-679
		Up to 80% for FICO 680+
		Up to 100% for applicants who are qualified as owner-occupants for Assisted Home Performance with ENERGY STAR Subsidy for the subject property of the loan. (\$5000/50%)
Bankruptcy	No bankruptcy, foreclosure, or repossession within last 7 years	No bankruptcy, foreclosure, or repossession within last 2 years
Judgments	No combined outstanding collections, judgments, charge-offs, or tax liens > \$2,500	

Figure 5-3. GJGNV Loans Issued by Tier

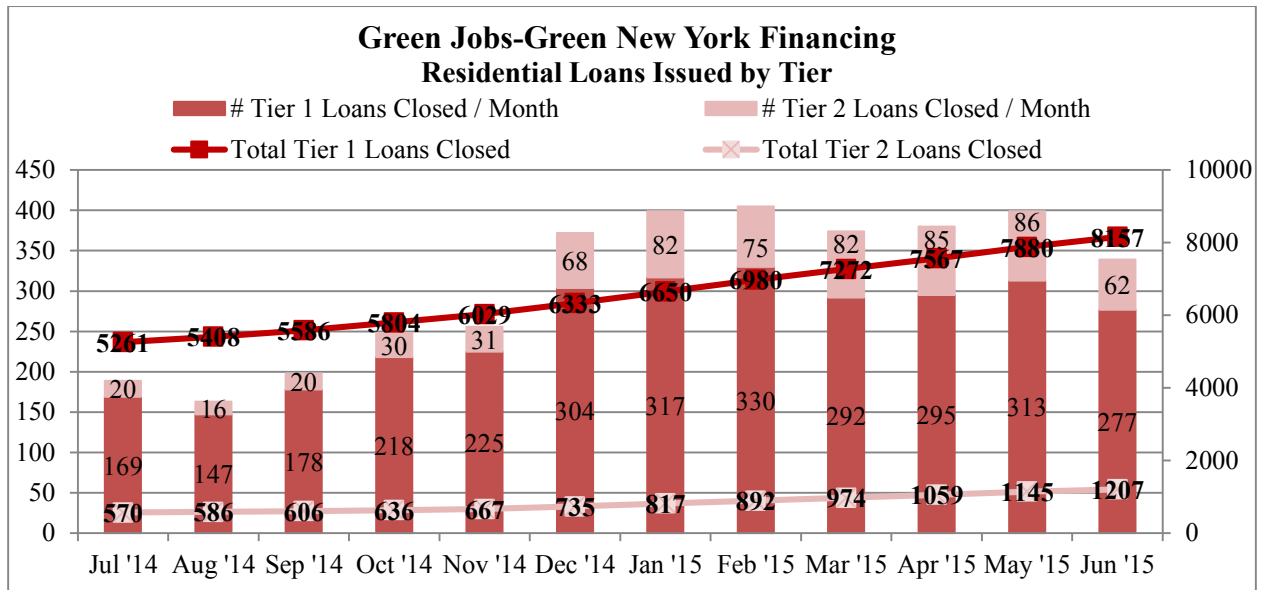


Table 5-4. GJGNY Residential Financing Summary as of June 30, 2015

Summary of Loans by Type						
GJGNY Loan Type	Applications Received (Number)	Applications Approved (Number)	Loans Closed (Number)	Loans Closed (Dollar Value)	Loans Awaiting Closing (Number)	Loans Awaiting Closing (Dollar Value)
EE Smart Energy Loan	12,059	8,640	5,667	\$53,845,464	525	\$5,507,130
EE On-Bill Recovery Loan	7,325	4,959	2,543	\$28,302,823	208	\$3,140,972
Total	19,384	13,599	8,210	\$82,148,287	733	\$8,648,102
PV Smart Energy Loan	1,602	1,445	592	\$10,040,942	405	\$7,175,039
PV On-Bill Recovery Loan	2,488	2,107	555	\$9,498,963	515	\$8,660,446
Total	4,090	3,552	1,147	\$19,539,905	920	\$15,835,484
EE & PV Smart Energy Loan	58	43	3	\$46,435	8	\$129,046
EE & PV On-Bill Recovery Loan	146	78	2	\$42,993	2	\$30,539
Total	204	121	5	\$89,427	10	\$159,585
RHNY Smart Energy Loan	3	3	1	\$24,850	1	\$1,950
RHNY On-Bill Recovery Loan	0	0	0	\$0	0	\$0
Total	3	3	1	\$24,850	1	\$1,950
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	23,682	17,276	9,364	\$101,807,545	1,664	\$24,645,122

Table 5-4 continued

Summary of Smart Energy and On-Bill Recovery Tiers				
Smart Energy			On-Bill Recovery	
Tier 1	Tier 2		Tier 1	Tier 2
5,439	825	Loans Closed*	2,719	382
\$55,670,921	\$8,291,844	Value**	\$33,346,385	\$4,498,395
\$10,236	\$10,051	Average Loan**	\$12,269	\$11,776
12.9 years	13.9 years	Average Term**	14.6 years	14.6 years
N/A	N/A	2.99%**	29.91%	24.08%
83.38%	81.45%	3.49%**	70.09%	75.92%
16.62%	18.55%	3.99%**	N/A	N/A
77.08%	Approval Rate***		74.80%	
17.66%	Denial Rate***		20.67%	
5.26%	Denied Tier 1, didn't pursue Tier 2***		4.53%	
The amount shown here is the total value of loans closed as of 6/30/15, which included loans not yet invoiced as of 6/30/15 ** Refers to closed loans only *** Does not include applications pending review or withdrawn.				
Reasons for Denial by Percentage				
Smart Energy	Reason for Denial	On-Bill Recovery		
33.89%	Debt Ratio	34.44%		
29.14%	Credit Score	31.49%		
12.55%	Bankruptcy/Foreclosure/Repo	10.10%		
22.60%	Collections/Judgments/ Charge-offs	22.56%		
1.83%	Other	1.41%		
100%	Total	100%		

Table 5-4 continued

Default Analysis							
Smart Energy			120+ Days Past Due	On-Bill Recovery			
Tier 1		Tier 2		Tier 1		Tier 2	
59	\$550,828	12		\$111,234	30	\$344,346	2
On-Bill Recovery Utilities							
On-Bill Recovery Utility	Applications Received	Total Loans Closed		Total Loans in Process		Utility Progress towards Initial Cap (.5%)*	
Central Hudson Gas & Electric	942	303	\$3,574,105	461	\$5,355,705	30.30%	
Consolidated Edison	1,289	300	\$4,076,259	670	\$8,278,673	3.90%	
Long Island Power Authority	4,110	1285	\$17,969,300	2,489	\$34,005,850	44.50%	
National Grid	2,676	560	\$5,324,311	910	\$9,152,471	10.80%	
New York State Electric & Gas Corp.	1,503	427	\$4,457,632	595	\$6,478,035	12.70%	
Orange & Rockland Utilities	497	168	\$1,979,641	272	\$3,158,514	24.20%	
Rochester Gas & Electric	321	57	\$463,531	108	\$996,192	5.30%	
TOTAL	11,338	3,100	\$37,844,779	5,505	\$67,425,440	13.60%	
* A 0.5 percent initial cap was placed on the number of accounts eligible for On-Bill Recovery Loans in each Utility service territory. The percentage indicates Utility progress toward meeting the initial 0.5 percent cap.							

5.7 Additional Consumer Incentives

NYSERDA offers a consumer discount to eligible households equal to 10 percent of the cost of eligible measures. Availability of the discount is subject to funding availability from the Energy Efficiency Portfolio Standard for prequalified electric and natural gas measures and from the Regional Greenhouse Gas Initiative for non-electric and non-gas measures. NYSERDA provides participating contractors with updates on funding availability and household eligibility as necessary.

In addition, building owners with incomes equal to or less than 80 percent of the State or area median income may be eligible for a discount of 50 percent of the cost of eligible measures, up to \$5,000, or up to \$10,000 for buildings with two to four units, through Assisted HPwES. Homeowners with incomes at or below 60 percent of the State median income are eligible to be served by both EmPower New York (with no cost to the household for certain eligible measures) and Assisted HPwES. Coordination guidelines have been created to aid contractors in determining how to best coordinate services between the two programs for households who meet the eligibility criteria for both programs.

NYSERDA continues to work with other program administrators, including investor-owned and municipal gas and electric utilities and PSEG Long Island to address coordination and minimize confusion where multiple incentive opportunities are available to residential customers.

Provided that the work performed to participate in a utility rebate program meets NYSERDA's HPwES requirements and is completed by a participating HPwES contractor, the GJGNY loan may be used in coordination with the utility rebate, just as the GJGNY loan may be used in coordination with the NYSERDA incentives. Although GJGNY loans may be combined with either the NYSERDA or the utility incentives, NYSERDA and utility incentives cannot be combined with each other on the same measure.

Table 5-5 presents an example of a work scope that includes measures eligible for utility incentives and GJGNY financing. The GJGNY loan amount is determined by netting out all applicable utility or NYSERDA incentives at the measure level from the total cost of the work.

Table 5-5. Example Eligible Work Scope for GJGNY Financing

GJGNY Financing Work Scope			
Measure	Cost	Incentive	Source
Gas Heating Equipment	\$4,500	\$500	Utility
Central AC	\$3,000	\$400	Utility
Air Sealing	\$750	\$75	NYSERDA
Insulation	\$3,500	\$350	NYSERDA
Total Project Cost/Incentives	\$11,750	\$1,325	
Net Cost Eligible for Financing	\$10,425		

5.8 Budget, Goals, and Metrics

Table 5-6 describes the One- to Four-Family Residential Buildings budget, and Table 5-7 describes its goals and metrics, respectively.

Table 5-6. One- to Four-Family Residential Buildings Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Energy Assessments	\$22,978,109	\$19,245,310	\$0	\$1,998,733	\$1,734,066
Assessment Implementation and Quality Assurance	1,000,000	1,000,000	0	0	0
Financing					
Loans	53,111,564	38,394,531*	0	17,435,150	(8,334,014)
Implementation		5,463,763	152,134	0	
TOTAL	\$77,089,673	\$64,103,604	\$152,134	\$19,433,883	(\$6,599,948)
<p>* Loan Expended amount is net of loan repayments made through reporting period and includes bond proceeds, less bond issuance cost.</p> <p>Expended: Contractor Invoices and loans processed for payment by NYSERDA.</p> <p>Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan.</p> <p>Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.</p>					

Table 5-7. One- to Four-Family Residential Buildings Goals and Metrics

Metric	Market Rate	Affordable	Total	Goals	Progress Toward Goals
Assessment Applications (number)			104,030		
Assessments Complete (number)			75,478	100,000	75%
Projects Contracted (units)			22,950		
Projects Completed (units)	14,391	7,026	21,417	34,200	63%
1st Year Net KWh Savings (installed)	5,950,102	3,621,757	9,571,859		
1st Year Net MMBtu Savings (installed)	524,225	245,711	769,935		
Estimated Annual Bill Savings (installed)	\$12,387,775	\$5,501,430	\$17,889,205		
Estimated Annual KWh Savings/unit (installed) ¹	413	515	447	688	65%
Estimated Annual MMBtu Savings/unit (installed) ¹	36	35	36	31	116%
Estimated Annual Dollar Savings/unit (installed) ¹	\$861	\$783	\$835	\$675	124%
Loans Issued/Closed (#) ²	5,844	2,366	8,210		
Value of Loans ³	\$64,309,401	\$17,838,886	\$82,148,287		
Potential lifetime savings of assessment projects and loan projects	\$282,441,273	\$122,681,883	\$393,562,507		
Estimated lifetime savings of loan projects only	\$158,138,682	\$53,218,587	\$211,357,268		
<p>¹ Projects that receive GJGNY-supported assessments and/or financing may also receive incentives through Energy Efficiency Portfolio Standard (EEPS) and/or utility programs, such that projects' energy savings may not all be attributable solely to GJGNY.</p> <p>² The amount shown here is the total number of energy efficiency loans.</p> <p>³ The amount shown here is the total value of energy efficiency loans closed as of June 30, 2015 which includes loans not yet invoiced as of June 30, 2015.</p>					

Since program launch, 20,892 projects associated with a GJGNY assessment or loan have been completed, representing a total of 21,417 individual housing units. An additional 6,253 projects were completed during this period without the benefit of a GJGNY assessment or loan. This number may represent households who are not eligible for a free or reduced-cost assessment and also chose not to use program financing. The number also represents projects that were initiated prior to November 2010. In addition, 1,934 projects have been completed through the Low-Rise Multiunit Program. Since September 2011, 81 percent of the completed HPwES projects originated from a GJGNY assessment.

Figure 5-4 illustrates an increase in Assisted HPwES project completions over time with 469 Assisted HPwES completions for fourth quarter 2012 compared to 612 for fourth quarter 2014, which is an increase of 30 percent. Assisted HPwES has also grown as a percentage of total project completions. Whereas Assisted HPwES projects accounted for only 17 percent of total project completions as of the fourth quarter of 2010 (at the launch of GJGNY), Assisted HPwES projects accounted for 34 percent of total project completions as of the second quarter of 2015—equivalent to an 18 percent increase. The increase may be attributed to a number of factors, including the free assessment, availability of GJGNY financing, CBO outreach, and an improved economy compared to 2010.

