



NYSERDA

Green Jobs - Green New York 2017 Annual Report

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

2017 Annual Report

Final Report

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New York State Energy Research and Development Authority

Albany, NY

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Summary

Ramping up the rate of participation in energy efficiency projects can boost New York State's economy by reducing energy bills and creating job opportunities. Energy efficiency is a cost-effective means to reduce greenhouse gas emissions, benefit to the health of the environment, and means to help achieve the State's energy goals. These objectives are particularly important in economically distressed communities where many households have limited options for undertaking energy efficiency improvements.

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 the New York State Energy and Research Development Authority (NYSERDA) to:

- Establish a revolving loan fund 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 median household income, as determined by NYSERDA, or those 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 Financing Program (OBR) 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 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, Chair of the Senate Committee on Energy and Telecommunications, and Chair of the Assembly Committee on Energy regarding the financial status of the GJGNY program.
- Continue to offer financing through the GJGNY 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 (LMI) households statewide for qualified energy efficiency services under the GJGNY program.
- Convene a working group to assist in developing these standards and/or criteria that includes individual representatives of CBOs.
- Consult with and solicit information and recommendations from the working group as to how to increase participation and issuance of loans to LMI households seeking qualified energy efficiency services.
- Report the results of consultations with and solicitations of the working group to the Governor, Senate Majority Leader, and Speaker of the Assembly within six months of the March 31, 2015 effective date of the legislation.

This seventh Annual Report submitted for GJGNY was prepared pursuant to Section 1899 of the Act, and provides an update on the progress and achievements of the GJGNY initiative through June 30, 2017. Visit nyserdera.ny.gov/About/Publications/GJGNY-Advisory-Council-Reports to view prior annual reports.

S.1 Stakeholder Input

NYSERDA meets with stakeholders through the Advisory Council at least biannually, but more often if warranted, and provides monthly written reports to Advisory Council members, in addition to ad hoc reports as needed. During this annual reporting period, NYSERDA met with the Advisory Council twice. Members of the general public can, and often do, participate in Advisory Council meetings. Videos of Advisory Council meetings, agendas, notes, presentations, 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 scheduling regular calls or meetings, and by engaging contractors through roundtable meetings hosted by the Building Performance Contractors Association (BPCA) to discuss program challenges and opportunities. During the current reporting period, the BPCA provided continual feedback to NYSERDA on program processes and features and assisted in communicating program changes to contractors during the transition to CEF funding. Feedback provided by the group, as well as other stakeholders, was factored into program improvements and had immediate positive impacts on program delivery and participation.

S.2 Funding and Accomplishments to Date

The Act allocated \$112 million in funding from New York State's share of the Regional Greenhouse Gas Initiative (RGGI) to support GJGNY. In consultation with the GJGNY Advisory Council, NYSERDA sub-allocated the funding across the various program components prescribed by the GJGNY Act. Over time, NYSERDA further allocated interest earnings and additional RGGI funds. 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 was used to support GJGNY financing or outreach. NYSERDA supplemented the initial GJGNY program funding with \$90,295,238 in additional RGGI funds to date to ensure uninterrupted program services where needed.

By far the greatest demand for GJGNY funding has been from the residential revolving loan fund, which issued loans totaling its original allocation in less than three years. The residential revolving loan fund is now maintained primarily through a combination of short-term financing and proceeds from the sale of bonds:

- In August 2013, NYSERDA issued \$24.3 million in Residential Energy Efficiency Financing Revenue Bonds, secured by certain pledged residential energy efficiency loans issued through June 2013. The New York State Environmental Facilities Corporation (EFC) provided a guarantee of the principal and interest on the bonds through its Clean Water State Revolving Fund (SRF), enabling the bonds to achieve a AAA rating. The bonds were sold as Qualified Energy Conservation Bonds (QECCB), enabling a reduction in program interest cost.
- In September 2015, NYSERDA issued \$46.23 million in Residential Energy Efficiency Financing Revenue Bonds to EFC, in connection with AAA-rated SRF bonds issued by EFC, secured by certain pledged residential energy efficiency loans issued through March 2016.
- In October 2015, NYSERDA received approval for a \$50 million credit facility from M&T Bank to refinance GJGNY residential solar loans, as these loans were not able to qualify for financing assistance through the Clean Water SRF. NYSERDA issued bonds to M&T Bank totaling approximately \$48.5 million under the credit facility through its expiration in September 2016, and the bonds are secured by certain pledged residential solar loans issued through that date.
- In September 2016, NYSERDA issued \$23.2 million in Residential Energy Efficiency Financing Revenue Bonds to EFC, in connection with AAA-rated SRF bonds issued by EFC, secured by certain pledged residential energy efficiency loans issued or anticipated to be issued through November 2017.

Section 3 provides more details regarding the bond issuance process.

Even though NYSERDA had success using bonds to support the residential revolving loan fund, because of the subsidized interest rate offered on a rapidly growing number of GJGNY loans, the program required additional RGGI fund allocations to fund loan organizations not recovered bond proceeds. The loan fund could not continue operating in a sustainable manner, due to reduced RGGI auction proceeds and the need to balance GJGNY program needs with other initiatives. The need to address the unsustainability of the residential loan fund became critical in 2015. Working with the Advisory Council, a plan was developed to implement higher interest rates starting on September 1, 2016 for consumers who have sufficient household incomes and meet traditional market-based underwriting criteria. Funding to support overcollateralization is by far the greatest need for this sector, especially for those obtaining loans for solar projects. The interest rates offered to these customers was revised so the loans would not require additional RGGI funding. Limited RGGI funds could be used to continue providing discounted rates to LMI consumers and those who lack access to traditional financing options.

A spring 2017 review of the impact of the interest rate change showed the strategy reduced the amount of RGGI funds expected to be needed to maintain the loan fund to a manageable amount. The number of loans issued to higher income households also decreased. The impact of the loan fund change will be closely monitored and reported to the GJGNY Advisory Council, who will also be notified if additional changes need to be discussed. Section 3 further details interest rate change and its impact.

Table S-1 outlines funding, including interest earnings and subsequent additions of RGGI funds, allocated to individual components of GJGNY nearly fully committed or expended. Reallocations of remaining uncommitted funds to the components most in need will be accomplished as needed. As previously discussed, the budget for residential financing is now supported through bond issuances. To enable continued implementation of GJGNY activities, NYSERDA included elements of GJGNY in the planning of the Clean Energy Fund (CEF).¹ NYSERDA is working with stakeholders to incorporate lessons learned from GJGNY into CEF planning and ensure benefits from GJGNY initiatives, particularly those benefitting the LMI sector. As of the end of this reporting cycle, the CEF supported energy audits and will also support community-based outreach and workforce development initiatives in the future.

Table S-1 provides a summary of the GJGNY budget as of June 30, 2017. Additional details regarding GJGNY activities and contracts at the sector or program level can be found in Sections 3 through 8 and Section 10 of this report. Visit NYSERDA at nyserda.ny.gov/About/Clean-Energy-Fund for information regarding initiatives and budgets of the CEF.

¹ CEF, one of Reforming the Energy Vision's (REV) three strategic pillars, is designed to deliver on New York State's commitment to reduce ratepayer collections, drive economic development, and accelerate the use of clean energy and energy innovation. It will reshape the State's energy efficiency, clean energy, and energy innovation programs. Visit nyserda.ny.gov/About/Clean-Energy-Fund for more details regarding CEF planning.

Table S-1. GJGNY Budget Summary as of June 30, 2017

Program Area	Budget	Expended*	Encumbered	Committed	Balance
Workforce Development	\$7,337,565	\$6,679,467	\$145,130	\$0	\$512,968
Outreach and Marketing ¹	15,889,161	15,526,745	336,629	62,567	(36,780)
One- to Four-Family Residential Buildings ²	140,078,241	138,021,842	608,318	24,305,500	(22,857,419)
Multifamily Energy Performance	8,533,771	6,034,871	336,726	0	2,162,174
Small Commercial Energy Efficiency ³	13,744,147	9,797,777	278,946	556,728	3,110,696
Program Evaluation	5,600,000	3,353,052	1,260,096	0	986,852
Program Administration	11,756,835	10,691,916	25,414	0	1,039,505
NYS Cost Recovery Fee	2,465,301	2,233,858			231,443
Unallocated Interest Earnings	213,526				213,526
TOTAL	\$205,618,547	\$192,339,528	\$2,991,259	\$24,924,795	(\$14,637,035)

- ¹ The negative balance reflected above is due to contracts where funds were not disencumbered prior to the end of June 2017. Once those contracts were revised in July 2017, no negative balance remained in the budget.
- ² The table includes certain loans issued, but where proceeds from bonds to finance the pledged loans is received subsequently. The table also includes pre-encumbrances for approved loans not yet issued. Finally, certain additional funds are allocated in the FY16-17 RGGI Operating Plan and will be transferred to GJGNY. These are not yet reflected in the budgeted funds shown in this table.
- ³ The table includes pre-encumbrances for approved loans not yet issued. As needed, if proposed projects move forward, budget remaining available in the Multifamily loan fund will be used to support loans issued in the Small Commercial/Not-for-Profit sector.
- Expended: Contractor Invoices and loans processed for payment by NYSERDA. Expended amount is net of loan repayments made through reporting period for One- to Four-Family, Multifamily and Small Commercial/Not-for-Profit sectors, and includes bond proceeds, less bond issuance cost.
- 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 S-2 provides a summary of program performance metrics. Although specific goals are established for the number of assessments and projects completed, it is important to note there are many other indicators of program success not captured in the statistics regarding projects. Some of these additional indicators include the growth of participation in the programs active in underserved communities, the creation of quality jobs within those same communities, improved participation of LMI households in energy efficiency projects, and improved access to financing for households typically unable to qualify for financing. Other indicators of program success are seen in new, up-skilled, and higher-waged employment opportunities resulting from the GJGNY program.

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

Reporting on CEF performance can be found on nyscrda.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/Clean-Energy-Fund-Reports.

Table S-2. GJGNY Summary Performance Metrics

Metric	One- to Four-Family Residential Buildings	Multifamily Energy Performance	Small Commercial/Not-for-Profit Energy Efficiency	Total
Assessment Applications Received (number)	152,275	324	3,574	156,173
Assessments Completed (number)	112,095	324	3,367	115,786
1st Year Net KWh Savings*	16,031,517	53,902,039	21,524,992	91,458,548
1st Year Net MMBtu Savings*	1,174,738	822,955	242,850	2,240,543
Estimated Annual Bill Savings*	\$26,916,217	\$35,264,385	\$10,238	\$62,190,840
Loans Issued/Closed (number)	13,895	23	65	13,983
Total Value of Loans	\$134,414,148	\$12,099,797	\$3,151,377	\$149,665,322
* 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% project installation rate, based on historical performance for the Small Commercial/Not-for-Profit sector.				

S.3 Workforce Training and Development

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

Work under this initiative was closely coordinated with the New York State Department of Labor (DOL), 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 issued a total of seven Program Opportunity Notices (PON) and Requests for Proposals (RFP) designed to advance the WFD goals of GJGNY. Projects support the training objectives of the Act, include:

- Incremental occupational training to unemployed workers
- Work readiness and entry-level technical training

- Apprenticeship and labor-management certification training
- Skills development for incumbent workers
- Skills development for new workers to support advancement and improve employee retention
- Inventory of curriculum related to the objectives of GJGNY
- Qualitative research designed to assess skill gaps as identified by employers

As a result of the solicitations, 20 contracts were awarded for curriculum and certification/ accreditation development, representing approximately \$2 million in contract funding. Totalling more than \$2.7 million, 66 contracts were awarded to support apprenticeships and internships. In addition, 16 contracts were awarded to support equipment and training infrastructure, totaling \$1.9 million.

Through training partnership agreements under GJGNY, more than 3,800 New Yorkers were trained in skills related to energy efficiency, weatherization, solar electric, and solar thermal technologies; and 265 New Yorkers were hired through the on-the-job training initiative for technical jobs in the energy efficiency and renewable energy fields. Section 4 provides additional information on WFD and training activities.

S.4 Outreach, Education, and Marketing

GJGNY is designed to deliver services in targeted communities through 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, 2017, 11 competitively selected CBOs were under contract to assist with the program.

Three 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 team perform their assessments and any resulting work. Aggregation results in more efficient use of contractor resources and a 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, in exchange for receiving an aggregation of potential customers. Section 8 provides additional information on outreach and marketing activities.

S.5 Energy Retrofits and Financing

GJGNY energy audits (comprehensive home 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 112,000 assessments were completed through June 2017—30% of the homeowners who complete an assessment moved forward with completing energy efficiency work. OBR financing became available in January 2012, with customer billing first appearing on utility bills starting in June 2012. On February 3, 2014, NYSERDA launched GJGNY financing for residential solar electric (also known as photovoltaic or PV) to households participating in NYSERDA's solar programs. Through a Memorandum of Understanding, NYSERDA also extended GJGNY financing for solar electric systems to residents served by PSEG Long Island, as agent of and acting on behalf of the Long Island Power Authority (LIPA). Participants in NYSERDA's solar thermal and Renewable Heat NY programs are also able to apply for loans through GJGNY for eligible projects.

Through June 30, 2017, 7,186 residential OBR Loans totaling \$100.5 million and 13,352 residential Smart Energy Loans (a more traditional unsecured loan) totaling \$145.9 million have been issued. Of those loans, 3,401 loans totaling \$39 million were customers who qualified through NYSERDA's alternative underwriting criteria, expanding the reach of the loan program to consumers who otherwise would not have qualified for a loan.

Through NYSERDA's Multifamily Performance Program (MPP), NYSERDA provides co-funding for comprehensive energy assessments and the development of a Savings Verification and Information Tool (SAV-IT).² The availability of GJGNY co-funded assessments began in September 2010 and financing for the implementation of energy improvements in multifamily buildings was launched in June 2011. MPP is a comprehensive program that serves LMI 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 MPP Providers and must be hired by MPP participants to complete specific services, such as those outlined in the SAV-IT.

² SAV-IT identifies the set of cost-effective energy-related improvements to be installed and provides information necessary to guide installation of those measures. The SAV-IT includes a detailed description of the proposed work scope with the associated costs, projected energy saving, an outline for how costs will be financed, and a proposed schedule for construction.

GJGNY financing is available to multifamily building owners with an approved NYSERDA assessment. Building owners may work with a commercial lender of their choice as NYSERDA contracts directly with the lender. NYSERDA provides 50% of the principal of the loan made to support the installation of the improvements contained in the pre-approval document at 2% interest, up to \$5,000 per apartment or \$500,000 per building.

As of June 2017, 324 assessments were made, and work has been completed on 37,587 projects related to those assessments. Twenty-three loans were issued at a total value of \$12,099,797, NYSERDA's share of which was \$3,834,685. In addition to assessments and financing, participants have access to incentives through the programs offered by NYSERDA or utilities. Work 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 provides access to audits and financing to help small businesses and not-for-profit organizations improve their energy efficiency and reduce energy costs. Financing may also be available to small businesses or not-for-profits that receive an assessment from a utility or other source, if the assessment meets NYSERDA's standards. Applications for free energy audits were accepted from eligible small businesses and not-for-profits through December 31, 2016, and all related program activities were completed in the first quarter of 2017. Energy audits continue to be available from NYSERDA on a cost-shared basis via NYSERDA's FlexTech program.

In February 2012, NYSERDA launched a project expeditor pilot to assist small business and not-for-profit customers that obtained energy assessments through GJGNY to encourage implementation of energy assessment recommendations. In addition to the assessments and financing, some participants had access to incentives through programs offered by NYSERDA or utilities. Work under the pilot was completed in February 2017. Assistance provided through the Small Commercial/Not-for/Profit Expeditor Program resulted in 14 participation loans totaling \$845,844, and 23 OBR Loans totaling \$646,508.

As of June 2017, 3,367 qualified energy assessments were performed, resulting in an estimated completion of 1,481 projects.³ In total, 65 small commercial/not-for-profit loans have been issued at a total value of \$3.2 million. Details regarding program activity are included in Sections 3, 5, 6, and 7.

S.6. 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 LMI households statewide for qualified energy efficiency services under the GJGNY program.

In April 2015, NYSERDA established the GJGNY LMI Working Group, which consisted of 19 members representing CBOs, LMI consumer advocates, advocates on utility and housing issues, and stakeholders (including contractors) of the solar electric and home energy services industries. The group was chaired by the president and CEO of NYSERDA. To facilitate consistency and inter-group communication, several members of (or organizations represented on) the GJGNY Advisory Council also served on the GJGNY LMI Working Group.

The working group report was submitted to the Governor and members of the NYS Legislature on October 1, 2015. It is also posted on NYSERDA's web site.⁴ Some working group members also brought forward additional barriers to participation or challenges related to aspects of the GJGNY program that were outside the mission of the GJGNY LMI Working Group. As a result, in January 2016, the GJGNY Advisory Council established two additional working groups to address the issues that went beyond the scope of the GJGNY LMI Working Group. The working groups met throughout 2016 and provided reports to the GJGNY Advisory Council. Information about these two additional working groups can be found in sections 2.1 and 2.2 of this report.

³ The 2015 Small Commercial/Not-for-Profit Energy Efficiency Program Impact Evaluation found that 44% of the energy savings recommended through program audits were reported to be implemented.

⁴ nyserdera.ny.gov/Researchers-and-Policymakers/Green-Jobs-Green-New-York/GJGNY-LMI-Working-Group

S.7 Program Evaluation

Since the introduction of GJGNY, NYSERDA 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.

Since not all GJGNY programs were implemented concurrently, early discussions between evaluation staff, program staff, and the evaluation contractors identified the need for initial work focused 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.

Two evaluation projects were completed in this reporting period: an impact evaluation of the GJGNY audit-only participants in the residential sector and an update to the GJGNY Jobs Impact Assessment. The impact evaluation for the HPwES program was designed to assess the energy-saving impacts associated with homeowners who received a GJGNY audit, but no further incentives. The evaluation identified that quantifiable savings are being realized in homes receiving these GJGNY audits, indicating many of these households are going forward with at least some of the recommended work through means other than NYSERDA.

The GJGNY Jobs impact evaluation was conducted in two phases. The key focus of Phase 1 of this study was to estimate the number of jobs generated in 2014 and 2015 as a result of GJGNY-funded program activities and to determine other job-related impacts, particularly hourly wage levels. This information served as inputs to an economic impact analysis conducted under Phase 2. Phase 2 of this evaluation included an economic impact analysis, an assessment of the contribution that economic activity can have on a regional economy. This analysis estimated the extent to which the GJGNY program supported additional economic activity statewide, in 12 individual regions, and identified disadvantaged communities. Detailed findings and information about future evaluation efforts are included in Section 10.

S.8 Improvements to Program Offerings

NYSERDA is committed to an environment of continuous improvement, particularly focused on the customer. Beginning in 2014, NYSERDA worked with stakeholders to undertake a targeted effort to improve both customer and contractor experience with residential programs and GJGNY financing. Numerous improvements have been made, increasing automation and streamlining processes, improving response and approval times significantly; and work continues.

In addition, NYSERDA continues to evaluate underwriting criteria and documentation requirements for residential loans, with a goal to reach more households, reduce burden on applicants and improve approval times while still performing responsible lending. NYSERDA will discuss options with financial advisors and the GJGNY Advisory Council in the future.

S.9 Conclusion

The GJGNY program facilitates community-centered initiatives that increase the reach of GJGNY among disadvantaged populations and households not traditionally participating in energy efficiency programs. Workforce training and development (WFD) 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. NYSERDA 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, resulting in lower loan denial rates. As a result of these collective efforts, the number of LMI households receiving services through the program increased.

NYSERDA is undertaking a continuous process of improvements, rooted in the needs of consumers and service providers alike, to streamline programs and make them easier for households, contractors, and CBOs to participate. The implementation of recommendations made by the GJGNY LMI Working Group is ongoing.

A priority for the coming year is the evaluation and analysis of GJGNY initiatives, learning from successes and challenges, and developing plans to transition successful strategies and activities to the CEF. In particular, discussions regarding how to improve the impact of community outreach and workforce development initiatives are underway. A plan for ensuring the residential loan fund is sustainable has been implemented. These actions will ensure successful components of the GJGNY program continue into the future.

1 Introduction

Ramping up the rate of participation in energy efficiency projects can boost New York State's economy by reducing energy bills and creating job opportunities. Energy efficiency is a cost-effective means to reduce greenhouse gas emissions, benefit to the health of the environment, and means to help achieve the State's energy goals. These objectives are particularly important in economically distressed communities, where investment in energy efficiency and renewable energy resources is needed as many households have limited options for financing energy efficiency improvements.

To successfully grow the energy services industry, there needs to be investments on many fronts—homeowner and building-owner investments in property, business investments in cost-effective process improvements, public and private investments in creating service delivery infrastructure as well as investments in educating consumers on energy efficiency benefits and program opportunities. Public investment in improving access to financing and workforce development and training is also important as the market grows. Significant public investment in energy efficiency is occurring in New York State through the Reforming the Energy Vision (REV) proceeding, including the CEF, and Regional Greenhouse Gas Initiative (RGGI), and through federal resources such as the Weatherization Assistance Program (WAP). Simultaneously, residents and commercial industries are making significant investments in energy efficiency and renewable energy, which is 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 finance the cost of approved qualified energy efficiency services for residential, multifamily, and nonresidential structures.
- Offer OBR 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 CBOs that can connect community members to 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 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 GJGNY 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 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 implemented OBR Loans for residential consumers commencing January 30, 2012. In April 2012, an amendment to the GJGNY law 015 — 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. This amendment 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, Chair of the Senate Committee on Energy and Telecommunications, and Chair of the Assembly Committee on Energy regarding the financial status of the GJGNY program. This report was submitted on May 1, 2015.
- Continue to offer financing, pursuant to through the GJGNY 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 LMI households statewide for qualified energy efficiency services under the GJGNY program.
- Convene a working group to assist in developing these standards and/or criteria that includes individual representatives of CBOs.
- Consult with and solicit information and recommendations from the working group as to how to increase participation and issuance of loans to LMI households seeking qualified energy efficiency services.
- Report the results of consultations with, and solicitations of, the working group to the Governor, Senate Majority Leader, and Speaker of the Assembly within six months of the March 31, 2015 effective date of the legislation.

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, the Advisory Council schedule changed to two meetings per year as opposed to quarterly, but will hold additional special meetings as needed 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 are posted on NYSERDA’s website. Visit nyserdera.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 23 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. Due to the critical and timely nature of discussions taking place about the residential revolving loan fund through the past year, no changes to membership were proposed, even though some members continue to serve with expired terms.

During the 2017 Annual Report reporting period, the Advisory Council met on September 8, 2016 and May 16, 2017. Agendas for the Advisory Council meetings are provided in Appendix A.

Table 2-1. GJGNY Advisory Council Members

Name	Organization
Alicia Barton	President and CEO, NYSERDA (Chair)
Howard Zemsky	Commissioner, New York State Department of Economic Development
Samuel D. Roberts	Commissioner, New York State Office of Temporary and Disability Assistance
Thomas Falcone	Acting CEO & CFO, Long Island Power Authority
Basil Seggos	Acting Commissioner, New York State Department of Environmental Conservation
Rossana Rosado	Acting Secretary of State
Gil C. Quinines	President and CEO, New York State Power Authority

Table 2-1 continued

Name	Organization
Roberta Reardon	Commissioner, Department of Labor
RuthAnne Visnauskas	Commissioner, New York State Homes and Community Renewal.
James Barry	Service Employees International Union 32BJ
Chuck Bell	Consumers Union
Les Bluestone	Blue Sea Construction
Tria Case	City University of New York
Sammy Chu	Suffolk County Department of Labor
Stephen Edel	Center for Working Families
Kate Fish	Adirondack North Country Association
Clarke Gocker	People United for Sustainable Housing - Buffalo
Ross Gould	Workforce Development Institute
Dave Hepinstall	Association for Energy Affordability
Alan Hipps	Housing Assistance Program of Essex County
David Johnson	Laborers International Union of North America
William Johnson	Green America Public Private Partnership
Jennifer Keida	Standard Insulation Co. Inc.
Jason Kuflik	Green Street Power
Conrad Metcalf	Building Performance Contractors Assoc.
Jackson Morris	National Resource Defense Council
Ellen Redmond	International Brotherhood of Electrical Workers
Kevin Rooney	Oil Heat Institute of Long Island
Paul Shatsoff	PS Consulting
Hal Smith	Home Energy Performance by Halco
Lisa Tyson	Long Island Progressive Coalition
Michael Weisberg	Hudson Valley Commercial Bank

2.1 GJGNY Community Outreach Working Group

As an outcome of the LMI Working Group, a decision was made at the October 2015 GJGNY Advisory Council meeting to establish a Community Outreach Discussion Working Group to determine how to leverage valuable community resources toward achieving the best outcome for LMI households. The group held regular meetings and presented its final recommendations to the GJGNY Advisory Council at the September 2016 meeting.

The Working Group addressed the following items to inform a future community-based outreach initiative:

- Identify the activities that future community-based outreach organizations should perform to increase LMI participation in clean energy activities.
- Review current LMI outreach efforts by CBOs to determine what has or has not been successful to inform future program design.
- Identify metrics for each proposed activity to properly measure success of these efforts.
- Identify the characteristics of organizations and personnel that would best support the community-based outreach effort.

Working group members included: Kelly Tyler (NYSERDA, Chair), Chris Carrick (CNY Regional Planning and Development Board), Stephan Edel (Center for Working Families), Clarke Gocker (PUSH Buffalo), Guy Kempe (RUPCO), Jason Kuflik (Green Street Power), Jason Kulaszewski (PUSH Green), Kathleen Langton (Affordable Housing Partnership), Conrad Metcalfe (Building Performance Contractors Association), Kevin Rooney (Oil Heat Institute of Long Island), Will Schweiger (Efficiency First New York), Hal Smith (Halco), Lisa Tyson (Long Island Progressive Coalition), and Jessica Waldorf (NYSERDA).

The group completed their draft report in the summer of 2016. The draft report was presented to the GJGNY Advisory Council at the September 2016 meeting, and the final report is provided in Appendix D. The Community Outreach Discussion Working Group identified elements that should be addressed in the future Community-Based Engagement Initiative to resolve the barriers and challenges identified by the Group:

- Focus on clear and measurable outcomes for each locally based engagement organization to easily define and measure success.
- Require quarterly plans from each locally based engagement organization to set flexible goals throughout the program.
- Target regional coverage based on the 10 Economic Development Regions as defined by Empire State Development.
- Be aware of and align, if possible, with activities of the Regional Economic Development Councils.
- Create a better system to associate and attribute leads back to locally based engagement organizations.
- Clarify that preference expressed in the GJGNY Act for locally based engagement that includes significant participation by minority- and women-owned business enterprises includes partnerships with organizations that consistently employ women and/or minorities.
- Include requirements for technical expertise in the selection of community-based engagement organizations

- Provide and continue to build strategic business relationships with local partners with the intention of extending NYSERDA’s outreach to residential LMI customers.
- Ensure marketing tools used locally are up-to-date and reflect current market conditions.
- Define the data needs and sharing requirements related to different parties, establish appropriate centralized databases, and simplify data collection processes
- Build relationships with contractors—a key task for the future Community-Based Engagement Initiative by the Working Group. NYSERDA should direct locally based engagement organization to develop strong relationships with contractors and identify any challenges or issues for resolution.
- Develop a training component for contractors so they understand what locally based engagement organizations offer as a resource.
- Address the complexity of clean energy programs by removing the silos that have existed between programs in the past and working to streamline programs. This work will lead to locally based engagement organizations and contractors being able to more easily navigate NYSERDA program resources and reduce response time to customers on what resources are the best fit for their projects

The Working Group discussed how the activities in the upcoming Community-Based Engagement Initiative could be structured to improve the program. The group proposed that NYSERDA should require a set of activities that every locally based engagement organization would have to implement and provide funding for those and for regional-specific focused activities. Organizations would submit proposals to do “pilot projects” focused on a defined region with a set timeframe, specific activities, and measurable outcomes. Examples could include aggregation projects, workforce development initiatives, and energy challenge campaigns (similar to Solarize campaigns).

The Working Group recommended that the following be considered base activities:

- Connecting consumers to external programs and resources. Locally based engagement organizations would assist customers with completing applications for projects and help customers find the financial resources to complete projects based on the home energy assessment conducted by a contractor. Locally based engagement organizations would assist consumers with accessing NYSERDA and other State, federal, and local resources to complete clean energy projects and to help reduce their energy burden. These organizations would be expected to have knowledge of all locally available resources.
- Facilitating finance applications. Under this activity, locally based engagement organizations would assist customers with applications, loan qualification, and understanding the process.
- Contractor engagement. Under this activity, locally based engagement organizations would work with the Home Performance Program contractors and other local contractors to clarify work scopes for clients, enabling projects to move forward. Locally based engagement organizations need to create unique ways to engage contractors with a shared goal of serving more LMI customers. They could partner for tabling at events and other forms of combined

marketing and engagement. Community-based organizations can assist in reducing the costs of customer acquisition through providing qualified leads to contractors and through the community events and education programs they execute. The Working Group identified prequalification as a huge benefit to the contractor.

- Partner development and engagement. Locally based engagement organizations should work with other locally based organizations to form partnerships to extend the education and outreach to a broader audience.
- Consumer education and marketing. This activity would entail tabling at events, community presentations, and one-on-one engagement to community leaders and elected officials. Engagement organizations should work with NYSERDA to customize marketing materials to fit the needs of the community or group to which they are conducting the engagement.

NYSERDA appreciates the time put into the Working Group by its members. The full report is posted on nyserdera.ny.gov/About/Publications/GJGNY-Advisory-Council-Reports and includes NYSERDA's response to the recommendations.

2.2 GJGNY Workforce Development Working Group

Also as an outcome of the work of the LMI Working Group, at the October 2015 GJGNY Advisory Council meeting, a decision was made to establish a Workforce Development Working Group to provide recommendations on workforce development initiatives moving forward. The Working Group is addressing the following workforce opportunities and needs:

- Role of community-based organizations in future workforce training efforts
- Opportunities to coordinate with the NYS Department of Labor (DOL)
- Future directions for workforce training efforts, including career pathways, training consortia, apprenticeships, and direct entry
- Incorporating lessons learned both from within GJGNY programs and other jurisdictions
- Labor standards

Working group members included: Adele Ferranti (NYSERDA, Chair), Stephan Edel (Center for Working Families), Clarke Gocker (PUSH Buffalo), Ross Gould (Workforce Development Institute), Dave Hepinstall (Association for Energy Affordability), Tony Joseph (NYS Department of Labor, New York), Paul Shatsoff (PS Consulting), and Hal Smith (Halco).