Figure 5-4. HPwES and Assisted HPwES Completed Projects, by Comparison

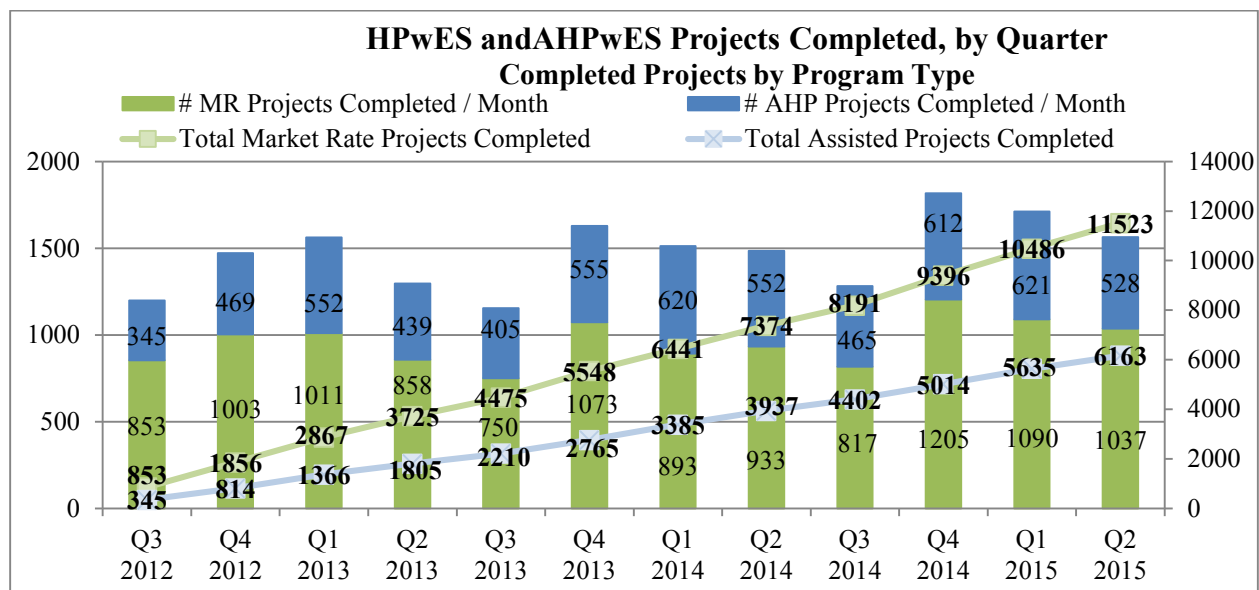
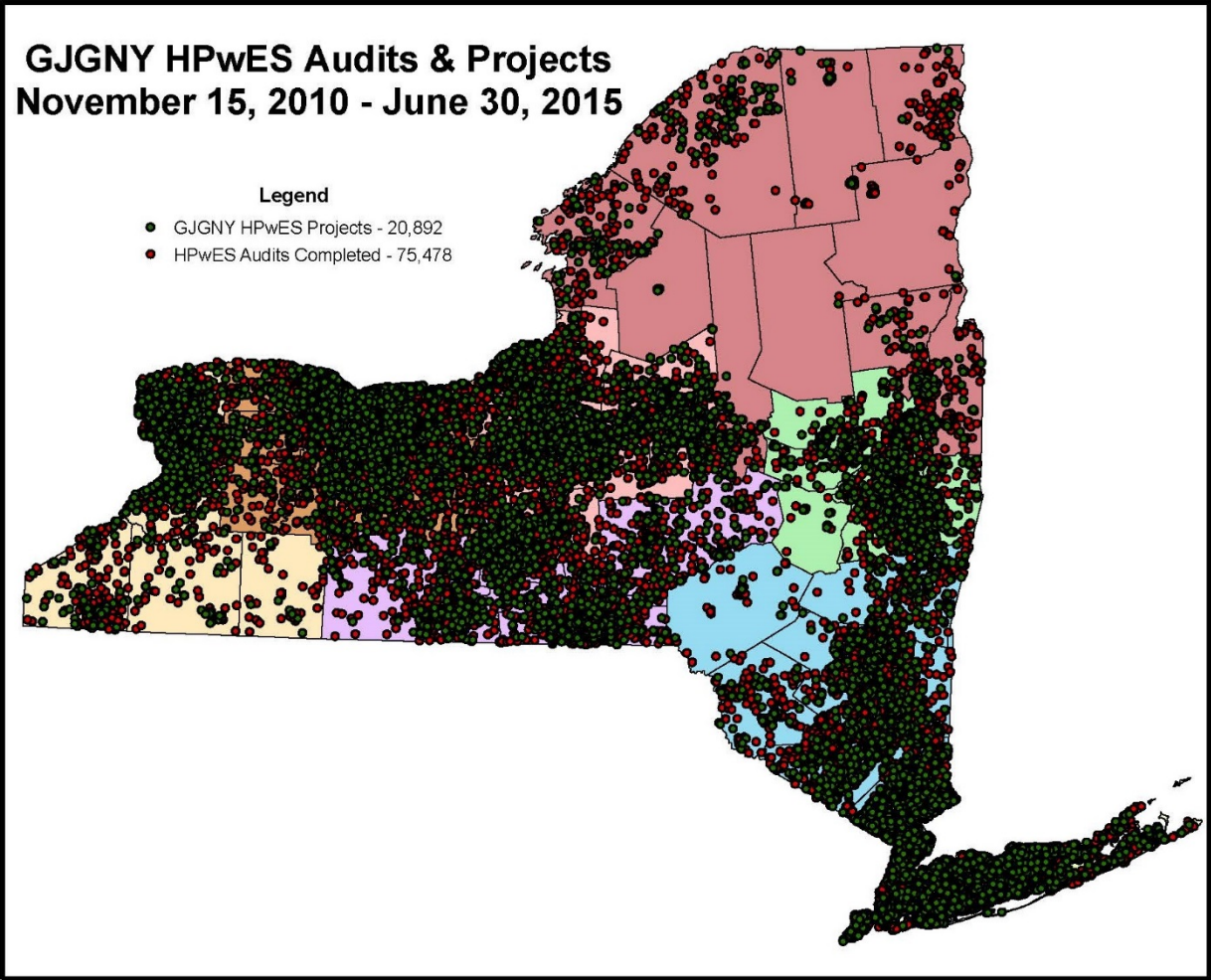


Figure 5-5 shows statewide coverage of work being done through GJGNY activities. Both assessment activities and completed projects are represented.

Figure 5-5. GJGNY HPwES Assessment and Project Completions



5.9 One- to Four-Family Residential Buildings Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 5-8.

Table 5-8. One- to Four-Family Residential Buildings Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
AGGREGATED ENERGY ASSESSMENTS			N/A	\$19,245,310	\$0	\$1,998,733
Assessment Implementation and Quality Assurance						
PO- 32323	Conservation Services Group	Energy Audit Implementation	317,746	317,746	0	0
PO- 32323-1	Conservation Services Group	Energy Audit Implementation	183,844	183,844	0	0
PO- ST9802-1	Conservation Services Group	Energy Audit Implementation	483,117	483,117	0	0
PO- ST10743-1	Harris Beach PPLC	Bond Counsel	10,000	10,000	0	0
PO- ST9940-1	Honeywell International Inc	Quality Assurance	5,293	5,293	0	0
TOTAL AUDIT IMPLEMENTATION AND QUALITY ASSURANCE			\$1,000,000	\$1,000,000	\$0	\$0
Loan Activity						
Aggregated Loans Issued	Various	Loans Issued	N/A	101,773,913	0	17,435,150
Aggregated Loan Repayments	Various	Loan Repayments	N/A	(63,379,382)	0	0
NET AGGREGATED LOAN ACTIVITY			N/A	\$38,394,531	\$0	\$17,435,150
Financing Implementation						
PO- 21769	Concord Servicing Corporation	RES Master Loan Servicer for GJGNY	N/A	1,048,009	0	0
15518	Energy Finance Solutions	Origination Fees	N/A	1,822,925	0	0
		LIPA Fees	N/A	9,520	0	0
		Ramp-up / Development costs for GJGNY & OBR programs	N/A	87,999	0	0
OBR Billing Agreements, no PO#	Central Hudson Gas & Electric	Utility Fees for OBR Loans	N/A	63,839	0	0
	Consolidated Edison		N/A	68,385	0	0
	LIPA		N/A	272,175	0	0
	Niagara Mohawk dba National Grid		N/A	104,059	0	0
	NYSEG		N/A	84,006	0	0
	Orange & Rockland Utilities		N/A	33,881	0	0

Table 5-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
	Rochester Gas & Electric			9,657	0	0
PO-35421	First Associates Loan Servicing	Backup Loan Servicer for GJGNY Loan Program	116,500	34,500	82,000	0
PO- 27533	NY Title Research Corp.	OBR Last Owner Searches	59,860	59,860	0	0
PO- 31684	Zodiac Title Services	OBR Last Owner Searches & Recording Services	100,000	100,000	0	0
PO- 31684-1	Zodiac Title Services	OBR Last Owner Searches & Recording Services	50,000	26,670	23,331	0
PO- 33527	Advantage Title Agency, Inc	OBR Last Owner Searches & Recording Services	75,000	75,000	0	0
PO- 36864	Advantage Title Agency, Inc	OBR Last Owner Searches & Recording Services	200,000	197,123	2,878	0
PO- 38299	Frontier Abstract & Research Services	OBR Last Owner Searches & Recording Services	199,999	186,194	13,805	0
PO- 37723	Stewart Title Insurance Company	OBR Last Owner Searches & Recording Services	199,999	187,497	12,361	0
Title Company pass through fees, no PO#	NY Title Research Corp.	OBR Last Owner Searches & Recording Services	N/A	8,563	0	0
	Zodiac Title Services	OBR Last Owner Searches & Recording Services		56,383	0	0
	Advantage Title Agency, Inc	OBR Last Owner Searches & Recording Services		47,059	0	0
PO- 40738	Energy Improvement Corporation	Energize New York Program Support	50,000	50,000	0	0
PO- 20662	Energy Programs Consortium	Phase I	6,250	6,250	0	0
PO- 18591	Hawkins Delafield & Wood	Legal financial advisory services for GJGNY	319,920	313,998	5,922	0
PO- 19923	Lamont Financial Services Corporation	Financial Advisor Services	327,050	315,212	11,838	0
PO- 26143	Equifax Credit Marketing Services	Annual Subscription to CreditForecast.com 2011-12	20,000	20,000	0	0

Table 5-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO- 30985	Fitch Ratings, Inc.	Issuance of NYSERDA 2012 GJGNY Energy Efficiency Bonds	45,000	45,000	0	0
PO- ST10743-1	Harris Beach PLLC	Bond Counsel	125,000	125,000	0	0
PO- 33119	NetRoadshow, Inc.	Establishment of portal communication between NYSERDA and bond rating agency	5,000	5,000	0	0
TOTAL FINANCING IMPLEMENTATION			\$1,899,579	\$5,463,763	\$152,134	\$0
GRAND TOTAL			\$2,899,578	\$64,103,603	\$152,134	\$19,433,883

6 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 facilitate assessments, funding and implementation of energy efficiency upgrades that improve building performance and save money. Implementation of the approved GJGNY Multifamily Buildings initiative began in the third quarter of 2010.

6.1 Target Audience

The needs of the multifamily residential sector are addressed by working with developers, building owners, and their representatives to improve the energy efficiency, health, safety, and security of multifamily buildings.¹⁰ The program identifies and targets those potential participants¹¹ who are committed to the implementation of energy-related improvements. As part of the GJGNY marketing and outreach efforts, provisions have been made to encourage referrals from constituency-based organizations.

6.2 Implementation Strategy

Through NYSERDA's Multifamily Energy Performance Portfolio (MEPP), GJGNY provides co-funding for comprehensive energy assessments and the development of an Energy Reduction Plan (ERP).¹² The availability of GJGNY co-funded assessments began in September 2010, and GJGNY financing for the implementation of energy improvements in multifamily buildings was launched in June 2011. MEPP is a comprehensive program that serves market-rate and low- to moderate-income projects using a common process and relies on a network of energy service contractors who have demonstrated their ability to provide building performance services to multifamily buildings. These contractors are identified as MEPP Partners and must be employed by MEPP participants to complete specific building performance services, such as those outlined in the ERP.

¹⁰ According to the GJGNY Act, a multifamily structure is defined as a multi-unit residential building with five or more dwelling units. A multifamily project may include a single multifamily structure or a group of multifamily structures.

¹¹ Eligibility to apply and participate is limited to building owners and entities authorized by owners to contract for the provision of qualified energy efficiency services. Singular-dwelling unit residents or owners are not eligible to separately participate.

¹² An Energy Reduction Plan (ERP) identifies the set of cost-effective energy-related improvements to be installed and provides information necessary to guide installation of those measures. The ERP includes a detailed description of the proposed work scope with the associated costs, projected energy saving, and an outline for how costs will be financed. This plan includes a proposed schedule for construction.

NYSERDA manages GJGNY-funded services as a seamless part of the MEPP process, regardless of whether participants intend to access MEPP implementation incentives, utility program rebates, or other financial assistance, or whether participants intend to fund a portion or all of the energy-related improvements through GJGNY financing. To promote participation within the multifamily sector, NYSERDA uses a number of marketing and educational tools. For example, morning presentations, or “Power Breakfasts,” are offered statewide to promote and educate the public about the suite of multifamily programs offered through NYSERDA’s Multifamily Energy Performance Portfolio.

NYSERDA continues to look for areas of improvement for programs. As noted in last year’s annual report, the GJGNY multifamily team looked to expedite the contracting process at NYSERDA to reduce processing times and promote customer service. The team continues to work on similar intervention strategies to eliminate consumer confusion and streamline participation.

6.3 Assessment Fees

Co-funding of the energy assessment(s) and development of ERPs is offered in two tiers. The tiers are based on household income, with a higher level of funding available to buildings that satisfy NYSERDA’s affordable housing criteria. To be eligible as an affordable housing project, the applicant must document that at least 25 percent of the residential dwelling units are occupied by families earning no more than 80 percent of the State or area median income, whichever is higher. NYSERDA allows reliance upon certain proxies to document compliance with this definition. Those proxies are specified in MEPP program documentation. Current proxies include previously completed household income verification by housing regulators such as NYS Homes and Community Renewal, New York City’s Housing Preservation and Development, the NYS Housing Finance Agency, and the U.S. Department of Housing and Urban Development.

One ERP is developed per project. However, a single project may include multiple buildings. The co-funding amount is dependent on project size, and whether the building is a “firm gas” customer or a non-firm gas-heated building that may also use another fuel as its primary heating fuel. To be eligible to receive this co-funding, the participant must use an MEPP Partner to complete the assessment and ERP. The co-funding amounts offered for completion of the assessments and ERPs are listed and specified in the MEPP program documentation (Table 6-1).

Table 6-1. GJGNY Multifamily Energy Performance Assessment Co-funding

Affordable		Market Rate	
Firm Gas*	Non-Firm Gas	Firm Gas*	Non-Firm Gas
(per unit)	(per unit)	(per unit)	(per unit)
\$75.00	\$60.00	\$52.50	\$37.50
* A firm gas project is defined as a project in which all buildings within a project pay into the System Benefits Charge fund through a firm gas heating rate as defined by the participant's utility for their primary space heating fuel.			

6.4 Additional NYSERDA Incentives

NYSERDA offers additional incentives to install eligible measures outlined within the ERP. Each incentive is subject to funding availability from the Energy Efficiency Portfolio Standard or Regional Greenhouse Gas Initiative. Through MEPP, per unit incentives are available for projects predicted to achieve the 15 percent energy reduction threshold. Additional Performance Payments may apply in the case of eligible projects predicting and achieving savings above the 15 percent energy reduction threshold. Incentives are paid at specified stages of a project's completion. Incentive amounts are detailed in Table 6-2.

Table 6-2. Multifamily Energy Performance Incentive Schedule

Affordable		Market Rate	
Firm Gas*	Non-Firm Gas	Firm Gas*	Non-Firm Gas
(per unit)	(per unit)	(per unit)	(per unit)
\$875.00	\$690.00	\$597.50	\$262.50
* A firm gas project is defined as a project in which all buildings within a project pay into the System Benefits Charge fund through a firm gas heating rate as defined by the participant's utility for their primary space heating fuel.			
Performance Payment (per unit)¹			
Tier	Estimated Energy Reduction ²	Applicable Performance Payment	
1	20%-22%	\$200.00	
2	23%-25%	\$250.00	
3	26%-28%	\$300.00	
4	29%+	\$350.00	
¹ The Performance Payment applies in the case of eligible projects predicting and achieving savings above the 15 percent program threshold. NOTE: A project's incentive may be reduced based on the cost and/or cost-effectiveness of the recommended upgrades.			
² MPP energy reduction is based on source energy.			