The group met throughout 2016 and presented its recommendations to the GJGNY Advisory Council at its May 2017 meeting:

- Provide on-the-job training incentives to mitigate business risks associated with hiring new clean energy workers.
 - Working Group members suggest a focus on energy efficiency workers (air sealing, insulation, weatherization) because those are the positions for which it is more difficult to recruit and retain talent
 - Classroom training should also be supported along with OJT funding to more closely align with the apprenticeship model
 - Employers would also like to have financial support for advancing incumbent workers
- Support New York State registered apprenticeships in clean energy fields
 - Link community-based hiring halls and workforce training programs to registered apprenticeships
 - Expand pre-apprenticeship training programs with direct entry into Registered Apprenticeships
 - Explore a model that encourages partnerships between community
- Explore innovative, employer-driven approaches to bridging the gaps between training and employment
 - Consider nontraditional ways to support disadvantaged workers such as hiring halls, where skilled and vetted workers are employed and insured by a host and can be hired out as required by need
 - This is one way to support “high-road standards” such as family-sustaining wages, fringe benefits, and overtime pay
 - Work with locally based organizations who are uniquely positioned to bridge gaps between workers and clean energy businesses seeking to hire

Based on the discussion that took place at the Advisory Council meeting, NYSERDA will continue to obtain input from the Working Group and others prior to finalizing the report, however, recommendations are already being considered in the planning process for CEF.

2.3 Website

To ensure transparency and keep members of the public up-to-date, a section of NYSERDA’s website is dedicated to GJGNY.⁵ All GJGNY-related documents, including Advisory Council meeting materials and videos, monthly updates, and annual reports are posted to the website.

⁵ Visit nyserda.ny.gov/About/Green-Jobs-Green-New-York for information about GJGNY.

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, approximately \$10 million supported the GJGNY loan fund. Previous GJGNY Annual Reports provide detailed information regarding the allocation and use of the grant, and can be found at nysesda.ny.gov/About/Publications/GJGNY-Advisory-Council-Reports/AC-Archives.

3.2 Revolving Loan Fund

NYSERDA 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% of the total balance. NYSERDA allocated financing across sectors as represented in Table 3-1.

Table 3-1. 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	\$112,201,564	\$261,530,164	\$150,286,512*	\$608,318	\$24,037,500	(\$23,687,906)
Multifamily Performance	3,822,516	4,009,112	2,491,996	156,906	0	\$2,148,494
Small Commercial Energy Efficiency	4,083,235	2,331,418	455,966	269,415	556,728	\$1,381,640
TOTAL	\$120,107,315	\$267,870,694	\$153,234,474	\$1,034,639	\$24,594,228	(\$20,157,772)
<p>* Bond proceeds are reported less bond issuance cost.</p> <p>NOTE: The summary includes certain loans issued, but where proceeds from bonds to finance the pledged loans is received subsequently. The summary also includes pre-encumbrances for approved loans not yet issued, which will be funded in part from future bond proceeds. These are not yet reflected in the budgeted funds shown in this table.</p>						

Pursuant to the GJGNY Act, loans were initially limited to \$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 allows loans up to \$25,000 for residential structures and up to \$50,000 for small business and not-for-profit structures, provided that the project payback is 15 years or less. NYSERDA 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 available incentives or rebates. The total cost of the project may include the removal of equipment or systems, the purchase and installation of new systems or equipment and any required ancillary equipment and related services, including necessary health and safety improvements, 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 (Concord). 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 required by the statute date. 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 Concord, 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 applications and originates loans pursuant to underwriting criteria established by NYSERDA. EFS closes on the loan, disburses proceeds to the contractor from a cash advance pool provided by NYSERDA to EFS, and then submits the loan to Concord. NYSERDA then replenishes the cash advance pool for the loan disbursement. Concord 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 reporting on the residential loan fund is located 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% of the loan (up to a maximum of \$5,000 per unit or \$500,000 per building) at 2% 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 located in Section 6.

3.2.3 Small Commercial/Not-for-Profit 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% of the loan (not to exceed \$50,000) at 2% interest with a 10-year maximum term—the lender sets the interest rate on its share of the loan. The lender is responsible for collecting loan repayments and remitting its proportionate share to NYSERDA. 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 OBR Loans allowing participating lenders 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% for a maximum amount of \$50,000, and for a term up to 10 years. The loan is repaid to NYSERDA through an installment charge on the participating electric/gas utility bill, remitted to Concord. 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 certain pledged residential energy efficiency loans issued through the program (totaling approximately \$29.2 million in aggregate principal) through June 2013 and available monies in the GJGNY revolving loan fund. Approximately 65% of the pledged loan pool were unsecured Smart Energy Loans and the remaining 35% were OBR Loans. The bonds require NYSERDA to maintain future loan repayments and other pledged revenues of not less than 110% of the annual bond principal and interest due in each year.

As a second source of security, the EFC provided a guarantee of the principal and interest on the bonds through its SRF program. EFC's SRF program provides access to AAA-rated financing for clean 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 approximately 3.2%. The net interest rate on the bonds, net of anticipated QECB interest subsidies, is estimated to be 0.5%.

The transaction was a success, with 34% 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 for consideration by other states.

In September 2015, \$46.23 million in long-term bonds were issued to EFC in connection with EFC's 2015 pool bonds, secured by additional energy efficiency loans issued through March 2016.

In October 2015, NYSERDA closed on a \$50 million credit facility with M&T Bank to finance GJGNY residential solar electric loans, as these loans were unable to meet the eligibility criteria required for SRF. NYSERDA drew down approximately \$48.5 million under the credit facility through its expiration in September 2016. The bonds are secured by certain pledged residential solar electric loans issued through that date.

In September 2016, NYSERDA issued additional bonds in connection with EFC's 2016 pool bonds. The Series 2016A Bonds were issued for a principal amount of approximately \$23.2 million and are secured by additional residential energy efficiency loans in the aggregate principal amount of approximately \$27.0 million that have been or will be issued through November 2017.

3.3 Residential Loan Fund Sustainability

Although NYSERDA experienced success in using bonds to support the residential revolving loan fund, because of the subsidized interest rate offered on a rapidly growing number of GJGNY loans, the program required additional RGGI fund allocations to fund the loan originations not recovered through bond proceeds. The loan fund could not continue operating in a sustainable manner. Since solar electric loans became eligible, the value of issued loans quadrupled in only two years. The subsidized interest rate would result in significant losses to the loan fund, which were expected to nearly double from 2016 to 2017. Reduced RGGI auction proceeds and the need to balance the GJGNY program with other initiatives limit NYSERDA's ability to fully mitigate loan fund losses through RGGI allocations. The demand to address the unsustainability of the residential loan fund became critical in 2015. Therefore, NYSERDA continued its work with the GJGNY Advisory Council to identify a solution to the problem. Details of the meetings with the Advisory Council can be found at nyserdera.ny.gov/About/Green-Jobs-Green-New-York/Advisory-Council/Meetings.

Analysis of the loan fund demonstrated that most issued loans were to households with higher incomes and good credit. It was also known, from NYSERDA’s market research, that a number of third-party financing options exist in the market for that sector. Working with the Advisory Council, a plan was developed to implement higher interest rates starting September 1, 2016, for consumers who have higher household incomes and who meet traditional market-based underwriting criteria. The interest rates offered to these customers was revised so that loans would not require additional RGGI funding, while limited RGGI funds could be used to continue to provide discounted rates to LMI households and those who lack access to traditional financing options. The interest rate changes are shown in Table 3-2.

Table 3-2. New Residential Loan Fund Interest Rates as of September 1, 2016

Program Type	Energy Efficiency			Renewable Energy / Combined		
	Smart Energy - Pay by mail	Smart Energy - Auto Pay	On-Bill Recovery	Smart Energy - Pay by mail	Smart Energy - Auto Pay	On-Bill Recovery
Income Level						
Less than or equal to 80%	3.99%	3.49%	3.49%	3.99%	3.49%	3.49%
Greater than 80% up to 120%	5.49%	4.99%	4.99%	5.49%	4.99%	4.99%
Greater than 120%	6.49%* or 7.49%**	5.99%* or 6.99%**	5.99%* or 6.99%**	6.49%* or 8.49%**	5.99%* or 7.99%**	5.99%* or 7.99%**
* Primarily based upon a FICO score lower than 640; or a debt-to-income ratio above 50%; and no bankruptcies within the past two years.						
** Primarily based upon a FICO score of 640 or greater; and a debt-to-income ratio of 50% or less; and no bankruptcies within the past seven years.						

Since the interest rate change on September 1, 2016, indications are that participation in the residential loan fund reflects anticipated trends, as shown in Figures 3-1 and 3-2. As expected, many contractors and installers have established relationships with third-party lenders and offer their products to customers with higher incomes and good credit ratings. As a result, it is anticipated that with the occasional addition of limited RGGI funds, the residential loan fund can be sustained.

Figure 3-1. GJGNY Residential (Energy Efficiency) Loans Issued for Applications Received on or after September 1, 2016

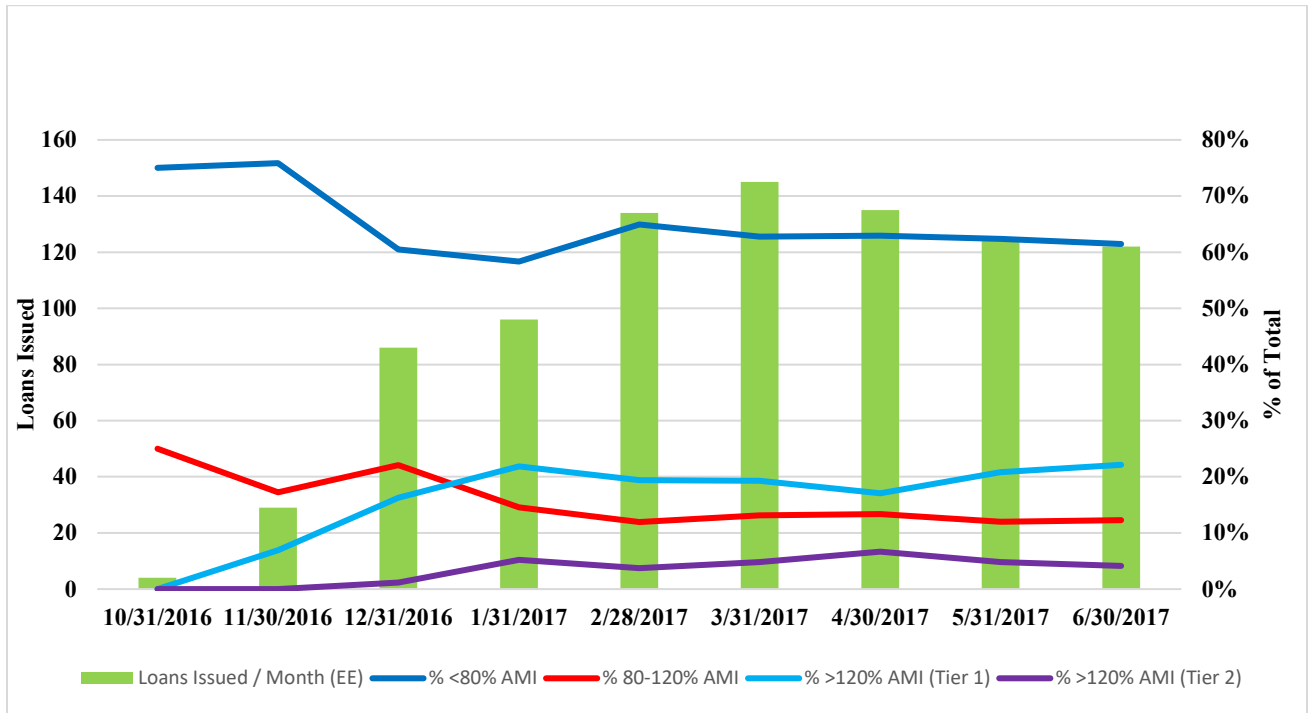
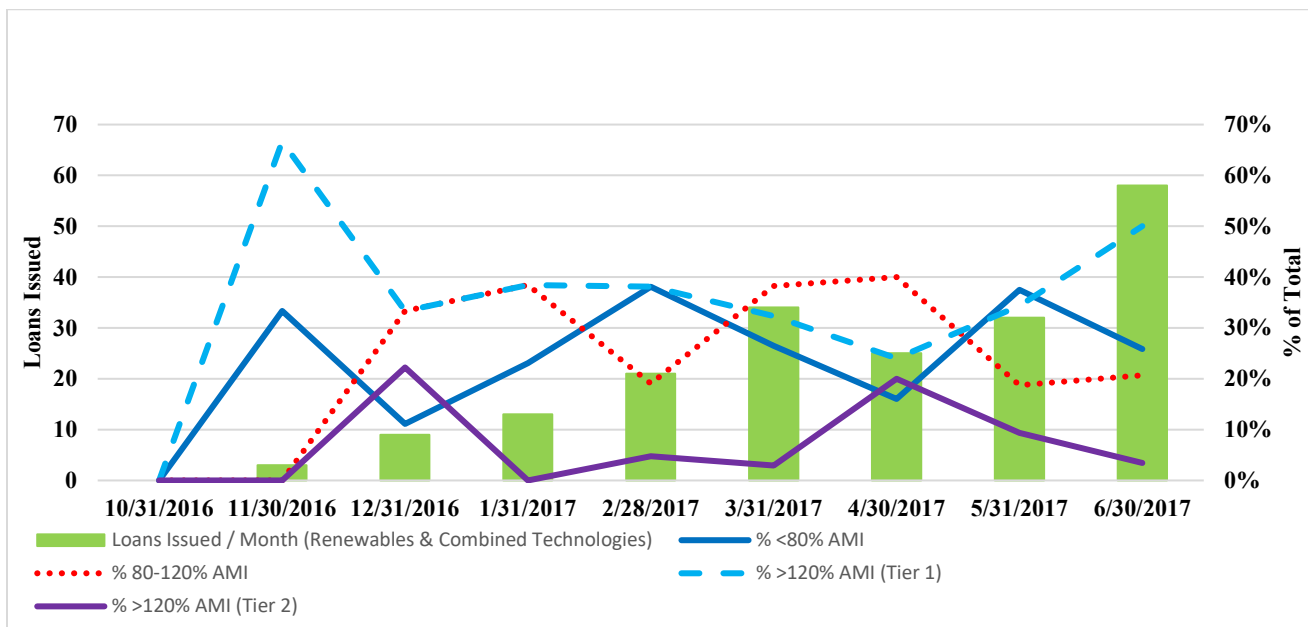


Figure 3-2. GJGNY Residential (Renewable and Combined Technologies Only) Loans Issued for Applications Received on or after September 1, 2016



3.4 Financing Contracts

In May 2017, NYSERDA awarded a competitively selected contract to EFS to originate GJGNY residential financing. Concord continues to provide master loan servicing, while Advantage Title Agency, Frontier Abstract, and Stewart Title continue to perform property searches and to file mortgage/declaration documents to support OBR Loans.

NYSERDA also continues to receive services from several other competitively selected organizations to assist with program design and provide financial and legal advice. Funding amounts for these contracts are detailed in Table 3-3. However, the allocation of these costs to the residential, multifamily, and small commercial/not-for-profit sectors are provided in Sections 5, 6, and 7.

Table 3-3. Financing Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Bond Issuance Costs						
PO- 35984	Fulbright & Jaworski LLP	Bond Counsel Services	\$29,549	\$29,549	\$0	\$0
PO- 93881	Bergmann Associates	Stamped EFS Engineering Report for FY16-17 Bonds	5,900	5,900	0	0
PO- 72571	Bank of New York	Trustee Services for 2013A Bonds	57,000	8,000	49,000	0
PO- 75651	Bank of New York	GJGNY Bond Issue Costs 2015	62,000	5,000	57,000	0
Bond Issuance Costs, no PO#	NYS Environmental Facilities Corp.	Bond Issuance Costs	N/A	574,102	0	0
	Hinckley Allen & Snyder LLP	Bond Issuance Costs		3,000	0	0
	N/A	Budget Adjustments		2,222,394	0	0
TOTAL BOND ISSUANCE COSTS			\$154,449	\$2,847,945	\$106,000	\$0

Table 3-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO- 21769	Concord Servicing Corporation	RES Master Loan Servicer for GJGNY	N/A	\$1,885,119	\$0	\$0
15518	Winsconsin Energy Conservation Corporation (Energy Finance Solutions)	Origination Fees	N/A	3,065,600	0	0
		LIPA Fees		14,500	0	0
		Ramp-up / Development costs for GJGNY & OBR programs		87,999	0	0
PO-35421	First Associates Loan Servicing	Backup Loan Servicer for GJGNY Loan Program	116,500	73,620	42,880	50,000
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	26,670	26,670	0	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	333,333	330,471	2,862	0
PO- 38299	Frontier Abstract & Research Services	OBR Last Owner Searches & Recording Services	333,332	329,710	3,622	0
PO- 37723	Stewart Title Insurance Company	OBR Last Owner Searches & Recording Services	333,332	330,082	3,250	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	313,998	313,998	0	0

Table 3-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO- 19923	Lamont Financial Services Corporation	Financial Advisor Services	327,050	326,064	986	0
PO- 19923-1	Lamont Financial Services Corporation	Financial Advisor Services	50,000	14,412	35,588	50,000
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	Outside 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
PO- 72032	Bank of New York	Trustee Services for 2014A Notes	5,000	5,000	0	0
PO- 73313	Kroll Bond Rating Agency Inc.	Bond Rating Services	12,500	12,500	0	0
PO- 80732	Dentons US LLP	Bond Counsel Services	13,000	12,917	83	0
TOTAL FINANCING IMPLMENTATION			\$2,350,825	\$7,314,772	\$89,271	\$100,000
GRAND TOTAL			\$2,505,274	\$10,162,717	\$195,271	\$100,000
<p>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/Not-for-Profit sectors, the prorated share of these contracts is also provided in the Contracts Entered Into tables in sections 5, 6, and 7.</p>						

3.4.1 On-Bill Recovery Financing

The Power Act of 2011 requires additional reporting regarding OBR. Additional information regarding OBR as of June 30, 2017, 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 DOL programs targeted at preparing individuals for energy efficiency and renewable energy careers in the 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 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; future contracts supporting GJGNY workforce development initiatives will be funded through the CEF.

4.1 Workforce Training and Development Solicitations and Contracts

NYSERDA issued a total of seven Program Opportunity Notices (PONs) and Requests for Proposals (RFPs) designed to support workforce training objectives of GJGNY:

- Workforce Development and Training Partnerships for Energy Efficiency and Lab Houses for Field Testing opportunity (PON 1816), which built on existing career pathways efforts and included GJGNY funding for accreditations and certifications. The solicitation also sought proposals to establish lab houses, also known as pressure houses, for use in connection with classroom instruction, field activities, and field testing for green job worker certifications.
- Energy Efficiency Technical Training opportunity (PON 1817) to support the development of Oil Heat Efficiency training and Small Commercial Energy Assessment training.
- Solar Thermal Training opportunity (PON 2011) 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.
- Contractor Exchange Workshops (RFP 2014) 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.
- Technical Workshops/Expanding BPI Field Exam Capacity/Certification Standards opportunity (PON 2032) provided funding for three activities: Hands-on Technical Workshops, Expanding BPI Exam Capacity, and development of Oil and Gas Furnace Installation Certification Standards.

- Internships/Apprenticeships/On-the-Job Training opportunity (PON 2033) 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.
- Green Jobs – Green New York Curriculum Inventory Assessment, and Curriculum Updates opportunity (RFP 2034) to conduct a curriculum inventory, contractor needs assessment, and curriculum updates.

In addition, NYSERDA added GJGNY funding to RFP 2697 (originally funded with Systems Benefit Charge funds) to support balance-of-system training work with the NY-Sun PV Trainers Network on Long Island. Most activity related to contracts awarded through the solicitations concluded by June 2016. However, SUNY Ulster continued to deliver energy efficiency and solar electric training through December 2016.

In April 2017, NYSERDA added GJGNY funding to an Agreement with Green City Force (GCF), a Brooklyn-based provider of training and job placement support to disadvantaged young adults. Prior to the latest investment of GJGNY funding, GCF was under contract to offer clean energy training and internships to 75 program participants through a contract funded under the System Benefits Charge. The addition of \$60,000 in GJGNY funding will allow GCF to expand its network of employer partners resulting in additional opportunities for internships, apprenticeships, and job placement for program participants and alumni. Additionally, participants and alumni will receive assistance with resume development, job readiness coaching, and job search assistance as well as support services including referrals to subsidized child care services and transportation assistance. The first cohort of 35 students under this agreement graduated on June 1, 2017. As of June 30, Franklin Energy hired seven graduates to work under the Brooklyn Queens Demand Management project in coordination with Con Edison. Up to 20 of the graduates will be hired to support GCF's EmPower NY and New York City Housing Authority efforts on a full time, temporary basis.

In total through training partnership agreements under GJGNY, more than 3,800 New Yorkers were trained on subjects including energy efficiency, weatherization, solar electric, and solar thermal technologies.

4.2 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	\$1,770,034	\$11,103		\$114,538
Incentives	100,000	21,697	0		78,303
Certifications and Company Accreditation					
Contracts	326,949	326,949	0		
Incentives	200,000	136,357	0		63,643
Apprenticeships/Internships	2,889,250	2,571,468	134,027		183,755
Curriculums	1,648,372	1,575,644	0		72,728
Conferences and Technical	277,318	277,318	0		
TOTAL	\$7,337,565	\$6,679,467	\$145,130	\$0	\$512,967

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.

4.3 Workforce Training and Development Contracts

Contracts related to the implementation of the GJGNY Workforce Development Initiative are detailed in Table 4-2.

Table 4-2. Workforce Training and Development Contracts

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

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
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	165,397	0	0
53130	K&L Green Operations, LLC	PON 2033 OJT Incentive	8,320	8,320	0	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
56345	Kalex Energy Company	PON 2033 OJT Incentive	2,523	2,523	0	0
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

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
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	289,232	289,232	0	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	121,971	121,971	0	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
34356	Global Dwelling	PON 2033 OJT Incentive	15,000	15,000	0	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
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	29,780	29,780	0	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	157,939	157,939	0	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	14,400	14,400	0	0
49785	Green Audit USA Inc.	PON 2033 OJT Incentive	72,131	72,131	0	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
50447	Home Performance Professionals Inc.	PON 2033 OJT Incentive	528	528	0	0
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	22,382	0	0
53620	Malcarne Contracting Inc.	PON 2033 OJT Incentive	14,210	14,210	0	0
56340	Green Power Solutions Inc.	PON 2033 OJT Incentive	8,250	8,250	0	0
56342	OnForce Solar	PON 2033 OJT Incentive	12,480	0	0	0
58433	Solar Project Solutions Inc	PON 2033 OJT Incentive	27,973	27,973	0	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	230,050	156,023	74,027	0
97827	Green City Force	Clean Energy Internships and Job Placement	60,000	0	60,000	0
Vouchers	NA	Certification and Accreditation (funds reclassified)		(1,925)	0	0
TOTAL APPRENTICESHIPS/INTERNSHIPS			\$2,719,900	\$2,571,468	\$134,027	\$0.00
Certification and Company Accreditation						
18165	N. American Board of Certified Energy Practitioners (NABCEP)	Clean Energy Technology Training	\$182,000	\$182,000	\$0	\$0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
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 BOS Training & Education	94,950	94,950	0	0
Vouchers	N/A	Certification and Company Accreditation		136,357	0	0
TOTAL CERTIFICATION AND COMPANY ACCREDITATION			\$326,949	\$463,306	\$0.00	\$0.00
Conferences and Technical						
22983	Building Performance Contractors Association (BPCA)	Contractor Exchange Workshops	\$150,000	\$150,000	\$0	\$0
ST-9991-7	Interstate Renewable Energy Council (IREC)	TWOP 7 (Workforce Conference)	127,318	127,318	0	0
TOTAL CONFERENCES AND TECHNICAL			\$277,318	\$277,318	\$0.00	\$0.00
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	37,774	37,774	0	0
22987	SUNY Canton	PON 2011 Solar Thermal Training	107,238	107,238	0	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
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			\$1,575,644	\$1,575,644	\$0.00	\$0.00
Equipment and Training Infrastructure						
31339	Institute for Building Technology and Safety	PON 2032 Technical Training	\$343,492	\$343,492	\$0	\$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	90,204	90,204	0	0

Table 4-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Apprenticeships/Internships						
32692	Building Performance Contractors Association (BPCA)	PON 2032 Technical Training	78,880	78,880	0	0
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	160,942	11,103	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	128,474	128,474	0	0
35211	Building Performance Contractors Association (BPCA)	GJGNY Technical Certifications	118,871	118,871	0	0
Reclass	Reclass	Reclass GJWFD to GJWFTR	0	927	0	0
Vouchers	NA	Equipment Incentive	0	21,697	0	0
TOTAL EQUIPMENT AND TRAINING INFRASTRUCTURE			\$1,780,211	\$1,791,733	\$11,103	\$0.00
GRAND TOTAL			\$6,680,022	\$6,679,468	\$145,130	\$0.00

5 One- to Four-Family Residential

Consistent with the legislation, GJGNY services to the residential⁶ sector are delivered through successful existing programs. Free and reduced cost residential energy audits are provided through NYSERDA's HPwES program,⁷ which offers homeowners in the State a comprehensive approach to improving energy efficiency and home comfort while saving money. Participating HPwES contractors, who are BPI GoldStar contractors, conduct home energy assessments and upgrades. Income-qualified homeowners are eligible for additional incentives for energy improvements. GJGNY residential loans are offered through HPwES as well as NYSERDA's NY-Sun Incentive Program, Solar Thermal Program, and Renewable Heat NY. NY-Sun and Renewable Heat NY also offer additional incentives for income-qualified households. Implementation of GJGNY energy efficiency program features for the residential sector began in the fourth quarter of 2010 and expanded to include renewable energy.

5.1 Target Audience

HPwES is a market transformation program that uses building science and a comprehensive approach to identifying and implementing energy efficiency improvements. The program is designed to reduce the energy use in existing one- to four-family homes while also addressing indoor air quality and other energy-related health and safety issues. Improvements in building shells and heating systems typically result 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 HPwES is owners of residential buildings with incomes above 60% of the State median. 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 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% of the State or area median income, considered LMI households, are of particular interest in GJGNY and may be eligible for a discount of 50% of the cost of the eligible work, up to \$4,000, or up to \$8,000 for

⁶ The GJGNY Act defines a residential structure as a residential building that has four or fewer dwelling units

⁷ The residential audits were originally funded with an allocation of GJGNY funds. Effective March 1, 2016 audits in CEF territory have been funded with CEF funds, and RGGI funds are used to fund audits in non-CEF territory.

buildings with two to four units, from NYSEERDA⁸ through the assisted component of HPwES program. 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 CBOs conducting outreach to homeowners and landlords across the State. Additional information about CBO activities can be found in Section 8.

5.2 Residential Energy Efficiency

5.2.1 Implementation Approach

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 and a cost and energy-savings estimate for proposed improvements. 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 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 the State's housing stock by addressing problems such as ice damming, mold, and mildew.

The contractor tests the house when work is complete to ensure a safe and healthy environment after installation of energy efficiency measures. The program offers GJGNY financing and homeowner discounts (to income-eligible households) to encourage comprehensive work scopes. Participating households typically reduce their total energy use by 20% after work on the home is complete.

⁸ These incentives are provided through an Energy Efficiency Portfolio Standard, System Benefit Charge, Regional Greenhouse Gas Initiative (RGGI), or Clean Energy Fund(CEF) component of the HPwES program.

The GJGNY-supported free or reduced-cost energy assessments and financing components of HPwES were launched on November 15, 2010. Owners of residential buildings with four units or fewer interested in receiving a free or reduced-cost home energy assessment can apply online at nysesda.ny.gov/home-performance, or download an application. Alternatively, they can call 1-866-NYSERDA to request an assessment application be mailed or obtain an assessment application from a participating contractor or CBO.

An applicant 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 paid by NYSERDA to the contractor for a complete assessment. The final amount 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.

In some areas, community-based organizations may aggregate households interested in receiving energy efficiency or renewable energy services to provide benefits to the homeowners, such as lower costs through standardized pricing and a simplified participation process. Homeowners agree in advance to have the same contractor or 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 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.

5.2.2 Standards for Energy Assessments and Development of Work Scopes

Energy assessments for GJGNY and resulting energy services are delivered by participating HPwES contractors having Participation Agreements⁹ with NYSERDA. Contractors delivering assessments and performing services must participate in HPwES and be BPI GoldStar¹⁰ designated. The BPI GoldStar designation includes a review of certain business standards and practices in addition to technical certification requirements.

NYSERDA performs quality assurance inspections on an average of 10 to 15% 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 policies and procedures.

5.2.3 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 is waived for households with income that is 200% of the median county household income or less. In households with income greater than 200% up to 400% 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% pay the full fee. 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.

⁹ Visit nyserda.ny.gov/-/media/Files/EERP/Residential/Programs/Existing-Home-Renovations/Join-Program/hpwes-contractor-participation-agreement.pdf to view the 2016-2017 HPwES contractor Participation Agreement.

¹⁰ Visit <http://www.bpi.org/goldstar.aspx> for more information on the BPI GoldStar Contractor designation.

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

5.2.4 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, 2017, there have been a total of 152,275 applications with 145,986 approved, which corresponds to an average of more than 1,836 per month. Nearly 112,100 assessments have been completed. Participating contractors submitted 34,570 contracts for HPwES energy upgrades. From those contracts for HPwES energy upgrades, 33,178 projects are associated with a GJGNY assessment or loan. The average time lag from assessment completion to completed work is 68 days. After accounting for the lag between performing the assessment and completion of work, the conversion rate from assessment to project through the HPwES program is approximately 30%, and in the past 12 months, the assessment to project conversion rate was approximately 36%. A 2012 evaluation indicated pieces of the recommended work proceeds outside the program, either with the benefit of utility rebates or by the homeowner on their own. Among those assessment-approved and assessment-completed participants surveyed in the evaluation, nearly 38% of respondents reported they installed program eligible energy-efficient measures outside of the program.¹¹ Another 31% of customers who received an assessment complete work in the program, resulting in an estimated overall conversion rate of nearly 70%. The success of this effort is largely attributed 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 U.S., 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 February 2016, NYSERDA revised the audit application approval process to facilitate an automated review of applications received. Approximately 83% of audit applications received are approved upon submission. For the remainder, the applications are reviewed within one business day.