MEPP also offers incentives through the Advanced Submetering Program (ASP). ASP serves master-metered rental buildings, cooperatives, and condominiums across the State, providing incentives for the installation of advanced submeters and master meters as well as energy efficient refrigerators and in-unit lighting. Building owners of rental properties participating in this program, including rented co-op and condo units, are required to offer new ENERGY STAR certified refrigerators as replacements for refrigerators that are 10 years old or older, at no cost to the tenants.

6.5 Financing

NYSERDA launched the GJGNY Multifamily Financing Program in June 2011. GJGNY financing is available to multifamily building owners with an approved NYSERDA assessment. Building owners may work with a commercial lender of their choice. NYSERDA contracts directly with the lender. NYSERDA provides 50 percent of the principal of the loan made to support the installation of the improvements contained in the pre-approval document at zero percent interest, up to \$5,000 per apartment or \$500,000 per building. The lender provides the remaining principal of the loan at the market rate. The lender collects all loan payments and remits to NYSERDA its share of the loan. NYSERDA uses these funds to continue further lending activities. By participating in the loan program, New York State lenders are able to offer blended interest rates at below market rate. Twenty-one loans totaling \$10,416,507.60 have been issued as of June 30, 2015.

6.6 Coordination with Other Program Administrators

NYSERDA coordinates with the NYS Homes and Community Renewal's Weatherization Assistance Program (WAP), NYC Housing Preservation and Development (HPD), the U.S. Department of Housing and Urban Development (HUD), and others to leverage additional funding, as appropriate.

NYSERDA continues to work with utility program administrators to address coordination issues and minimize confusion when multiple incentive opportunities are available to customers. If the multifamily building owner chooses not to participate in NYSERDA's MEPP, the owner may elect to participate in a utility rebate program. In this case, the GJGNY loan may be used in coordination with the utility rebate(s), provided a building assessment has been completed that meets MEPP standards. Although GJGNY loans may be combined with either the NYSERDA or utility incentives, NYSERDA and utility incentives cannot be combined with each other to cover the same measure. The GJGNY loan amount is determined by netting out all applicable utility or NYSERDA incentives at the measure level from the total cost of the work.

6.7 Budget, Goals, and Metrics

Table 6-3 and 6-4 describe the MEPP budget and goals and metrics, respectively.

Table 6-3. Multifamily Energy Performance Program Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Energy Assessments	\$3,800,000	\$2,473,677	\$970,193	\$3,075	\$353,055
Implementation and Quality Assurance	1,618,920	1,400,000	0	0	218,920
Financing					
Loans	5,145,749	2,738,013*	0	698,561	1,709,175
Implementation	277,420	142,212	160,708	0	(25,500)
TOTAL	\$10,842,089	\$6,753,903	\$1,130,900	\$701,636	\$2,255,650
<p>* Loan Expended amount is net of loan repayments made through reporting period. Expended: Contractor Invoices and loans processed for payment by NYSERDA. Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan. Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.</p>					

Table 6-4. Multifamily Energy Performance Program Goals and Metrics

Metric	Market Rate	Affordable	Total	Goals	Progress Toward Goals
Assessment Applications Received (number)	135	189	324	500	65%
Assessments Complete (number)	135	184	319	400	80%
Projects Contracted (units)	135	189	324	500	65%
1st Year Net KWh Savings (committed) *	17,329,098.05	4,311,267	21,640,365		
1st Year Net MMBtu Savings (committed) *	396,166.75	480,458.09	876,624.8		
Estimated Annual Bill Savings (committed) *	\$10,34,470	\$20,588,076	\$21,622,546		
Projects with Installed measures (units)	16,151	17,498	33,649		
1st Year Net KWh Savings (installed) *	11,632,361.05	27,824,399.42	39,456,760		
1st Year Net MMBtu Savings (installed) *	265,804.75	305,691.09	571,495.8		
Estimated Annual Bill Savings (installed) *	\$7,614,622	\$9,815,115	\$17,429,737		
Estimated Annual KWh Savings/unit (installed)	720.2254381	1590.147			
Estimated Annual MMBtu Savings/unit (installed)	16.45747941	17.47006			
Estimated Annual Dollar Savings/unit (installed)	\$471.46	\$560.93			
Loans Issued (number)	21				
Value of Loans	\$10,416,507.60				
* Projects that receive GJGNY-supported assessments and/or financing may also receive incentives through Energy Efficiency Portfolio Standard (EEPS), Regional Green House Gas Initiative and/or utility programs, such that projects' energy savings may not all be attributable solely to GJGNY.					

6.8 Multifamily Energy Performance Program Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 6-5.

Table 6-5. Multifamily Energy Performance Program Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
AGGREGATED ENERGY ASSESSMENTS			\$3,411,785	\$2,473,677	\$970,193	\$3,075
Assessment Implementation and Quality Assurance						
PO-18649	TRC	Implementation	1,233,514	1,233,514		
PO-ST9941	Taitem	Quality Assurance	152,551	152,551		
PO-ST9941-1	Taitem	Quality Assurance	13,935	13,935		
TOTAL ASSESSMENT IMPLEMENTATION AND QUALITY ASSURANCE			\$1,400,000	\$1,400,000	\$0	\$0
Loan Activity						
Aggregated Loans Issued			4,126,841	3,663,566	0	698,561
Aggregated Loan Repayments			0	(925,552)	0	0
NET AGGREGATED LOAN ACTIVITY			\$4,126,841	\$2,738,013	\$0	\$698,561
Financing Implementation						
PO-18591	Hawkins Delafield & Wood	Legal financial services	84,000	81,858	2,142	0
PO-19923	Lamont Financial Services	Financial advisor services	56,420	56,420	0	0
PO-20662	Energy Program Consortium	Unknown	2,500	2,500	0	0
PO-25909	Concord Servicing Corp.	MF master loan servicer	150,000	1,392	148,608	0
PO-38299	Frontier Abstract & Research Services	On-bill recovery program title	3,333		3,333	0
PO-36864	Advantage Title Agency	On-bill recovery title search	3,333		3,333	0
PO-37723	Stewart Title Insurance Company	On-bill recovery title search	3,333	42	3,333	0
TOTAL FINANCING IMPLMENTATION			\$302,920	\$142,212	\$160,750	\$0
GRAND TOTAL			\$9,241,545	\$6,753,903	\$1,130,942	\$701,636

7 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 option is On-Bill Recovery Financing, which makes it possible for small businesses and not-for-profit organizations to use the savings on their energy bills to pay for their energy efficiency upgrades. The second option is the Participation Loan, where NYSERDA partners with lenders across New York State to help small businesses and not-for-profits access low-interest financing for energy efficiency improvements. Implementation of this program began in the first quarter of 2011, when it was known as the Small Business/ Not-for-Profit Energy-Efficiency Financing Program.

7.1 Target Audience

In June 2011, the Small Commercial Energy Efficiency Program began offering Participation Loans to small businesses with 100 employees or fewer and to not-for-profits with any number of employees, which have Qualified Energy Assessments.¹³ Small businesses and not-for-profits must own, lease, or manage the building that the organization uses or occupies and must have the authority to contract for the provision of Qualified Energy-Efficiency Services¹⁴ to the building. If the small business or not-for-profit leases or manages all or part of a building, it must obtain permission from the building owner to seek energy efficiency financing through the program.

¹³ Qualified Energy Assessments include either 1) a Full Walkthrough Energy Assessment that provides customers with energy use information, a set of recommendations for Qualified Energy Efficiency Services, installation cost estimates, and associated energy and cost savings estimates; or 2) a Technology or Equipment Specific Commercial Assessment that provides energy use information, recommendations on one or more specific building systems, equipment replacement or upgrade opportunities, and associated energy and cost savings estimates. Qualified Energy Assessments must be provided by Qualified Energy Consultants and must meet NYSERDA's standards for small commercial energy assessments.

¹⁴ Qualified Energy Efficiency Services are modifications to nonresidential structures based upon recommendations contained in a Qualified Energy Assessment performed under a NYSERDA program, by a utility program, or by a Qualified Energy Assessor. Qualified Energy Efficiency Services may include prequalified and custom measures or services including but not limited to: heating, ventilation, air conditioning; lighting; controls; building envelope; domestic or service hot water; solar thermal heat or hot water; or business processes (e.g., kitchens, laundries, air compression, etc.).

In June 2012, the program began offering On-Bill Recovery (OBR) Loans to small businesses and not-for-profits that meet GJGNY eligibility requirements, meet NYSERDA's underwriting criteria, and have utility accounts with one of the following participating utilities: Central Hudson, Con Edison, Long Island Power Authority, National Grid (Upstate New York customers only), New York State Electric and Gas Corporation, Orange and Rockland, or Rochester Gas and Electric.

7.2 Implementation Strategy

NYSERDA offers eligible small business and not-for-profit customers Qualified Energy Assessments from competitively selected Qualified Energy Consultants.¹⁵ GJGNY currently allows small business and not-for-profit customers to use Qualified Energy Assessments provided by NYSERDA, utility service providers, or Qualified Energy Consultants as the basis of an application for financing, provided the energy assessment meets NYSERDA's standards for small commercial energy assessments found in the NYSERDA Small Commercial Energy Efficiency Program Energy Assessment and Request for Financing Package.¹⁶ NYSERDA enters into agreements with lenders to provide small businesses and not-for-profits with access to low-interest energy-efficiency financing through either the Participation Loan or OBR Loan.

In February 2012, NYSERDA launched a project expeditor pilot to provide assistance to small business and not-for-profit customers who had obtained energy assessments through GJGNY to encourage implementation of energy assessment recommendations. The project expeditors follow up with customers who have received energy assessments to determine if customers are eligible for financial incentives or energy-efficiency financing, to help customers apply for available incentives and financing, to verify that the technologies and services included in energy project proposals are consistent with technologies recommended in Qualified Energy Assessments, and to provide additional technical assistance as necessary.

¹⁵ Visit nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Small-Business/Energy-Assessment-Standards.pdf to view the definition of a Qualified Energy Consultant found in the NYSERDA Small Commercial Energy Efficiency Program Energy Assessment and Request for Financing Package.

¹⁶ Visit nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Small-Business/Energy-Assessment-Standards.pdf to view NYSERDA's Standards for Small Commercial Energy Assessments found in the NYSERDA Small Commercial Energy Efficiency Program Energy Assessment and Request for Financing Package.

Expeditor pilot results demonstrate that small business and not-for-profit customers benefit from dedicated project implementation assistance, including assistance identifying and accessing financial incentives and low-interest energy efficiency financing, to help lower the cost of implementing energy efficiency improvements recommended on Qualified Energy Assessments. As a result, NYSERDA added dedicated implementation assistance to the Small Commercial Energy Efficiency Program. Qualified Energy Consultants, selected through Technical Review and Program Support Contractors Request for Proposals (RFP 2621), provide energy assessments to small business and not-for-profit customers, explain energy assessment recommendations and the business case for implementing energy efficiency measures to customers, and identify and help customers apply for any available financial incentives or low-interest energy efficiency financing. NYSERDA anticipates that providing energy assessments integrated with dedicated implementation assistance will help more small business and not-for-profit customers implement energy efficiency improvements in their buildings.

As a result of the Small Commercial Expeditor Program, a total of 51 NYSERDA-approved participation loan applications and 29 NYSERDA-approved On-Bill Recovery financing loan applications can be attributed to assistance provided through the pilot. Of these, 11 participation loans were closed as of June 30, 2015, at an aggregate of \$683,454 in financing, and six On-Bill Recovery financing loans closed, totaling of \$146,151. Further results of the expeditor pilot will be determined over time. These energy efficiency loans are included in the loan totals provided in Section 7.3.

7.3 Financing

NYSERDA enters into agreements with lenders who wish to partner with NYSERDA to provide low-interest energy efficiency financing to small business and not-for-profit customers through Participation Loans and OBR Loans. Lenders follow NYSERDA's underwriting criteria¹⁷ when originating NYSERDA loans.

¹⁷ Criteria include but are not limited to: Organization in existence at least two years, credit score of 650 or higher, no bankruptcies within the last 5 years; no current judgments or liens in excess of \$5,000, debt service coverage ratio > 1.2. These criteria are subject to change.

7.3.1 Participation Loans

Eligible small businesses and nonprofits are also allowed to finance both the installation of energy efficiency upgrades and the purchase of solar electric systems under 200 kW, as approved under NYSERDA's NY-Sun Incentive Program, through participating lenders. Through Participation Loans, NYSERDA provides 50 percent of the principal of the loan, up to \$50,000, at 2 percent interest for up to 10 years. The lender provides the remaining principal of the loan at market rate. Participating lenders collect loan payments from the customer and remit to NYSERDA its share of the loan. NYSERDA will use these funds to continue further lending activities. By participating in the program, lenders can offer energy efficiency financing to small business and not-for-profit customers at a below-market interest rate. The Participation Loan Program is currently open to banks, credit unions, local development corporations, and community development financial institutions. As of June 30, 2015, a total of 16 Participation Loans have been closed with a total loan value of \$1,206,360. These include 11 energy efficiency loans totaling \$683,454 and five solar electric loans totaling \$522,906.

7.3.2 On-Bill Recovery Loans

Participating lenders can also originate OBR Loans on NYSERDA's behalf. Through this loan product, NYSERDA offers eligible small business and not-for-profit customers up to \$50,000 at 2.5 percent interest for a maximum 10 years to finance the cost of their energy-efficiency or solar electric system projects. Customers repay their OBR Loan through an installment charge on their utility bill. Currently, lenders earn a \$300 origination fee for each OBR Loan they originate on NYSERDA's behalf, but feedback indicates that the origination fee does not cover the cost of underwriting. Going forward, lenders will be able to charge a customary fee, which can be included in the financing, provided the simple payback period remains 10 years or less. As of June 30, 2015, eight OBR Loans have been closed with a total loan value of \$202,205. The consisted of six energy efficiency loans totaling \$146,151, and two solar electric loans totaling \$56,054.

7.4 Program Outreach Efforts

7.4.1 Coordination with Other Program Administrators

NYSERDA's Small Commercial Energy Efficiency Program currently allows small business and not-for-profit customers to use Qualified Energy Assessments provided by NYSERDA, utilities, or a Qualified Energy Consultant of their choice as the basis of an application for low-interest energy efficiency financing made available through GJGNY. The energy assessment, however, must meet NYSERDA's standards for small commercial energy assessments found in the NYSERDA Small Commercial Energy Efficiency Program Energy Assessment and Request for Financing Package.¹⁸ By taking advantage of available financing, small businesses and not-for-profits can access the initial capital necessary to cover the cost of implementing approved energy efficiency improvements that are not covered by estimated incentives.

7.4.2 Coordination with CBOs

NYSERDA is coordinating with constituency-based organizations (CBOs) to raise awareness of the Program by hosting a monthly training webinar for CBOs interested in connecting their local small business and not-for-profit customers with low-interest energy efficiency financing. NYSERDA also hosted a training webinar for solar electric contractors participating in the NY-Sun Incentive Program (Program Opportunity Notice 2112) to inform them of the availability of Participation Loans and On-Bill Recovery Loans to finance the purchase and installation of solar electric systems up to 200 kW by small businesses and not-for-profit customers.

7.5 Budget, Goals, and Metrics

Table 7-1 describes the Small Commercial Energy Efficiency budget, and Table 7-2 describes the goals and metrics, respectively.

¹⁸ Visit nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Small-Business/Energy-Assessment-Standards.pdf to view the NYSERDA Small Commercial Energy Efficiency Program Energy Assessment and Request for Financing Package.

Table 7-1. Small Commercial Energy Efficiency Program Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Energy Assessments	\$8,623,091	\$4,657,240	\$3,965,850	\$0	\$0
Implementation and Quality Assurance	1,037,821	555,556	432,264	0	50,001
Financing					
Loans	1,494,917	651,381*	0	0	843,536
Implementation	280,000	268,203	279,855	0	(268,058)
TOTAL	\$11,435,829	\$6,132,380	\$4,677,969	\$0	\$625,480

* Loan Expended amount is net of loan repayments made through reporting period.
 Expended: Contractor Invoices and loans processed for payment by NYSERDA.
 Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan.
 Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.

Table 7-2. Small Commercial Energy Efficiency Program Goals and Metrics

Metric	Performance To Date	Goals
Assessment Applications Received (number)	2,823	
Assessments Complete (number)	2,575	2100
Estimated Projects Completed (number) ^{a,c}	685	1296
1st Year Net KWh Savings (assessment recommended) ^b	40,284,565	
1st Year Net KWh Savings (estimated installed) ^c	8,056,913	
1st Year Net MMBtu Savings (assessment recommended)	368,808	
1st Year Net MMBtu Savings (estimated installed) ^c	17,638	
Estimated Annual Bill Savings (assessment recommended)	23,458,378	
Estimated Annual Bill Savings (estimated installed) ^c	4,691,676	
Estimated Annual KWh Savings/project	11,762	18,000 kWh per year / completed project
Estimated Annual MMBtu Savings/project	25.75	160 MMBtu per year/ completed project
Estimated Annual Dollar Savings/project	6,849	\$5,200 per year / completed project
Loans Issued (number)	25	1000
Value of Loans ^d	1,424,381	
<p>^a Projects that receive GJGNY-supported assessments and/or financing may also receive incentives through Energy Efficiency Portfolio Standard (EEPS) and/or utility.</p> <p>^b Assessment recommended savings represent the total potential energy and energy bill savings that could be achieved if all measures recommended in the assessment are implemented</p> <p>^c Based on preliminary findings from NYSERDA's expeditor pilot, staff have found that approximately 20 percent of projects that receive energy assessments are implemented. Estimated installed metrics reflects the total energy and energy bill savings expected based on a projected implementation rate of 20 percent.</p> <p>^d 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.</p>		

7.6 Small Commercial Energy Efficiency Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 7-3.

Table 7-3. Small Commercial Energy Efficiency Program Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
PO-ST9848-1	C.J. Brown Energy, PC	Energy Assessment Provider	\$360,941	\$360,941	\$0	\$0
PO-ST9849-1	L&S Energy Services, Inc	Energy Assessment Provider	672,710	672,710	0	0
PO-ST9850-1	Daylight Savings Co	Energy Assessment Provider	1,500,485	1,538,405	0	0
PO-ST9851-1	EME Consulting Engineering Group, LLC	Energy Assessment Provider	518,675	518,675	0	0
PO-40830	L&S Energy Services, Inc	Energy Assessment Provider	1,293,593	515,140	778,453	0
PO-40827	Daylight Savings Co	Energy Assessment Provider	1,293,594	331,849	961,745	0
PO-40829	GDS Associates, Inc	Energy Assessment Provider	1,293,594	389,189	904,405	0
PO-41849	TRC Energy Services	Energy Assessment Provider	1,651,579	330,331	1,321,247	0
TOTAL ENERGY ASSESSMENTS			8,585,171	4,657,240	3,965,850	0
Assessment Implementation and Quality Assurance						
PO-24210	Kema Services, Inc.	Program Support Services	49,857	49,857	0	0
PO-27052	Novus Engineering, PC	Expeditior Pilot	49,176	49,176	0	0
PO-27726	Taitum Engineering, PC	Expeditior Pilot	50,000	50,000	0	0
PO-27661	Nexant, Inc	Expeditior Pilot	44,593	44,593	0	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Assessment Implementation and Quality Assurance						
PO-30679	Kema Services, Inc.	Program Support Services	47,642	47,642	0	0
PO-33565	LaBella Associates, PC	QA Services	1,737	1,737	0	0
PO-33570	TRC Energy Services	QA Services	2,699	2,699	0	0
PO-56337	Taitum Engineering, PC	Program Support Services	24,982	5,405	19,577	0
PO-55032	LaBella Associates, PC	Program Support Services	24,640	5,218	19,422	0
PO-32825	Taitum Engineering, PC	Expeditor Pilot	74,331	74,331	0	0
PO-32865	Aramark Management Service Ltd Partnerhsip	Program support services	65,000	65,000	0	0
PO-40830	L&S Energy Services, Inc	Expeditor Services	138,532	55,167	83,365	0
PO-40827	Daylight Savings Co	Expeditor Services	138,532	35,538	102,994	0
PO-40829	GDS Associates, Inc	Expeditor Services	138,532	41,679	96,854	0
PO-41849	TRC Energy Services	Expeditor Services	137,567	27,514	110,052	0
TOTAL ASSESSMENT IMPLEMENTATION AND QUALITY ASSURANCE			\$987,820	\$555,556	\$432,264	\$0
Loan Activity						
Aggregated Loans Issued	Various	Loans Issued	NA	757,233	0	0
Aggregated Loan Repayments	Various	Loans Payment	NA	(105,852)	0	0
NET AGGREGATED TOTAL LOAN ACTIVITY				\$651,381	\$0	\$0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO-37428	Blue Springs Energy, LLC	Lender Outreach	50,000	50,000	0	0
PO-18591	Hawkins Delafield & Wood	Legal/Program Design	126,000	122,787	3,213	0
PO-19923	Lamont Financial Services Corp	Legal/Program Design	84,630	84,630	0	0
PO-20662	Earthspouse, LLC	PV Development	3,750	3,750	0	0
PO-25910	Concord Servicing Corp	Loan Servicer	120,000	2,213	117,787	0
PO-25910	Concord Servicing Corp	Loan Servicer	120,000	178	119,822	0
PO-38299	Frontier Abstract and Research Services	Legal- Title	13,333	0	13,333	0
PO-36864	Advantage Title Agency Co	Legal- Title	13,333	425	12,908	0
PO-37723	Stewart Title Insurance Co	Legal- Title	13,333	541	12,792	0
VC-298768	LIPA	Utility Remittance	0	233	0	0
VC-343904	Niagara Mohawk	Utility Remittance	0	600	0	0
VC-404265			0	446	0	0
VC-339249	Pathstone Enterprise Center, Inc	Origination Fee	0	300	0	0
VC-409423	Community Loan Fund of the Capital Region	Origination Fee	0	300	0	0
VC-416980	New York Business Development Corp	Origination Fee	0	300	0	0
VC-305913	Community Development Corp	Origination Fee	0	300	0	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
VC-401392	New York Business Development Corp	Origination Fee	0	300	0	0
VC-401393	New York Business Development Corp	Origination Fee	0	300	0	0
VC-416714	BOC Capital Corp	Origination Fee	0	300	0	0
VC-417069	The Canandaigua National Bank & Trust	Origination Fee	0	300	0	0
TOTAL FINANCING IMPLEMENTATION			544,379	268,203	279,855	0
GRAND TOTAL			\$10,117,370	\$6,132,380	\$4,677,969	\$0
NOTE: Financing implementation contract funding amounts listed in this table represent the prorated share of costs for the Small Commercial sector. GJGNY program-wide contract funding amounts are provided in Table 3-3.						

8 Outreach and Marketing

GJGNY provides for community-based outreach, enabling one-to-one assistance with the process of participating in the program. This community-based approach, combined with statewide marketing, is expected to increase the reach of the program, particularly among disadvantaged populations and those not traditionally participating in energy-efficiency programs. Although one-to-one assistance can be a more expensive form of marketing, reaching households with limited incomes who otherwise might not participate and enabling them to permanently reduce their energy bills, as well as improve health effects, comfort and home safety provides both personal and environmental benefits.

8.1 Outreach through Constituency-Based Organizations

The GJGNY program provides outreach services in targeted communities through CBOs, which locate residents, businesses, not-for-profits, multifamily building owners, and potential workforce participants. CBOs encourage participation in energy efficiency programs, facilitate awareness of workforce training opportunities available through the GJGNY program, and assist with enrollment in those efforts. As of June 30, 2015, 11 competitively solicited CBOs are currently under contract to assist with program. Table 8-1 lists CBOs that have worked in or are currently working in the program, along with the sectors targeted and an indication of whether they also have a workforce or aggregation components.

Table 8-1. CBOs Selected through Requests for Proposals

CBOs Selected through a First Round Solicitation (RFP 2038 and RFP 2327) with contract durations in the 2011-2014 timeframe						
Target Region	CBO Name	Outreach Activity				Aggregation
		One- to Four- Family Residential Buildings	Multifamily Energy Performance	Small Commercial Energy Efficiency	Workforce Training and Development	
Downstate						
Bronx	Northwest Bronx Community and Clergy Coalition (NWBCCC)				X	
	Bronx Overall Economic Development Corporation (BOEDC)	X	X	X		
Kings and Richmond	Neighborhood Housing Services of Staten Island (NHSSI)	X			X	
	El Punte	X	X	X		
	Make the Road New York (MRNY)	X	X		X	
New York	Downtown Manhattan Community Development Corporation (DMCDC)		X		X	
	Civic Association Serving Harlem (CASH)	X	X			
Queens	Asian Americans for Equality Community Development Fund (AAFE)	X			X	
	Neighborhood Housing Services of Jamaica (NHSJ)	X				

Table 8-1 continued

Target Region	CBO Name	Outreach Activity				Aggregation
		One- to Four-Family Residential Buildings	Multifamily Energy Performance	Small Commercial Energy Efficiency	Workforce Training and Development	
Upstate						
Capital	Northeast Parent and Child Society (NEPC)				X	
	Affordable Housing Partnership of the Capital Region (AHP)	X				
Central	Public Policy and Education Fund of Central New York (PPEF-Central)	X		X	X	
Finger Lakes	PathStone	X		X	X	
Long Island	Long Island Progressive Coalition (LIPC)	X				X
Mid-Hudson and Westchester	Rural Ulster Preservation Company (RUPCO)	X		X	X	
North Country	Adirondack North Country Association (ANCA)	X	X	X	X	
Southern Tier	Public Policy and Education Fund of the Southern Tier (PPEF-ST)	X		X	X	
Western	People United for Sustainable Housing (PUSH)	X	X		X	X

Table 8-1 continued

CBOs Selected through a Second Round of Requests for Proposals (RFP 2773) with contract durations in the 2013-2016 timeframe						
Target Region	CBO Name	Outreach Activity				Proposed Aggregation
		One- to Four- Family Residential Buildings	Multifamily Energy Performance	Small Commercial Energy Efficiency	Workforce Training and Development	
Downstate						
Bronx	Sustainable South Bronx (SSBx)	X	X	X	X	
Richmond	Neighborhood Housing Services of Staten Island (NHSSI)	X			X	
Kings	El Puente	X	X	X	X	X
Queens	Neighborhood Housing Services of Jamaica (NHSJ)	X				

Table 8-1 continued

CBOs Selected through a Second Round of Requests for Proposals (RFP 2773) with contract durations in the 2013-2016 timeframe						
Target Region	CBO Name	Outreach Activity	Proposed Aggregation	Target Region	CBO Name	Outreach Activity
		One- to Four-Family Residential Buildings	Multifamily Energy Performance			One- to Four-Family Residential Buildings
Upstate						
Capital	Affordable Housing Partnership of the Capital Region (AHP)	X				
Finger Lakes	PathStone	X				
Nassau & Suffolk	Long Island Progressive Coalition (LIPC)	X		X	X	X
Mid-Hudson and Westchester	Rural Ulster Preservation Corporation (RUPCO)	X	X	X	X	X
North Country	Adirondack North Country Association (ANCA)	X	X	X	X	
Southern Tier	Public Policy and Education Fund of the Southern Tier (PPEF-ST)	X	X	X		
Western	People United for Sustainable Housing (PUSH)	X		X	X	X

CBOs are reaching more lower income households than in previous years, which is the consumer segment that the program intends to target. As of June 30, 2015, 48 percent of the completed retrofits that resulted from CBO outreach were eligible for the Assisted HPwES program, compared to 37 percent program wide. CBOs are also leveraging other State, federal, and local funds to complete Home Performance work.

CBOs are reaching multifamily and small commercial markets in addition to their residential outreach while developing a network of productive partnerships. Area-specific, NYSERDA-approved contractor lists, which may include additional information such as languages spoken by the contractor staff, are being distributed to facilitate the homeowner's contractor selection process. Aggregation is bringing with it new ways of reaching customers while enhancing community benefits through local hiring practices and wage standards.

Attendance at local events such as home ownership forums and street fairs assists in communicating with new populations. This commitment to personal interaction, coupled with creative social media strategies, has helped forge strong connections with local community and environmental groups and has resulted in CBOs winning the approval of local government and community leaders, serving to validate the program at the community level. Rural Ulster Preservation Company (RUPCO), the CBO providing outreach to the Mid-Hudson Valley has brokered a number of unique partnerships to promote the HPwES program in local communities.

The City of White Plains in Westchester County is a recent example. On April 26, 2015, RUPCO participated in the City of White Plains Earth Day. RUPCO was invited by Jill Iannetta, the coordinator of special projects for the office of the Mayor of City of White Plains, and this event marked the first opportunity for RUPCO to collaborate with the City of White Plains and their environmental and energy conservation efforts.

Pratt Center for Community Development, in coordination with the New York City CBOs, launched the downstate Energy Champions Referral program in October 2014. Under the Energy Champions Referral program, the four New York City based CBOs (El Puente, Neighborhood Housing Services of Jamaica, Neighborhood Housing Services of Staten Island, and Sustainable South Bronx) allow individuals to become Energy Champions and not-for-profits to become Energy Champion Partner Organizations when they refer homeowners into the HPwES program. Energy Champions as well as Partner Organizations receive monetary as well as non-monetary benefits from the Home Performance contractor

for successfully recruiting homeowners who complete a retrofit. However, although NYSERDA received positive responses from downstate Home Performance contractors at the launch of this program, there have only been 18 leads attributed to an Energy Champion referral, resulting in one retrofit in the first eight months. The lack of program momentum has resulted in decreased interest from contractors, CBOs, and current Energy Champions.