¹¹ NYSERDA. 2012. "Process Evaluation and Market Characterization and Assessment: Green Jobs - Green New York Residential Program," nyserdera.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2012ContractorReports/2012-GJGNY-MCA-Report.pdf

5.2.5 Additional Incentives

To qualify for HPwES program incentives, eligible measures must meet the program minimum efficiency and cost effectiveness requirements. NYSERDA offers a contractor incentive of 10% of the cost of eligible measures for market rate HPwES projects. Availability of the incentive is subject to funding availability from the CEF¹² or from the RGGI for customers of municipal utilities. Note that as of January 1, 2017, NYSERDA transitioned programs previously offered to LIPA customers and funded by RGGI to PSEG-LI.

Building owners with incomes equal to or less than 80% of the State or area median income may be eligible for a discount of 50% of the cost of eligible measures, up to \$4,000, or up to \$8,000 for buildings with two to four units, through Assisted HPwES. Homeowners with incomes at or below 60% 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.

5.3 Residential Loans

Energy efficiency improvements and certain renewable energy systems have become eligible for GJGNY financing at various points since program inception. To qualify for GJGNY financing, a project must meet cost effectiveness requirements. In response to the record low natural gas prices, and recognizing that energy projects 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% of the total loan payments. Pro forma tools (spreadsheets) have been developed to standardize the process of verifying cost-effectiveness of the projects seeking financing. Though not required, households seeking to install a renewable energy system are encouraged to have a home

¹² Prior to implementation of the CEF, incentives were provided through the System Benefits Charge, Energy Efficiency Portfolio Standard or RGGI

energy assessment done through HPwES. In fact, the NY-Sun program requires a “clipboard” energy efficiency audit to make consumers aware of opportunities to reduce their energy consumption and demand. Undertaking energy efficiency improvements prior to installing a renewable energy system may result in the installation of a smaller, lower cost renewable energy system. The reduction in energy bills associated with the energy efficiency project may offset some costs of the renewable energy system. Assuming the project meets cost-effectiveness requirements and can be installed within the loan cap amount, loans may be made available for a combination of energy efficiency and renewable energy work.

5.3.1 Energy Efficiency

To be eligible for financing, HPwES projects must meet cost-effectiveness requirements as previously described. However, 15% 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% of the cost is for HPwES prequalified measures is automatically eligible for the Smart Energy loan and incentives and does not go through screening. However, 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, as required by the GJGNY Act. Appendix C provides additional details.

Provided 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 NYSERDA incentives. Although GJGNY loans may be combined with other incentives, NYSERDA and utility incentives cannot be combined with each other on the same measure.

5.3.2 Solar PV and Other Net Metered Technologies

The amendment to the GJGNY Act of 2009, dated October 22, 2013, made the installation of energy technologies eligible for net energy metering pursuant to Section 66-j or 66-l of the Public Service Law eligible for GJGNY financing. In the residential sector, the only such technology likely to be installed at a residence is solar electric. Effective February 3, 2014, NYSERDA began offering the two GJGNY financing options for solar electric systems in most of the State. In July 2014, through a Memorandum of Understanding, GJGNY loans also became available for solar PV projects located in LIPA service territory, served by PSEG Long Island.

To be eligible for a GJGNY loan, Solar PV systems must be installed by a participating contractor in good standing with the NY-Sun program. In addition to other criteria, the installer must fulfill one of the following: NABCEP (North American Board of Certified Energy Practitioners) PV Installation Professional Certification; IBEW-NECA Electrical Journeyman and Apprentice Training (International Brotherhood of Electrical Workers and National Electrical Contractors Association); or UL (Underwriters Labs) PV System Installation Certification. The contractor must submit the project package to the NY-Sun program for approval, even if there is no NY-Sun incentive available for the project. At a minimum, the project package must include a project application form signed by the customer with a certification statement that the clipboard energy efficiency audit has been performed; site plan; site photos; one or three-line drawing; shading report and estimate of annual output; and cost-effectiveness pro forma.

Consumers purchasing solar electric systems may use the loan in addition to receiving federal and State tax incentives and incentives offered through the NY-Sun program,¹³ where available (PON 2112). The loan may also be combined with NYSERDA's Affordable Solar incentive, which targets households with a total income of up to 80% of the State or county median income. More information about NY-Sun can be found at nysesda.ny.gov/All-Programs/Programs/NY-Sun.

5.3.3 Solar Thermal Systems

Solar thermal heat or hot water systems have been an eligible measure since GJGNY loans were launched in the fall of 2010. However, they were initially only eligible when included in a cost-effective scope of energy efficiency services through HPwES. On October 17, 2014, solar thermal systems also became eligible on a stand-alone basis through NYSERDA's Solar Thermal Incentive Program.

To be eligible for a GJGNY loan, the solar thermal project must be installed by a participating contractor in good standing with NYSERDA's Solar Thermal Incentive Program. The contractor is responsible for preparing and submitting the necessary project application to NYSERDA, even if there is no incentive available. To become an eligible installer, in addition to meeting other criteria, an individual must fulfill one of the following: NABCEP (North American Board of Certified Energy Practitioners) Solar Heating Installer Certification; Journeyman who has completed an approved DOL Apprenticeship Program through the United Association of Plumbers, Fitters, Welders, and HVAC Service Techs Apprentice Program including UA approved solar thermal training; or completed a Solar Thermal Manufacturer's

¹³ Incentives for NY-Sun are provided through the Renewable Portfolio Standard, Regional Greenhouse Gas Initiative, and the Clean Energy Fund.

certification, which includes 18 hours of manufacturer’s specific training and demonstration of equivalent experience. Consumers purchasing a residential solar thermal system may use the loan in addition to receiving federal and State tax incentives and incentives offered through the Solar Thermal Incentive Program,¹⁴ if available.

5.3.4 Renewable Heating Systems (Wood Pellet Stoves)

Renewable Heat NY provides incentives toward the installed cost of high-efficiency, low-emission wood heating systems. In the residential sector, the program supports wood pellet stoves and boilers with thermal storage, and advanced cordwood boilers with thermal storage. Replacement of wood heating systems serving as the primary heating source in a residence have been eligible for GJGNY financing as part of a qualified, cost-effective scope of energy efficiency services through HPwES since the loan program inception. However, on March 10, 2016, they became eligible on a standalone basis provided the project meets cost-effectiveness requirements. To be eligible for a GJGNY loan, the standalone system must be installed by a participating contractor in good standing with the Renewable Heat NY program.

Consumers purchasing eligible residential wood heating systems may use the loan in addition to receiving incentives offered through the Renewable Heat NY program,¹⁵ where available. The loan may also be combined with NYSERDA’s income-eligible pellet stove incentive, which targets households with a total income up to 80% of the State or county median income. Visit nyserdera.ny.gov/All-Programs/Programs/Renewable-Heat-NY to learn more about Renewable Heat NY.

5.4 Residential Loan Fund Performance

A significant volume of work is supported by the GJGNY financing options. From October 2010 through June 2017, 13,895 energy efficiency loans closed valued at more than \$134 million—an additional 461 loans are pending, valued at more than \$5.5 million. Approximately 37% of HPwES projects completed in the 12 months ending on June 30, 2017 included a GJGNY loan. From February 2014 through June 2017, 6,584 solar electric loans closed totaling more than \$111 million dollars, with another 307 loans pending completion valued at approximately \$5.4 million dollars.

¹⁴ Incentives for the Solar Thermal Incentive Program, when available, have been provided through the RPS and RGGI.

¹⁵ Incentives for Renewable Heat NY are funded through RGGI.

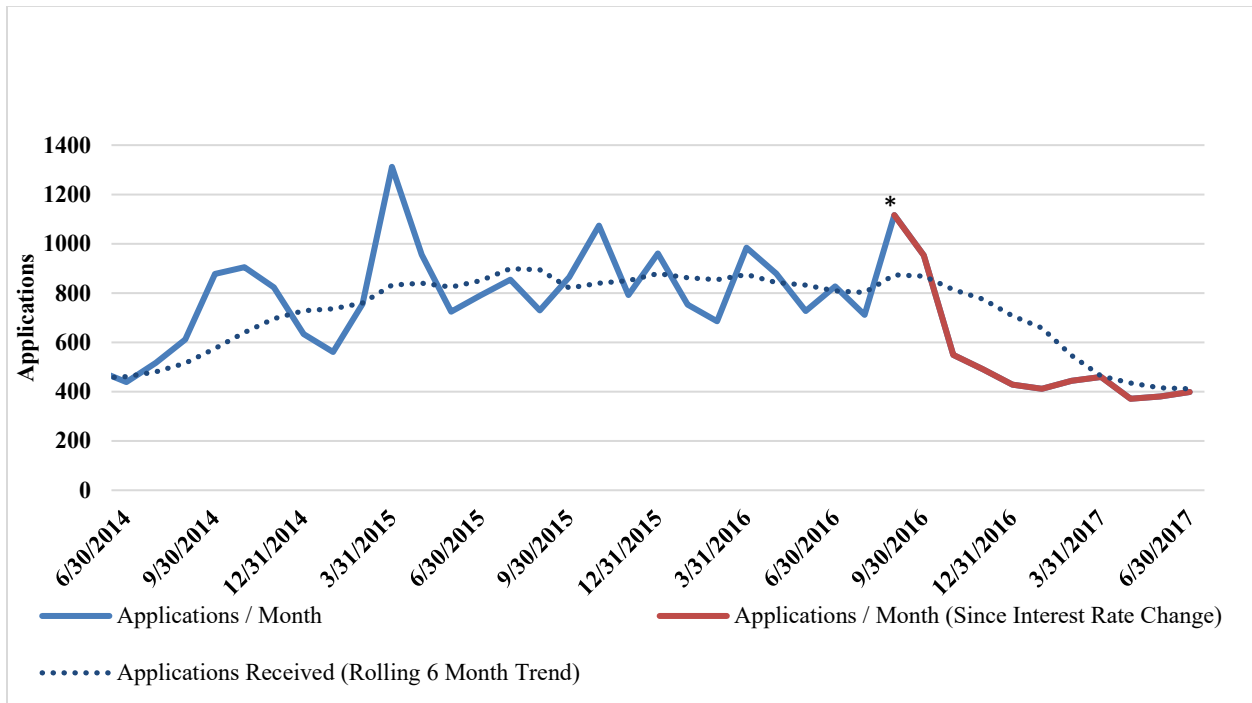
In addition, 59 loans closed for solar thermal, wood heating systems, and combination energy efficiency and renewable energy projects totaling nearly \$850,000, with an added five loans pending valued at more than \$45,000.

On average per month, the majority of GJGNY loan applications were for the OBR Loan option immediately upon its introduction. However, due to the more restrictive cost-effectiveness requirements of the OBR Loan, some customers who preferred an OBR Loan had to use the Smart Energy Loan instead. Therefore, the Smart Energy Loan consistently represents the majority of loans closed on a monthly basis. Over the last 12 months OBR Loans represented only 36% of loans closed.

On September 1, 2016, an interest rate change was implemented, which provides different rates based on household income and credit considerations. The new structure enables NYSERDA to offset costs of administering the loan fund to households with higher income and high credit ratings who may have multiple finance sources, while continuing to offer subsidized financing to households with few financing options in the market. As a result, many higher-income households are no longer using the GJGNY loan, but instead are using alternatives such as third-party lenders offered by their contractor or options offered through their local bank such as home equity loans.

Figure 5-1 and 5-2 illustrate the changes in financing applications submitted, and Smart Energy and OBR and loans issued over the past three years.

Figure 5-1. Financing Applications Received, per Month (Past Three Years)



* Denotes deadline for applications that were submitted before tiered interest rate took effect.

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

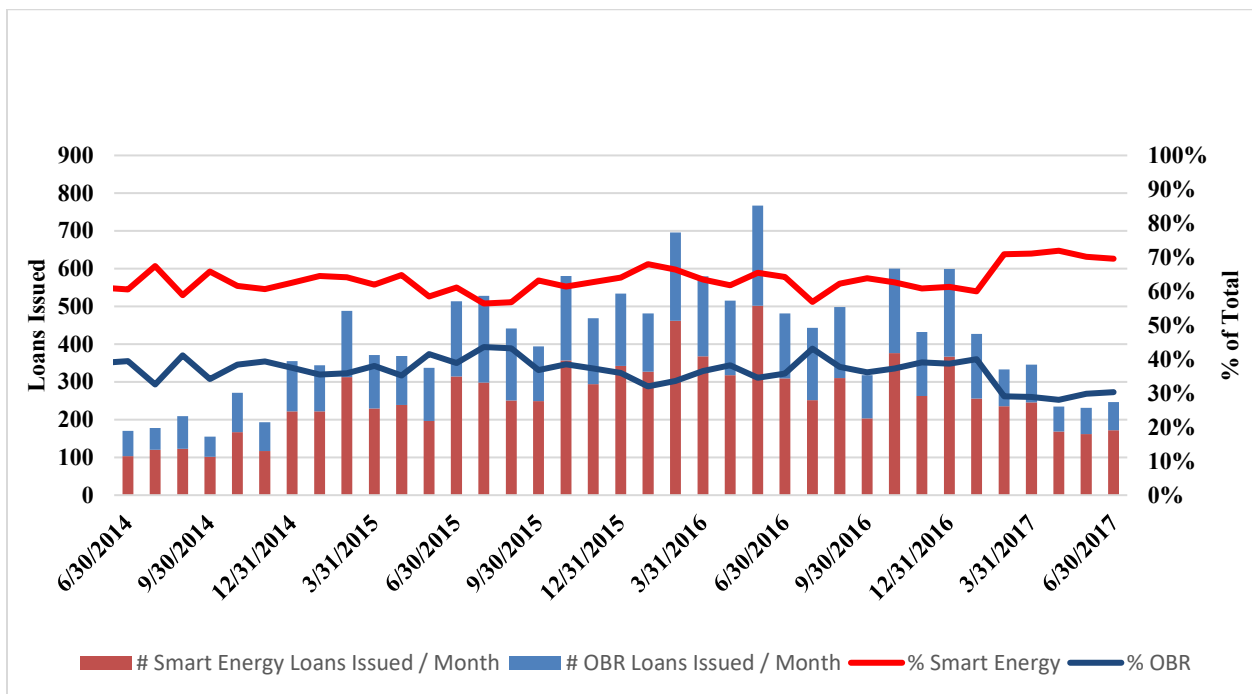


Table 5-3 summarizes loan underwriting standards used for both the Smart Energy and OBR Loans. NYSERDA modified loan underwriting standards seven times since the launch of the program in an effort to address loan application denials and responsibly improve the penetration of financing to consumers who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

Tier 1 loans use standard underwriting criteria relying primarily on FICO scores and debt-to-income ratio. 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 20-25% of loans issued on a monthly basis. Table 5-4 summarizes metrics surrounding loan applications and loans closed through June 30, 2017.

Table 5-3. GJGNY Loan Underwriting Standards as of June 30, 2017

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. GJGNY Loans Issued by Tier (Past Three Years)

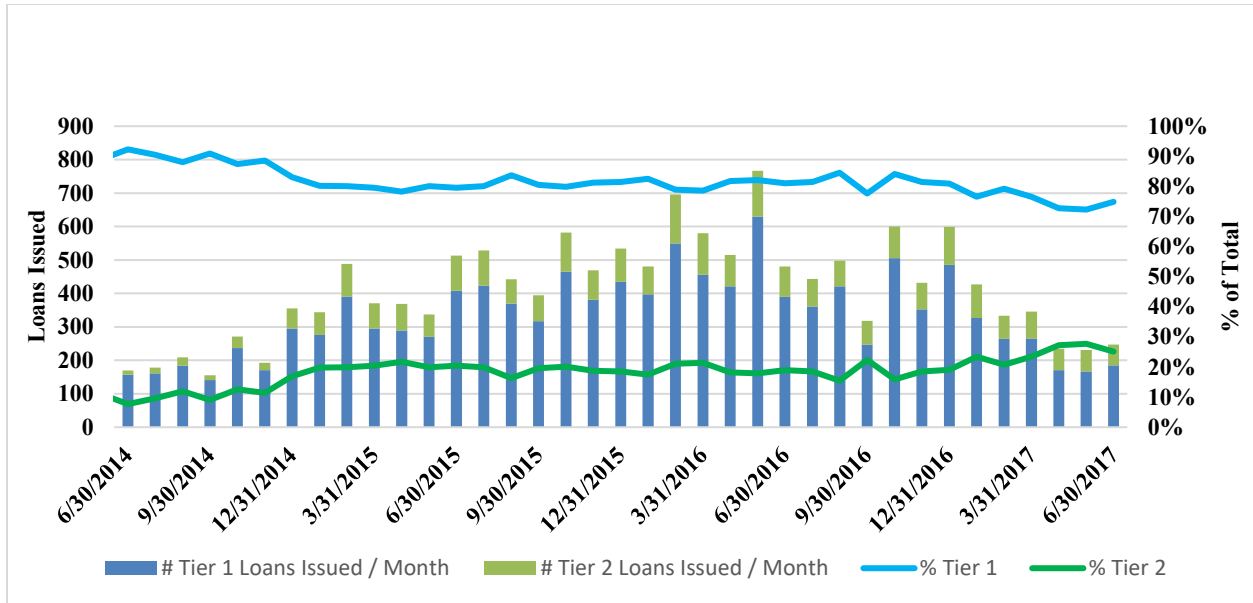


Table 5-4. GJGNY Residential Financing Summary as of June 30, 2017

GJGNY Loan Type	Applications Received (Number)*	Applications Approved (Number)	Loans Issued (Number)	Loans Issued (Dollars)	Loans Awaiting Issuance (Number)	Loans Awaiting Issuance (Dollars)
EE Smart Energy Loan		13,427	10,139	\$92,684,881	450	\$3,972,797
EE On-Bill Recovery Loan		6,144	3,756	\$41,729,267	11	\$1,673,342
Total	29,989	19,571	13,895	\$134,414,148	461	\$5,646,139
PV Smart Energy Loan		3,841	3,165	\$52,552,314	194	\$3,097,116
PV On-Bill Recovery Loan		4,345	3,419	\$58,542,660	113	\$2,391,539
Total	10,153	8,186	6,584	\$111,094,974	307	\$5,488,654
EE & PV Smart Energy Loan		53	22	\$402,089	2	\$29,793
EE & PV On-Bill Recovery Loan		81	8	\$176,050	0	\$0
Total	314	134	30	\$578,139	2	\$29,793
RHNY Smart Energy Loan		26	17	\$175,088	3	\$17,174
RHNY On-Bill Recovery Loan		6	1	\$13,445	0	\$0
Total	54	32	18	\$188,533	3	\$17,174
ST Smart Energy Loan		12	9	\$64,039	0	\$0
ST On-Bill Recovery Loan		2	2	\$11,510	0	\$0
Total	14	14	11	\$75,549	0	\$0
Grand Total	40,524	27,937	20,538	\$246,351,343	773	\$11,181,761

* Applicants are not required to choose loan type (Smart Energy vs On-Bill Loan) at time of application, therefore only total applications are shown.

Table 5-4 continued

Financing Summary	Smart Energy			On-Bill Recovery		
	Tier 1	Tier 2	Total	Tier 1	Tier 2	Total
Loans Issued	11,020	2,332	13,352	6,117	1,069	7,186
Value	\$121,532,236	\$24,346,175	145,878,411	\$85,772,405	\$14,700,527	100,472,932
Average Loan*	\$11,028	\$10,440	\$10,926	\$14,022	\$13,752	\$13,982
Average Term	13.4 Years	14.1 Years	13.5 Years	14.7 Years	14.8 Years	14.7 Years
2.99%	N/A			13.78%	8.98%	13.07%
3.49%	82.68%	79.16%	82.06%	85.17%	89.62%	85.83%
3.99%	14.51%	17.41%	15.02%			
4.99%	0.77%	1.24%	0.85%	0.38%	0.47%	0.39%
5.49%	0.22%	0.34%	0.24%	N/A		
5.99%	N/A	1.59%	0.28%	N/A	0.94%	0.14%
6.49%	N/A	0.26%	0.04%	N/A		
6.99%	1.14%	N/A	0.94%	0.31%		0.26%
7.49%	0.20%	N/A	0.16%	N/A		
7.99%	0.45%	N/A	0.37%	0.36%		0.31%
8.49%	0.03%	N/A	0.02%	N/A		
* Average Loan Amount for borrowers with Assisted Home Performance projects is \$7,211.						
NOTE: Black fill for a particular interest rate denotes that rate is not available for that loan type and/or tier.						

Table 5-4 continued

Default Analysis								
Smart Energy				120+ Days Past Due	On-Bill Recovery			
Tier 1		Tier 2			Tier 1		Tier 2	
172	\$1,503,404	76	\$658,844		109	\$1,241,679	42	\$513,364
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	1,301	461	\$5,736,730	555	\$6,864,460	36.4%		
Consolidated Edison	2,313	827	\$12,171,326	1110	\$15,543,021	6.5%		
Long Island Power Authority	7,640	3,736	\$60,578,174	4,593	\$70,416,049	82.1%		
National Grid	3,894	924	\$9,558,041	1228	\$12,824,452	14.6%		
New York State Electric & Gas Corp.	2,076	659	\$7,546,905	787	\$8,978,643	16.8%		
Orange & Rockland Utilities	805	335	\$4,148,070	422	\$5,114,727	37.6%		
Rochester Gas & Electric	487	87	\$733,686	115	\$1,020,415	5.7%		
TOTAL	18,516	7,029	\$100,472,932	8,810	\$120,761,768	21.8%		
* A 0.5% 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% cap.								

5.5 Budget, Goals, and Metrics

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

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

Component	Budget	Expended	Encumbered	Committed	Balance
Energy Assessments	\$26,876,677	\$25,778,190	\$0	\$267,998	\$830,489
Assessment Implementation and Quality Assurance	1,000,000	1,000,000	0	0	0
Financing					
Loans	112,201,564	95,618,669*	218,000	23,987,500	(\$23,687,906)
Implementation		15,624,983	390,318	50,000	
TOTAL	\$140,078,241	\$138,021,842	\$608,318	\$24,305,500 ^a	(\$22,857,417)
<p>* Loan Expended amount is net of loan repayments made through reporting period and includes bond proceeds, less bond issuance cost. 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> <p>^a Due to conventional rounding, the Committed difference on the Budget Table (5-5) and Contracts Table (5-7) is \$2.</p> <p>NOTE: The table includes certain loans issued, but where proceeds from bonds to finance the pledged loans is received subsequently. The table also includes pre-encumbrances for approved loans not yet issued. Finally, certain additional funds are allocated in the FY16-17 RGGI Operating Plan and will be transferred to GJGNY. These are not yet reflected in the budgeted funds shown in this table.</p>					

Table 5-6. One- to Four-Family Residential Buildings Goals and Metrics

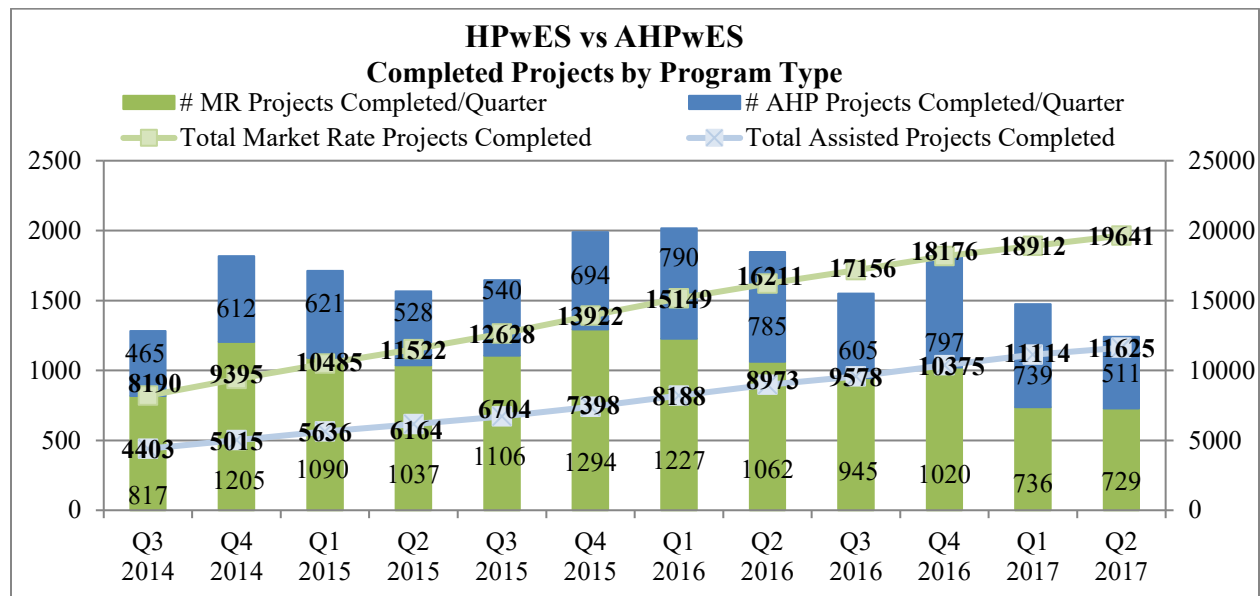
Metric	Market Rate	Affordable	Total	Goals	Progress Toward Goals
Assessment Applications (number)			152,275		
Assessments Complete (number)			112,095	100,000	112%
Projects Contracted (units)			35,254		
Projects Completed (units)	22,152	12,094	34,246	34,200	100%
1st Year Net KWh Savings (installed)	9,717,757	6,313,760	16,031,517		
1st Year Net MMBtu Savings (installed)	769,297	405,441	1,174,738		
Estimated Annual Bill Savings (installed)	\$18,132,067	\$8,784,150	\$26,916,217		
Estimated Annual KWh Savings/unit (installed) ^a	439	522	468	688	68%
Estimated Annual MMBtu Savings/unit (installed) ^a	35	34	34	31	111%
Estimated Annual Dollar Savings/unit (installed) ^a	\$819	\$726	\$786	\$675	116%
Loans Issued/Closed (#) ^b	9,126	4,769	13,895		
Value of Loans ^c	\$100,077,293	\$34,336,855	\$134,414,148		
<p>^a 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>^b The amount shown here is the total number of energy efficiency loans; loans for renewable energy systems are not included</p> <p>^c The amount shown here is the total value of energy efficiency loans closed as of June 30, 2017, which includes loans not yet invoiced as of June 30, 2017.</p>					

Since program launch, 33,192 projects associated with a GJGNY assessment or loan have been completed representing a total of 33,856 individual housing units. An additional 12,309 projects were completed during this period without the benefit of a GJGNY assessment or loan, which may represent households not eligible for a free or reduced-cost assessment and/or chose not to use program financing. The number also represents projects that were initiated prior to, but completed on or after, November 2010. In addition, 4,766 projects have been completed through the Low-Rise Program. Since September 2011, 75% of the completed HPwES projects originated from a GJGNY assessment.

Figure 5-4 illustrates an increase in Assisted HPwES project completions over time with 465 Assisted HPwES completions for the third quarter 2013 compared to 511 for the second quarter of 2017, with increases in the annual completions each year. Assisted HPwES has also grown as a percentage of total project completions. Whereas Assisted HPwES projects accounted for only 17% of total projection completions in the fourth quarter of 2010 (at the launch of GJGNY), Assisted HPwES projects accounted for 41% of project completions in the second quarter of 2017, and 37% of total project completions since GJGNY program launch. The increase may be attributed to a number of factors including free assessments, availability of GJGNY financing, CBO and contractor outreach, and an improved economy compared to 2010.

The original allocation of GJGNY funding to support residential audits was fully committed in 2016. Audits are now primarily supported through CEF. However, beginning in Q1 2017, because LIPA customers do not pay into the System Benefits Charge which is the source of funds for the CEF, most projects in Nassau and Suffolk counties are served through PSEGLI's Programs, funded in part by RGGI funds through a Memorandum of Understanding between NYSERDA and LIPA. In 2016, Nassau and Suffolk counties accounted for approximately 14% of the work completed through HPwES. This shift is expected to result in fewer NYSERDA project completions in 2017 than in recent years, although PSEGLI customers may still take advantage of GJGNY financing for eligible projects meeting cost-effectiveness criteria.

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



5.6 One- to Four-Family Residential Contracts

External contracts related to the implementation of the GJGNY Program in the residential sector are detailed in Table 5-7.

Table 5-7. One- to Four-Family Residential Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
AGGREGATED ENERGY ASSESSMENTS			N/A	\$25,778,190	\$0	\$267,998
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	Outside 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	\$245,905,181	\$0	\$23,987,500
Bond Proceeds	Various	Bond proceeds		(136,092,454)		
Aggregated Loan Repayments	Various	Loan Repayments	N/A	(17,759,933)	\$0	\$0
NET AGGREGATED LOAN ACTIVITY			N/A	\$92,052,794	\$0	\$23,987,500
Bond Issuance Costs						
PO- 35984	Fulbright & Jaworski LLP	Bond Counsel Services	\$29,549	\$29,549	\$0	\$0
PO- 93881	Bergmann Associates	Stamped EFS Engineering Report for FY16-17 Bonds	\$5,900	\$5,900	\$0	\$0

Table 5-7 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Bond Issuance Costs						
PO- 72571	Bank of New York	Trustee Services for 2013A Bonds	\$57,000	\$12,000	\$45,000	\$0
PO- 100055	Bank of New York	GJGNY 2016 Bonds Trustee	\$62,000	\$8,000	\$54,000	\$0
PO- 75651	Bank of New York	GJGNY Bond Issue Costs 2015	\$62,000	\$8,000	\$54,000	\$0
PO- 110407	Kroll Bond Rating Agency Inc.	Bond Rating Services	\$65,000	\$0	\$65,000	\$0
PO- 98553	L&S Energy Services Inc.	EFC Bonding Requirements - Stmp Eng. Rpt	\$5,677	\$5,677	\$0	\$0
VC- 461023	NYS Environmental Facilities Corp.	Bond Issuance Costs	N/A	\$574,102	\$0	\$0
VC- 469699	Hinckley Allen & Snyder LLP	Bond Issuance Costs	N/A	\$3,000	\$0	\$0
N/A	N/A	Bond issuance costs and fees	N/A	\$2,919,646	\$0	\$0
TOTAL BOND ISSUANCE COSTS			\$287,126	\$3,565,875	\$218,000	\$0
Financing Implementation						
Various	Concord Servicing Corporation	RES Master Loan Servicer for GJGNY	N/A	\$2,936,181	\$0	\$0
Various	Wisconsin Energy Conservation Corp dba EFS	Origination Fees	N/A	\$3,976,986	\$0	\$0
		LIPA Fees	N/A	\$14,500	\$0	\$0
		EFS Advance	N/A	\$3,000,000	\$0	\$0
		Ramp-up / Development costs for GJGNY & OBR programs	N/A	\$100,079	\$0	\$0

Table 5-7 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
OBR Billing Agreements, no PO#	Central Hudson Gas & Electric	Utility Fees for OBR Loans	N/A	\$103,815	\$0	\$0
	Consolidated Edison			\$204,378	\$0	\$0
	LIPA			\$968,811	\$0	\$0
	Niagara Mohawk dba National Grid			\$187,171	\$0	\$0
	NYSEG			\$140,877	\$0	\$0
	Orange & Rockland Utilities			\$73,974	\$0	\$0
	Rochester Gas & Electric			\$15,877	\$0	\$0
PO-35421	First Associates Loan Servicing	Backup Loan Servicer for GJGNY Loan Program	\$166,500	\$124,950	\$41,551	\$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	\$26,670	\$26,670	\$0	\$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	\$333,333	\$330,471	\$2,863	\$0
PO- 38299	Frontier Abstract & Research Services	OBR Last Owner Searches & Recording Services	\$333,332	\$330,159	\$3,173	\$0
PO- 37723	Stewart Title Insurance Company	OBR Last Owner Searches & Recording Services	\$333,332	\$330,296	\$3,037	\$0

Table 5-7 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
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		\$876,715	\$0	\$0
	Frontier Abstract and Research Services	OBR Last Owner Searches & Recording Services		\$332,602	\$0	\$0
	Stewart Title Insurance Company	OBR Last Owner Searches & Recording Services		\$272,489	\$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	\$313,998	\$313,998	\$0	\$0
PO- 19923	Lamont Financial Services Corporation	Financial Advisor Services	\$327,050	\$326,064	\$986	\$50,000
PO- 19923-1	Lamont Financial Services Corporation	Financial Advisor Services	\$17,037	\$17,037	\$0	\$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	Outside Counsel	\$125,000	\$125,000	\$0	\$0

Table 5-7 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Financing Implementation						
PO- 33119	NetRoadshow, Inc.	Establishment of portal communication between NYSERDA and bond rating agency	\$5,000	\$5,000	\$0	\$0
PO- 72032	Bank of New York	Trustee Services for 2014A Notes	\$5,000	\$5,000	\$0	\$0
PO- 73313	Kroll Bond Rating Agency Inc.	Bond Rating Services	\$12,500	\$12,500	\$0	\$0
PO- 80732	Dentons US LLP	Bond Counsel Services	\$13,000	\$12,917	\$83	\$0
PO- 103102	Omnicap Group LLC	GJGNY Financial Advisory Services	\$375,000	\$36,375	\$338,625	\$0
Various	Various	Death Certificates	N/A	\$100	\$0	\$0
Various	New York State Attorney General	Fees for services	N/A	\$2,935	\$0	\$0
TOTAL FINANCING IMPLMENTATION			\$2,742,862	\$15,624,982	\$390,318	\$50,000
GRAND TOTAL			\$4,029,988	\$138,021,841	\$608,318	\$24,305,498
<p>Aggregated Loan Repayment Expended amount is net of loan repayments made through reporting period and includes bond proceeds. NOTE: Financing implementation contract funding amounts listed in Table 5-8 represent the prorated share of costs for the One- to Four-Family sector. GJGNY program-wide contract funding amounts are provided in Table 3-3.</p>						

6 Multifamily Performance Program

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 the State. NYSERDA's programs facilitate assessments, funding, and implementation of energy efficiency upgrades that improve building performance and save money. Implementation of the 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.¹⁶ The programs identify and target those potential participants¹⁷ who are committed to the implementation of energy-related improvements. As part of GJGNY marketing and outreach efforts, provisions have been made to encourage referrals from CBOs.

6.2 Implementation Approach

Through NYSERDA's Multifamily Performance Program (MPP), NYSERDA provides co-funding for comprehensive energy assessments and the development of a SAV-IT.¹⁸ The availability of GJGNY co-funded assessments began in September 2010, and GJGNY financing for the implementation of energy improvements in multifamily buildings launched in June 2011. MPP is a comprehensive program that serves LMI 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 MPP Providers and must be hired by MPP participants to complete specific building performance services, such as those outlined in the SAV-IT.

¹⁶ 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.

¹⁷ 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.

¹⁸ SAV-IT identifies the set of cost-effective energy-related improvements to be installed and provides information necessary to guide installation of those measures. The SAV-IT 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-related services as a seamless part of the MPP process, regardless of whether participants intend to access MPP 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.

NYSERDA continues to look for areas of improvement for programs. For example, work done by NYSERDA's multifamily team to expedite the contracting process, 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 NYSERDA Incentives

Co-funding of the energy assessment(s) and development of SAV-IT is offered to affordable buildings through the MPP. To be eligible as an affordable housing project, the applicant must document at least 25% of the residential dwelling units are occupied by families earning no more than 80% of the State or county median income, whichever is higher. NYSERDA allows reliance upon certain proxies to document compliance with this definition. Those proxies are specified in MPP documentation and currently 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 (HUD).

The co-funding amounts offered for completion of the assessments are included as part of the MPP incentive and are listed in Table 6-1. One SAV-IT is developed per project; however, a single project may include multiple buildings. The participant must use an MPP Provider to complete the assessment.

NYSERDA's MPP incentives are calculated based on the number of units in a building. The incentive payments are structured to support the installation of eligible measures outlined within the SAV-IT. Incentives are subject to funding availability from the Clean Energy Fund. Incentives are available for projects predicted to achieve the 20% energy reduction threshold. Additional performance payments may apply in the case of eligible projects predicting and achieving savings above the 20% energy reduction threshold. Incentives are paid at specified stages of a project's completion and amounts are detailed in Table 6-1.

Table 6-1. Multifamily Energy Performance Incentive Schedule

Projected Energy Savings Target	Total Incentive (per unit)	Program Payment	Performance Payment
20%-24%	\$700	\$600	\$100
25%-29%	\$800	\$700	\$100
30% - 34%	\$1,000	\$800	\$200
35%+	\$1,500	\$1,000	\$500

6.4 Financing

NYSERDA launched the GJGNY Multifamily Financing Program in June 2011, available to multifamily building owners with an approved assessment. Building owners may work with a commercial lender of their choice; NYSERDA contracts directly with the lender. NYSERDA provides 50% of the loan principal to support the improvements contained in the pre-approval document at 2% interest, not to exceed \$5,000 per apartment or \$500,000 per building. The lender provides the remaining principal of the loan at market rate, 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 program, State lenders are able to offer blended interest rates at below market rate. As of June 30, 2017, there were 19 loans with an outstanding balance of \$1,369,252.

6.5 Coordination with Other Program Administrators

NYSERDA coordinates with the NYS Homes and Community Renewal's WAP, NYC Housing Preservation and Development (HPD), 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 MPP, the owner may elect to take part 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 MPP standards. Although GJGNY loans may be combined with either NYSERDA or utility incentives, these 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.

6.6 Budget, Goals, and Metrics

Tables 6-2 and 6-3 describe the MPP budget and goals and metrics, respectively.

Table 6-2. Multifamily Performance Program Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Energy Assessments	\$3,311,255	\$3,117,755	\$179,820	\$0	\$13,680
Implementation and Quality Assurance	1,400,000	1,400,000		0	0
Financing					0
Loans	3,545,096	1,367,901		0	2,177,195
Implementation	277,420	149,215	156,906	0	(28,701)
TOTAL	\$8,533,771	\$6,034,871	\$336,726	\$0	\$2,162,174
<p>* Loan Expended amount is net of loan repayments made through reporting period and includes bond proceeds, less bond issuance cost.</p> <ul style="list-style-type: none"> • 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 6-3. Multifamily Energy Performance Portfolio 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	189	324	400	81%
Projects Contracted (units)	135	189	324	500	65%
1st Year Net KWh Savings (committed) *	15,859,969	38,042,070	53,902,039		
1st Year Net MMBtu Savings (committed) *	349,694	473,261	822,955		
Estimated Annual Bill Savings (committed) *	14,984,724	20,279,661	35,264,385		
Projects with Installed measures (units)	17,024	20,563	37,587		
1st Year Net KWh Savings (installed) *	12,376,367	32,470,199	44,846,566		
1st Year Net MMBtu Savings (installed) *	277,436	360,673	638,109		
Estimated Annual Bill Savings (installed) *	11,888,401	15,455,166.63	27,343,568		
Estimated Annual KWh Savings/unit (installed)	727	1,579	2,306		
Estimated Annual MMBtu Savings/unit (installed)	16	18	34		
Estimated Annual Dollar Savings/unit (installed)	\$698	\$752	\$1,450		
Loans Issued (number)				23	
Value of Loans				\$12,099,797.00	
<p>* 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.</p>					

6.7 Multifamily Energy Performance Portfolio Contracts

External contracts related to the implementation of the GJGNY Program in the multifamily sector are detailed in Table 6-4.

Table 6-4. Multifamily Energy Performance Portfolio Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
AGGREGATED ENERGY ASSESSMENTS			\$3,252,490	\$3,072,670	\$179,820	\$0
Assessment Implementation and Quality Assurance						
PO-18649	TRC	Implementation	1,233,514	1,233,514		0
PO-ST9941	Taitem	Quality Assurance	152,551	152,551	0	0
PO-ST9941-1	Taitem	Quality Assurance	13,935	13,935	0	0
TOTAL ASSESSMENT IMPLEMENTATION AND QUALITY ASSURANCE			\$1,400,000	\$1,400,000	\$0	\$0
Loan Activity						
Aggregated Loans Issued			3,859,897	\$3,859,897	0	0
Aggregated Loan Repayments					(2,491,996)	0
NET AGGREGATED LOAN ACTIVITY			\$3,859,897	\$3,859,897	(\$2,491,996)	\$0
PO-18591	Hawkins Delafield & Wood	Legal financial services	81,858	81,858	0	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	150,144	3,271	146,873	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		3,333	0
PO-60714A	Dentons US LLP	Bond Counsel Services	5,200	5,167	33	0
TOTAL FINANCING IMPLMENTATION			\$306,122	\$149,215	\$156,906	\$0
GRAND TOTAL			\$8,818,509	\$8,481,782	\$336,726	\$0

7 Small Commercial/Not-for-Profit Energy Efficiency Program

NYSERDA's Small Commercial/Not-for-Profit Energy Efficiency Program provides access to audits and financing to help small businesses and not-for-profit organizations improve their efficiency and reduce energy costs. The first financing option is OBR, which makes it possible for small businesses and not-for-profits to use the savings on their energy bills to pay for their energy efficiency upgrades. The second financing option is the Participation Loan, where NYSERDA partners with lenders across the 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

As previously noted, the target audience for the program is small businesses and not-for-profit organizations within State boundaries. Energy audits are the technical assistance portion of this program offering. The energy audit program component is available to small businesses and not-for-profit customers with 10 employees or fewer and an average annual electric demand of less than 100 kW.

In June 2011, NYSERDA began offering Participation Loans to small businesses with 100 employees or fewer and to not-for-profits with any number of employees that have Qualified Energy Assessments.¹⁹ Small businesses and not-for-profits must own, lease, or manage the building the organization uses or

¹⁹ Qualified Energy Assessments include either 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 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/not-for-profit energy assessments.

occupies and must have the authority to contract for the provision of Qualified Energy Efficiency Services²⁰ to the building. If the organization leases or manages all or part of a building, it must obtain permission from the building owner to seek energy efficiency financing through this program offering.

In June 2012, the program began offering 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 Approach

The GJGNY Small Commercial/Not-for-Profit Energy Efficiency Program stopped accepting applications for free energy assessments on December 31, 2016, and wrapped up all related program activities in the first quarter of 2017. Energy audits continue to be available from NYSERDA on a cost-shared basis via NYSERDA's FlexTech program. Additionally, NYSERDA is reviewing ways to provide recommended measure lists for specific building types that will include cost and payback information enabling customers to make informed decisions about common clean energy upgrades.

NYSERDA continues to allow eligible small business and not-for-profit customers to provide reports generated as part of the Qualified Energy Assessments provided by a NYSERDA energy assessment program, utility service provider, or other third-party as the basis of an application for financing, provided the assessment met NYSERDA's standards.²¹ 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.

²⁰ 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 technical report completed by a third party. 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).

²¹ Visit nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Small-Business/Energy-Assessment-Standards.pdf to view NYSERDA's Standards for Small Commercial/Not-for-Profit Energy Assessments found in the NYSERDA Small Commercial/Not-for-Profit Energy Efficiency Program Energy Assessment and Request for Financing Package.

In February 2012, NYSERDA launched a project expeditor pilot to provide assistance to small business and not-for-profits who obtained assessments through GJGNY to encourage implementation of energy assessment recommendations. The project expeditors followed up with customers who received energy assessments to determine eligibility and assist in applications for incentives or energy efficiency financing. Expeditors also verified that technologies and services included in energy project proposals were consistent with the recommendations in the Qualified Energy Assessments and provided additional technical assistance as necessary.

Expeditor pilot results demonstrated that small business and not-for-profits could benefit from dedicated project implementation assistance, including identifying and accessing incentives and low-interest energy efficiency financing to help lower the cost of implementing recommended energy efficiency improvements. As a result, NYSERDA added dedicated implementation assistance to the Small Commercial/Not-for-Profit Energy Efficiency Program. Qualified Energy Consultants, selected through Technical Review and Program Support Contractors Request for Proposals (RFP 2621), provided energy assessments, explained assessment recommendations and the business case for implementing efficiency measures, and assisted customers with applying for any available incentives or low-interest financing. NYSERDA anticipated that providing energy assessments integrated with dedicated assistance would help more customers implement energy efficiency improvements in their buildings.

The Small Commercial Expeditor Program resulted in a total of 79 NYSERDA-approved participation loan applications and 58 NYSERDA-approved OBR Loan applications. As of February 28, 2017, 14 participation loans were closed at an aggregate of \$845,844 in financing, and 23 OBR Loans closed, totaling \$646,508. These energy efficiency loans are included in the loan totals provided in Section 7.3.

7.3 Financing

NYSERDA contracts with lenders who wish to provide low-interest energy efficiency financing to small business and not-for-profit customers through Participation and OBR Loans. Lenders are required to follow NYSERDA's underwriting criteria²² when originating loans.

²² Criteria include, but are not limited to, organization in existence for at least two years, credit score of 650 or higher, no bankruptcies within the last five years; no current judgments or liens in excess of \$5,000, debt service coverage ratio > 1.2. These criteria are subject to change.

Eligible small business and not-for-profit customers are allowed to finance the installation of energy efficiency upgrades, the purchase of solar electric systems under 200 kW, as approved under NYSERDA's NY-Sun Incentive Program, and the purchase of solar thermal systems, pellet stoves and advanced cord wood boilers as approved under NYSERDA's Renewable Heat NY Program through lenders participating in either the Participation Loan or OBR Loan product.

7.3.1 Participation Loans

Through Participation Loans, NYSERDA provides 50% of the loan principal, up to \$50,000 at a 2% interest rate for no more than 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, 2017, 28 Participation Loans have been closed with a total value of \$1,877,489. These include 15 energy efficiency loans totaling \$848,311 and 13 solar electric loans totaling \$1,029,178.

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% 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 fee for each OBR Loan they originate on NYSERDA's behalf, though lenders are 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, 2017, 37 OBR Loans have been closed with a total loan value of \$1,170,748. This consisted of 28 energy efficiency loans totaling \$866,319, and nine solar electric loans totaling \$304,429.

7.4 Program Outreach Efforts

7.4.1 Coordination with Other Program Administrators

NYSERDA's Small Commercial/Not-for-Profit 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 through GJGNY. The energy assessment, however, must meet NYSERDA's standards for small commercial/not-for-profit energy assessments found in the NYSERDA Small Commercial/Not-for-Profit Energy Efficiency Program Energy Assessment and Request for Financing Package.²³ 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 not covered by incentives.

7.4.2 Coordination with CBOs

NYSERDA is coordinating with 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 OBR 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/Not-for-Profit Energy Efficiency budget and Table 7-2 describes the goals and metrics. Reallocations within the Small Commercial/Not-for-Profit Energy Efficiency budget will be accomplished in the coming months to ensure funds are available where needed most.

²³ Visit nyserdera.ny.gov/-/media/Files/EERP/GJGNY/Small-Business/Energy-Assessment-Standards.pdf to view the NYSERDA Small Commercial/Not-for-Profit Energy Efficiency Program Energy Assessment and Request for Financing Package.

Table 7-1. Small Commercial/Not-for-Profit Energy Efficiency Program Budget

Component	Budget	Expended*	Encumbered	Committed	Balance
Energy Assessments	\$8,623,091	\$7,049,396	\$0	\$0	\$1,573,695
Implementation and Quality Assurance	1,037,821	872,929	9,531	0	\$155,361
Financing					\$0
Loans	3,803,235	1,617,054	0	556,728	\$1,629,453
Implementation	280,000	258,398	269,415	0	(\$247,813)
TOTAL	\$13,744,147	\$9,797,777	\$278,946	\$556,728	\$3,110,696

* Loan Expended amount is net of loan repayments made through reporting period and includes bond proceeds, less bond issuance cost.

- 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/Not-for-Profit Energy Efficiency Program Goals and Metrics

Metric	Performance to Date	Goals
Assessment Applications Received (number)	3,574	
Assessments Complete (number)	3,367	2,100
Estimated Projects Completed (number) ^{a,c}	1,481	1,296
1st Year Net KWh Savings (assessment recommended) ^b	48,902,436	
1st Year Net KWh Savings (estimated installed) ^c	21,524,992	
1st Year Net MMBtu Savings (assessment recommended)	551,932	
1st Year Net MMBtu Savings (estimated installed) ^c	242,850	
Estimated Annual Bill Savings (assessment recommended)	\$15,329,330	
Estimated Annual Bill Savings (estimated installed) ^c	\$2,744,905	
Estimated Annual KWh Savings/project	32,672	18,000 kWh per year / completed project
Estimated Annual MMBtu Savings/project	369	160 MMBTU per year / completed project
Estimated Annual Dollar Savings/project	\$10,238	\$5,200 per year / completed project
Loans Issued (number)	65	
Value of Loans ^d	\$3,151,377	
<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 The 2015 Small Commercial/Not-for-Profit Energy Efficiency Program Impact Evaluation found that 44% of the energy savings recommended through program audits were reported to be implemented.</p> <p>^d The total loan value represents the value issued by the lender to the borrower and may include financing for non-energy efficiency projects. NYSERDA's share of the total loan value represents 50% of the total energy efficiency project cost or \$50,000, whichever is less.</p>		

7.6 Small Commercial/Not-for-Profit Energy Efficiency Contracts

External contracts related to the implementation of the GJGNY Program in the small commercial and not-for-profit sectors are detailed in Table 7-3.

Table 7-3. Small Commercial/Not-for-Profit Energy Efficiency Program Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
PO40827	The Daylight Savings Company	Energy Assessment Provider	\$757,008	\$757,008	\$0	\$0
PO40829	GDS Associates, Inc.	Energy Assessment Provider	985,499	985,499	0	0
PO40830	L&S Energy Services, Inc.	Energy Assessment Provider	1,117,945	1,117,945	0	0
PO41849	TRC Environmental Corp.	Energy Assessment Provider	1,098,212	1,098,212	0	0
PO- ST9848-1	C.J. Brown Energy P.C.	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	The Daylight Savings Company	Energy Assessment Provider	1,500,485	1,538,405	0	0
PO- ST9851-1	EME Consulting Engineering Group LLC	Energy Assessment Provider	518,676	518,676	0	0
TOTAL ENERGY ASSESSMENTS			\$7,011,476	\$7,049,396	\$0	\$0
Assessment Implementation and Quality Assurance						
PO40827	The Daylight Savings Company	Expeditor Services	\$81,069	\$81,069	\$0	\$0
PO40829	GDS Associates, Inc.	Expeditor Services	105,538	105,538	0	0
PO40830	L&S Energy Services, Inc.	Expeditor Services	119,722	119,722	0	0
PO41849	TRC Environmental Corp.	Expeditor Services	91,474	91,474	0	0
PO- 0000024210	Kema Services Inc.	Program Support Services	49,857	49,857	0	0
PO- 0000027052	Novus Engineering P.C.	Expeditor Pilot	49,176	49,176	0	0
PO- 0000027661	Nexant Inc.	Expeditor Pilot	44,593	44,593	0	0
PO- 0000027726	Taitem Engineering P.C.	Expeditor Pilot	50,000	50,000	0	0
PO- 0000030679	Kema Services Inc.	Program Support Services	47,642	47,642	0	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
PO-0000032825	Taitem Engineering P.C.	Expeditor Pilot	74,331	74,331	0	0
PO-0000032865	Aramark Management Srvc Ltd Prtnshp	Program Support Services	65,000	65,000	0	0
PO-0000033565	LaBella Associates P.C.	Quality Assurance Services	1,737	1,737	0	0
PO-0000033570	TRC Companies Inc.	Quality Assurance Services	2,699	2,699	0	0
PO-0000037428	Blue Springs Energy LLC	Program Support Services	50,000	50,000	0	0
PO-0000055032	LaBella Associates P.C.	Program Support Services	24,640	23,062	1,578	0
PO-0000056337	Taitem Engineering P.C.	Program Support Services	24,982	17,029	7,953	0
TOTAL ASSESSMENT IMPLEMENTATION AND QUALITY ASSURANCE			\$882,460	\$872,929	\$9,531	\$0
Loan Activity						
Aggregated Loans Issued	Various	Loans Issued	NA	\$2,073,020	\$0	\$0
Aggregated Loan Repayments	Various	Loans Payment	NA	(455,966)		
NET AGGREGATED TOTAL LOAN ACTIVITY				\$1,617,054	\$0	\$0
Financing Implementation						
PO- 18591	Hawkins Delafield & Wood	Legal/Program Design	\$122,787	\$122,787	\$0	\$0
PO- 19923	Lamont Financial Services Corp	Legal/Program Design	84,630	84,630	0	0
PO- 20662	Earthsponse, LLC	PV Development	3,750	3,750	0	0
PO- 25910	Concord Servicing Corp	Loan Servicer	240,000	6,207	234,178	0
PO- 36864	Advantage Title Agency Co	Legal- Title	13,333	1,925	11,408	0
PO- 37723	Stewart Title Insurance Co	Legal- Title	13,333	1,715	11,619	0
PO- 38299	Frontier Abstract and Research Services	Legal- Title	13,333	1,173	12,160	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
PO- 80732	Dentons US, LLP	Bond Counsel Services	7,800	7,750	50	0
VC- 305913	Community Development Corporation of Lon	Origination Fee	0	300	0	0
VC- 298768	LIPA	Utility Remittance	0	233	0	0
VC- 487544	LIPA	Utility Remittance	0	300	0	0
VC-567989	LIPA	Utility Remittance	0	550	0	0
VC-592876	LIPA	Utility Remittance	0	386	0	0
VC-610426	LIPA	Utility Remittance	0	329	0	0
VC- 490159	Pathstone Enterprise Center Inc	Origination Fee	0	1,277	0	0
VC- 475242	Pathstone Enterprise Center Inc	Origination Fee	0	800	0	0
VC- 475244	Pathstone Enterprise Center Inc	Origination Fee	0	800	0	0
VC-339219	Pathstone Enterprise Center Inc	Origination Fee	0	300	0	0
VC- 490163	Pathstone Enterprise Center Inc	Origination Fee	0	800	0	0
VC- 343904	Niagara Mohawk	Utility Remittance	0	600	0	0
VC- 461839	Niagara Mohawk	Utility Remittance	0	391	0	0
VC- 504587	Niagara Mohawk	Utility Remittance	0	317	0	0
VC- 513001	Niagara Mohawk	Utility Remittance	0	222	0	0
VC-585880	Niagara Mohawk	Utility Remittance	0	404	0	0
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

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
VC-529377	New York Business Development Corp	Origination Fee	0	300	0	0
VC-544321	New York Business Development Corp	Origination Fee	0	300	0	0
VC-597423	New York Business Development Corp	Origination Fee	0	750	0	0
VC- 416980	New York Business Development Corp	Origination Fee	0	300	0	0
VC- 537088	New York Business Development Corp	Origination Fee	0	300	0	0
VC- 409423	Community Loan Fund of the Capital District	Origination Fee	0	300	0	0
VC-620958	BOC Capital Corp	Origination Fee	0	1,000	0	0
VC- 416714	BOC Capital Corp	Origination Fee	0	300	0	0
VC-581123	BOC Capital Corp	Origination Fee	0	572	0	0
VC-581126	BOC Capital Corp	Origination Fee	0	1,000	0	0
VC-588273	BOC Capital Corp	Origination Fee	0	632	0	0
VC-598333	BOC Capital Corp	Origination Fee	0	979	0	0
VC-602281	BOC Capital Corp	Origination Fee	0	795	0	0
VC-608867	BOC Capital Corp	Origination Fee	0	500	0	0
VC-610558	BOC Capital Corp	Origination Fee	0	879	0	0
VC-616548	BOC Capital Corp	Origination Fee	0	1,000	0	0
VC-594783	BOC Capital Corp	Origination Fee	0	500	0	0
VC- 417069	The Canandaigua National Bank and Trust	Origination Fee	0	300	0	0
VC- 461838	Central Hudson Gas and Electric	Utility Remittance	0	392	0	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
VC- 404265	Central Hudson Gas and Electric	Utility Remittance	0	446	0	0
VC-562679	Central Hudson Gas and Electric	Utility Remittance	0	336	0	0
VC-605157	Central Hudson Gas and Electric	Utility Remittance	0	600	0	0
VC- 476686	NYSEG	Utility Remittance	0	460	0	0
VC-559427	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	225	0	0
VC- 502485	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC- 512203	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-479087	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-485720	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-588272	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-595788	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-613399	Brooklyn Cooperative Federal Credit Union	Origination Fee	0	300	0	0
VC-515889	Brooklyn Cooperative Federal Credit Union	Origination Fee Reversal	0	(300)	0	0

Table 7-3 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
Energy Assessments						
VC-519675	Brooklyn Cooperative Federal Credit Union	Origination Fee Reversal	0	(300)	0	0
VC-568643	Barrett Capital Corp	Origination Fee	0	1,390		
VC- 553526	Barrett Capital Corp	Origination Fee	0	788	0	0
VC-493605	Barrett Capital Corp	Origination Fee	0	1,400	0	0
VC-579120	Barrett Capital Corp	Origination Fee	0	1,044	0	0
VC- 531495	Consolidated Edison	Utility Remittance	0	1,143	0	0
VC-556184	Consolidated Edison	Utility Remittance	0	603	0	0
VC-592875	Consolidated Edison	Utility Remittance	0	244	0	0
VC-610425	Consolidated Edison	Utility Remittance	0	317	0	0
JL - 15192	Frontier Abstract and Research Services	Reclassification: Refund	0	(280)	0	0
JL - 15760	Frontier Abstract and Research Services	Reclassification: Refund	0	(1,462)	0	0
Small Commercial/Not-for-Profit Pipeline			0	0	0	556,728
TOTAL FINANCING IMPLEMENTATION			\$498,966	\$258,398	\$269,415	\$556,728
GRAND TOTAL			\$8,392,902	\$9,797,777	\$278,946	\$556,728

8 Outreach and Marketing

GJGNY provides for community-based outreach, enabling one-to-one assistance with the process of obtaining energy services. Combined with statewide marketing, this approach is expected to increase the reach of the program in a more targeted manner. Although one-to-one assistance is generally a more expensive form of outreach, it includes households with limited incomes who otherwise might not participate to permanently reduce energy bills and assists with improving health, comfort, and home safety.

8.1 Outreach through Constituency-Based Organizations

The GJGNY program provides outreach services in targeted communities through CBOs that locate residents, businesses, nonprofits, multifamily building owners, and potential workforce participants. CBOs encourage participation in energy efficiency programs, facilitate awareness of workforce training opportunities available within the community, and assist with enrollment and participation in those efforts. In addition, they coordinate GJGNY program activities with other energy or home improvement-related initiatives within their communities. As of June 30, 2017, 11 competitively solicited CBOs are currently under contract to assist with the program. Table 8-1 lists the CBOs currently working in the program, the sectors targeted, and indicates whether they also have workforce or aggregation components.

Table 8-1. CBOs Currently Working in the Program

Target Region	CBO Name	Outreach Activity				Aggregation
		One- to Four-Family Residential Buildings	Multifamily Energy Performance	Small Commercial/Not-for-Profit Energy Efficiency	Workforce Training and Development	
Bronx	Sustainable South Bronx (SSBx)	X	X	X	X	
Richmond	Neighborhood Housing Services of Staten Island (NHSSI)	X				
Kings	El Puente	X	X	X		X
Queens	Neighborhood Housing Services of Jamaica (NHSJ)	X				
Capital	Affordable Housing Partnership of the Capital Region (AHP)	X				
Finger Lakes	PathStone	X				X
Nassau & Suffolk	Long Island Progressive Coalition (LIPC)	X		X		X
Mid-Hudson and Westchester	Rural Ulster Preservation Corporation (RUPCO)	X	X	X		X
North Country	Adirondack North Country Association (ANCA)	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

As of June 30, 2017, 30% of the CBO inspired audits resulted in completed retrofits. These CBOs are leveraging other State, federal, and local funds to complete Home Performance work.

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 some CBOs winning the approval of local government and community leaders, serving to validate the program at the community level. While developing a network of productive partnerships, CBOs are reaching multifamily and small commercial markets in addition to their presence in the residential market. Unfortunately, for the program, the decline in fuel prices over the course of the year was instrumental in reducing energy bill savings in audit reports and limited the amount of interest generally in doing retrofit work.

Highlights CBO activities are as follows:

- New York City CBOs targeted multifamily and small commercial buildings. For example, Sustainable South Bronx reached out to Multifamily property owners with a portfolio of buildings. El Puente targeted the Housing Development Fund Corp. (HDFC) low-income buildings.
- As of January 2017, incentives for the HPwES Program in Long Island are now coming from PSEG LI. LIPC's PowerUp Communities staff worked to smooth the transition away from the NYSERDA funded HPwES program to the similar PSEGLI offerings.
- PathStone took initial steps toward creating its own aggregation pilot in coordination with the City of Rochester. The CBO arranged for its in-house workforce development counselors as well as the Office of Sustainability for the City of Rochester and the Rochester People's Climate Coalition to participate in this initiative. PathStone identified four participating HPwES contractors that expressed an interest in joining the aggregation pilot – with the CBO hoping to recruit additional firms. The CBO agreed to serve as the initial intake point for its rehabilitation and emergency repair grant program. PathStone is optimistic that a significant portion of these clients will be interested and eligible for the HPwES program. By May 2017, at least 35 applications for the program have been processed to date, assisting clients with grants for services not covered through the Assisted subsidy or for homeowners ineligible for HPwES loan products.