Other endeavors of CBOs resulting from the GJGNY Outreach program include:

- El Puente successfully pursued projects within 12 multifamily buildings. All 12 buildings have their Energy Reduction Plans approved.
- In the fall of 2014, Sustainable South Bronx (SSBx) engaged the Shorehaven Homeowner's Association to undertake a modified aggregation outreach model for residents of the Shorehaven Condominium residential development. SSBx is working with a HPwES contractor, BrightHome Energy Solutions, to provide energy efficiency upgrades to units in the complex through standard contract package offerings to homeowners. As of June 30, 2015, the Shorehaven project is about to commence and has potential to engage numerous homeowners. In the future, there may also be potential to provide services for low-rise multi-unit buildings in the development.
- To support the sale of comprehensive Home Performance jobs in the downstate market, NYSERDA piloted a HPwES third-party assessment and sales program in Richmond County (Staten Island) beginning in May 2014 and ending in January 2015. The pilot used the Conservation Services Group (CSG) implementation staff in the role of sales consultants performing the Comprehensive Home Assessments (CHAs), workscope creation, and package pricing to homeowners. Contractors could then opt-in to the pilot and agree to respond with bids for sales generated by the pilot. During the limited pilot phase, CSG's staff would mentor these contractors until they were proficient in effective sales techniques and provide suggestions to streamline their business processes. As part of the pilot, Neighborhood Housing Services of Staten Island (NHSSI) played a vital role assisting CSG by providing 15 percent of all of customer leads, pre-screening pilot candidates for financial eligibility, assisting with the preparation of financing applications, leveraging other statewide and regional programs to assist the homeowner finance the project as well as following-up with ineligible customers. Although it did lead to an increase in audit requests, the overall numbers were still very low with a total of 40 audits and 16 completed projects over the nine-month pilot. The increased cost of this business model did not produce a commensurate increase in success. Despite the challenges, the pilot did prove that a high quality audit and consultative sales approach was successful in achieving a better than industry average closing rate of 40 percent. NYSERDA will continue to explore third-party audit business models in collaboration with CBOs, contractors, and others.

- Public Policy and Education Fund of the Southern Tier has had great success in building contractor relationships. It has successfully organized a number of HPwES promotional events in which local HPwES contractors are encouraged to attend. An example of a successful event was the Elmira (Chemung County) press conference on October 28, 2014. Homeowners, local officials, representatives of State officials, and local BPI contractors attended this press event and spoke about the benefits of energy efficiency and to encourage residents to take advantage of the program. This press conference was highlighted on local television stations and generated well over 200 leads, with a large amount of intake continuing into November.
- Rural Ulster Preservation Company (RUPCO) established a number of partnerships, including partnerships with Central Hudson Gas and Electric, Energize NY, Mid-Hudson Economic Development Growth Extension Program Coordinator, HPwES contractors, and municipalities who provide customer referral sources on almost a daily basis. In 2014, RUPCO partnered with Central Hudson to combine NYSERDA funding with Central Hudson incentives for oil to natural gas conversions. 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. RUPCO also has staff members that are fluent in Spanish, which has made a significant impact in reaching the Hispanic community through Spanish language presentations on energy efficiency in targeted Hudson Valley communities. From June 2014 until June 2015, RUPCO participated in 13 Spanish language presentations, workshops, business seminars, and one radio talk show. The RUPCO GJGNY Team created three video guides, available in Spanish and English, demonstrating how to complete the NYSERDA forms for the Residential Home Energy Assessment, the Assisted HPwES Program, and the Residential Credit Application. In the future, RUPCO will be creating additional video guides for navigating the NYSERDA and RUPCO websites, and posting a narrated PowerPoint Presentation on HPwES.
- People United for Sustainable Housing (PUSH) developed the PUSH Green Ambassador program to strategically leverage institutional and organizational participation from key community stakeholders and enhanced marketing efforts. PUSH has partnered with Buffalo City Councilman Michael LoCurto, New York State Assemblyman Sean Ryan, and New York State Assemblyman Mickey Kearns to raise awareness of the HPwES program, with targeted letter writing initiatives, posters displayed in area businesses, and a Green Forum community event with other local elected officials, in addition to other initiatives.
- In 2015, PUSH Buffalo received funding through NYSERDA’s Cleaner Green Communities program to expand PUSH Green’s ability to assist LMI residents install solar photovoltaic and solar thermal technologies on their homes. PUSH plans on leveraging their investment in the Green Economic Development Zone to further solar development within the corridor through a joint solar and HPwES aggregation model.

- In the fall 2014, PUSH Buffalo launched their Warm & Dry on the Westside program which provides matching funding for LMI homeowners in the 14213 zip code that are interested in making energy efficiency improvements on their homes, but have pre-existing conditions such as leaky roofs, structural issues, and other health and safety issues that have prevented them from installing energy efficiency upgrades. In September 2014, PUSH's affordable housing subsidiary, the Buffalo Neighborhood Stabilization Company (BNSC) was awarded a grant from the Affordable Housing Corporation that will fund building repairs for an estimated 30 low-to-moderate income homeowners who commit to completing NYSERDA energy efficiency improvements.
- In March 2014, Pathstone Corporation partnered with the City of Canandaigua to operate as construction manager for their Home Energy Improvement Grant. Through the partnership, PathStone was able to provide LMI city residents matching funds from the City grant, Assisted Home Performance, the Affordable Housing Corporation, Weatherization, Empower, and On-Bill Recovery that enabled 9 homeowners to complete energy retrofits as well as structural, electrical, water, and other safety work. The project leveraged a contribution from the City of \$44,279 which assisted in completing \$126,778 worth of retrofits. The Program operated from March 2014 until August 2015, and PathStone and the City Of Canandaigua are currently discussing a second round of funding.
- 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 spring 2015, TRC Solutions, energy auditors for NYSERDA's Small Commercial Energy Efficiency Program, completed assessments and worksopes for 22 project sites and is in the process of assessing and creating worksopes for an additional nine project sites. In June of 2015, the Long Island Presbytery Board of Trustees in consultation with the 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. The estimated value of the work recommended through the completed assessments is \$566,028.

8.1.1 Training and Implementation Contractor

Conservation Services Group (CSG) was competitively selected as the GJGNY Training and Implementation Contractor (TIC) during the first contract period and again under the second contract. The TIC provides structured training and support for the CBOs. In addition, the TIC provides geographic coordination and support of CBO Outreach programs, enabling communication across all regions. CSG tracks CBO goals, and assess and fulfills CBO needs. While tracing progress of referrals made to GJGNY, CSG gathers data and provides regular reporting of program activities and results to NYSERDA.

CSG facilitates ongoing monthly bi-monthly webinar trainings for participating CBOs on program updates and changes, providing continual reinforcement of Outreach program procedures and protocols. CSG hosts and maintains the CBO SharePoint Portal online communication tool, providing assistance to CBOs with the tool while also providing assistance to CBOs in using NYSERDA's Comprehensive Residential Information System database and the NY HP Portal web-based communication tool. In addition, CSG provides oversight and guidance to the active aggregation programs in Western New York and the Long Island Regions as well as support to CBOs incorporating energy efficiency into local Solarize campaigns.

8.1.2 SharePoint Portal

To support the CBO outreach effort, a SharePoint Portal was developed that serves as a central communication tool and reporting mechanism for participating organizations. The site is password-protected and accessible to NYSERDA staff, CSG and its subcontractor Pratt Center for Community Development, CBOs, and applicable NYSERDA staff.

The SharePoint Portal enables CBOs to access and download program information and materials, to upload information such as reports and leads, and to converse about the program and its deployment. The site is a critical tool for the implementation of the GJGNY Outreach program. CSG worked with NYSERDA to ensure the information gathered from CBOs on the site integrates with the Comprehensive Residential Information System (CRIS) programmatic database system. CBOs are required to report and track leads, assessments, and retrofits in the CRIS system.

The CBO SharePoint Portal is being used as a central communication tool to support participating CBOs, allowing program staff and CBOs to share information efficiently. Program staff and CBOs use the Portal to post announcements about training classes, notices of upcoming webinars, programmatic updates, and multimedia resources. CBOs can use the same tool to access files such as presentation slides from training sessions, recorded webinars, aggregation documents, reporting and invoicing templates, and approved marketing language and logos. Press releases, Web copy, and marketing materials can be conveniently uploaded for program administrator review. The Portal can be used to assign Aggregation Group ID numbers so that the neighborhood clusters of HPwES participants are properly associated, thereby ensuring community-scale pricing and other benefits are delivered. By providing all new, open, and

closed issues raised for tracking and reporting purposes in a centralized location, administrative burden is alleviated and tracking and reporting accuracy is ensured. In addition, portal users can participate in a real-time, public group discussion board created to provide a venue for dialogue and to promote best practices among CBOs.

In early 2014, a new SharePoint feature that allows CBO metric reporting was made available. The metric reporting site facilitates a single location for NYSERDA and CBOs to view and track performance and confirm program verified, credited retrofits. Although NYSERDA can view statistics on all CBOs, the individual CBO groups have access to only their own organization's metrics.

8.1.3 CBO Training and Webinars

NYSERDA provides regular training to CBOs via a series of webinars that provide CBOs with regular program updates, information on best practices, and other necessary information. During the reporting period, outreach and marketing staff and contractors conducted six CBO bi-monthly webinars as well as a SharePoint training webinar and links to relevant NYSERDA HPwES and MPP program trainings. All training presentations and materials are available on the CBO SharePoint Portal for review and as a refresher for staff, as necessary. Details about webinar topics can be found in Appendix C.

Additionally, the TIC provides training through on-site meetings for new CBO staff as well as refresher training for existing staff, remote CBO staff training utilizing virtual meetings and conference calls, and a monthly in-person training meeting for the downstate region in Manhattan. In 2015, the TIC coordinated with NYSERDA workforce development staff to provide energy efficiency training for the downstate CBO staff at the Green Jobs Training Center in Howard Beach. The Green Jobs Training Center classes incorporate hands-on with classroom training to further build CBO staff's technical and field knowledge.

8.1.4 Aggregation

Aggregation is the process of unifying a collection of eligible homeowners who have agreed in advance to use the same contractor or contractor team to perform assessments and retrofit work, and who are brought to the GJGNY program by a CBO under contract with NYSERDA to perform customer outreach services. Aggregation provides benefits to the homeowner such as lower costs through standardized pricing and a simplified participation process. Aggregation provides benefits to contractors by reducing costs associated with travel and marketing, allowing more efficient use of crews and bulk material purchases, and

providing a ready audience of potential leads. In addition, this process benefits the targeted community by creating employment for local residents. Additionally, aggregation complements ongoing market transformation efforts by expanding awareness, increasing education, and reaching populations not currently responding to programs.

Each CBO participating in Aggregation has created a plan identifying the neighborhoods to target, minimum number of households to be included in the aggregation, strategies to provide pricing economies of scale, processes for assigning aggregations to participating Home Performance contractors, timelines for contractors to complete work, and fulfilling other aspects of the program. Contractors interested in providing services to an aggregated group of households and benefiting from receiving a list of pre-screened customers located within a small area must also agree to provide community benefits such as local hiring, employee training, or providing living wages. The nature of the community benefits is unique to each region and is developed by the CBOs in coordination with regional contractors.

Aggregation is being implemented by two of the 11 participating CBOs: Long Island Progressive Coalition and People United for Sustainable Housing (PUSH). NYSERDA began processing GJGNY assessment applications for aggregation projects on May 14, 2012, in preparation for the official launch of the Aggregation Pilot in Erie County and Long Island. With the second round of funding, PUSH has expanded their outreach initiative to Niagara and Chautauqua counties. Also with the second round of funding, aggregation components were proposed by two additional CBOs, El Puente and Rural Ulster Preservation Company (RUPCO). El Puente aimed to have their pilot implemented in the second year of their contract. However, due to the departure of their Outreach Coordinator in May 2014, the aggregation plans have been put on hold. RUPCO has been operating under the interim aggregation arrangement and is currently working on a proposal for an HPwES “Stalled” Customer modified aggregation outreach campaign.

As of June 30, 2015, the following HPwES contractors are active in the GJGNY Aggregation Pilot program:

- Long Island Region - Long Island Progressive Coalition (LIPC):
 - Green Audit USA
 - K and L Green Operations LLC dba Powersmith
- Western Region - People for Sustainable Housing (PUSH):
 - Ivy Lea Construction, Inc.
 - New Buffalo Impact, Inc.
 - Zenner and Ritter

LIPC's aggregation pilot was launched officially on July 9, 2012, after months of planning and establishing relationships with their aggregation contractors. As of June 2015, LIPC has facilitated 172 customers within 40 aggregation clusters. Of these clients, 139 have completed their comprehensive home energy assessments and 77 have progressed to HPwES-approved projects. LIPC's project conversion rate is currently 19 percent higher than the 31 percent HPwES program conversion rate. LIPC attributes the above average conversion rate on their pre-screening of customers for financial eligibility prior to assessment application submittal.

People United for Sustainable Housing (PUSH) is marketing their aggregation program, which is called the PUSH Green Friends and Neighbors program (PUSH Green). PUSH Green held their contractor lottery on June 11, 2012 and assigned the first three aggregation bundles. As of June 2015, PUSH has facilitated 453 customers within 56 aggregation clusters. Sixty percent of these customers (274 individuals) have since completed assessments on their homes. Of these projects, 99 have received program approval for advancing to retrofits.

To increase participation by low to moderate income homeowners in the aggregation program, PUSH Green matched NYSERDA's Assisted Home Performance Subsidy with Green and Healthy Homes Initiative (GHHI) funding to provide 100 percent of project funding for eligible homeowners in the City of Buffalo. GHHI matching grant funds were exhausted in the fall of 2013, but PUSH continued to target low to moderate income households. In September 2014, PUSH's affordable housing subsidiary, the Buffalo Neighborhood Stabilization Company was awarded a grant from the Affordable Housing Corporation that will fund building repairs for low-to-moderate income homeowners who commit to completing NYSERDA energy efficiency improvements. The program will target homeowners living in

PUSH's core community on the West Side of Buffalo and will include an innovative workforce development and contracting model. Funding will support approximately 30 projects and will leverage both EmPower and Assisted Home Performance subsidies. The program launched marketing activities in February 2015. In March, PUSH Green began enrolling participants in the Warm and Dry program.

It is intended that the two programs currently underway be used to inform other CBOs of the opportunities and challenges associated with aggregation, in addition to the degree of success being achieved, so that other CBOs can decide whether to pursue this option. Due to the initial success, the aggregation program is no longer viewed as a pilot. In addition, NYSERDA will analyze the results of aggregation to determine to what degree the original goals for customer benefits, contractor benefits, and community development are being achieved.

Conservation Services Group (CSG), the outreach and marketing training and implementation contractor, assists NYSERDA with general oversight of the CBO aggregation program and works with NYSERDA to track how aggregation is being deployed and managed by the participating CBOs. CSG also monitors participating CBO protocols and procedures for aggregation implementation, providing NYSERDA updates on how the protocols and procedures are working in the field, tracks and makes recommendations on necessary development work to support aggregation in associated databases, in addition to assisting with training and support. In addition, CSG works to inform CBOs of other national, state and regional aggregation models and has arranged conference calls to facilitate knowledge and understanding of these alternate models.

8.1.5 Outreach to Support Workforce Development

CBOs facilitate awareness of the various GJGNY training programs, partners, and initiatives; connect students and workers to appropriate training opportunities including on-the-job training; and assist with educating trainees about career steps and opportunities for employment and advancement. The CBO workforce training outreach effort targets areas with high populations of minorities, low-income individuals, and populations with barriers to employment. When possible, CBOs coordinate with New York State Department of Labor (NYS DOL) Career Centers to leverage other federal and State training resources and to identify employment opportunities.

CBOs also support the continued growth of a strong foundation of accredited contractors, including minority- and women-owned business enterprises, and encourage workers to leverage training opportunities currently in place. CBOs provide specific program information including: types of workforce training opportunities, names of organizations or other entities providing training, contractors and trade organizations providing on-the-job training opportunities, contacts, and processes for enrollment or participation.

Several CBOs have had significant successes with their workforce development activities. Under the first contract, Adirondack North Country Association (ANCA) worked with a subcontractor, the Workforce Development Institute (WDI), in the North Country. WDI, in conjunction with State University of New York at Canton, Institute for Building Technology and Safety (IBTS), and the Building Performance Contractors Association of New York, worked together to raise awareness of GJGNY opportunities. These organizations reached out to contractors in the North Country and informed them of the HPwES program while also encouraging the firms to become accredited by the Building Performance Institute (BPI). Several BPI training dates were established at SUNY Canton. Additional workforce development outreach opportunities were also pursued. ANCA continues relationships with WDI, IBTS and the New York State Department of Labor (NYS DOL) One Stop Centers. For example, as a result of ANCA's efforts, one contractor enrolled in the HPwES program and two additional training class members are employed at participating contractor companies. This addition is a great opportunity for the North Country, which has a limited number of participating contractors relative to the size of the region.

Long Island Progressive Coalition (LIPC) is working with United Way YouthBuild to educate graduates on career opportunities in the HPwES program by conducting presentations. Additionally, the CBO helped facilitate a partnership by referring interested participants to United Way and the NYS DOL, both of which serve as training hosts. Contractors have continued to alert LIPC of job openings prior to posting on job listing websites, which has further bolstered the CBO's workforce development efforts. LIPC was successful in training new workers, cooperating with the Laborers' International Union of North America Local 10 on providing two 30-day Weatherization Training programs. This training helped prepare workers for energy efficiency work and resulted in trainees having over 10 new certifications in the field. LIPC's outreach in low-income minority communities aided to find potential trainees and assisted them in applying for the training. After the training, LIPC worked with some of the trainees to develop their resumes and to assist them in finding jobs.

As of June 2015, People United for Sustainable Housing (PUSH) Buffalo has connected 36 community residents to employment in the green construction sector through an innovative new initiative called the Community Hiring Hall. The Community Hiring Hall, housed under PUSH's affordable housing subsidiary, the Buffalo Neighborhood Stabilization Corporation (BNSC), provides construction labor to PUSH's 16 Winter Street project as well as to projects managed by a private construction services company, Savarino Construction. The Community Hiring Hall represents an innovative high road employment model that can compete on cost with private for-profit temporary staffing agencies while also providing workers with access to industry training and the City of Buffalo living wage rate of \$12.84 per hour. PUSH introduced Friends and Neighbors contractors to BNSC's Community Hiring Hall model during contractor accountability meetings earlier this year. Ivy Lea Construction, a participating PUSH HPwES Aggregation contractor, has made a tentative commitment to utilizing the community hiring hall beginning in early 2015.

Neighborhood Housing Services of Jamaica (NHSJ) promotes the Green Jobs-Green New York program at its Handyman Training classes that occur several times per year.

8.1.6 Summary of CBO Program Statistics

Table 8-2 provides a summary of HPwES program activities by CBO for the one- to four-family sector through June 30, 2015.

Table 8-2. HPwES Activity Summary by CBO

CBO Name	HP Applications Received	HP Assessments Completed	HP Work Approved (number of jobs)	HP Completed Retrofits	Conversion Rate
Downstate					
Northwest Bronx Community and Clergy Coalition (NWBCCC)	Workforce Development Activities Only				
Sustainable South Bronx (SSBx)	211	112	15	12	13%
Neighborhood Housing Services of Staten Island (NHSSI)	242	160	35	32	24%
El Puente	44	23	6	4	29%
Make the Road New York (MRNY)	23	20	51	2	20%
Downtown Manhattan Community Development Corporation (DMCDC)	Multifamily Activities Only				
Civic Association Serving Harlem (CASH)	7	2	1	1	50%
Asian Americans for Equality Community Development Fund (AAFE)	71	52	17	14	33%
Neighborhood Housing Services of Jamaica (NHSJ)	320	177	50	44	30%

Table 8-2 continued

Upstate					
Northeast Parent and Child Society (NEPC)	Workforce Development Activities Only				
Affordable Housing Partnership of the Capital Region (AHP)	828	497	199	166	42%
Public Policy and Education Fund of Central New York (PPEF-Central)	334	210	28	22	14%
PathStone	854	593	159	133	32%
Long Island Progressive Coalition (LIPC)	550	376	179	162	50%
Rural Ulster Preservation Corporation (RUPCO)	2,387	1,600	390	326	27%
Adirondack North Country Association (ANCA)	393	260	58	53	25%
Public Policy and Education Fund of the Southern Tier (PPEF-ST)	1,687	1,304	270	245	22%
People United for Sustainable Housing (PUSH)	1,068	640	260	218	41%
TOTAL	9,019	6,026	1,718	1,434	30%

Table 8-3 and Table 8-4 provide summaries of outreach activities for the multifamily and small commercial sectors through June 30, 2015.

Table 8-3. Multifamily Performance Program Activity Summary by CBO

CBO Name	SharePoint Leads*	Completed Energy Reduction Plans (number of buildings)	Energy Reduction Plans in Progress**
SSBx	4	11	0
DMCDC	127	25	11
El Puente	57	34	12
MRNY	298	1	1
PathStone	1	0	0
RUPCO	41	0	0
ANCA	1	0	0
PPEF - ST	0	0	0
PUSH	1	0	0
TOTAL	530	71	24
<p>* SharePoint Leads are individuals who have received information on NYSERDA programs through CBO outreach activities.</p> <p>** Confirmed by CSG through NYSERDA's Multi-Family CRIS system.</p> <p>NOTE: Consult Table 8-1 to interpret CBO acronyms.</p>			

Table 8-4. Small Commercial Energy Efficiency Activity Summary by CBO

CBO Name	SharePoint Leads*	Completed Assessments
AHP	1	0
ANCA	59	27
El Puente	46	0
LIPC	0	0
PathStone	220	7
PPEF - Central	498	4
PPEF - ST	14	0
PUSH	279	69
RUPCO	84	0
SSBx (BOEDC under RFP 2038)	29	0
TOTAL	1,230	107
<p>* SharePoint Leads are individuals who have received information on NYSERDA programs through CBO outreach activities.</p> <p>** Confirmed by CBO through a follow-up visit/call to the customer.</p> <p>NOTE: Consult Table 8-1 to interpret CBO acronyms.</p>		

Table 8-5 provides a summary of outreach activities supporting workforce development initiatives, such as recruiting new trainees or encouraging contractors to participate in the on-the-job training opportunities, through June 30, 2015.

Table 8-5. Workforce Training and Development Activity Summary

CBO Leads	SharePoint Enrolled in Training*	SharePoint Completed Training*	SharePoint Workers Connected to Employers*	SharePoint Workers Employed*
2,087	413	236	98	83
* Self-Reported from SharePoint				

Table 8-6 provides a summary of CBO event statistics through June 30, 2015. Self-reported statistics are submitted by each CBO.

Table 8-6. CBO Event Totals

CBO Name	Total Events	Total Attendance
ANCA	61	8,741
AHP	97	4,235
AAFE	22	607
CASH	0	0
DMCDC	4	7,840
EI Puente	55	2,384
LIPC	73	2,296
MRNY	41	1,951
NEPC	5	66
NHSJ	22	4,908
NHSSI	57	763
NWBCCC	4	42
PathStone	121	24,435
PPEF - Central	63	4,688
PPEF - ST	45	2,226
PUSH	221	9,611
RUPCO	158	14,481
SSBx	60	7,380
TOTAL	1,109	96,654
NOTE: Consult Table 8-1 to interpret CBO acronyms.		

8.2 Marketing

Marketing is used to build awareness and participation statewide and to support the face-to-face grassroots activities necessary to effectively penetrate communities and populations who are challenging to reach, while delivering the education and support necessary to secure assessments and conversion to retrofits. NYSERDA competitively procured a marketing contractor, Brand Cool, to develop and execute a statewide integrated marketing and communication program to support GJGNY across all building sectors and including workforce development. Materials were also developed to support the CBOs, including those that could be branded by the CBOs for local distribution. Numerous marketing materials were developed in previous years, but no additional materials were developed or marketing campaigns undertaken during the reporting period.

8.3 Outreach and Marketing Budget

Table 8-7 provides the Outreach and Marketing budget.

Table 8-7. Outreach and Marketing Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Delivered through CBOs	\$10,793,120	\$7,842,200	\$1,537,089	\$124,080	\$1,289,751
General Statewide Marketing	2,704,569	2,680,365	24,204	0	0
Training and Implementation Contractor	1,441,472	1,219,516	221,955	0	0
TOTAL	\$14,939,161	\$11,742,081	\$1,783,248	\$124,080	\$1,289,751
Expended: Contractor Invoices and loans processed for payment by NYSERDA. Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan. Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.					

8.4 Outreach and Marketing Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 8-8.

Table 8-8. Outreach and Marketing Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
10984	Getty Images	Photography	\$0	\$455	\$0	\$0
31919	CEC	Eco House	49,500	49,500	0	0
22502	Brand Cool	GJGNY Marketing	2,454,614	2,430,410	24,204	0
22725	Cision	PR Subscription	1,700	1,700	0	0
41140	Benchmark Printing	CBO print materials	705	705	0	0
	Dowd Whitbeck Printing	CBO print materials	673	673	0	0
24317	Conservation Services Group	Training and Implementation Contractor	1,174,738	1,174,738	0	0
37334	Conservation Services Group	Training and Implementation Contractor Round 2	699,853	477,898	221,955	
25984	Public Policy and Education Fund - Central (PPEF-C)	GJGNY Services and Support Contract	295,056	295,056	0	0
25987	Public Policy and Education Fund - Southern Tier (PPEF-ST)	GJGNY Services and Support Contract	231,010	231,010	0	0
26094	Adirondack North Country Association (ANCA)	GJGNY Services and Support Contract	256,158	256,158	0	0
26202	Rural Ulster Preservation Company (RUPCO)	GJGNY Services and Support Contract	568,146	568,146	0	0
26396	Northeast Parent and Child (NEPAC)	GJGNY Services and Support Contract	44,770	44,770	0	0

Table 8-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
26397	PathStone	GJGNY Services and Support Contract	423,804	423,804	0	0
26400	Affordable Housing Partnership (AHP)	GJGNY Services and Support Contract	296,555	296,555	0	0
26644	Downtown Manhattan Community Development Corporation (DMCDC)	GJGNY Services and Support Contract	426,126	426,126	0	0
27024	El Puente	GJGNY Services and Support Contract	131,181	131,181	0	0
27230	People United for Sustainable Housing (PUSH)	GJGNY Services and Support Contract	470,960	470,960	0	0
27328	Bronx Overall Economic Development Council (BOEDC)	GJGNY Services and Support Contract	383,595	383,595	0	0
27522	Neighborhood Housing Services of Staten Island (NHSSI)	GJGNY Services and Support Contract	233,205	233,205	0	0
27586	Long Island Progressive Coalition (LIPC)	GJGNY Services and Support Contract	304,408	304,408	0	0
27829	Asian Americans for Affordable Equality (AAFE)	GJGNY Services and Support Contract	355,060	355,060	0	0
29418	Make the Road New York (MRNY)	GJGNY Services and Support Contract	350,000	350,000	0	0

Table 8-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
29419	Northwest Bronx Community Clergy Coalition (NWBCCC)	GJGNY Services and Support Contract	85,000	85,000	0	0
29983	Civic Association Serving Harlem (CASH)	GJGNY Services and Support Contract	131,250	131,250	0	0
30598	Neighborhood Housing Services of Jamaica (NHSJ)	GJGNY Services and Support Contract	135,149	135,149	0	0
36979	Neighborhood Housing Services of Jamaica (NHSJ)	GJGNY Outreach Program	456,500	191,333	265,167	0
39325	Long Island Progressive Coalition (LIPC)	GJGNY Outreach Program	829,033	498,508	330,525	0
39326	Adirondack North Country Association (ANCA)	GJGNY Outreach Program	191,708	126,916	64,792	0
39353	Public Policy and Education Fund - Southern Tier (PPEF-ST)	GJGNY Outreach Program	210,672	172,538	38,134	0
39780	Rural Ulster Preservation Company (RUPCO)	GJGNY Outreach Program	646,703	461,593	185,110	0
39827	Sustainable South Bronx (SSBx)	GJGNY Outreach Program	236,900	134,451	102,449	17,659
40732	Affordable Housing Partnership (AHP)	GJGNY Outreach Program	309,831	219,796	90,035	0

Table 8-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
41521	El Puente	GJGNY Outreach Program	230,000	114,846	115,154	44,167
42719	People United for Sustainable Housing (PUSH)	GJGNY Outreach Program	415,029	281,527	133,502	62,254
43058	Neighborhood Housing Services of Staten Island (NHSSI)	GJGNY Outreach Program	117,724	50,405	67,319	0
43774	PathStone	GJGNY Outreach Program	392,839	232,659	144,902	0
Total			\$13,540,152	\$11,742,081	\$1,783,248	\$124,080

9 Evaluation

Since the introduction of GJGNY, NYSERDA has engaged its third-party evaluation contractors to develop and implement evaluation plans for GJGNY programs. Each evaluation activity is designed to assess the effectiveness, progress, and outcomes related to each of the GJGNY program initiatives.