- ANCA partnered with a participating HPwES contractor in the region to perform follow-up services to all of the stalled or in-progress clients. ANCA planned for outreach activities to be conducted in libraries throughout the North Country, in the spring. Additionally, the CBO performed outreach workshops at a regional junior high school that resulted in nearly two dozen parents/households applying to NYSERDA energy efficiency programs. ANCA reached out to hundreds of businesses that worked with one of the CBO's staff members over the past decade and utilized NYSERDA's Small Commercial/Not-for-Profit Energy Audit program. The CBO is attempting to convert those commercial clients into new residential program customers. Staff anticipated that the positive experience with their commercial efficiency endeavors would increase the likelihood that individual homeowners will pursue residential work. ANCA was in direct communication with several local HPwES contractors to ensure follow-up was performed within three weeks of completed audits. The CBO expressed optimism that this strategy would pay dividends in terms of increasing the likelihood of clients pursuing retrofit work in the HPwES program.
- El Puente reached out to owners of commercial spaces such as local shopping centers to set up future tabling events in the community. Additionally, El Puente used several social media outreach campaigns to spread awareness of efficiency among its followers online. They also participated in the utility-designated Brooklyn/Queens energy target zone planning process by attending meetings to inform attendees about energy efficiency programs.
- PUSH Buffalo held outreach events throughout the greater Buffalo area, some of which piggybacked off Small Business Administration meetings and wellness fairs in Erie County. The CBO engaged several of its past clients, deemed program "ambassadors," to recruit them to host future outreach events that encourage friends and neighbors to participate in NYSERDA's energy efficiency offerings. PUSH was able to pre-screen approximately 24 homes earlier in the year, resulting in more than a dozen potential homeowners who may qualify. The CBO promoted small business efficiency at Buffalo State College and outreach for the Lackawanna Love Day. PUSH continued its Green Brewery tour, which provides program information in a casual pub setting.
- In the Mid-Hudson region, RUPCO continued to rely on its strong relationships with key partners including the local utility (Central Hudson Gas & Electric) as well as Energize NY and the Mid-Hudson EDGE program staff for leads. For example, through the Central Hudson Call center, customers who express concern about their high energy bills are asked to call RUPCO and apply for a NYSERDA home energy assessment. RUPCO also collaborates with CHGE programs and attends their events. RUPCO also made use of social media outreach, publishing posts regularly viewed by an average of a thousand constituents a month. These efforts, along with having a multilingual staff who can make presentations in various languages, helped the volume of leads and referrals generated to remain strong.
- In Queens, NHSJ via its subcontractor Chhava Community Development Corporation, held free daily tax assistance workshops and their attendees were informed of NYSERDA's energy efficiency offerings as well. They participated in the preliminary NYC Regional Economic Development Council (REDC) meetings to discuss how to spend the \$1,000,000 awarded to the community of Jamaica, won in the 2016 NYC REDC Neighborhood Revitalization Initiative (NRI) designation. Their efforts will include promoting energy efficiency to residents as part of the campaign, which will run beyond the current GJGNY CBO funding.

- In the Southern Tier region, PPEF concentrated outreach to populations in four of its seven counties through various media and tabling events. For example, the CBO staff tabled the Wildflower Festival in Hornell, at Sherburne Earth Fest 2017 in Sherburne, and at the 55th Annual General Clinton Canoe Regatta in Bainbridge. The CBO was able to utilize a local TV channel to place an ongoing public service announcement targeting residents of Deposit and Windsor; the broadcast ran regularly over a five-week timeframe.
- Some of the CBOs are either NeighborWorks agencies or recipients of grants from the Affordable Housing Corp., which they use to help their customers do the repair work necessary to enable or protect energy efficiency measures undertaken through HPwES. For example, NHS of Staten Island received \$800,000 to assist homeowner clients. NHS of Jamaica also received AHC funding (\$750,000), which was available throughout the five boroughs of NYC. Due to the high demand for grants, the CBOs still have customers, who already received audits, awaiting the next round of rehabilitation funding.
- NHS of Staten Island worked with Grid Alternatives (who implements a Solar program for low-income homeowners) in reaching out to clients with existing solar installations to explore undertaking energy efficiency retrofits.
- The NYC CBOs received referrals from the NYC Retrofit Accelerator (RA), a NYC initiative for which the GJGNY team was a contact for the City's (311) operators to refer residential customers. The CBOs participated in neighborhood events where the RA would bring multiple city programs together to table at events around the City.

In 2016, with NYSERDA transitioning to the CEF, the CBOs were kept abreast of changes and given new program contacts; those changes included learning about the new MPP.

The current GJGNY CBO contracts expire in July 2017. Building on lessons learned and considering the recommendations of the Community Outreach Working Group, NYSERDA will develop, launch, and execute a new outreach program that will seek proposals from local organizations to provide locally based engagement (energy awareness and education) services to drive energy efficiency and renewable energy deployment with a focus on LMI households and communities. The program will focus on connecting underserved communities across that State to these cost-saving opportunities. The solicitation will seek to award up to 10 contracts to organizations covering each of the State's economic development regions to provide these services.

8.1.1 Training and Implementation Contractor

Conservation Services Group was competitively selected as the GJGNY Training and Implementation Contractor (TIC). In 2015, the Group was purchased by CLEAResult and now goes by that name. The TIC provides structured training and support for the CBOs along with geographic coordination and support of CBO outreach programs, enabling communication across all regions. CLEAResult tracks CBO goals, assess and fulfills CBO needs, tracks progress of referrals made to GJGNY, and provides regular reporting of program activities and results to NYSERDA. CLEAResult's contract was extended to June 2017, along with the GJGNY CBOs, to continue offering oversight and reporting data to NYSERDA.

During the reporting year, CLEAResult accomplished the following:

- Facilitated ongoing bi-monthly webinar trainings for participating CBOs on program updates and changes.
- Provided continual reinforcement of outreach program procedures and protocols.
- Developed and delivered on-boarding training to new CBO staff assigned to GJGNY outreach to ensure procedural consistency.
- Hosted and maintained the CBO SharePoint Portal online communication tool, which provided assistance to CBOs with the tool as well as using NYSERDA's Comprehensive Residential Information System database and the NY HP Portal web-based communication tool.
- Sought resolution to customer concerns.
- Shared best practices and success stories among CBO groups.
- Assisted with outreach to PSEGLI to facilitate proper tracking of project completions that were facilitated by LIPC.

8.1.2 SharePoint Portal

To support the CBO outreach effort, the TIC established a SharePoint Portal that serves as a central communication tool and reporting mechanism for participating organizations. The site is password-protected and accessible to NYSERDA staff, CLEAResult, its subcontractor, Pratt Center for Community Development, and the GJGNY CBOs. The SharePoint Portal enables CBOs to access and download program information and materials, upload information such as reports and leads, and converse about the program and its deployment.

Program staff 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.

Although NYSERDA can view statistics on all CBOs, individual CBO groups previously had limited access via SharePoint to metrics for other organizations. Dashboard enhancements made in 2016 allow CBOs to view their progress as plotted in graphs that include all CBOs or all counties, whichever is relevant. This allows each CBO to judge its progress as compared with peers in other regions as well. The graph gallery illustrates CBO assisted retrofit projects by geography, Assisted Home Performance vs. market rate, month, and other criteria in order to comparatively assess productivity and program penetration. NYSERDA worked with CLEAResult to create these graphs for snapshot views of efforts and the results achieved in the various regions.

CLEAResult assisted CBOs with reporting and tracking leads, assessments, and retrofits in NYSERDA's Comprehensive Residential Information System (CRIS) system. They also assisted NYSERDA in creating a template for the Close-Out report required to be submitted by the CBOs at the end of June 2017. CLEAResult provided NYSERDA with all its reporting data since they will not be continuing as the program Implementation Contractor after July 2017.

8.1.3 CBO Training and Webinars

NYSERDA provides regular training via a series of webinars that provide CBOs with program updates, information on best practices, and other necessary information. During the reporting period, outreach and marketing staff and contractors conducted three CBO webinars and provided web links to relevant NYSERDA HPwES and MPP program trainings and conferences. All training presentations and materials were available on the CBO SharePoint Portal for review and as a refresher for staff.

Additionally, the TIC provides training through on-site meetings for new CBO staff, remote CBO staff training utilizing virtual meetings and conference calls, and a monthly in-person training meeting for the downstate region in NYC.

8.1.4 Aggregation

Aggregation is the process of grouping eligible homeowners who have agreed in advance to use the same contractor or 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 and discounted 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. Additionally, this process creates employment for local residents and complements ongoing market transformation efforts by expanding awareness, increasing education, and reaching populations not currently responding to programs.

Aggregation is actively being implemented by LIPC, PUSH, and PathStone. 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. In 2016, Pathstone participated in an aggregation project with other organizations in the Rochester area, specific to a particular LMI neighborhood.

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

As of June 30, 2017, the following HPwES contractors are active in the GJGNY Aggregation Pilot program:

- Long Island Region – Long Island Progressive Coalition (LIPC):
 - Green Audit USA
 - Home Performance Technologies, Inc.
 - Triple H Contracting, Inc.
- Western Region – People for Sustainable Housing (PUSH):
 - Ivy Lea Construction, Inc.
 - New Buffalo Impact, Inc.
- Finger Lakes Region – Pathstone
 - Wise Home Energy
 - Halco
 - Crossfield Home Energy Solutions
 - Taylor Home Energy
 - Airtight Services
 - Ryan Plumbing, Heating, Air Conditioning and Fire Protection
 - Neighborworks Rochester

Long Island Progressive Coalition (Long Island Region)

LIPC made changes to their aggregation approach in 2016 and started a new pilot program with religious institutions to retrofit the not-for-profit buildings and speak with their congregants about participating in the residential programs. LIPC conducted 25 energy audits through the Small Commercial/Not-for-Profit Audit program and developed a solicitation to select HPwES contractors to perform work on residences. The jobs were bundled, which allowed the HPwES contractors to use bulk purchasing to lower the prices for the work and led to a 10% cost reduction for each project in addition to available program incentives. In total, 13 congregations with 23 buildings were successfully retrofitted, most using the GJGNY Commercial OBR loan and others using a National Presbytery Loan Fund. This project has been a huge success resulting in \$474,000 invested in energy efficiency, which saves the congregations over \$50,000 a year in energy costs.

LIPC made several presentations to the congregations; worked with the TRC (Commercial auditor) and HPwES contractors on scheduling audits, translated that audit to the congregations decision-making team and worked to prepare documents for loan submission. Often the Manses (residences), which house the clergy members, needed significant improvements and were a major incentive for the congregation to

agree to go through the program for both the church and their residences. The improvements included energy-efficient fixtures, LED lighting, high-efficiency heating systems, oil-to-gas conversions, insulation, and air and duct sealing. Incentives from NYSERDA, PSEGLI, and National Grid were bundled, which saved a significant amount of money.

Some congregation members also went through the HPwES program, although that number was far less than anticipated. LIPC verified that 29 residential and 14 commercial retrofits were completed in 2017.

PUSH Buffalo (Western Region)

PUSH Buffalo established the Friends and Neighbors (F&N) residential aggregation program in 2014 and learned from it over time. Implementation of the aggregation program during the latter part of 2016 targeted 27 zip codes in Erie County identified as having the most potential for needing home performance related improvements. Prescreening of homes identified eligibility for various programs such as NYSERDA's Assisted HPwES or EmPower New York programs, and PUSH Green's Staying Warm and Dry on the West Side (WDWS) comprehensive home repair program, as well as discussing the benefits of participating in the F&N aggregation program.

PUSH participated in outreach events and used mailings, paid advertisements, television appearances, social media, and house meetings to reach homeowners. Often, this outreach happened in coordination with elected officials or trusted community leaders that helped give PUSH more credibility in communities that may have never heard of the organization. Known as the Ambassadors Program, it became a hallmark of their most effective outreach tactic and increased participation in the aggregation program. The Ambassadors program helped recruit homeowners who already received services to help recruit other homeowners from the same community to go through the process. During successful campaigns, PUSH would have residual interest for months after the initial contact was made. Ambassadors include Senators, Assembly Members, Mayors, Legislators, Councilmembers, Block Clubs, employers, community group/organizations, business associations, religious organizations, educational facilities, and homeowners.

The most attractive homeowner benefits of F&N participation are group discounts and PUSH staff assistance, which includes helping homeowners apply for incentives and financing, helping choose a trusted contractor, attending and reviewing assessment results, and providing feedback and support throughout the decision making and implementation phases of the energy upgrades.

Contractor benefits of participating in F&N include reduced marketing and outreach costs as PUSH provides bundles of five to 10 prescreened and financially prequalified homes. Bundles were sent out to contractors every six weeks on average. PUSH also helps contractors when they are having various issues that may arise when scheduling energy assessments, in home presentations, and work. Sometimes PUSH can also help mediate issues involving non-payment, workmanship, and interpersonal issues that hinder contractor's ability to work in certain situations. For this service, the contractor agrees to provide discounts of between 5% and 10% based on the number of homes in the bundle. Discounts are guaranteed to all participating home owners regardless of how many projects move forward. To date, 44% of homes participating in the F&N Program moved forward to complete work.

Between July 1, 2016 and June 30, 2017, the F&N aggregation program facilitated 56 customers in seven aggregation clusters, 47 completed energy assessments on their homes, and 18 advanced to the retrofit stage through HPwES or EmPower New York.

PathStone (Finger Lakes Region)

PathStone started development of a pilot aggregation program, The Rochester Safe and Efficient Home Initiative (RSEHI) in the Fall of 2016 with a goal of providing clients applying for City of Rochester targeted neighborhood rehabilitation grants with energy services to supplement the lead remediation and health and safety work from the City grant. The intake for City rehabilitation programs also provided information required for the Assisted HPwES program application, so clients only needed to fill out financing applications. Pathstone reached out to all the contractors in the area who participate in the HPwES program, and eight contractors expressed interest in participating in RSEHI. Bundles of five clients were allotted to each contractor in turn. To date, 20 clients signed up for the program; six homes are under contract for \$142,974 worth of work with Assisted HPwES subsidies of \$18,037 (these totals do not include some lead remediation work which has not yet been bid, but is expected to bring the total value of the work closer to \$175,000.)

This program has been successful in bringing many resources to homes in LMI communities that have a large amount of deferred maintenance. By bringing in funds from as many as 5 different sources per home, multiple agencies have been able to undertake combined work scopes that were formerly not performed for single family owner occupied homes. Working in targeted areas had a greater impact, including one block where six houses received exterior paint, new roofs, and energy efficiency work—this significantly changed the appearance of the block and spurred interest in the program from neighbors.

With a focus on LMI families, coordination between multiple agencies, and contractors, the time needed for a program of this intensity has been unexpected. PathStone had to adjust schedules to accomplish what they did, and believed the outcomes certainly prove this intense outreach and construction management yields positive results. One challenge of the project is the need to find matching funds for the Assisted HPwES projects as many of the households could not provide their share of funding on their own.

Like PUSH and LIPC before them, Pathstone also shared their experiences with the other CBOs across the State to inform them of the opportunities and challenges associated with an aggregation initiative. CLEAResult continued to assist NYSERDA with general oversight of the CBO aggregation program.

8.1.5 Outreach to Support Workforce Development

The number of CBOs participating in workforce development outreach declined over the past year as CBOs focused more on meeting performance goals and participating in outreach events. The exception was PUSH Buffalo who continued to train as well as place workers with existing home performance contractors.

PUSH connected their Workforce Development initiative to their F&N aggregation program. In exchange for bundled customer leads, the contractor agreed to use PUSH Buffalo's hiring hall as a first source when looking to fill a position within their organization, and pay that worker Buffalo's family sustaining wage, which is \$12.35 per hour.

PUSH's hiring hall is composed of workers who completed various levels of training, including basic fit tests, OSHA 10 certifications, forklift operation, and some also receive lead and asbestos awareness/abatement training. Additional trainings may also be offered, such as those offered through NYSERDA's PV Trainer's network, training for Building Performance Institute certifications, and OSHA-40.

When available, trainees may gain work experience at Workforce Development Training Houses. The training house is usually an abandoned home owned by Buffalo Neighborhood Stabilization Company that needs gut rehabilitation and is the ideal opportunity for trainees to learn basic home construction skills. Trainees receive first-hand experience doing demolition work, abatement (when necessary),

framing, installing various kinds of insulations, drywall, plumbing, electrical, finishing work, and other general contracting skills. Contractors often lead workshops to help trainees understand the real-world application of the various skills they are learning at the training house. From July 2016 to June 2017, PUSH connected 17 community residents to training and employment in the green construction sector.

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, 2017.

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)**	807	154	34	22	22%
Neighborhood Housing Services of Staten Island (NHSSI)**	643	186	59	41	32%
El Puente**	731	59	15	11	25%
Make the Road New York (MRNY)	23	19	15	50	79%
Downtown Manhattan Community Development Corporation (DMCDC)	Multifamily Activities Only				
Civic Association Serving Harlem (CASH)	7	3	1	1	33%
Asian Americans for Equality Community Development Fund (AAFE)	72	53	18	16	34%
Neighborhood Housing Services of Jamaica (NHSJ)**	1501	274	76	35	28%

Table8-2 continued

CBO Name	HP Applications Received	HP Assessments Completed	HP Work Approved (number of jobs)	HP Completed Retrofits	Conversion Rate
Upstate					
Northeast Parent and Child Society (NEPC)	Workforce Development Activities Only				
Affordable Housing Partnership of the Capital Region (AHP)**	4262	816	336	243	41%
Public Policy and Education Fund of Central New York (PPEF-Central)	333	219	30	27	14%
PathStone**	2205	1121	361	315	32%
Long Island Progressive Coalition (LIPC)**	2935	2510	551	194	22%
Rural Ulster Preservation Corporation (RUPCO)**	4,610	2,599	626	441	24%
Adirondack North Country Association (ANCA)**	1298	464	145	105	31%
Public Policy and Education Fund of the Southern Tier (PPEF-ST)**	5,565	1,477	338	188	23%
People United for Sustainable Housing (PUSH)**	2,445	754	360	174	48%
TOTAL	27,437	10,708	3,002	1,863	46%

** Active 2016-2017

Table 8-3 and Table 8-4 provide summaries of outreach activities for the multifamily and small commercial/not-for-profit sectors through June 30, 2017.

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	39	3	3
DMCDC	127	25	11
El Puente	77	11	5
MRNY	298	1	1
PathStone	1	0	0
RUPCO	41	0	0
ANCA	1	0	0
PPEF - ST	0	0	0
PUSH	5	0	0
TOTAL***	589	40	19
<p>* SharePoint Leads are individuals who have received information on NYSERDA programs through CBO outreach activities.</p> <p>** Confirmed by TIC through NYSERDA's Multi-Family CRIS system.</p> <p>*** Cumulative MPP data</p> <p>NOTE: Consult Table 8-1 to interpret CBO acronyms.</p>			

Table 8-4. Small Commercial/Not-for-Profit Energy Efficiency Activity Summary by CBO

CBO Name	SharePoint Leads*	Completed Assessments
AHP	1	0
ANCA	59	27
El Puente	46	1
LIPC	49	25
PathStone	220	7
NHSJ	0	0
PPEF - ST	16	0
PUSH	326	74
RUPCO	91	0
SSBx (BOEDC under RFP 2038)	34	0
NHSSI	0	0
TOTAL	826	64
<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, 2017.

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*
2,186	451	259	122	96
* Self-Reported from CBO SharePoint site				

Table 8-6 provides a summary of CBO event statistics through June 30, 2017. Self-reported statistics are submitted by each CBO.

Table 8-6. CBO Event Totals

CBO Name	Total Events	Total Attendance
ANCA	63	8,891
AHP	128	5869
AAFE	22	607
CASH	0	0
DMCDC	4	7,840
EI Puente	137	3,077
LIPC	248	2,721
MRNY	41	1,951
NEPC	5	66
NHSJ	152	6,801
NHSSI	113	864
NWBCCC	4	42
PathStone	386	24,609
PPEF - Central	63	4,688
PPEF - ST	74	11,033
PUSH	359	17,746
RUPCO	159	14,516
SSBx	176	8,731
TOTAL	2,119	119,482
NOTE: Consult Table 8-1 to interpret CBO acronyms.		

8.2 Marketing

Marketing is used to build awareness and participation statewide as well as support the face-to-face grassroots activities necessary to effectively penetrate communities and populations who are challenging to reach while delivering the education necessary to secure assessments and conversion to retrofits. Some CBOs elected to produce flyers and banners for specific promotions or events and in those instances, the

TIC worked with the CBOs to produce suitable collateral, which was submitted for approval through NYSERDA’s marketing staff as prescribed by the CBO agreements. To look more professional at tabling events, SSBx created a banner with NYSERDA’s assistance and many of the other Downstate CBO’s used it as a template to create their own banners. They indicated foot traffic increased as a result.

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	\$11,393,195	\$11,054,983	\$336,629	\$38,363	(\$36,781)
General Statewide Marketing	2,704,569	2,680,365	0	24,204	0
Training and Implementation Contractor	1,791,397	1,791,397	0	0	0
TOTAL	\$15,889,161	\$15,526,745	\$336,629	\$62,567	(\$36,780)

NOTE: The negative balance reflected above is due to contracts where funds were not disencumbered prior to the end of June 2017. Once those contracts were revised in July 2017, no negative balance remained in the budget.

* Loan Expended amount is net of loan repayments made through reporting period and includes bond proceeds, less bond issuance cost.

- 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

External contracts related to the outreach and marketing component of the GJGNY Program are detailed in Table 8-8.

Table 8-8. Outreach and Marketing Contracts

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
10984	Getty Images	Photography	\$0	\$455	\$0	\$0
22502	Brand Cool	GJGNY Marketing	2,430,410	2,430,410	0	0
22725	Cision	PR Subscription	1,700	1,700	0	0
24317	Conservation Services Group	Training and Implementation Contractor	1,174,738	1,174,738	0	0
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
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

Table8-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
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
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
31919	CEC	Eco House	49,500	49,500	0	0
34279	Dowd Whitbeck Printing	CBO print materials	673	673	0	0
39325	Long Island Progressive Coalition (LIPC)	GJGNY Outreach Program	1,169,781	1,169,781	0	0
39326	Adirondack North Country Association (ANCA)	GJGNY Outreach Program	265,600	252,085	13,516	363
39353	Public Policy and Education Fund - Southern Tier (PPEF-ST)	GJGNY Outreach Program	313,080	295,103	17,977	0
39780	Rural Ulster Preservation Company (RUPCO)	GJGNY Outreach Program	965,722	965,722	0	22,000
39827	Sustainable South Bronx (SSBx)	GJGNY Outreach Program	313,077	309,916	3,161	0
40732	Affordable Housing Partnership (AHP)	GJGNY Outreach Program	473,755	453,144	20,610	0
41521	El Puente	GJGNY Outreach Program	274,167	274,167	0	0

Table 8-8 continued

Identification Number	Contractor	Description	Contract Amount	Expended	Encumbered	Committed
42719	People United for Sustainable Housing (PUSH)	GJGNY Outreach Program	837,891	683,822	154,069	0
43058	Neighborhood Housing Services of Staten Island (NHSSI)	GJGNY Outreach Program	229,351	209,995	19,356	0
43774	PathStone	GJGNY Outreach Program	517,809	491,718	24,928	0
50590	Benchmark Printing Inc.	OBR Inserts	438	438	0	0
53612	Benchmark Printing Inc.	OBR Inserts	267	267	0	0
54842	Neighborhood Housing Services of Jamaica (NHSJ)	GJGNY Outreach Program	525,451	519,143	6,309	16,000
61491	Conservation Services Group Inc.	Green Jobs – Green New York Training and Implementation Contractor	549,705	516,225	0	0
75627	CLEARresult Consulting Inc.	GJGNY TIC	678,554	601,851	76,704	0
82424	Benchmark Printing Inc.	OBR Complaint Forms	1,257	1,257	0	0
100748	Benchmark Printing Inc.	OBR Inserts	2,613	2,613	0	0
103212	Benchmark Printing Inc.	Replacement OBR Inserts - NYSEG	592	592	0	0
18602A	Butler/Till Media Services Inc.	GJGNY Marketing	0	0	0	24,204
22502-1	Brand/Cool Marketing	Recreate of PO 22502 GJGNY Marketing balance	0	0	0	0
TOTAL			\$15,897,563	\$15,526,745	\$336,629	\$62,567

9 Evaluation

Since the introduction of GJGNY, NYSERDA 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 planned and completed during the reporting period. Evaluation contractor reports are posted on NYSERDA's website for public use once completed.²⁴

9.1 Completed Evaluation Activities

Two evaluation projects were completed in this reporting period: an impact evaluation of the GJGNY audit-only participants in the residential sector and an update to the GJGNY Jobs Impact Assessment. A summary of results of each project is described in the following section.

9.1.1 Single-Family Residential Buildings

NYSERDA finalized the evaluation of the HPwES program. This multi-faceted assessment of the HPwES program included an impact evaluation designed to assess the energy-saving impacts associated with homeowners who received a GJGNY audit, but did not pursue participation in the programs. The evaluation identified that quantifiable savings are being realized for GJGNY audit-only participants. These savings are achieved in homes receiving GJGNY audits, but no further incentives to install energy saving measures are pursued thru NYSERDA residential programs. The GJGNY Audit-only Impact Evaluation report is available on the NYSERDA website.²⁵

²⁴ Visit nyserdera.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/Evaluation-Contractor-Reports to view completed evaluation reports.

²⁵ Visit nyserdera.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2016ContractorReports/HPwES-IE-Report-Vol4.pdf to view the Green Jobs Breen New York Audit-only Impact Evaluation.

9.1.2 Jobs Impact Assessment

A two-phase evaluation of the GJGNY Jobs impacts was recently completed. The key focus of Phase 1 of this study was to estimate the number of jobs generated in 2014 and 2015 as a result of GJGNY-funded program activities and to determine other job-related impacts, particularly hourly wage levels. This information served as inputs to an economic impact analysis conducted under Phase 2.

Key findings of the Phase 1 study include NYSERDA's GJGNY program resulted in a total of 2,627 direct jobs in 2014 and 2015 combined, 98% of which were generated as a result of three programs. With 1,236.8 Direct jobs, the Workforce Development and Training program accounted for slightly under one-half of the total. The NY-Sun Initiative had 863.1, representing one-third of the total direct jobs. The HPwES program had 471.1, representing close to one-fifth of the total. The Phase 1 evaluation report can be accessed on the NYSERDA website.²⁶

Phase 2 of this evaluation included an economic impact analysis, an assessment of the contribution that economic activity can have on a regional economy. This analysis estimated the extent to which the GJGNY program supported additional economic activity statewide, in 12 individual regions, and in identified disadvantaged communities. To conduct this analysis, Phase 2 relied on primary survey data of 2014 and 2015 GJGNY program full-time equivalent employees (FTE) and wages captured by a survey of trade allies and program partners conducted in Phase 1. This information was then used to create IMPLAN modeling scenarios for new, retained, and up-skilled and up-waged jobs.

²⁶ Visit nysesda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2016ContractorReports/GJGNY-Jobs-Analysis-Phase-I.pdf for the Assessment of Job Impacts of the Green Jobs-Green New York Program, Phase I.

The Phase 2 study found the GJGNY program-related activities generate a significant economic impact throughout the State. In addition to creating job opportunities for workers directly related to the GJGNY program (i.e., direct effects), the program generates job opportunities in industries that sell to, and buy from, sectors supporting the program (i.e., indirect effects) as well as in consumer goods and services industries to satisfy the increased demands resulting from the worker wages (i.e., induced effects). The full report of Phase 2 methodology and results can be accessed on the NYSERDA website.²⁷

9.2 Evaluation Activities Planned

9.2.1 Single-Family Residential Buildings

The GJGNY audit program was started in 2010 to provide homeowners in the State free or reduced cost energy audits and encourage installation of energy efficiency measures through the HPwES Program. Customers who choose to install measures suggested in the audit can elect to either use a NYSERDA Home Performance contractor through HPwES, or to install measures on their own. This second type of customer, a GJGNY audit-only recipient who installs measures outside of the HPwES Program, generates savings not captured or recorded as contributing toward the State's energy goals. NYSERDA will conduct an evaluation of GJGNY-funded audit-only projects for studies completed between 2014 and 2016 to estimate these savings. This evaluation is slated to begin in the third quarter of 2017 and results are expected in 2019. In addition, a billing analysis of HPwES GJGNY OBR projects is in the planning phase. Results will be summarized in future reports.

9.3 Budget

Table 9-1 provides the evaluation budget.

²⁷ Visit nyserdera.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2016ContractorReports/GJGNY-Jobs-Analysis-Phase-II.pdf for the Assessment of Job Impacts of the Green Jobs-Green New York Program, Phase II.

Table 9-1. Evaluation Budget

Component	Budget	Expended	Encumbered	Committed	Balance
Internal Cost	\$5,600,000	\$1,010,113	\$0	\$0	\$986,852
Evaluation Consultants		2,342,940	1,260,096	0	
TOTAL	\$5,600,000	\$3,353,052	\$1,260,096	\$0	\$986,852

- 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.

9.4 Evaluation Contracts

External contracts related to the evaluation of the GJGNY Program are detailed in Table 10-2.