This section describes evaluation activities completed during the reporting period, underway, and planned. Evaluation contractor reports are posted on NYSERDA's website for public use once completed. Visit nyserda.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/Evaluation-Contractor-Reports to view evaluation reports completed prior to July 2014.

9.1 Completed Evaluation Activities

9.1.1 Multifamily Performance Program

A process evaluation and market characterization assessment of the Multifamily Energy Performance Program was completed in October 2014 as part of the Energy Efficiency Portfolio Standard evaluation plan. Because a portion of funding received by projects being evaluated has come from GJGNY, this evaluation effort was leveraged to collect data to inform GJGNY. To gather this information, additional questions were asked during interviews with participating owners, managers, and developers regarding knowledge of GJGNY financing options and decision making regarding the application of GJGNY funding.

Results of GJGNY-impacts are limited. Only two Partners interviewed reported projects that made use of GJGNY financing during the period covered in the evaluation. Of these respondents, participants who sought any type of financing, more than-three quarters had either not heard of GJGNY or did not have sufficient information to apply for GJGNY financing.

Visit nyserda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2014ContractorReports/2014-MPP-Process-Evaluation.pdf to view the finalized results of this evaluation.

9.2 Evaluation Activities Currently Underway

Two evaluation projects are currently underway: a measure adoption rate assessment of the Small Commercial Energy Efficiency Program and the impact evaluation of the GJGNY assessment-only participants in the residential sector. The status of each project is described in the following subsections.

9.2.1 Small Commercial Energy Efficiency

An impact evaluation of the Small Commercial Energy Efficiency Program that will focus on quantifying the measure adoption rate over time, the degree of program influence on the participant decision-making, and the proportion of installed measures for which customers accessed other NYSERDA funding is currently underway. This evaluation effort is in the data analysis stage and is expected to be completed in fall 2015.

9.2.2 Single-Family Residential Buildings

As a part of the impact evaluation of the HPwES program, evaluators are seeking to assess the energy-related impacts of GJGNY assessment-only participants. Data collection is complete and the evaluators are conducting the pre- and post-consumption billing analysis to assess the energy savings impacts associated with homeowners who received a GJGNY assessment and did not pursue financial support through the NYSERDA residential programs. NYSERDA will work toward having the results of this evaluation in fall 2015.

9.3 Evaluation Activities Planned

9.3.1 CBO Initiative, Phase 3

The evaluation of the CBO initiative is occurring in a phased approach. The first phase was completed in 2013, the second is currently underway, and the research plan for the third is under consideration. This third phase may include a process evaluation/market characterization assessment of the CBO initiative and has two overarching goals. The first key overarching goal of this evaluation is to attempt to document and, where possible, quantify the effects of the GJGNY Outreach Program. The second key overarching goal is to understand CBO outreach strategies proven most effective.

9.3.2 On-Bill Recovery Financing

On-Bill Recovery financing, launched in January 2012, is a way to obtain loans for energy efficiency improvements through NYSERDA and to repay these loans through a charge on the customer's electric and/or gas utility bill. As an early critical mass of loans reached completion, NYSERDA has been evaluating performance on several key indicators. A full and more complete evaluation of the On-Bill Recovery financing activities is planned for 2016-2017. This timeline allows for the On-Bill Recovery financing mechanism to mature and the number of projects to increase.

9.3.3 Jobs Impacts Assessment

In 2016-2017, NYSERDA anticipates updating the GJGNY job impact assessment that was finalized in November 2013. This assessment addressed the GJGNY impact on jobs and other key economic indicators. Phase 1 included primary and secondary research to estimate the number of jobs, in full time equivalents (FTEs), generated as a result of GJGNY-funded program activities and assessed other job-related impacts such as wage levels and worker skills. In addition, this evaluation estimated the FTEs created in disadvantaged communities in the State. In Phase 2, the evaluators used the detailed results derived from Phase 1 research as inputs to a macroeconomic input-output analysis that estimated the total (direct, indirect, and induced) job impact, economic output, labor income, and gross state product impacts from the GJGNY Program. A similar methodology will be considered for the update study, which will capture impacts over a longer time horizon of GJGNY operation.

9.4 Budget

Table 9-1 provides the Evaluation budget.

Table 9-1. Evaluation Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Internal Cost	\$5,600,000	\$742,039	\$0	\$0	\$1,317,769
Evaluation Consultants		1,847,752	1,691,792	0	
TOTAL	\$5,600,000	\$2,590,439	\$1,691,792	\$0	\$1,317,769
<p>Expended: Contractor Invoices and loans processed for payment by NYSERDA.</p> <p>Encumbered: Remaining funding obligated under a contract, purchase order, incentive award, or loan.</p> <p>Committed: Planned funding for contracts awarded and under negotiation; loans approved; and planned funding under active development through open solicitations with upcoming proposal due dates.</p>					

9.5 Evaluation Contracts Entered Into

External contracts related to the implementation of the GJGNY Program are detailed in Table 9-2.

Table 9-2. Evaluation Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended*	Encumbered	Committed
19112	Navigant Consulting Inc.	Cost Modification: MCA Evaluation	\$189,757	\$189,757	\$0	\$0
24594	NMR Group Inc.	General Evaluation Assistance Contractor	119,985	67,304	52,681	0
24594	NMR Group Inc.	Cost mod increase: general evaluation assistance contractor	25,000	0	25,000	0
28232	ICF Resources LLC	TWO # 1 Planning	15,371	15,371	0	0
28232-1	ICF Resources LLC	Modification 1 to TWO #1 Line 3	8,497	8,497	0	0
28232-1	ICF Resources LLC	Recreate of Balance PO 0000028232 Task #1	239	239	0	0
29131	Research Into Action Inc.	Cost Modification: Process and market evaluation contractor	649,998	0	649,998	0
29131	Research Into Action Inc.	Process and market evaluation contractor	850,002	804,844	45,158	0
29725	Abt SRBI Inc.	Survey data collection contractor for evaluation of NYSERDA Programs	326,480	293,946	32,534	0
29725	Abt SRBI Inc.	Cost Modification: Evaluation Survey contractor	70,000	0	70,000	0
30146	Energy & Resource Solutions Inc.	Impact Evaluation of NYSERDA Programs	500,000	183,578	316,422	0
30146	Energy & Resource Solutions Inc.	Cost Modification: Impact Evaluation Contractor	500,000	0	500,000	0
34368	ICF Resources LLC	TWO #4 GJGNY	96,180	96,180	0	0
ST9835-1	Research Into Action Inc.	Modification No. 4 - Process Assessment and Evaluation Management for the Energy Smart Program	46,583	46,583	0	0
ST9835-1	Research Into Action Inc.	Modification No. 5 - Process Assessment and Evaluation Management for the Energy Smart Program	6,458	6,458	0	0
ST9942-1	Apprise Incorporated	Cost Modification 6 Survey Data	20,000	20,000	0	0
ST9942-1	Apprise Incorporated	Cost Modification 5 Survey Data	114,995	114,995	0	0
TOTAL			\$3,539,544	\$1,847,752	\$1,691,792	\$0
* Expended funds in the amount of \$742,039 for internal costs are not represented in this table.						

Appendix A:
GJGNY Advisory Council Meeting Agendas



NYSERDA

ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

JOHN B. RHODES
President and CEO

**Green Jobs – Green New York (GJGNY)
Advisory Council Meeting Agenda
December 3, 2014
1:00 pm – 5:00 pm**

Meeting will be held at NYSERDA’s Albany, New York City, and Buffalo Offices.

Call-in number: 1-866-394-2346, Conference code: 5819671375

Welcome and Introductions	John Rhodes
Clean Energy Fund Process	Karen Hamilton
Residential Report: impact of Early Wins, stats on those denied financing	John Ahearn
Financing Transition	Jeff Pitkin
Renewed Focus of Workforce Development	Rebecca Hughes
Low- to Moderate-Income stakeholder discussions	John Rhodes
Public Input	John Rhodes
Closing Remarks and Next Steps	John Rhodes

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NYSERDA

ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

JOHN B. RHODES
President and CEO

**Green Jobs – Green New York (GJGNY)
Advisory Council Meeting Agenda
December 3, 2014
1:00 pm – 5:00 pm**

Meeting will be held at NYSERDA’s Albany, New York City, and Buffalo Offices.

Call-in number: 1-866-394-2346, Conference code: 5819671375

Welcome and Introductions	John Rhodes
GJGNY Low-to-Moderate Income Working Group: Requirement, Membership, and Progress	John Rhodes
Budget Update	Jeff Pitkin
Discussion: Self-sufficiency of the GJGNY Loan Fund	Jeff Pitkin
Clean Energy Fund Proposal	John Rhodes
Public Comment	John Rhodes
Next Steps and Adjourn	John Rhodes

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Appendix B: On Bill Annual Reporting 2015

Annual On-Bill Recovery Report

All OBR loans, energy savings and expenditures reported in this Appendix are included in the GJGNY Annual totals reported in the body of the report. Expenditures are pro-rated based on the percentage of OBR loans compared to the total GJGNY portfolio.

Reporting period - January 30, 2012 through June 30, 2015		Residential		Small Business / Not-For-Profit		Multifamily	
		Customers	Dollars	Customers	Dollars	Customers	Dollars
Utility Account Arrears > 60 Days	Central Hudson Gas and Electric	25	\$4,619	0	\$0	0	\$0
	Consolidated Edison	6	\$3,547	0	\$0	0	\$0
	PSEG Long Island	83	\$88,827	1	\$9,848	0	\$0
	National Grid	95	\$46,758	0	\$0	0	\$0
	New York State Electric and Gas Corporation	8	\$4,002	0	\$0	0	\$0
	Orange and Rockland Utilities	8	\$9,004	0	\$0	0	\$0
	Rochester Gas & Electric	0	\$0	0	\$0	0	\$0
	Total	225	\$156,757	1	\$9,848	0	\$0
On-Bill Recovery Payment Arrears > 60 Days	Central Hudson Gas and Electric	54	\$8,164	0	\$0	0	\$0
	Consolidated Edison	18	\$15,207	0	\$0	0	\$0
	PSEG Long Island	357	\$113,941	5	\$13,854	0	\$0
	National Grid	272	\$52,577	0	\$0	0	\$0
	New York State Electric and Gas Corporation	7	\$1,700	0	\$0	0	\$0
	Orange and Rockland Utilities	8	\$4,743	0	\$0	0	\$0
	Rochester Gas & Electric	0	\$0	0	\$0	0	\$0
	Total	716	\$196,332	5	\$13,854	0	\$0
Utility Service Terminated	Central Hudson Gas and Electric	0	\$0	0	\$0	0	\$0
	Consolidated Edison	0	\$0	0	\$0	0	\$0
	PSEG Long Island	3	\$5,148	0	\$0	0	\$0
	National Grid	1	\$633	0	\$0	0	\$0
	New York State Electric and Gas Corporation	12	\$1,639	0	\$0	0	\$0
	Orange and Rockland Utilities	0	\$0	0	\$0	0	\$0
	Rochester Gas & Electric	0	\$0	0	\$0	0	\$0
	Total	16	\$7,420	0	\$0	0	\$0

Reporting period - January 30, 2012 through June 30, 2015		Residential		Small Business / Not-For-Profit		Multifamily	
		Units	Dollars	Units	Dollars	Units	Dollars
1st Year Energy Savings ¹	Estimate of kWh savings	2,204,233	\$326,986	291,883	\$27,084	-	\$0
	Estimate of oil mmBtu savings	120,060	\$3,381,313	7	\$5,041	-	\$0
	Estimate of propane mmBtu savings	1,535	\$53,907	-	\$0	-	\$0
	Estimate of efficiency natural gas mmBtu savings	49,531	\$649,580	-	\$0	-	\$0
	Estimate of oil conversion gas mmBtu savings	(43,358)	(\$622,032)	-	\$0	-	\$0
	Estimate of other mmBtu savings	3,225	\$36,914	-	\$0	-	\$0
	Total Dollar Savings		\$3,826,667		\$32,125		\$0
Lifetime Energy Savings ¹	Estimate of kWh savings	38,834,534	\$5,568,124	N/A	N/A	-	\$0
	Estimate of oil mmBtu savings	2,778,183	\$78,111,963			-	\$0
	Estimate of propane mmBtu savings	36,997	\$1,288,403			-	\$0
	Estimate of efficiency natural gas mmBtu savings	1,147,584	\$14,968,694			-	\$0
	Estimate of oil conversion gas mmBtu savings	(1,034,004)	(\$14,886,022)			-	\$0
	Estimate of other mmBtu savings	75,297	\$901,535			-	\$0
	Total Dollar Savings		\$85,952,697				

OBR Expenditures through 6/30/15		
Program Area	Expended	
Administrative/General ²	\$2,440,475	
Marketing	\$3,960,829	
Evaluation	\$858,498	
Audit Incentive	\$7,019,844	
Payment to Utilities (\$100 per loan & 1% of loan amount)	\$636,002	
OBR Loans	RES	\$37,844,779
	SB/NFP	\$182,205
	MF	\$0
	Total	\$38,026,984
Implementation/Services	RES	\$2,494,962
	SB/NFP	\$11,394
	MF	\$0
	Total	\$2,506,356
Total Expended	\$55,448,988	

¹ Energy savings do not include installed capacity from photovoltaic OBR loans.

² Includes NYS Cost Recovery Fee

Appendix C:
Outreach and Marketing CBO Training Webinars

Green Jobs – Green New York Outreach and Marketing
Constituency-based Organization (CBO) Training Webinar Details
July 1, 2014-June 30, 2015

NYSERDA provides bi-monthly training to CBOs via a series of webinars that provide regular program updates, information on best practices, and other necessary information. During the reporting period, webinars addressed the following topics.

July 2014: Overview of the Early Wins for Home Performance with ENERGY STAR® (HPwES) program initiative.

October 2014: Update on Early Wins successes; update on the HPwES Net Promoter Score Pilot; insight on handling personal, private, and sensitive customer information; refresher on NYSERDA's EmPower program CBO referral protocol and invoicing; and miscellaneous updates on CBO program metrics, HPwES eligible measures, large scale residential customer reconciliation, and CBO statewide highlights.

November 2014: Community-based social marketing presented with Chuck Wilson, former Program Director of Small Town Energy Program; update on new HPwES work scope submission and approval process; NYSERDA's on-bill recovery concern submission tracker; updates on CBO program metrics, CBO employee updates, CBO NY HP Portal guide, large scale residential customer reconciliation, and CBO statewide highlights.

January 2015: Overview of community solar by Elana Bulman, Community Solar Facilitator at SolarOne; overview of HPwES energy modeling software by NYSERDA; Energy Champions Referral program update; overview of the Clean Energy Fund; updates on CBO program metrics, large scale residential customer reconciliation, and CBO statewide highlights.

March 2015: Home Performance contractor insights with guest speaker Jay Best, principal of Green Audit USA; strategies for successful outreach by RUPCO ; overview of new HPwES contractor support system; NYSERDA's Material and Installation Guidelines and Quality Assurance Contractor Scoring System; updates on CBO program metrics, large scale residential customer reconciliation, and CBO statewide highlights.

May 2015: NYSERDA Solar Thermal program primer; CBO strategies for successful outreach by PathStone; new outreach strategies emerging from Solarize HPwES aggregation by PUSH Buffalo; NYSERDA Low to Moderate Income (LMI) Working Group update by Sustainable South Bronx; updates on CBO program metrics, large scale residential customer reconciliation, and CBO statewide highlights.



**Appendix D:
Home Performance with ENERGY STAR® Eligible
Measures and Accessories List Effective 6/16/2015**

NY Home Performance with ENERGY STAR® Eligible Measures and Accessories

Effective: June 16, 2016

This is a general guide to eligible incentives and financing options available through NYSERDA’s Home Performance with ENERGY STAR (HPwES) Program. Eligibility may vary based on the energy efficiency requirements for each upgrade type, results of the comprehensive home assessment, fuel type, energy utility, and funding source availability.

Subject to the terms described on pages 2 and 3, the upgrades marked with an “✓” below on the “Prequalified List” are eligible for either a 10% High Efficiency Measure Incentive (HEMI), the 50% Assisted Subsidy for income-eligible households, or the Residential Loan Fund. NYSERDA also offers two low-interest financing options through Green Jobs – Green NY (GJGNY): a Smart Energy Loan and an On-Bill Recovery (OBR) Loan. A Smart Energy Loan project for up to \$13,000 that includes only the upgrades on the “Prequalified List” below requires no additional cost-effectiveness screening. If the project includes additional eligible upgrades below that are not on the Prequalified List, the loan is subject to cost-effectiveness standards as described on page 4. Items on this list without a checkmark are OBR or Smart Energy loan only.

Table 1. Eligible Measures – Prequalified List

	Eligible Measures	Minimum Efficiency Requirements	Prequalified
Primary Heating and Cooling System^{1, 6, 8}	Furnace ² – Natural Gas or LP	AFUE 95% (as long as not prohibited by local codes). Furnaces with ECM Motor allowed.	✓
	Furnace ² – Fuel Oil	AFUE 85%	✓
	Boiler – Gas Condensing	AFUE 90%	✓
	Boiler – Oil Condensing	AFUE 87%	✓
	Boiler – Non-Condensing ³	AFUE 85% (project must include boiler reset control)	✓
	Boiler – Steam	AFUE 82% (size must be matched to cumulative capacity of connected radiators, per Institute of Boilers & Radiator Mfrs (IBR) standards)	✓
	Boiler Reset Controls	Programmed properly per manufacturer’s specifications and site conditions. Maximum price of \$500.	✓
	Air Source Heat Pump (electric split systems) ²	14.5 SEER / 12 EER / 8.2 HSPF	
	Ground Source Heat Pump ²	ENERGY STAR Qualified (closed-loop, open-loop, or direct expansion). Requires submission of detailed engineering design work prior to approval.	
	Wood Stove ⁴	EPA certified for particulate matter output of 4.5 grams per hour or less	
	Pellet Stove/Pellet Stove Insert ⁵	EPA certified for particulate matter output of 2.0 grams per hour or less	
	Distribution Improvements in Natural Gas or Electrically Heated Homes ⁶	Installed in accordance with all applicable state and local codes	
	Distribution Improvements in Oil or Propane Heated Homes ⁶	Installed in accordance with all applicable state and local codes	✓
	Duct Sealing	UL 181B mastic or tape; use of “duct tape” is disallowed	✓
	Duct Insulation	Installed in accordance with all applicable state and local codes	✓
Pipe Insulation	R-3	✓	
Building Shell	Central Air Conditioner (split system) ^{7,9}	AHRI Certificate Required. 14.5 SEER / 12 EER. Except in Con Edison and Central Hudson electric territory, this measure is subject to site-specific TRC analysis in order to determine HEMI eligibility.	✓
	Programmable Thermostat	5+2 day programmable thermostat including smart thermostat. Limited to one thermostat installed per zone.	✓
	Insulation (attic, wall, floor, band joist, basement, crawl space)	Refer to Insulation Program Policy for homes heated with natural gas or electricity. Must be accompanied by blower door assisted air sealing per BPI and program guidelines.	✓
	Air Sealing	Supervised by professional; blower door assisted per BPI and program guidelines.	✓
	Replacement Windows	ENERGY STAR for climate/region. May be subject to SHPO review.	
Storm Windows and Doors	No minimum efficiency requirement. May be subject to SHPO review.		
Movable Window Insulation	R-3		
Exterior Doors	ENERGY STAR for climate/region. May be subject to SHPO review.		

	Eligible Measures	Minimum Efficiency Requirements	Prequalified
Water Heater ⁸		Tank: 40-100 gallons, EF \geq 0.67, FHR \geq 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified	✓
	Natural Gas	On-Demand: EF \geq 0.82, GPM \geq 2.5 over a 77°F rise, <2 gallons storage, <200,00 BTU. ENERGY STAR Qualified. Must replace a conventional 40 or 50 gallon tank.	✓
	Electric	EF .93	
		Tank: 20-100 gallons, EF \geq 0.67, FHR \geq 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified	✓
	Propane	On-Demand: EF \geq 0.82, GPM \geq 2.5 over a 77°F rise, <2 gallons storage, <200,00 BTU. ENERGY STAR Qualified	✓
	Oil	Tank: 20-100 gallons, EF \geq 0.67	✓
	Indirect-Fired Tank	UL Approved	✓
	Heat Pump Water Heaters	50 gallon tank, EF \geq .2.2, ENERGY STAR Qualified. Must be installed in an unconditioned space.	✓
	Pipe Insulation	R-3	✓
	Hot Water Tank Insulation - Electric	R-10	
Conservation	Faucet Aerator	No minimum efficiency requirement	✓
	Low Flow Showerhead	Maximum flow rate of 1.5 gallons per minute. Aerating type showerheads not eligible.	✓
Appliances & Lighting ⁹	Refrigerator	CEE Tier 2 or 3	✓
	Freezer	ENERGY STAR Qualified	✓
	Dishwasher	ENERGY STAR Qualified	
	Clothes washer	ENERGY STAR Qualified	
	Dehumidifier	ENERGY STAR Qualified	✓
	Room Air Conditioner	ENERGY STAR Qualified	✓
	CFLs	ENERGY STAR Qualified. Refer to Lighting Guidelines in Contractor Resource Manual (CRM).	✓
	LEDs	ENERGY STAR Qualified. Refer to Lighting Guidelines in CRM.	✓
	Light Fixtures	ENERGY STAR Qualified for compact fluorescent, or electronic ballast for fluorescent tubes	

¹ Defined as the primary heating system for the space being conditioned. Addition/replacement of secondary heating systems is not eligible. The new unit must be the primary heat for the space being served.

² Duct systems for warm air furnaces, heat pumps and central air conditioners should be tested and sealed to reduce leakage. This will help ensure that the total system will operate efficiently.

³ In instances where venting conditions require the installation of a non-condensing boiler, boiler reset controls must be included in the project; tank-less coil DHW is not allowed.

⁴ Wood stoves must supply a primary portion of heat.

⁵ Visit www.nysersda.ny.gov/renewableheatny/pelletstoves for qualifications and available incentives. RHNy qualified pellet stoves and inserts are loan pre-qualified for up to \$13,000. See guidance under RHNy documents on the Contractor Support website regarding proper modeling.

⁶ In instances where an area of a home lacks adequate distribution, installation of new distribution to serve the area is eligible. The area lacking adequate distribution must be located within the pre-existing thermal boundary.

⁷ Not eligible for the Assisted Home Performance subsidy.

⁸ Refer to the Fuel Conversion Policy for eligibility of fuel switches

⁹ Measure is only eligible for incentive when there is a replacement of an existing appliance or existing cooling system. Maximum Assisted Subsidy for each appliance is: \$300 for refrigerators and freezers; \$75 for dehumidifiers; and \$50 for room air conditioners. Only the base price of the appliance plus applicable tax is eligible; delivery, set-up, warranties or appliance accessories, and any associated taxes on these items are not eligible for incentives.

Eligible Health & Safety Measures and Accessories

Non-prequalified measures and Health and Safety Measures and Accessories are not eligible for the 10% HEMI, the 50% Assisted Subsidy, or the Residential Loan Fund.

Smart Energy Loan:

Up to 15%, not to exceed \$2,000, in non-prequalified measures listed in Table 1 and eligible Health & Safety Measures and Accessories in Table 2 may be included in a Smart Energy Loan without additional cost-effectiveness screening.

On-Bill Recovery:

Up to 15%, not to exceed \$2,000, in eligible Health & Safety Measures and Accessories in Table 2 may be included in an On-Bill Recovery Loan subject to cost-effectiveness requirements.

Table 2. Eligible Health & Safety Measures and Accessories

Health and Safety	Asbestos abatement	Ventilation Fans (Whole house fans or similar attic exhaust fans are not eligible)
	Electrical service upgrade necessary when installing a new heating/cooling unit	Repairs/upgrades to heating and/or DHW systems (including power venting kits) to correct spillage, inadequate draft, carbon monoxide failures
	Upgrade of knob and tube wiring in order to install insulation	Measures to provide sufficient combustion air and prevent Combustion Appliance Zone (CAZ) depressurization, spillage or inadequate draft
	Radon and lead abatement work	Gas leak repair
	Cost of removing an oil tank or replacing a faulty oil tank when done in connection with a heating system replacement	Dryer vent repair
	Repairs to the home due to water damage, molds and mildew, ice dams or other symptoms of poor building performance, as long as the cause(s) of building performance-related damage are addressed	Heat/Energy Recovery Ventilator
Qualified Accessories	Attic soffit, gable, or ridge vents	Furnace humidifier
	Attic storage areas / mechanical access	Chimney liners and caps
	Attic pull-down stairs	Germicidal UV lights or HEPA filters
	Drywall as thermal barrier for spray foam or air sealing	AC coil when not installed with condenser
	Thermal barriers for spray foam	Fuel conversion accessory items
	Air Cleaners	Oil burner replacement
	Additional thermostats	Moisture barriers

All Health and Safety Measures and Accessories costs must be itemized for the purposes of determining incentive eligibility and loan cost effectiveness. These costs are eligible for incorporation into a Smart Energy Loan or On-Bill Recovery Loan, but are not eligible for the 10% HEMI, the Assisted Subsidy, or the Assisted Loan.

The costs associated with the installation of certain measures can be included in the related energy saving measure. Items such as high hat covers, kneewall wrap, weather stripping, and outlet gaskets can be included with air sealing. Baffles, insulation dams, and creating access to the attic can be included with attic insulation.

Renewable Technologies

Solar thermal and solar photovoltaic (PV) systems may be included in a Smart Energy Loan or the On-Bill Recovery Loan, subject to cost-effectiveness requirements, with approval through the NYSERDA Solar Thermal Program or NY-Sun.

Table 3. Renewable Technologies

	Eligible Measures	Minimum Efficiency Requirements
Renewable Technologies	Solar Thermal	OG-100 or OG-300 certification from SRCC. SF 0.5. Warranty: 10 years on the panel, 5 years on the system. System needs to be reviewed and approved by the NYSERDA or PSEGLI Solar Thermal Program prior to submission to HPwES.
	Solar Photovoltaic (PV)	Warranty: 5 years on the system. System needs to be reviewed and approved by NY-Sun prior to submission to HPwES.

INCENTIVES

The HPwES Program offers a 10% cash-back HEMI on eligible measures. For income-qualified customers, Assisted HPwES offers a 50% work scope subsidy of up to \$5,000 for a single-family home and up to \$10,000 for 2 to 4-family homes. The balance of the project cost is eligible for financing. The HEMI and Assisted Subsidy can be used in combination with low interest rate Smart Energy or On-Bill Recovery Loan. For those borrowers who choose to finance through the Residential Loan Fund, that loan may be combined with the Assisted Subsidy, but not the HEMI.

Incentive Eligibility

The 10% HEMI, 50% Assisted Subsidy, and the Residential Loan Fund are available for natural gas or electric efficiency measures to customers in the following utility territories: Central Hudson, Con Edison, National Fuel, National Grid (NYC and Upstate), NYSEG, Orange & Rockland, and Rochester Gas and Electric. Customers of National Grid (Long Island) are eligible for the HEMI or the Assisted Subsidy for natural gas efficiency measures only. The 10% HEMI and the 50% Assisted Subsidy may not be combined with any other utility incentive.

The HEMI and Assisted Subsidy for eligible oil and propane efficiency measures are available statewide regardless of utility territory.

FINANCING OPTIONS

Program Financing is available statewide for all eligible measures that meet the cost-effectiveness standards of the loan product.

The maximum loan amount for the Smart Energy and On-Bill Recovery Loans is \$13,000 per applicant; up to \$25,000 if the payback period is 15 years or less. The minimum loan is \$1,500.

The calculation of cost-effectiveness for the Smart Energy and On-Bill Recovery Loans is based on the amount borrowed by the consumer, net of any incentives, including the 10% HEMI, 50% Assisted Subsidy or utility incentives. Financing charges are included in the cost effectiveness calculation. Customers have the option to “buy down” the project cost so that the financed amount meets the cost effectiveness criteria. The loan terms are 5, 10, or 15 years, but the term may not exceed the average useful life of the financed measures.

Smart Energy Loan

The Smart Energy Loan is available at 3.99%*, or 3.49%* with automatic (ACH) payment, and is repaid in installments to NYSERDA’s loan servicer.

Up to 15%, not to exceed \$2,000, in non-prequalified upgrades listed in Table 1 and eligible Health and Safety Measures and Accessories in Table 2 may be included in a Smart Energy Loan without additional cost-effectiveness screening. For those projects where more than 15% of the cost is for items other than those on the Prequalified List, a Savings to Investment Ratio (SIR) greater than .8 is required.

On-Bill Recovery Loan

The On-Bill Recovery Loan, available at 3.49%*, is repaid through an installment charge on the customer’s utility bill. Upgrades listed in Table 1 and Table 2 may be included in the loan, however the monthly loan installment payment may not exceed 1/12th of the estimated annual energy cost savings for the improvements over the loan term. Measures and accessories listed in Table 2 are capped at 15% of the total prequalified measure cost, not to exceed \$2,000.

Residential Loan Fund

The Residential Loan Fund provides an interest rate reduction of up to 4.0% less than a Participating Residential Loan Fund Lender’s normal interest rate on loans up to \$20,000, for a term up to 10 years. The Residential Loan Fund is offered in limited areas and may not be combined with the 10% HEMI. Only those upgrades on the Prequalified List may be included in the Residential Loan Fund, and no further cost-effectiveness screening is required. Eligible upgrades in Table 2 may not be included in the Residential Loan Fund.

*Interest rates and loans terms are subject to change. Full details about all Program Financing are available at <http://www.nysesda.ny.gov/residential-financing>.

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