Table 9-2. Evaluation Contracts Entered Into

Identification Number	Contractor	Description	Contract Amount	Expended*	Encumbered	Committed
PO- 101564	ICF Resources LLC	TWO #7 2015 GJGNY Jobs Analysis	\$63,492	\$32,436	\$31,056	\$0
PO- 19112	Navigant Consulting Inc.	Cost Mod: MCA Eval	189,757	189,757	0	0
PO- 24594	NMR Group Inc.	General Evaluation Assistance Contractor	119,985	68,278	51,707	0
PO- 24594	NMR Group Inc.	Cost mod increase: general evaluation assistance contractor	25,000	0	25,000	0
PO- 28232	ICF Resources LLC	TWO # 1 Planning	15,371	15,371	0	0
PO- 28232	ICF Resources LLC	Mod 1 to TWO #1 Line 3	0	0	0	0
PO- 28232-1	ICF Resources LLC	Mod 1 to TWO #1 Line 3	8,497	8,497	0	0
PO- 28232-1	ICF Resources LLC	Recreate of Balance PO 0000028232 Task #1	239	239	0	0
PO- 29131	Research Into Action Inc.	Process and market evaluation contractor	850,002	850,002	0	0
PO- 29131	Research Into Action Inc.	Cost mod: Process and market evaluation contractor	649,998	132,226	517,772	0

Table 9-2 continued

Identification Number	Contractor	Description	Contract Amount	Expended*	Encumbered	Committed
PO- 29725	Abt SRBI Inc.	Survey data collection contractor for evaluation of NYSERDA Programs	326,480	326,480	0	0
PO- 29725	Abt SRBI Inc.	Cost mod increase: Evaluation Survey contractor	70,000	70,000	0	0
PO- 30146	Energy & Resource Solutions Inc.	Impact Evaluation of NYSERDA Programs	499,999	365,438	134,561	0
PO- 30146	Energy & Resource Solutions Inc.	Cost Mod: Impact Evaluation Contractor	500,000	0	500,000	0
PO- 34368	ICF Resources LLC	TWO #4 GJGNY	96,180	96,180	0	0
PO- 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
PO- 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
PO- ST9836-1	Megdal & Associates	New York Energy \$mart Impact Assessment	0	0	0	0
PO- ST9836-1	Megdal & Associates	Mod 3 Impact Assessment for the NY Energy \$mart Program	0	0	0	0
PO- ST9942-1	Apprise Incorporated	Mod 5 Survey Data	114,995	114,995	0	0
PO- ST9942-1	Apprise Incorporated	Cost Mod 6 Survey Data	20,000	20,000	0	0
TOTAL			\$3,603,036	\$2,342,940	\$1,260,096	\$0

* Expended funds in the amount of \$1,010,113 for internal costs are not represented in this table.

Appendix A: Advisory Council Meeting Agendas



NYSERDA

ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

ALICIA BARTON
President and CEO

**Green Jobs - Green New York
Advisory Council Meeting Agenda**
Thursday, September 8, 2016
3:00 p.m. ET

The meeting will be held by video conference at NYSERDA’s Albany, New York City and Buffalo offices. Those unable to attend at one of NYSERDA’s office locations may participate by phone.

Phone number: (866)394-2346

Conference code: 581 967 1375

Office locations: <https://www.nyserda.ny.gov/Contacts>

Welcome and Introductions	John Rhodes
Draft Report from the Community Outreach Discussion Working Group and NYSERDA Response	Kelly Tyler
Update on September 1st Launch of Revised Interest Rates	Karen Hamilton
Update on Small Commercial and Multifamily Loan Funds	Karen Hamilton
Research and Analysis Regarding Residential Audits	Karen Hamilton
Draft GJGNY Annual Report - Additional Comments?	Karen Hamilton
Public Input	
Closing Remarks	John Rhodes

New York State Energy Research and Development Authority

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17 Columbia Circle, Albany, NY 12203-6399
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New York City
1359 Broadway
19th Floor
New York, NY
10018-7842
(P) 212-971-5342
(F) 518-862-1091

**West Valley Site
Management Program**
9030-B Route 219
West Valley, NY
14171-9500
(P) 716-942-9960
(F) 716-942-9961



NYSERDA

ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

ALICIA BARTON
President and CEO

**Green Jobs - Green New York
Advisory Council Meeting Agenda**

Tuesday, May 16, 2017

3:00 p.m. ET

The meeting will be held by video conference at NYSERDA’s Albany, New York City and Buffalo offices. Those unable to attend at one of NYSERDA’s office locations may participate by phone.

Phone number: (866)394-2346

Conference code: 581 967 1375

Office locations: <https://www.nyserda.ny.gov/Contacts>

Welcome and Introductions	John Rhodes
Residential Loan Fund Review and Residential Energy Efficiency Program Update	Karen Hamilton
Workforce Development Working Group Report and Recommendations	Adele Ferranti
GJGNY Jobs Analysis	Tracey DeSimone
Closing Remarks and Next Steps	John Rhodes

New York State Energy Research and Development Authority

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Appendix B: Annual On-Bill Recovery Report

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, 2017		Residential		Small Business / Not-For-Profit		Multifamily	
		Customers	Dollars	Customers	Dollars	Customers	Dollars
Utility Account Arrears > 60 Days	Central Hudson Gas and Electric	59	\$12,781	0	\$0	0	\$0
	Consolidated Edison	13	\$7,213	0	\$0	0	\$0
	PSEG Long Island	219	\$185,018	1	\$9,848	0	\$0
	National Grid	548	\$528,709	2	\$131	0	\$0
	New York State Electric and Gas Corporation	43	\$13,540	0	\$0	0	\$0
	Orange and Rockland Utilities	4	\$2,774	0	\$0	0	\$0
	Rochester Gas & Electric	4	\$1,388	0	\$0	0	\$0
	Total	890	\$751,423	3	\$9,979	0	\$0
On-Bill Recovery Payment Arrears > 60 Days ¹	Central Hudson Gas and Electric	231	\$36,315	0	\$0	0	\$0
	Consolidated Edison	46	\$40,902	0	\$0	0	\$0
	PSEG Long Island	1260	\$516,103	12	\$26,172	0	\$0
	National Grid	1718	\$422,896	6	\$2,769	0	\$0
	New York State Electric and Gas Corporation	57	\$18,590	0	\$0	0	\$0
	Orange and Rockland Utilities	4	\$1,507	0	\$0	0	\$0
	Rochester Gas & Electric	10	\$820	0	\$0	0	\$0
	Total	3,326	\$1,037,134	18	\$28,941	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	14	\$11,784	0	\$0	0	\$0
	National Grid	30	\$33,535	0	\$0	0	\$0
	New York State Electric and Gas Corporation	35	\$5,820	0	\$0	0	\$0
	Orange and Rockland Utilities	3	\$1,847	0	\$0	0	\$0
	Rochester Gas & Electric	6	\$608	0	\$0	0	\$0
	Total	88	\$53,594	0	\$0	0	\$0

Reporting period - January 30, 2012 through June 30, 2017		Residential		Small Business / Not-For-Profit		Multifamily	
		Units	Dollars	Units	Dollars	Units	Dollars
1st Year Energy Savings ²	Estimate of kWh savings	3,296,791	\$508,139	488,106	\$65,503	-	\$0
	Estimate of oil mmBtu savings	171,099	\$4,753,187	11,327	\$72,555	-	\$0
	Estimate of propane mmBtu savings	794	\$42,620	-	\$0	-	\$0
	Estimate of efficiency natural gas mmBtu savings	79,027	\$1,052,629	(3,752)	\$2,751	-	\$0
	Estimate of oil conversion gas mmBtu savings	(60,076)	(\$872,489)	-	\$0	-	\$0
	Estimate of other mmBtu savings	34,595	\$53,824	-	\$0	-	\$0
	Total Dollar Savings		\$5,537,911		\$140,809		\$0
Lifetime Energy Savings ²	Estimate of kWh savings	56,649,621	\$8,495,168	N/A	N/A	-	\$0
	Estimate of oil mmBtu savings	3,962,399	\$109,700,338			-	\$0
	Estimate of propane mmBtu savings	17,201	\$941,243			-	\$0
	Estimate of efficiency natural gas mmBtu savings	1,815,679	\$24,039,363			-	\$0
	Estimate of oil conversion gas mmBtu savings	(1,445,026)	(\$21,008,217)			-	\$0
	Estimate of other mmBtu savings	855,830	\$1,301,582			-	\$0
	Total Dollar Savings		\$123,469,476				\$0

OBR Expenditures through 6/30/17		
Program Area	Expended	
Administrative/General ³	\$3,952,959	
Marketing	\$5,717,947	
Evaluation	(\$1,218,177)	
Audit Incentive	\$10,843,838	
Payment to Utilities (\$100 per loan & 1% of loan amount)	\$1,703,175	
OBR Loans	RES	\$100,472,932
	SB/NFP	\$757,456
	MF	\$0
	Total	\$101,230,388
Implementation/Services	RES	\$5,880,916
	SB/NFP	\$44,453
	MF	\$0
	Total	\$5,925,369
Total Expended	\$130,591,853	

¹ On-Bill Recovery (OBR) payment arrears include utility customers who have active Deferred Payment Arrangements (DPAs) with their utility company. OBR installment charges collected from the consumer are applied to active utility DPAs resulting in NYSERDA OBR delinquencies until the utility arrearage is satisfied.

² Energy savings do not include installed capacity from photovoltaic OBR loans.

³ Includes NYS Cost Recovery Fee

Appendix C: HPwES Eligible Measures and Accessories

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 >= 0.67, FHR >= 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified	✓
	Natural Gas	On-Demand: EF >= 0.82, GPM >= 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 >= 0.67, FHR >= 67 gallons per hour, <75,000 BTU. ENERGY STAR Qualified	✓
	Propane	On-Demand: EF >= 0.82, GPM >= 2.5 over a 77°F rise, <2 gallons storage, <200,00 BTU. ENERGY STAR Qualified	✓
	Oil	Tank: 20-100 gallons, EF >= 0.67	✓
	Indirect-Fired Tank	UL Approved	✓
	Heat Pump Water Heaters	50 gallon tank, EF >= .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>.

Appendix D: GJGNY Community Outreach Working Group Recommendations Report



NYSERDA

Green Jobs - Green New York Community Outreach Discussion Working Group Recommendations

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
Community Outreach Discussion Working Group
Recommendations

Final Report

Prepared by:

New York State Energy Research and Development Authority

Albany, NY

Preface

NYSERDA established a Community Outreach Discussion Working Group to make recommendations to the Green Jobs - Green New York (GJGNY) Advisory Council for future locally-based engagement efforts in part to support low- to moderate-income (LMI) communities and households with the goal to increase LMI participation in clean energy activities. The undersigned members of the Working Group have convened and consulted on the content and recommendations contained in this report.

Kelly Tyler (Chair)
Director, Communities and Local Government, NYSERDA

Chris Carrick
Program Manager, Energy Management, Central New York Regional Planning and Development Board

Stephan Edel
Policy Director, Center for Working Families

Clarke Gocker
Director of Policy and Strategy, PUSH Buffalo

Guy Kempe
VP of Community Development, RUPCO and Program Director, GJGNY

Jason Kuflik
Founder and Member, Green Street Solar Power

Jason Kulaszewski
PUSH Green Program Director, PUSH Buffalo

Kathleen Langton
Energy Program Manager, AHP Homeownership Center

Conrad Metcalfe
Executive Director, Building Performance Contractors Association

Kevin Rooney
Chief Executive Officer, Oil Heat Institute of Long Island

Will Schweiger
State Director, Efficiency First

Hal Smith
President, Home Energy Performance by Halco

Lisa Tyson
Director, Long Island Progressive Coalition

Jessica Waldorf
Project Manager, Communities and Local Government, NYSERDA

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Executive Summary

This report is prepared in response to the decision made at the October 23, 2015 Green Jobs – Green New York (GJGNY) Advisory Council Meeting to establish a Community Outreach Discussion Working Group to determine how best to leverage valuable resources toward achieving the best outcome for low- to moderate-income households. The Working Group addressed the following items to inform a future Community-Based Engagement Initiative:

- Identify the activities that future locally-based engagement organizations will perform to increase LMI participation in clean energy activities.
- Review current LMI outreach efforts by constituency-based organizations (CBOs) to determine what has been successful and what has not been successful to inform future program design.
- Identify metrics for each proposed activity future locally-based engagement organizations in order to properly measure success of these efforts.
- Identify the characteristics of organizations and personnel that would best support the locally-based engagement effort.

The Community Outreach Discussion Working Group consists of 14 members who represent CBOs, low-to moderate-income consumer advocates, and stakeholders (including contractors) of the home energy services industries. The group is chaired by Kelly Tyler, the director of Communities and Local Government at NYSERDA. It met 10 times to discuss barriers, review current outreach program efforts, and develop the recommendations in this report. Except where noted, the recommendations in this report reflect the consensus of all members of the Working Group. Where complete agreement could not be reached, multiple views are provided.

NYSERDA thanks the members of the Working Group for their time and effort in providing valuable feedback on the program, along with creative solutions to the challenges and barriers identified.

NYSERDA looks forward to continuing the discussion on the recommendations that require further research or development, along with other program and market-related topics.

1 Introduction

1.1 Establishment of the GJGNY Program

On October 9, 2009, the Green Jobs - Green New York Act of 2009 (the Act), was signed into New York State law. The purpose of the GJGNY program is to:

- Promote energy efficiency, energy conservation, and the installation of clean energy technologies.
- Reduce energy consumption and energy costs.
- Reduce greenhouse gas emissions.
- Support sustainable community development.
- Create green job opportunities, including opportunities for new entrants into the State's workforce, the long-term unemployed and displaced workers.
- Use innovative financing mechanisms to finance energy efficiency improvements through energy cost savings.

Among other initiatives, this Act directed NYSERDA to issue one or more competitive opportunities to solicit applications from partnerships or consortia composed of CBOs that can connect community members to GJGNY. In awarding contracts to CBOs, NYSERDA was directed to:

- 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, while also reflecting geographic diversity of the State.
- Give preference in awards to applicants that include significant participation by minority-and women-owned business enterprises (MWBES).
- Give preference to applications to serve economically distressed communities.

Since 2009, NYSERDA has issued several competitive opportunities to establish a network of CBOs that can conduct outreach and support the GJGNY program. There are currently 11 CBOs under contract to NYSERDA implementing outreach efforts and a statewide implementation contractor providing training, support, and reporting to the CBOs and NYSERDA.

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. CBOs also help identify additional funding sources to cover the cost of necessary non-energy improvements, or the cost-share needed for energy improvements.

CBO activities are just one component of the GJGNY program; however, they touch upon all of the other components (Workforce Development, energy audits and the revolving loan fund). Some CBOs also conduct aggregation pilots to encourage Home Performance with ENERGY STAR® (HPwES) retrofits by grouping retrofit projects into clusters using the same contractor to reduce costs, streamline program processes, and provide community benefits. While the scopes of work that guide each CBO are different, as a group the CBOs work to connect community members to GJGNY program services.

1.2 Program Evolution

Outreach to LMI communities and households has been managed in accordance with the GJGNY Act since its inception. The Act required that all of the contracts awarded for outreach for the GJGNY Program be to CBOs or partnerships or consortia including CBOs. The Act defined a CBO as “an organization incorporated for the purpose of providing services or other assistance to economically or socially disadvantaged persons within a specified community, and which is supported by, or whose actions are directed by, members of the community in which it operates.”¹

However, as the GJGNY program funding is almost fully expended, a Community-Based Engagement Initiative will now be included within the Communities Chapter of the Clean Energy Fund Investment Plan. The flexibility of this new funding source will enable evolution of the Community-Based Engagement Initiative, learning from lessons of the past, enabling an expansion of the definition of “CBO” to include other types of locally-based organizations that could also effectively accomplish the mission and meet the needs and goals of the future. Locally-based organizations that have strong ties to their community and an established group of local partners are well-positioned to best support the new effort to engage and stimulate the regional market to influence and drive clean energy actions of homeowners, renters, and community stakeholders.

¹ Public Authorities Law Section 1891(3).

1.3 Community Outreach Discussion Working Group

This report is submitted to summarize the results of the Community Outreach Discussion Working Group established at the October 23, 2015, Green Jobs – Green New York (GJGNY) Advisory Council Meeting. The Working Group consists of 14 members who represent CBOs, LMI consumer advocates, advocates on utility and housing issues, Spanish speaking communities, stakeholders (including contractors) of the home energy services industries, and women, children, and members of the LGBT (lesbian, gay, bisexual, and transgender) community. Members of the Community Outreach Discussion Working Group are listed in Table 1.

Table 1. Community Outreach Discussion Working Group Members

Name	Organization
Kelly Tyler	NYSERDA (Chair)
Chris Carrick	Central New York Regional Planning and Development Board
Stephan Edel	Center for Working Families
Clarke Gocker	PUSH Buffalo
Guy Kempe	RUPCO
Jason Kuflik	Green Street Solar Power
Jason Kulaszewski	PUSH Buffalo
Kathleen Langton	AHP Homeownership Center
Conrad Metcalfe	Building Performance Contractors Association
Kevin Rooney	Oil Heat Institute of Long Island
Will Schweiger	Efficiency First
Hal Smith	Home Energy Performance by Halco
Lisa Tyson	Long Island Progressive Coalition
Jessica Waldorf	NYSERDA

The Community Outreach Discussion Working group met in 2016 on January 5, February 2, February 11, February 25, March 10, March 17, March 24, March 31, and April 7. Meeting notes are provided in Appendix B. Two additional meetings were held on July 19 and August 11 to review the draft report and comments have been incorporated. Except where noted, the recommendations in this report reflect the consensus of all members of the Working Group.

2 Background

To put forth recommendations, the Community Outreach Discussion Working Group first outlined the goals of a future Community-Based Engagement Initiative and hypotheses that were used to inform the discussion on activities that future locally-based engagement organizations will implement.

2.1 Current CBO Outreach Efforts

GJGNY provides for community-based outreach, enabling one-to-one assistance with the process of participating in NYSERDA programs. This community-based approach, combined with statewide marketing, facilitates reaching disadvantaged populations and those not traditionally participating in energy-efficiency programs. CBOs' primary activity is conducting outreach to encourage residential retrofits eligible for NYSERDA's HPwES program. CBOs execute several additional secondary activities that may include additional follow up, assisting customers with paperwork and access to a variety of incentive and loan programs, finding a contractor, reviewing work scopes, etc. in order to successfully assist a customer in completing retrofit projects. This customer follow-up ensures that customers take advantage of all of the opportunities available to them.

Many CBOs are able to help their clients access other financial resources in addition to NYSERDA's energy efficiency programs in order to implement clean energy projects. In areas where CBOs do not currently exist, some contractors are able to leverage other funding and resources. However, a lot of the smaller contractors do not have the capacity to do this, which is where CBOs have the greatest impact.

Strategies that provide one-on-one follow-up appear to be key to generating retrofits. Establishing good relationships with retrofit contractors and helping participants access funding to complete needed health and safety upgrades prior to the energy efficiency upgrades also emerged as elements of successful strategies. Although one-to-one assistance can be a more expensive form of outreach, it facilitates 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, providing personal, societal, and environmental benefits.

2.2 Goals of Community-Based Engagement Initiative

During its meetings, the Working Group identified a need to clearly outline the goals for the future Community-Based Engagement Initiative. Addressing the energy affordability needs of the LMI households and communities will be the primary goal of the new initiative. The Working Group outlined the following additional goals:

- Promote energy efficiency and the installation of clean energy technologies to reduce energy costs and greenhouse gas emissions.
- Provide information on programs and resources including information to achieve greater energy literacy through education.
- Act as a market-enabler, stimulator, and aggregator of clean energy demand, both in promising areas that need public investment as a bridge to market readiness or among otherwise underserved populations, such as rural, LMI, and environmental justice communities as well as in market-ready sectors.
- Support sustainable community development and create opportunities for green jobs.
- Enhance access to and uptake of energy efficiency and renewable energy programs and solutions for LMI households and communities.
- Facilitate awareness of clean energy workforce training opportunities available locally and assist with regional enrollment in those efforts.
- Increase access to financing for LMI communities and households.

2.3 Key Hypotheses for Community-Based Engagement Initiative

The future Community-Based Engagement Initiative will build on the efforts of the previous GJGNY CBO efforts, while also removing previously ineffective strategies and restructuring the approach to increase the success of engagement efforts. The Community Outreach Discussion Working Group identified the following hypotheses that were used to inform the discussion on activities that future locally-based engagement organizations will implement:

- If we enhancing access to and uptake of energy efficiency and renewable solutions for LMI households and communities, then we will help New York State meet its ambitious clean energy, environmental, and affordability goals.
- If locally based organizations that have knowledge and expertise to make programs more accessible, and to identify available resources that can be successfully leveraged to deploy energy efficiency improvements to the residents of their community, then their engagement with customers should result in an increase in successfully completed projects.
- If aggregation is a model that can create great relationships with contractors, then it should lead to very successful outcomes, but it may not work in every area of the State. Successful outcomes from an aggregation project may include:

- Benefits to the homeowner such as lower costs through standardized or otherwise discounted bulk pricing and a simplified participation process.
- Benefits to the targeted community by creating jobs that may comply with certain standards and may be filled by residents of the community.
- Results that complement ongoing market transformation efforts by expanding awareness, increasing education, and reaching populations not currently responding to programs.
- If counties are economically diverse, then a one size fits all approach may not work with community engagement efforts.
- If locally-based organizations are there to support home owners, tenants, and landlords through the entire process of making improvements to the home and in ways that they may not otherwise be assisted by contractors (completing applications, working with lenders, applying for financing, attending assessments, project oversight, following up with consumers, addressing issues with workmanship, etc.), then their engagement with customers should result in an increase in customers that previously did not participate in clean energy programs and in the number of completed projects.

3 Barriers to Participation in Clean Energy Programs for CBOs and LMI Households

The Working Group identified numerous barriers faced by existing CBOs as well as by LMI households and communities to participating in clean energy programs, as described in this section. The Working Group addressed these barriers by identifying future activities locally-based engagement organizations could implement as outlined in Section 4.

3.1 Challenges and Barriers for Existing CBOs

The organizations conducting residential outreach have encountered several notable challenges. At a high level, these challenges and barriers can be broken into the following categories: education, marketing, metrics tracking, relationship with contractors, and resources. Encouraging participants to complete assessments and retrofits, ensuring participants secure project funding, and overcoming other barriers for participants to complete retrofits, have all been more challenging than expected. Finding and establishing relationships with reliable and responsive contractors and helping participants navigate the HPwES program have also challenged CBOs. CBOs have adapted their strategies to overcome these challenges throughout the contract period. The following paragraphs outline the different challenges identified by the Working Group and how CBOs have worked to overcome those challenges. Additional barriers that still need to be addressed in the future Community-Based Engagement Initiative are also outlined.

In the current GJGNY outreach program, there is an inconsistent level of education across all of the CBOs in energy efficiency and renewable energy. To address this concern, several CBOs have provided their staff with courses and trainings such as Building Performance Institute (BPI) certifications and BPI Building Science Principles certificate. Some CBOs lack of awareness of new participating contractors and an understanding of the service territory of contractors in their region, which leads to confusion for CBOs and customers.

In regards to marketing, there is a lack of updated marketing tools to reflect current understanding of market status and challenges. Additionally, lack of a good, central database for information sharing between CBOs and contractors is a barrier to metrics tracking for the GJGNY program. This lack of a good, central database makes it difficult to track projects and customer interactions. Currently, each CBO has their own, separate tracking system and there are several databases at NYSERDA used to track information for the various activities conducted by CBOs.

Inconsistent relationships between CBOs and contractors creates challenges with implementing projects. The majority of CBOs have been able to forge successful relationships with contractors which has resulted in the ability to increase the number of projects that are completed after the home energy assessment phase. However, a few of the CBOs from the Working Group noted challenges in their region with contractors and subcontractors including unwillingness by the contractor to use on-bill recovery financing, not understanding the “house as a system” (whole building) approach, lack of communication with the CBO, and in some cases trying to oversell to the homeowner.

CBOs cover large territories which are difficult to provide services to consistently. Additionally, there are large gaps that exist in areas served by CBOs across New York State.

There is a lack of definitions for terms commonly used in the CBO efforts to keep everyone on the same page. This lack of common terminology leads to confusion between CBOs and contractors on what different activities CBOs are performing involve.

3.2 Barriers to LMI Households and Communities

Cost is a barrier that keeps projects from moving beyond the home energy assessment phase. There is a lack of available capital for both homeowners (who have difficulty paying utility bills) and building owners (who are hesitant to take on additional debt). Additionally, LMI consumers have difficulty accessing financing for clean energy projects.

Lack of awareness or education about energy efficiency is a barrier to participation in clean energy programs for LMI communities and households. There is a lack of awareness and/or skepticism about the ability to deliver on performance among residents and building owners. Additionally, end users do not know how to operate and maintain equipment, such as high efficiency boilers or furnaces, once it is in place. More education is needed on how to operate and maintain equipment post-installation.

Many homeowners are still unaware of the NYSERDA programs available to them for energy efficiency. It is very difficult to promote programs that many people are still unaware of and competitive advertising regarding solar energy has created an obstacle to educating homeowners on the value of energy efficiency.

Outreach support to LMI communities and households is not currently being provided consistently throughout the state and there are gaps in different regions. As required in the GJGNY Act, each CBO currently focuses on particular communities within their region, generally in the area that the CBO is physically located.

Homeowners who qualify for the Assisted Home Performance with ENERGY STAR incentive often do not qualify for a loan, and typically do not have the savings to invest in the project. While CBO'S serve many low to moderate income customers, CBO's are left in a position of focusing more on market rate customers to meet deliverables for numbers of retrofits, which is the current main metric for success for CBOs.

Lack of coordination across State-sponsored LMI focused initiatives, community organizations, and financial institutions can be a barrier to finding effective solutions. Coordination among these parties would allow for better packaging of resources for LMI consumers and increase participation in clean energy programs.

Low energy prices are becoming an obstacle to motivating homeowners to take action. This obstacle is also making the Savings to Investment Ratio (SIR) harder to show on some projects, which affects the availability of NYSERDA financing.

LMI consumers sometimes receive inconsistent direction from locally-based engagement organizations and contractors. For example, even though On-Bill Recovery (OBR) Financing is an option that homeowners want to use and CBOs promote the benefits of OBR, contractors may not offer the option because, in many cases, they know the project will not pass the strict cost-effectiveness criteria for OBR. More coordination is needed between the locally-based engagement organizations and contractors so they provide clear and consistent direction to end users.

An additional barrier to both LMI consumers and CBOs involves the complexity of the different clean energy programs and resources that are available to customers. Current NYSERDA programs are complex and time consuming compared to most home retrofit projects. The NYSERDA process has many decision points, each of which adds time to the project and adds additional opportunities for a customer to say no or drop the project after losing interest. The complexity of the process is difficult to communicate concisely and can be discouraging to customers.

Some contractors do not provide multiple proposals that prioritize recommended measures by cost effectiveness. Recommended measures are often combined together in one or two scenarios and customers cannot compare the relative savings of each recommended measure. LMI customers may feel they need to install a project that is too expensive for them or not at all. CBO's reach many LMI customers to help them create a more reasonable work scope, but many opt out of the program or may not be a priority for the contractor if they are not able to complete a large work scope.

4 Recommendations

This section provides the Working Group recommendations for future activities for the next round of locally-based engagement organizations.

4.1 Key Considerations for Future Community-Based Engagement Initiative

The Community Outreach Discussion Working Group identified several elements that should be included in the future Community-Based Engagement Initiative to address some of the barriers identified in Section 3. These elements introduce what a future Community-Based Engagement Initiative should address. Specific activities are identified in Section 4.2.

The future Community-Based Engagement Initiative should focus on clear and measurable outcomes so success is easy to define and measure. While the current CBO contracts have consistent overarching goals, the task(s), retrofit goals, and targets, varied from region to region which, at times, made it difficult to quantify results and measure success as a whole for the program. Additionally, a chief emphasis of success for CBOs was the number of retrofits generated for the HPwES Program. Limiting the focus of success to this single measurement down-scored the value of the CBO efforts, and it is recommended NYSERDA consider additional metrics. Locally-based engagement organizations need to facilitate relationships between local economic development agencies, local community-based organizations, contractors, and other agencies and organizations to maximize the potential impact of engagement efforts to the LMI households and communities. This will enable locally-based engagement organizations to work with other locally-based organizations to form partnerships and extend the engagement to a broader audience.

The future Community-Based Engagement Initiative should include quarterly plans to set flexible goals throughout the program. This practice will also allow locally-based engagement organizations to adjust strategies as the program is being implemented and as opportunities for LMI consumers and households evolve. Currently, NYSERDA energy efficiency programs require customers select and work with a participating contractor. The Working Group suggested that upon a customer completing an application for NYSERDA programs they receive contact information for their regional locally-based engagement organization to ensure customers are provided with this resource and increase the likelihood of

successfully completed projects. A list of common definitions (Appendix A) should be incorporated into the future Community-Based Engagement Initiative. During the current CBO effort, there has been different interpretations of what certain elements of the program are meant to address. For example, several CBOs have different interpretations of how NYSERDA defines aggregation and how it should be implemented. A list of common definitions should help to address this confusion.

The next Community-Based Engagement Initiative should target regional coverage based on the 10 Economic Development Regions as defined by Empire State Development. The regions are North Country, Capital District, Mid-Hudson, Long Island, New York City, Mohawk Valley, Southern Tier, Central New York, Finger Lakes, and Western New York. This geographic alignment with other State efforts would allow for full Statewide coverage with locally-based engagement organizations that can provide services throughout each region. Additionally, although efforts will primarily target LMI communities and households, locally-based engagement organizations will also assist market-rate customers.

Locally-based engagement organizations should have an awareness and alignment with Regional Economic Development Councils (REDCs) and what they are doing in their region. REDCs tend to focus on individual communities that are in need. Locally-based engagement organizations need to be aware of those communities along with the additional resources that will be brought to that community. Homes and Community Renewal (HCR) is one of the groups that participates in the REDCs; locally-based engagement organizations that have relationships with HCR can be kept aware of opportunities through HCR. Although the Neighborhood Preservation Coalitions and Rural Preservation Coalitions (NPCs and RPCs) administered by HCR are not included in the Consolidated Funding Application (CFA) process administered by REDCs, the CFA does include some funding opportunities from HCR, such as the NY Main Street (NYMS) and Urban Initiatives (UI) programs, that locally-based engagement organizations can concurrently leverage to provide opportunities for residential and commercial energy efficiency.

The Working Group identified a need to have a better system to associate and attribute leads back to locally-based engagement organizations. The issue was traced back to language on the application. Specifically, the terminology used in the question on the application needs to be simplified or the question needs to be asked differently. For example, most consumers do not know what the acronym “CBO”

means, and may not know the full term without explanation. Members of the Working Group suggested the application be changed so that the lead is directly attributed to the locally-based engagement organizations through automated hyperlinks or some other mechanism so that the consumer does not have to remember to select the organization on the application.

The future initiative should take into account that many organizations are generally not allowed to become certified MWBEs. NYSERDA should reconsider the language included in the GJGNY law and included in past solicitations for locally-based engagement to give preference in awards to applicants that include significant participation by minority- and women-owned business enterprises (MWBEs) and add to this language, partnerships with MWBEs or organizations that consistently employ women and/or minorities.

The future Community-Based Engagement Initiative should ensure educational barriers by the local engagement contractors are addressed by including requirements for technical expertise in the selection process and throughout the program. A routine conference call or meeting is suggested however, it is recognized, that alone may not achieve the requisite level of expertise necessary for locally-based engagement organizations to efficiently provide reliable, authoritative, professional services to customers, and that additional educational opportunities may be necessary.

The local engagement organization should provide and continue to build strategic business relationships with local partners with the intention of extending NYSERDA's outreach to residential, LMI customers. This network of local partnerships (e.g., block clubs, Building Performance Contractors Association and Efficiency First) will act as channels for marketing, referrals, financing, resource identification, and project implementers. The Working Group recommends the future engagement organizations facilitate routine conference calls and/or webinars with partners that result in information exchanges and mutually beneficial strategies focused on LMI engagement that results in clean energy projects.

To address marketing related challenges, NYSERDA should work on an ongoing basis with locally-based engagement organizations to ensure marketing tools are up-to-date and reflect current market conditions. NYSERDA should also work with the future engagement organizations to ensure quality marketing tools are developed and maintained. To address the lack of awareness barrier for LMI communities and households' barrier outlined above, Working Group members suggest that NYSERDA increase its own marketing efforts or allow locally-based engagement organizations to publish their own advertising.

To address the database barrier described above, NYSERDA should work with the existing CBOs and future engagement organizations define the data needs, identify the data sharing requirements related to different parties, establish appropriate centralized databases, and simplify data collection processes.

Building relationships with contractors was identified as a key task for the future Community-Based Engagement Initiative by the Working Group. NYSERDA should direct current CBOs to continue to develop strong relationships with contractors and identify any challenges or issues to NYSERDA for resolution. NYSERDA should also develop a training component for contractors so they understand what locally-based engagement organizations offer as a resource.

NYSERDA is actively working to address the complexity of clean energy programs by removing the silos that have existed between programs in the past and working to streamline programs. This work will lead to locally-based engagement organizations and contractors being able to more easily navigate NYSERDA program resources and reduce response time to customers on what resources are the best fit for their projects. One example of this work to remove silos between existing programs involves the integration of EmPower and HPwES. This integration will resolve current contractor issues with confusion between programs and provide greater continuity for the customer. Members of the Working Group noted that the separation of the audit from the implementing contractor could serve a critical role in building trust and creating a more competitive environment for contractors. Having contractors bid on jobs that have been audited would also solve the issue of customers getting more than one option for implementation. Other members of the Working Group noted, however, that doing this would also make the process even more complex and could lead to delays with project implementation.

4.2 Essential Engagement Activities for LMI Households and Communities

In identifying future engagement activities, the Working Group wanted to ensure that each activity was SMART (specific, measurable, achievable, relevant, and time-bound) to make it easy to associate clear outcomes with each activity. The Working Group proposed to include a set of base activities that every locally-based engagement organization would have to implement as well as a separate pot of funds for regional-specific focused activities. Organizations would submit proposals to do “pilot projects” focused on a specific effort in a defined region with a set timeframe, specific activities, and measurable outcomes. Examples could include aggregation projects, workforce development initiatives, and energy challenge

campaigns (similar to Solarize campaigns). As the initiative is implemented and NYSERDA incorporates lessons learned, changes may be made to the activities of the locally-based engagement organizations. Additionally, the quarterly plan process outlined in Section 4.1 will allow future engagement organizations to incorporate regional differences in setting goals and outlining activities as well as being able to shift the scope of activities to incorporate changes that reflect current market needs.

The remainder of Section 4 outlines the base activities recommended by the Working Group.

4.2.1 Connecting Consumers to External Programs and Resources

Locally-based engagement organizations would assist customers with completing applications for projects and help customers find the financial resources to complete projects based on the home energy assessment conducted by a contractor. Locally-based engagement organizations would assist consumers with accessing NYSERDA, other State, federal, and local resources to complete clean energy projects and to help reduce their energy burden including payment assistance. These organizations would be expected to have knowledge of all of these available resources. Additionally, in the future, locally-based engagement organizations could play a value added role to ensure quality assurance of programs for NYSERDA.

Some members of the Working Group noted that locally-based engagement organizations do not necessarily possess the skills needed to leverage other sources of funding and/or financing for customers and that these skills are more akin to larger organizations, not necessarily the smaller, locally-based organizations. However, the ability to leverage other sources of funding and financing for projects will be essential to assist customers with securing funding for completing projects.

4.2.2 Contractor Engagement

Under this activity, locally-based engagement organizations would work with the Home Performance Program contractors and other NYSERDA contractors to clarify work scopes and enable projects to move forward. Additionally, locally-based engagement organizations could create templates and tools to help make work scopes more understandable to customers. However, some members of the Working Group felt that these templates and tools should be created by a central program and implementation contractor

for the Community-Based Engagement Initiative or by the contractors. NYSERDA could require contractors to provide templates and tools that are more understandable through contractor education and training. Locally-based engagement organizations would hold routine meetings with contractors to coordinate efforts on an ongoing basis and avoid duplication of efforts.

Locally-based engagement organizations need to create unique ways to engage contractors with a shared goal of serving more LMI customers. They could partner for tabling at events and other forms of combined marketing and engagement. Contractors often engage in events on a routine basis and should invite locally-based engagement organizations to participate with them. In addition, locally-based engagement organizations should work with contractors in order to assist them in learning how to access and leverage other sources of funding for clean energy projects so that they are better positioned to offer this support to future projects.

NYSERDA should also encourage contractors to reach out to locally-based engagement organizations and form strong partnerships. The Working Group noted that there is an opportunity to continue to improve the relationship between contractors and locally-based engagement organizations. One option identified by the Working Group was incentivizing the contractors to work more closely with the locally-based engagement organizations. This could also expand the breadth of our efforts into communities that current clean energy programs do not already reach.

Locally-based engagement organizations can play a critical role at reducing the level of overhead involved for contractors to participate in NYSERDA or other incentive and financing programs. Additionally, community-based organizations can assist in reducing the costs of customer acquisition through providing qualified leads to contractors and through the community events and education programs they execute. The Working Group identified prequalification as a huge benefit to the contractor. This involves the locally-based engagement organization providing a qualified lead (meaning the engagement organization has assessed the likelihood to acquire financing and the willingness of the homeowner to move forward) to the contractor. Working Group members noted that it is important that engagement by contractors with the locally-based engagement organizations does not increase their overhead, but instead decreases it through all of the ways cited throughout this report.

4.2.3 Partner Development and Engagement

Locally-based engagement organizations should work with other locally-based organizations to form partnerships to extend the education and outreach to a broader audience. Effective partnerships established by locally-based engagement organizations will result in increased market penetration and additional customer project activity. The locally-based engagement organizations will need to demonstrate that they have a really strong partner network and have the ability to form new partnerships. It is important to find organizations that are doing work similar to the locally-based engagement organizations so that they can share information where both parties benefit from the relationship. The Working Group agreed that partnerships should be ongoing relationships with exchanges of leads and referrals between the two entities, not just one-time occurrences.

4.2.4 Consumer Education and Marketing

This activity would entail tabling at events, community presentations, and one-on-one engagement to community leaders and elected officials. It would include speaking at rotary clubs, chambers of commerce, community groups, church groups, employee benefit fairs, lunch and learns, etc. and responding to inquiries from customers that actively seek information and assistance. Additionally, locally-based engagement organizations should target more events aimed at LMI customers as opposed to attending a lot of events where mainly higher-income level homeowners attend.

The Working Group also suggested that locally-based engagement organizations should look for unique strategies such as engaging consumers on clean energy at events that are not related to clean energy. Another strategy would be to invite participants to walk with contractors as they conduct a home energy assessment. NYSERDA could encourage locally-based engagement organizations to coordinate with the New York State Department of Education to teach energy workshops for school districts so that students, parents, teachers, renters, landlords and homeowners will be more consistently encouraged to participate in clean energy programs.

Locally-based engagement organizations could be asked to develop case studies to bring in more referrals, be engaged in social media, create and maintain websites, develop brochures, and develop flyers. Some elements that are currently missing from marketing materials are a focus on health and safety, quality assurance, and language diversity. Engagement organizations should work with

NYSERDA to customize marketing materials to fit the needs of the community or group to which they are conducting the engagement. Additionally, engagement organizations will work with NYSERDA to increase media involvement and engagement at events to get the word out to a broader audience.

Locally-based engagement organizations should also assist customers with language barriers, such as Spanish-speaking customers, by referring them to resources that can assist them and track the number of these types of customers where this assistance was provided.

4.2.5 Facilitating Finance Applications

Under this activity, locally-based engagement organizations would assist customers with applications, loan qualification, and understanding the process. While loan applications can be completed privately by applicants and submitted on-line, often times, customers who need assistance filling out an application do not feel comfortable providing personal financial information to contractors so locally-based engagement organizations may fill a critical role in making loan applications successful.

4.2.6 Regional-Specific Activities

As noted earlier, the Working Group proposed that NYSERDA have a separate fund to which engagement organizations can propose for regional-specific activities. Locally-based engagement organizations could submit proposals on a quarterly basis to NYSERDA for review and approval of these regionally specific activities. Proposals would be competitively selected from the pool of proposals received based on specific criteria. The Working Group identified two main regional-specific activities, which include aggregation and workforce development as examples of regional-specific activities.

Several members of the Working Group felt that aggregation is not the answer to scalability. Other members of the Working Group felt aggregation was a successful strategy to accelerate clean energy deployment. Several existing CBOs have chosen not to do aggregation because of the perceived obstacles and instead focused on marketing efforts that were already working in their regions. Thus, the Working Group decided to move aggregation to a region-specific activity instead of a base activity for all.

However, other members of the Working Group noted that aggregation could be a successful strategy that works in every part of the State. In some areas where aggregation did not work, existing CBOs were unprepared to sell energy efficiency, did not fully understand the home performance marketplace, and/or

were unable to garner support among contractors to get the work done. The CBOs that completed successful aggregation pilots were able to overcome these challenges. Should aggregation become part of the new Community-Based Engagement Initiative, the engagement organizations should receive extensive training on how to run a successful aggregation program, including mentoring from successful aggregators that have real experience.

Members of the Working Group identified the need to expand the concept of aggregation to different scenarios that may require coordination with other programs such as low-rise residential new construction for deep energy retrofits, multifamily performance, NY-Sun, etc. so that participating Home Performance contractors can be part of potentially bigger projects. In aggregation, there is not much of an opportunity for locally-based, untrained and disadvantaged workers to be involved. As is current practice, the Working Group suggested that community benefit agreements be used with participating contractors, who would agree to hire from the community to create some workforce development related benefits for the aggregation project.

Considering the points above, the Working Group recommends that, as in the past, aggregation be a region-specific activity instead of a base activity for all.

With regard to workforce development, different efforts undertaken by CBOs have resulted in various degrees of success. As an example of a successful effort, locally-based engagement organizations have provided university students with internships at the locally-based engagement organization and those students were then later employed in the clean energy industry.

Locally-based engagement organizations could facilitate and connect contractors (not just limited to Home Performance Program contractors) with resources in the community that they may not be aware of, such as courses and training programs at the local community colleges to assist contractors with acquiring new or advanced job positions in the clean energy industry. Additionally, locally-based engagement organizations could form partnerships with employers for either internships or job placement. This could help bridge the gap between community members and employers seeking to hire.

NYSERDA's Workforce Development Team would be part of the training of the engagement organizations up front. Despite several strategies being identified, the Working Group still believed that this activity would be better suited as a region-specific activity rather than a base activity.

5 Expected Outcomes and Metrics

This section provides the Community Outreach Discussion Working Group recommendations for expected outcomes and metrics associated with the activities outlined in Section 4. Table 2 outlines the expected outcomes and metrics by activity. Metrics will be better understood over time and may be adjusted as the initiative is implemented. Some of the metrics described below may need to be reported by parties other than the engagement organizations.

Table 2. Expected Outcomes and Metrics by Activity

Activity	Organization
Connecting Consumers to External Programs and Resources	<ul style="list-style-type: none"> • Number applications/leads for projects that apply to NYSERDA and other programs • Reduction of energy burden • Number of projects that could not have gone forward without the additional resources provided through the engagement organization • Amount of additional funds leveraged (Housing and Community Renewal (HCR) funding, Housing and Urban Development (HUD) funding through municipalities, etc.) • Resulting energy savings and greenhouse gas emissions • Conversion rate from audit to completed retrofit • Conversion rate from lead to completed audit
Contractor Engagement	<ul style="list-style-type: none"> • Number of working relationships that exist with contractors • Savings from the resulting projects • The recruitment of new contractors and minority and women-owned business enterprise (MWBEE) into the program • Job creation (for examples, contractors are able to hire new employees as a result of the relationship developed with the locally-based engagement organizations)
Partner Development and Engagement	<ul style="list-style-type: none"> • Number of new partnerships that are formed that result in an increase in project activity • Case studies describing successful types of partnerships, roles for partners and impacts of the partnership • Number of resulting projects that come out of that partnership and the resulting energy/greenhouse gas savings
Consumer Education and Marketing	<ul style="list-style-type: none"> • Number of attendees at events who had direct interaction with engagement organization • Number of events completed • Outcomes of the event including number of leads generated for specific programs • Resulting energy savings from projects
Facilitating Finance Applications	<ul style="list-style-type: none"> • Number of applicants assisted with loan applications (free home energy assessments, subsidy application, credit application, external grant application) • Completed loans • Anticipated energy savings • Number of customers making payments on loans/ Number of customers not making payments on loans

NYSERDA is trying to focus financial resources where dollars invested can make the most impact on energy savings/greenhouse gas emission savings. Members of the Working Group identified a concern on whether or not savings should be tied to leads generated for programs because locally-based engagement organizations do not have any control over completion of projects and resulting energy savings.

Engagement organizations generate a lot of leads that may not come to fruition if the customer opts not to go forward with the retrofit project. Members of the Working Group were not convinced that savings should be a measure of success of locally-based engagement organizations' engagement efforts. Although locally-based engagement organizations are involved with projects through completion, they do not have a direct impact on the measures that are installed for a project because they do not control the actual work scopes once the contractor gets involved.

Several suggestions were made on how to resolve this concern including having the contractor include projected energy savings in the work scope so that locally-based engagement organizations can access that information. Locally-based engagement organizations may be able to access utility information through working with the weatherization program and/or directly with the utilities. However, past CBOs have not been able to obtain data from utilities due to privacy issues. NYSERDA has agreements in place to obtain energy consumption data from utilities, and is currently developing plans for a secure data transmission and repository. Another suggestion was made that rather than having locally-based engagement organizations spend their budget on tracking down energy savings, NYSERDA can tie energy savings back to leads generated by these organizations using NYSERDA's databases. NYSERDA will work with the future engagement organizations to develop a simple process to connect energy savings to leads for performance tracking.

6 Characteristics of Successful Locally-Based Engagement Organizations

The Working Group provided recommendations on what characteristics future locally-based engagement organizations should possess in order to ensure a successful Community-Based Engagement Initiative. Specifically, these organizations should have technical expertise, basic financial knowledge, and strong relationships in the community.

One of the key characteristics identified for NYSERDA's next initiative is minimum standards for technical expertise. There were different views expressed by members of the Working Group on the appropriate level of technical expertise that should be required for future locally-based engagement organizations. Some members of the Working Group felt that not every individual needs to have the Building Performance Institute (BPI)-Building Analyst certification but contractors should have to demonstrate technical qualifications such as trainings completed (BPI Building Science Principles certificate). Other members of the Working Group felt that at a minimum, there should be at least one individual who completes the BPI Building Science Principals Certificate Course and possible the BPI Building Analyst and Envelope Professional certifications. NYSERDA could require different options for locally-based engagement organizations to demonstrate technical expertise to allow for flexibility in this requirement. Only staff members with demonstrated technical expertise (such as the BPI Building Analyst certification) can address issues of workmanship done by the contractors and provide quality assurance for the customer and program(s) providing financial assistance to the project.

The Working Group suggested that NYSERDA set aside funding in the future Community-Based Engagement Initiative for professional development for locally-based engagement organizations to increase knowledge in energy efficiency and renewable energy sectors. NYSERDA could also include training as part of webinars that are held on a routine basis with locally-based engagement organizations. NYSERDA's Workforce Development Team may be able to provide access for contractors to the BPI Building Science Principles certificate course at a reduced rate. Some members of the Working Group also noted that NYSERDA should ensure CBOs have the knowledge and understanding of the energy modeling predominantly utilized by contractors in their region. That way, they can properly assist customers with questions regarding the audit performed by the contractor.

Another key characteristic identified was that locally-based engagement organizations should possess a basic financial knowledge because they will be involved in facilitating finance applications. The Working Group identified language skills as something future organizations will need to possess since they have to be able to speak the languages to the communities' that they serve. Locally-based engagement organizations should also have to demonstrate strong sales experience as that is one of the key skills organizations will need to possess in order to be successful. NYSERDA can also provide sales training through the planned routine webinars described above.

Locally-based engagement organizations need to demonstrate good working relationships with contractors. In order to demonstrate this, future locally-based engagement organizations should be required to provide letters of recommendation and support from contractors within the region(s) they are proposing to serve. Additionally, locally-based engagement organizations should provide letters of recommendation and support from local organizations such as churches, rotary clubs, etc. to demonstrate strong ties to the communities in their region(s).

Lastly, locally-based engagement organizations should demonstrate the ability to form and maintain strong relationships with the municipalities and communities they will be working in.

These organizations should also demonstrate the ability to access and leverage additional grant (local, State, and federal) funding and be able to package these resources for projects. Locally-based engagement organizations should demonstrate the ability to reduce the energy burden for end users, such as familiarity with utility bill payment assistance programs.

7 NYSERDA Response to Recommendations

NYSERDA endorses the recognition throughout this report that many households and communities are not aware of the clean energy opportunities that are available to them or are unable to access them due to financial barriers to project implementation. In particular, low- to moderate-income (LMI) consumers pay a disproportionate share of their income toward the cost of energy. These consumers also are less likely to be reached in the near term by clean energy market actors and project developers because of perceived credit risks.² Enhancing access to and uptake of renewable and energy efficiency solutions for LMI households and communities will enable New York State to meet its ambitious clean energy, environmental, and affordability goals.

As mentioned earlier in this report, addressing the energy affordability needs of the LMI households and communities will be the primary goal of the new Community-Based Engagement Initiative and it is essential to focus on this goal when reviewing past outreach efforts and making recommendations for this new initiative. With this primary goal in mind, NYSERDA has reviewed the recommendations included within this report and outlined responses to those recommendations below.

NYSERDA agrees with the recommendations of the Working Group that there is value in having a set of base activities being undertaken by locally based engagement organizations, while also enabling regional-specific activities. Given the anticipated changes to NYSERDA programs over the next few years, leveraging other sources of funding and financing in order to assist LMI households with completing clean energy projects will become a primary activity. Although this is something current CBOs actively do in order to assist LMI households, the primary focus of the current CBO program is enrolling customers in NYSERDA GJGNY funded programs. It is important to highlight this significant change and note that these skills will be an essential component of the new Community-Based Engagement Initiative.

Regarding the metrics included in Section 5, NYSERDA agrees with the scope covered by these metrics, but recognizes that some deserve more weight than others when measuring performance and impact in the new initiative. NYSERDA will focus more on metrics with clearly defined outcomes and measurements of success that demonstrate direct benefits to LMI households and communities. Primary metrics for the

² 2015 New York State Energy Plan: <http://energyplan.ny.gov/Plans/2015>

new initiative will focus on the impact the new initiative has had on addressing the energy affordability needs of LMI households and communities. For example, energy bill savings and additional funds leveraged that enable projects to move forward will be weighted more heavily than number of attendees at an event or number of events completed.

Throughout the report, there are several references regarding locally-based engagement organizations playing a value-added role in quality assurance for NYSERDA programs. NYSERDA currently addresses quality assurance for its programs by inspecting a sample of contractors' projects and reviewing work in response to consumer concerns. Quality assurance inspections are accomplished by an independent third party whose technicians are trained in building science and energy efficiency project techniques. In order to avoid duplication of services between its contractors, NYSERDA will not include this role in the new initiative. However, NYSERDA will continue a dialog with CBOs to better understand their views regarding the quality assurance of LMI households and will focus on the continuous monitoring and improvement of existing quality assurance services. In addition, NYSERDA encourages CBOs and the future local engagement organizations to refer customer concerns to NYSERDA.

NYSERDA agrees with the recommendations of the Working Group in clearly outlining skills and qualifications in the new Community-Based Engagement Initiative so that we ensure we receive proposals from organizations that are best suited to perform the work. Key skills that we will look for include the ability to access and leverage funding from other State, federal, and not-for-profit entities; the ability to form strong partnerships with contractors and other locally-based engagement organizations to extend the outreach to a broader audience; the ability to conduct effective outreach activities, and technical expertise, meaning basic building science knowledge. Although NYSERDA plans to hold routine webinars for training (e.g., NYSERDA programs and initiatives; marketing and communication protocols; free online technical training opportunities; etc.) and information sharing between locally-based engagement organizations in the new initiative, the solicitation will include requirements for technical expertise to ensure organizations are selected that possess the necessary skills to be successful in addressing the needs of LMI households and communities in the new initiative. NYSERDA will require different options for locally-based engagement organizations to demonstrate community engagement experience and technical expertise to allow for flexibility in this requirement.

Several concerns were raised throughout the report regarding access to data for reporting and lack of a good, central database. NYSERDA will work with the existing CBOs and future locally-based engagement organizations define the data needs, identify the data sharing requirements related to different parties, establish appropriate centralized databases, and simplify data collection processes.

Members of the Working Group expressed concern regarding the new initiative no longer requiring organizations to meet the definition of a CBOs per the GJGNY legislation and as required in the current GJGNY outreach program. NYSERDA is expanding the definition so that it does not exclude other types of locally-based organizations that can effectively accomplish the goals of the new initiative. NYSERDA will focus more on the qualities and skills of organizations as opposed to structural and administrative characteristics, all with the objective of best serving LMI households.

In summary, NYSERDA again thanks the members of the Working Group for their time and effort in providing valuable feedback and recommendations for the Community-Based Engagement initiative. NYSERDA looks forward to launching this new initiative and working collaboratively with stakeholders in the LMI market to ensure its success at reducing the energy burden for LMI households and communities. NYSERDA will continue to explore the other recommendations in the report that are not mentioned above, discuss them with CBOs, home performance contractors and other stakeholders to better understand the impact of the recommendation on the ability to best serve LMI households, and report back to the GJGNY Advisory Council at a later date regarding their status.

Appendix A: List of Common Definitions

Aggregation: A collection of eligible homes, businesses and/or not-for-profits in the same neighborhood, brought to the program by an organization under contract (or subcontract) to NYSERDA for engagement services, and who have all agreed up-front to use the same contractor or contractor team to perform assessments and the ensuing retrofit work. This practice includes a community benefits agreement

that comes with discount for people getting the retrofit as well as benefits that create pathways for people to attain jobs (wage and hiring standards). Additionally, multiple contractors should be included

in an aggregation effort.

Environmental-Justice: Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.³

Environmental Justice Communities: Environmental justice communities are commonly identified as those where residents are predominantly minorities or low-income; where residents have been excluded from the environmental policy setting or decision-making process; where they are subject to a disproportionate impact from one or more environmental hazards; and where residents experience disparate implementation of environmental regulations, requirements, practices and activities in their communities.⁴ As established in DEC Commissioner Policy 29 on Environmental Justice and Permitting (CP-29)⁵, Potential EJ Areas are 2000 U.S. Census block groups of 250 to 500 households each that, in the 2000 Census, had populations that met or exceeded at least one of the following statistical thresholds:

- At least 51.1percent of the population in an urban area reported themselves to be members of minority groups; or
- At least 33.8percent of the population in a rural area reported themselves to be members of minority groups; or

³ <https://www.epa.gov/environmentaljustice>

⁴ http://www.energy.ca.gov/public_adviser/environmental_justice_faq.html

⁵ <http://www.dec.ny.gov/public/899.html>

- At least 23.59percent of the population in an urban or rural area had household incomes below the federal poverty level.

Local Partners: Groups, organizations, and/or individuals representing constituency groups that may include, but are not limited to: economic development agencies, business associations, community action agencies, chambers of commerce, municipal governments, business leaders, incubators, nonprofits, civic groups, utilities, other NYSERDA contractors, and others.

Low- to Moderate-Income: Less than or equal to 60 percent of the area (county) median income (AMI) for low income and above 60 up to 80 percent of the AMI for moderate income.

Packaging of Resources: Engagement organizations would be responsible for creating packages of services for consumers and connecting them to the appropriate programs and/or assisting with the prequalification or application process.

Partnerships: Strategic business relationships created with Local Partners by the engagement organization with the intention of extending NYSERDA's engagement to residential, small business, and multifamily customers.

Pilot Project: A project implemented by the engagement organization that involves the initial small-scale implementation of an activity or set of activities to test the viability of the initial pilot project and inform development of a long-term strategy.

Priority Projects: Projects defined by the Regional Economic Development Councils as meeting their regional goals for economic development and recommended to the Governor for funding.

Regional Economic Development Councils (REDCs): Appointed by the Governor and oversee the regional growth and development strategies they have defined to meet the goals and objectives for regional growth. (See <http://nyworks.ny.gov>).

Regional Strategic Plan: The summary plan that each region submitted to the State of New York as part of the Governor's New York Open for Business Regional Economic Development Councils competition in 2011. The Plan describes the characteristics, demographics, geographic and economic data, challenges and opportunities unique to a region. It also provides an outline to grow the regional economy by focusing on Priority Projects which stimulate investment and growth in the region.

Underserved Populations: Historically unserved and underserved communities are those groups that either have documented low levels of access and/or use of clean energy services and programs, face educational or language barriers to participation in clean energy programs and/or the policy making process for clean energy, may have low incomes and therefore carry a high energy cost relative to household income, and/or have been identified as priorities for clean energy services or program.

Appendix B: Green Jobs-Green New York Community Outreach Discussion Working Group Meeting Notes

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting One**

January 5, 2016
3:00 - 4:30 pm

Participants met via phone call, in person, and videoconference at NYSERDA’s Albany and Buffalo offices on January 5, 2016. Telephone access was made available to members who could not be present at a video conference site.

Attendees

Attendee	Response and Location
Lisa Tyson	Attending via conference call
Stephan Edel	Attending via conference call
Clarke Gocker	Attending in Buffalo (PUSH Buffalo)
Jason Kulaszewski	Attending in Buffalo (PUSH Buffalo)
Will Schweiger	Attending via conference call
Hal Smith	Attending via conference call
Kevin Rooney	Attending via conference call
Guy Kempe	Attending via conference call
Kathleen Langton	Attending in Albany
Chris Carrick	Attending via conference call
Kelly Tyler	Attending in Albany
Jessica Waldorf	Attending in Albany
Karen Hamilton	Attending in Albany
Alison Khachadourian	Attending in Albany
Kevin Carey	Attending via conference call

The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

NYSERDA Director of Communities and Local Government and working group facilitator, Kelly Tyler, introduced herself and had Jessica Waldorf perform a Roll Call for attendees. Kelly suggested and the Working Group agreed that the high level goal of the Working Group will be to provide NYSERDA with a recommendation to the Green Jobs Green New York (GJGNY) Advisory Council for future outreach efforts that will increase low-to-moderate (LMI) income participation in clean energy activities. In particular, recommendations shall include the identification of tasks and associated metrics that a support contractor (i.e. CBO) shall perform to support NYSERDA’s LMI efforts under the Clean Energy Fund. Recommendations may also include the characteristics of organizations and personnel that would best support the effort. She then invited comment from those present on all topics, beginning with thoughts/ideas for tasks for future contractors.

II. Discussion (All Attendees)

What are the needed tasks that will encourage clean energy activities by the LMI sector?

Comments/Discussion included:

- Continue to building relationships and help people through the process to ensure that projects move forward. Work with other organizations (throughout Western NY) to reach broader audience (City Neighborhood Housing Services). Customers need some hand holding.
- Counties are very economically diverse; consequently, there isn't a one size fits all approach that works. As an example, through current efforts, aggregation hasn't worked in rural areas.
- Constituency Based Organizations (CBOs) can leverage external funding to help support projects and bring resources, technical expertise, assist in accessing local banks for Community Reinvestment Act (CRA) funding, work with housing programs, etc.
- CBOs have expertise to know how to make programs accessible and expertise in knowing the resources that are out there.
- Couple outreach with the EmPower Program - CBOs spent a lot of time with LMI consumers but can't get them access to financing.
- It's critical that we find ways for homeowners to reduce energy demand through residential programs.
- If focus is to expand community outreach, need to work backwards and see what the impediments are that we have faced.
- Expand the breadth of area the local contractor is to cover. LMI residents live/work next to market-rate customers. You can't implement community outreach and get results without addressing opportunities for both audiences.
- Impediments preventing success include LMI consumers unable to get access to financing.
- Continue to expand criteria to allow for broader eligibility. CBOs can work with philanthropic organizations where loans are forgiven at some point.
- Discussed Neighborworks Loan Program which is able to consolidate lending and provide financing to others that wouldn't qualify for NYSERDA financing.
- Would be helpful if outreach contractor/NYSERDA put together regional matrix of all available funding. This might be easier to do based on region rather than across all of New York State.
- Need to have CBOs that can find and leverage external resources.
- Community Development Block Grant (CDBG) funds are available in local communities that CBOs can help access.
- One of tasks for outreach contractors should be to put together a menu of available programs and resources, many of which are specific to the region. CBOs research/secure/leverage other funding (grants) to get resources to fill in the gaps.
- The need exceeds the supply of funds. RUPCO has long list of homeowners in need of funds still waiting for next round of funding. GJGNV funding took a long time for work scopes to get approved.
- CBOs are constantly facing hang ups in the process (*e.g.*, EFS).
- Need regional support coverage throughout the state is not consistent. (Current CBO network does not cover entire state leaving regional gaps of service.)
- Capacity of CBOs varies region-to-region. Regions have unique needs. Discuss the need to target and the best way to do that.
- Proposers could suggest different targets and strategies
- Consumer education is a big component of what we should be doing and should broaden metrics of success to include number of presentations/educational seminars related to consumer education, as one example.

- People don't know how to use new equipment once it is in place. More education needed to end users on how to operate and maintain equipment once it is in place.
- One CBO mentioned they positioned their team to serve as a bridge between the customer and Home Performance (HP) contractor in order to protect customer interest by value propositioning. Having someone that isn't profit motivated is important.
- What type of education is most effective?
- One on one education with a customer is the best
- Discussed the CNY Energy Challenge Program performed by the Central New York Regional Development and Planning Board, which organized homeowners into small groups and conducted and implemented behavioral strategies that resulted in a with the goal to reduce residential energy use and get them into the HP Program.
- Discussed tailored education programs such as providing curriculum/education to middle school students. Students, in turn, bring home information to homeowners.
- Discussed the importance of a health and safety educational component and a home energy score that has real meaning and means something to the consumer that selling or buying their home.
- Need to make sure that CBO staff is well educated so they know what they are talking about when in the field.
- CBO staff education is definitely an area we are concerned about.
- Have CBOs been engaged with the Regional Economic Development Councils (REDCs)? REDCs are very informative and update their work every year in the form of Regional Strategic Plans, all of which have targeted focuses to spur activity/progress in low income communities. They also have REDC working groups in specific areas and it could be beneficial to have CBOs engaged in the REDCs and some associated working groups.
- Align LMI outreach efforts with the REDC Regional Sustainability Plans
- One CBO mentioned they submitted a CFA to the REDC for funding for state programs and participated in the Phase I regional plans.
- Discussed the workforce coordination role for CBOs: CBOs assisted in programs that created good paying local jobs, which helps to build relationships with homeowners. Assisting job seekers with finding Clean Energy jobs by using lead generation capacity with contractors to have them work with RUPCO to connect job seekers, help job seekers get access to training, matchmaking, mentoring, soft support, and transportation (hard) support.
- Aggregation can be a great model and creates great relationships with contractors.
- Aggregation doesn't work in every area and good relationships can be achieved without aggregation. We should incentivize contractors to work well with CBOs.
- It is great to foster good relationships between CBOs and contractors.
- CBOs should have more involvement with municipalities and local land banks.
- Discussed the relationship CBOs could have with the land bank and municipalities to get resolutions passed by municipalities to have individuals designated to assist with GJGNY effort.

In summary of the discussion, potential roles for future outreach efforts may include:

- Relationship building;
- Aggregation;
- Connecting consumers to external programs and resources; Packaging of resources

- Contractor and community resource; Assist contractors in finding other community resources if issues in home prevent other EE work to go forward
- Workforce development;
- Regional Economic Development Council engagement;
- Partner development;
- Consumer education -- Drive education and awareness of the low cost steps and behaviors LMI residents and building owners can take to save on utility bills;
- Facilitating finance applications;
- Outreach (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers);
- Contractor engagement and education (applications, find other resources, lead generation, contracts for aggregation); and
- Regionally specific focused tasks

III. Next Steps and Adjourn (Kelly Tyler)

Meeting minutes and a Doodle Poll to set up weekly meetings will be forthcoming. The agenda for the next meeting will include a discussion of how we want to measure success and (if time allows,) the identification of characteristics for the types of organizations that can conduct these tasks. Additionally, we may choose to discuss (define) the value to contractor for CBO engagement.

Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Two

February 2, 2016
3:00 - 4:30 pm

Attendees

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Jason Kulaszewski	PUSH Buffalo	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Guy Kempe	RUPCO	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Chris Carrick	Central New York Regional Planning and Development Board	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Karen Hamilton	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call

Participants met via conference call on February 2, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and had Jessica Waldorf perform a Roll Call for attendees. Kelly noted we are planning to extend the current CBO contracts through December 31, 2016, and clarified the discussion that this working group should focus on is for the future contractors, not the existing pool of CBOs. We would like to get a better sense of what is working now, what isn't working now, and what we should focus on under the next round of outreach in the future, likely starting January 1st, 2017, when the CBO contracts expire.

Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. No changes were suggested.

II. Discussion (All Attendees)

- Kelly reviewed the summary of potential roles for future outreach efforts identified from the previous meeting to see if anyone had changes or additional comments. Those roles include the following:
 - Relationship building;
 - Aggregation;
 - Connecting consumers to external programs and resources; Packaging of resources

- Contractor and community resource; Assist contractors in finding other community resources if issues in home prevent other EE work to go forward
- Workforce development;
- Regional Economic Development Council engagement;
- Partner development;
- Consumer education -- Drive education and awareness of the low cost steps and behaviors LMI residents and building owners can take to save on utility bills;
- Facilitating finance applications;
- Outreach (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers);
- Contractor engagement and education (applications, find other resources, lead generation, contracts for aggregation); and
- Regionally specific focused tasks
- What would be some of those regionally specific focused tasks? For example, someone noted in the last meeting that aggregation doesn't work in every region and could be a regionally-focused task. A couple of entities responded that aggregation was a good example. One person suggested that we drill down to a more local level for specific tasks such as a neighborhood or census block. Other than aggregation, no other region or local specific tasks were identified.
- Aggregation has been something that has worked really well for PUSH Buffalo. When we (Jason) are reaching out to end users, the message isn't the same for everyone so it makes sense to have more specific outreach. For example, the outreach and messaging differs between rural vs. urban areas.
- Kelly asked – What type of outreach are you referring to?
- Working with elected officials but also doing canvassing in the neighborhood through local events. The elected officials really need that education too.
- One member suggested that NYSEERDA comb through reports of successful CBOs to see what activities are working and include those as part of the future outreach contract.
- Direct leads and referrals from NYSEERDA to the CBOs have been working very well and should continue in the future.
- A suggestion was made to see what the numbers look like in areas where we don't have CBOs vs. the areas we do and what the differences are. When the Round 1 contracts started, zip codes were identified where the CBOs served. All of the jobs we received credit for would be identified on a zip code basis. Possibly use GIS to see what parts of the state CBOs are effective vs. what parts they are not.
- One CBO mentioned that one activity they have been doing is working with churches directly. We have 25 churches to reach a broader audience and getting about 40 retrofits. One of the things about that is that the churches have very different income levels. How will this work if we focus on low to moderate income in a very diverse audience? Don't think that it is region-specific, but we should be looking at how we get to a larger audience.
- Is partner development something that is working? What are we referring to when we talk about partner development?
 - The group seemed to agree, yes, partner development is an essential task for outreach.
 - An example provided was work with Presbyterian churches where she formed a very good partnership with them that resulted in a lot of projects being generated.

- The marketing to the market rate customers is the same for low-to-moderate customers (e.g. discussing the benefits of air-sealing), but the lower income community may just require a lot of additional handholding.
- In WNY, PUSH has been able to leverage the benefit of funding through the CBA (Community Benefits Agreement) and that has been a very effective pitch to customers.
- The CBA has been very effective in other regions as well and has helped to reduce the financial burden to the customer, especially in cases where we are doing aggregated projects.
- A member asked -- Are aggregation projects run similar to a solar aggregation campaign? Do they have a certain region, certain price guarantees, etc.?
 - Work with a group of contractors to sign agreements to offer discounted pricing to homeowners working with us in bundles. Based on volume of work, the Contractors are also agreeing to give us first-source hiring agreements so that the contractors come to us for individuals when they are looking to hire additional staff.
- Is the work that is performed a specific set of things or is it just anything that is needed?
 - It is all based on the audit that is done for the building. Anything found as part of the audit is available as part of the aggregation project.
- The churches also want solar to be included as part of the project, but we always try to encourage them to do efficiency first. Solar contractors are always coming to us for projects, but we can't give them to specific contractors. We would like to have solar included as part of the future roles for contractors.
- A few members of the working group mentioned they would also like the health and safety piece to be part of the work we do with customers. Unfortunately, we have to say now that if these are what they want addressed, we have to channel them to a different source.
- Are the current CBOs the types of organizations that can seek out external funding?
 - There are other groups that would provide the actual funding.
- Each CBO has their own different capacity. It is often a lot of work and takes time to track down these funding resources. A local resource guide of funding opportunities may be helpful to channel customers to the appropriate source.
 - NYSERDA could certainly help put this together, but we would look to the local organizations to help us identify those opportunities.
 - Some of this funding comes through CDBG grants that are given to local organizations like not-for-profit organizations. Part of the role could be to partner with municipalities to figure out what other funding opportunities there are. We should also be looking to health and safety projects and trying to push efficiency and other opportunities with those customers.
- CBO and Contractor Engagement
 - In reviewing the notes that we took at our last meeting, there weren't a lot of specific details on what types of activities CBOs could be doing with contractors. Can we take some time to talk about what current activities are, what is working, and what could be expanded upon?
 - One CBO suggested contractors should refer all customers to CBOs to handle the paperwork and work with Customers to help make projects work. Currently, we work with the contractor to complete financing paperwork and other paperwork from the contractor to help make projects work and accessing all external financing opportunities.

- There should be some sort of formal relationship defined between the contractor and the CBO.
- CBOs are reducing 10% of the cost for a project by completing the paperwork for the project. In exchange, they give the customer a reduction in the cost for a project and pay their employees working on the project a living wage.
- This could be defined as aggregation.
- Some contractors partner with church groups and do different types of shows and take care of the process to walk customers through the process if they don't have a CBO serving the area.
- One contractor mentioned they tried working with CBOs, but it doesn't always work. Getting the customer is the hardest part and once you have them, you have to work with them as part of the sales process and to build the relationship, not give the lead away to a third party. If that process goes awry, then there is an opportunity for CBOs to step in and assist with the project and trying to get it to move forward.
- Contractors might not want to hand off projects to a CBO if it means losing 10% of the cost of a project. They might not be willing to work with a CBO unless there was some other reason.
- I think what we are talking about is working together on making a sale to a customer as opposed to handing them off once a customer is on board to complete a project. In some regions we work together to sell programs to customers so that it is not seen as a competitive environment and instead as a collaboration.
- A good contractor can do all of the sales themselves. It is less risky for a contractor's sales person to work with a customer then to hand it off to a CBO. This could differ if the CBO has an existing relationship with a contractor.
- CBOs are giving contractors leads and then work as a team together to get the homeowner to go through the program.
- Even if we aren't providing leads to one specific contractor, when we are out doing events, we are promoting local contractors as an objective. That is something that should be kept in mind.
- There is a difference between a lead and qualified lead where you take on the paperwork. A qualified lead when you have done the work to calculate the financing and potential for a project to move forward, that is a huge benefit to the Contractor (pre-qualification).
- Would love to have an outside entity that provided qualified leads since as a contractor without a CBO in the region, we do a lot of that work ourselves.
- Contractor mistrust is something that has come up but as a contractor we do not have that experience and have very successful relationships with our customers. Most contractors are capable of doing that side of the business on our own.
- A bridge between the customer and contractor is not necessary. Contractors need and should form good relationships with customers on their own. We would, however, like it if there were someone else to do the paperwork.

Summary of Some Additional Roles/Activities for CBOs

- Combined market rate and LMI outreach
- Follow-up on direct leads/referrals from NYSERDA
- Elected/Municipal staff engagement

- Leveraging of external funds for outreach/education

III. Next Steps and Adjourn (Kelly Tyler)

NYSERDA will send out a Doodle poll to get a reoccurring meeting scheduled. Agenda items for the next meeting may include a break-down of activities for each role identified.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Three**

February 11, 2016
3:00 - 4:30 pm

Attendees

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe		Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Karen Hamilton	NYSERDA	Attending via conference call
Gregory Mumby	NYSERDA	Attending via conference call
Rebecca Hughes	NYSERDA	Attending via conference call
Jason Kulaszewski	PUSH Buffalo	Couldn't attend but sent meeting notes after the meeting that have been incorporated

Participants met via conference call on February 11, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and had Jessica Waldorf perform a Roll Call for attendees. Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. No changes were suggested. She reviewed the end goal of the working group, which is a final report to GJGNY Advisory Council and noted that this input will be considered in development of the next solicitation.

II. Discussion (All Attendees)

1. Question posed to group: What are the barriers that CBOs are trying to address in the market?
 - a. The financing process is difficult to get through, especially for the LMI communities. CBOs are addressing this barrier by assisting customers with getting through the financing process.

- b. There is a lack of awareness in the market and customers do not understand the need for energy efficiency. Customer education from CBOs can help address this barrier. Tools to help residents reduce energy use on their own would be extremely helpful. Discussed the ability to share tools and best practices of the CBOs through SharePoint or through meetings of the CBOs, such as the downstate convening that happens on a routine basis.
 - c. Cost is a barrier that keeps projects from moving beyond the audit phase.
 - d. Even though On Bill Recovery (OBR) is an option that home owners want to use, contractors dislike (or refuse to use) the option. This is frustrating because CBOs promote the benefits of OBR, but home owners get a different message from contractors that don't like the loan product.
 - e. Low energy prices are becoming an obstacle to motivating homeowners to take action. This also making the Savings to Investment Ratio (SIR) harder to show on some projects, which affects the availability of the NYSERDA financing.
2. Question posed to group: What is the value proposition that CBOs bring to the table as opposed to the next available alternative, which would be to not have any NYSERDA outreach intervention?
- a. Customers might not be able to make it through the program process on their own.
 - b. Serve as trusted advisor and are able to convince customers to move forward on projects.
 - c. Can assist with difficulty of finding financial resources to implement projects.
 - d. Are able to assist LMI communities in areas where they wouldn't otherwise be assisted by contractors. Other contractors do not provide information for assistance programs available to LMI households, or have limited to no experience using them. CBOs are knowledgeable about these programs and proactively promote them to the LMI communities.
 - e. CBOs are not profit motivated and are instead there to advocate for home owners through the entire process of making improvements to the home (completing applications, working with Energy Finance Solutions (EFS), applying for financing, attending assessments, project oversight, following up with folks, addressing issues with workmanship, etc.).
 - f. Consumer protection: CBOs are not contractors, but have the same certification that NYSERDA requires the contractors to have (e.g. Building Performance Institute Certified Building Professionals) so we can let home owners know what measures make the most sense (versus what a contractor may want to sell), and ensure that a comprehensive assessment is being completed at the home. *Note that this does not apply to all CBOs.*
 - g. CBOs help homeowners understand all of the various program options that are available (EmPower, Assisted Home Performance, etc.) We can also help guide people out of the program if they have pre-existing conditions that may prohibit a contractor from being able to make improvements, and guide them to resources to address those issues first.

3. Question posed to group: What are some of the barriers to success of CBOs and how can we help overcome them?
 - a. Lack of marketing tools to help customers understand value of program participation.
 - b. Lack of good, central database for information sharing between CBOs and contractors. This also makes it difficult to track quality assurance for projects and customer interactions. Currently, each CBO has their own, separate tracking system.
 - c. Question was posed on what the real focus of our efforts should be on. Should we focus on outreach (getting an energy audit) or more on getting customers to proceed with the actual retrofit? Answer was that we should focus on the entire process from the point at which the customer becomes aware of the program through the actual retrofit. Discussed the need to have a list of common definitions so that everyone is on the same page on what we mean when we refer to outreach and other common terms used for the CBO efforts.
 - d. Large territories can be difficult to cover.
 - e. Metrics for EmPower Program referrals aren't counted towards current CBO metrics.
 - f. Some CBOs face issues with contractors such as:
 - i. Lack of respect for home owners (stereotyping)
 - ii. Unwillingness to utilize On Bill Recovery (OBR)
 - iii. Trying to oversell to the home owner, which leads to a lack of confidence in the contractor
 - iv. Subcontractors and installation crews not understanding the "house as a system" (whole building) approach
 - v. Lack of communication between contractor and CBO (at times)
4. Review of each of the proposed task and discuss each in detail:
 - a. Regionally specific focused tasks
 - i. Discussed having this as a separate pot of funds for CBOs to conduct pilot projects.
 - ii. Aggregation might not be a good fit under this and a better fit for a common task. Discussed the need for a conversation overviewing this topic so that everyone has the same understanding of what we mean by aggregation.
 - iii. Ability to partner with schools and students for pilot projects is a good example.
 - iv. Community meetings similar to solarize that focused on energy efficiency.
 - b. Aggregation
 - i. This approach allows the home owners to work with a trusted organization that is looking out for the best interest of the home owner. This also allows more completed projects to happen because of discounts associated with aggregation, and better follow up than what a contractor would provide. Customers often perceive contractor follow up as pressure to sell something.
 - c. Connecting consumers to external programs and resources (packaging of resources)
 - i. CBOs that can do this help alleviate contractors from getting "bad leads"

if there are programs that need to happen before any energy efficiency work can happen. Braided funding sources can also help address the whole house to make larger improvements while making the house more energy efficient, especially for folks in the lower income range.

- d. Contractor engagement and education
- e. Workforce development
 - i. When working with contractors in aggregation, there is no accountability (or support from NYSERDA) to enforce collective bargaining agreements to hire even though we are increasing the amount of work that contractors are getting and growing their business.
- f. Regional Economic Development Council engagement
- g. Partner development
 - i. Discussed using community groups, such as Rotary Club or church groups, that can help push out the message. Music festivals, bridal shows, and other events should be tried to be used for greater outreach and to attain greater impact. Person-to-person outreach is effective and radio ads have shown to be not an effective form of outreach.
- h. Consumer engagement and education
 - i. Working with local organizations to attend events not necessarily related to energy and being able to make contacts with customers that way.
 - ii. Build trust with home owners going through the process. Home owners have a hard time trusting contractors to do right by them rather than upsell to make additional profits.
 - iii. This is a value added by CBO's during the relationship building process, and initial one on one interactions. Contractors care less about education, and more about being able to do work.
- i. Facilitating finance applications
- j. Outreach and marketing (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers)
 - i. By CBOs taking on this role more projects get completed, and the contractors can save on their overhead for these types of activities. This really helps smaller contractors to grow their business because they can spend less (or no) time doing outreach, and focusing on the work of installing equipment.

III. Next Steps and Adjourn (Kelly Tyler)

1. Develop common definition list for different activities CBOs will complete.
2. NYSERDA staff will review current marketing tools developed by NYSERDA and CBOs.
3. Continue discussion on individual tasks and then discuss what the outcomes will be of those tasks (metrics and measurements of success)
4. We will reconvene in two weeks.
5. We want to set up a final meeting in March with all of the working group members to review progress to date and pull together a final report for the GJGNY Advisory Council.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Four**

Meeting Agenda
February 25, 2016
3:00 pm - 4:00 pm

Attendees

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe	Building Performance Contractors Association	Attending via conference call
Jason Kulaszewski	PUSH Buffalo	Attending via conference call
Chris Carrick	Central New York Regional Planning and Development Board	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Rebecca Hughes	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call

Participants met via conference call on February 25, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and had Jessica Waldorf perform a Roll Call for attendees. Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. One change was suggested, which was to add in a comment to the meeting notes to clarify that not all CBOs have BPI certification.

II. Discussion (All Attendees)

5. Reminded the group that one of the goals of this working group is to outline clear traits that future LMI outreach contractors should possess and discussed some of those traits.
 - a. BPI certifications should not be required, but the outreach contractor should understand the general concepts to be able to respond to questions and provide general guidance to customers. There is a benefit to having the certification or at least taking the courses related to BPI certification.
 - b. It might make sense to have a requirement for outreach contractors to provide documentation of relevant courses completed to demonstrate basic energy efficiency/renewable energy knowledge, such as BPI Building Analyst course.

- c. Outreach contractors should demonstrate a basic financial knowledge since this is an area that CBOs are heavily involved in. There was a financial literacy training that Cornell Cooperative Extension conducted through EmPower when that program first started. This course could be an opportunity to meet this need.
 - d. Not every outreach contractor should have to demonstrate specific knowledge in the financial area since this isn't something that every CBO does.
6. Reviewed list of common definitions that will be used for the purposes of the working group as well as in the future LMI outreach solicitation.
- a. **Aggregation:** A collection of eligible homes, businesses and/or not-for-profits in the same neighborhood, brought to the program by an organization under contract (or subcontract) to NYSERDA for outreach services, and who have all agreed up-front to use the same contractor or contractor team to perform audits and the ensuing retrofit work.
 - i. Definition is missing community benefits agreement that comes with discount for people getting the retrofit as well as benefits that create pathways for people to attain jobs (wage and hiring standards).
 - ii. Also missing that this should include multiple contractors as part of the aggregation effort.
 - b. **Low-to-Moderate Income:** Less than or equal to 80 percent of the area (county) median income (AMI) for low income and 120 percent of the AMI for moderate income.
 - c. **Packaging of Resources:** Outreach organizations would be responsible for creating packages of services for consumers and connecting them to the appropriate programs and/or assisting with the pre-qualification or application process.
 - d. **Local Partners:** Groups, organizations, and/or individuals representing constituency groups that may include, but are not limited to: economic development agencies, business associations, community action agencies, chambers of commerce, municipal governments, business leaders, incubators, non-profits, civic groups, utilities, other NYSERDA contractors, and others.
 - e. **Partnerships:** Strategic business relationships created with Local Partners by the outreach organization with the intention of extending NYSERDA's outreach to residential, commercial, institutional, and municipal customers.
 - f. **Regional Economic Development Councils (REDCs):** Are appointed by the Governor and oversee the regional growth and development strategies they have defined to meet the goals and objectives for regional growth. (See <http://nyworks.ny.gov>).
 - g. **Regional Strategic Plan:** The summary plan that each region submitted to the State of New York as part of the Governor's New York Open for Business Regional Economic Development Councils competition in 2011. The Plan describes the characteristics, demographics, geographic and economic data, challenges and opportunities unique to a region. It also provides an outline to grow the regional economy by focusing on Priority Projects which stimulate investment and growth in the region.

- h. **Priority Projects:** Projects defined by the Regional Economic Development Councils as meeting their regional goals for economic development and recommended to the Governor for funding.
 - i. **Pilot Project:** A project implemented by the outreach organization that involves the initial small-scale implementation of an activity or set of activities to test the viability of the initial pilot project and inform development of a long-term strategy.
7. Continued review of each of the proposed task and discussed each in detail.
- a. Regionally specific focused tasks
 - i. Reviewed discussion from last meeting on funding for pilot projects.
 - b. Connecting consumers to external programs and resources (packaging of resources)
 - i. Would like to have relationship with contractors to complete paperwork for projects and helping customers find the financial resources to complete projects from the energy audit conducted by the contractor.
 - ii. Chris Carrick reviewed work done on solarize campaigns his organization has assisted with implementing per the request of the working group. Solarize campaigns involve a group of community organizers, municipalities, or not-profit organizations that form a campaign to do a large outreach effort to educate homeowners about solar energy in general as well as the specific benefits of the solarize campaign. These benefits can include a discount from the participating contractors that is secured through a competitive bidding process. Through this effort, the lead contractor typically educates consumers about other resources available to them including energy efficiency (Home Performance, EmPower, etc.). The purpose is to make it easier and more affordable to implement solar projects. The organization assists the customers through the process of getting the audit, then implementing the measures. The organization does a lot of work with customers to sign them up for the campaign all the way through the completion of the solar panel installation. This is a good example of an aggregation project and what is meant by aggregation for the purposes of this working group and future LMI outreach solicitation. It is a focused marketing effort that results in a discounted rate for multiple energy efficiency or renewable energy projects.
 - iii. If you are asking a contractor to give a discount, then we should include the requirement that it is in a neighborhood and not a large geographic area.
 - iv. Shouldn't only be limited to neighborhood since this doesn't apply in every area. This can create an unnecessary weight to create that bundle of projects.
 - v. It is hard to implement the neighborhood component, but this allows us to reduce costs and increase the chances of local hiring for the project.
 - c. Contractor engagement and education
 - d. Workforce development

- i. If a workforce component is included, partnerships could be formed with employers for either internships or job placement. This could help bridge the gap between community members and employers seeking to hire. NYSERDA’s Workforce Development Team would be part of the training of the outreach contractors up front. This would not just be limited to the Home Performance Program.
- e. Regional Economic Development Council (REDC) engagement
- f. Partner development and engagement
 - i. Discussed the example brought up in past meetings about working with churches.
 - ii. What do we mean by partner engagement?
 - 1. We don’t have enough funds to gain access to every potential customer that could participate in our programs. Thus, we look to our outreach contractors to work with other organizations to form partnerships to extend the outreach to a broader audience. Effective partnerships would result increased market penetration and additional end-user project activity. We are looking to the outreach contractors to have a really strong partner network that they can either bring to the initial contract or have the ability to form new partnerships.
 - 2. One organization mentioned that they included a strong focus on this in the first round, but removed it in the second round as it wasn’t found to be successful. The main reason is that the organization was locked into the requirements and couldn’t make changes throughout the contract term.
 - 3. Discussed the options of having quarterly plans to set flexible goals throughout the contract period. General consensus was that this would be a good addition to the solicitation and resulting contracts.
- g. Consumer engagement and education
- h. Facilitating finance applications
- i. Outreach and marketing (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers)
- j. Aggregation
 - i. When aggregation didn’t work, what were the obstacles?
 - 1. CBOs have chosen not to do it because of the perceived obstacles and instead focused on already existing working efforts.
 - 2. Access to financing and whether or not people can afford to do the work.
 - ii. Aggregation is not the answer to scalability, we need to solve other issues including expanding the definition for LMI to 120% AMI, affordability of projects, access to financing, etc.
 - iii. If you aren’t doing aggregation, then you can’t recommend specific contractors to customers. This prevents success of projects. Some CBOs give limited lists of contractors, but this is not something all current CBOs

thought was allowable. Need to determine if this is something that will continue in the future.

- iv. If giving a narrowed-down list isn't allowable, would it be possible to have CBOs give the name of the potential customer to a list of contractors and whomever contacts them first gets the project?
- v. In past solarize campaigns, we have encouraged them to stick with one to three contractors and it has been a successful approach. Is it possible to step back from the whole-house approach and just stick with a few measures so that the contractor can get economies of scale with visibility, project implementation, etc.? This is a lesson learned from solarize campaigns. When people in the neighborhood see solar panels on their neighbor's houses, then it is something that others in the community want to proceed with.

III. Next Steps and Adjourn (Kelly Tyler)

1. Will reconvene in two weeks and continue the discussion on remaining tasks including workforce development, contractor engagement and education, REDC engagement, outreach and marketing, consumer engagement and education, and facilitating finance applications.
2. Will also discuss metrics we can associate with each defined task at the next meeting and confirm a schedule for remaining meetings of the working group and final report to the GJGNY Advisory Council.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Five**

Meeting Notes
March 10, 2016
3:00 pm - 4:00 pm

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe	Building Performance Contractors Association	Attending via conference call
Chris Carrick	Central New York Regional Planning and Development Board	Attending via conference call
Euphemia Martin	PPEF-Southern Tier	Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Karen Hamilton	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call

Participants met via conference call and webinar on March 10, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and had Jessica Waldorf perform a Roll Call for attendees. Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. One change was suggested, which was to add Hal Smith as attendee. NYSERDA revised the notes from the last meeting to include this change.

II. Discussion (All Attendees)

8. Reviewed list of common definitions
 - a. No changes were suggested.
9. Continue review of each of the proposed task and discuss each in detail.
 - a. *Regionally specific focused tasks – Covered during previous calls*
 - i. Contractor recruitment (e.g. NYC, Capital District, North Country, etc.)
 - b. *Connecting consumers to external programs and resources (packaging of resources) – Covered during previous calls*
 - c. **Contractor engagement and education**
 - i. Referring to Home Performance and other NYSERDA program contractors here.

- ii. Outreach Contractors are good at handling the application processes for end-users and working with the Contractors on clarification on work scopes and bringing additional funding to the project to make it work.
 - iii. When new contractors under next LMI Outreach Solicitation are in place, we should send out an introduction letter to local contractors so they know who the new contractors are and what they will be doing in each region.
 - iv. Suggest having more routine meetings between contractors and Outreach Contractors to coordinate efforts on an ongoing basis.
 - v. Outreach Contractors handle relationships with contractors differently, but the idea would be to have meetings with contractors to find out the work the Outreach Contractors do and improve the communications between the two entities.
 - vi. In most parts of the state, BPCA has monthly/bi-monthly meetings to coordinate with contractors in each region and Outreach Contractors have not attended these meetings in the past. Highly encourage Outreach Contractors to attend these in the future. BPCA has four groups around the state that meet regularly (either monthly or bi-monthly depending on the region).
 - vii. Could measure success here based on the number of working relationships that exist with contractors and the resulting projects. Another goal is recruitment of new contractors into the program.
 - viii. Working with contractor associations has been a very successful way to engage with contractors.
 - ix. Would like Outreach Contractors to focus more on bringing in more projects to existing contractors and completion of projects.
 - x. Bringing in more MWBEs into the program through contractors.
 - xi. Mentoring program to engage entry level contractor staff into the program and educate them on comprehensive home energy audits.
- d. *Partner development and engagement – Covered during previous calls*
- e. *Aggregation – Covered during previous calls*
- f. **Workforce development**
- i. In the past, there wasn't enough workload to keep newly trained workers from low income communities on staff. We didn't get enough work to keep these employees hired and there was also a ton of individuals that were trained but didn't receive employment.
 - ii. Past training programs with BOCES were not successful.
 - iii. Need to be able to keep track of individuals that went through past trainings as there may be future opportunities. NYSERDA does have a database of past trainees.
 - iv. This could be something that we do on a regional basis.
 - v. On-the-job training program has been very successful and has assisted with job retention.

- vi. Outreach Contractors have worked with a lot of university students to have internships at the Outreach Contractor that have then went on to retain employment in the clean energy industry.
- vii. Outreach Contractors could connect contractors with resources in the community that they may not be aware of, such as courses and training programs at the local community colleges. Outreach Contractors could play a facilitation and connection role for contractors.
- g. **Regional Economic Development Council (REDC) engagement**
 - i. REDCs are a governor's effort that were established in 2011 to have ten REDCs across the State made up of volunteer community and business leaders.
 - ii. Every year, the REDCs develop Regional Strategic Plans that include goals and priority projects that will be the focus for the region in terms of economic development.
 - iii. Past discussions for Outreach Contractor roles include engagement with the REDC by attending meetings, becoming members of working groups, and identifying projects that Outreach Contractors could assist with and develop as part of this engagement.
 - iv. Have Outreach Contractors and/or contractors engaged with the REDCs in the past? PUSH Buffalo is an example of one that is actively engaged in the REDC. However, there are several Outreach Contractors that are not actively engaged.
 - v. REDCs have energy related working groups that would probably make sense for Outreach Contractors to be engaged with.
 - vi. NYSERDA also funded the development of Regional Sustainability Plans that are available on the REDC website as well as on the NYSERDA website.
 - vii. REDC central website: www.regionalcouncils.ny.gov
 - viii. A lot of the projects that the REDCs focus on would be on a much larger scale in terms of dollar amount and focused more on commercial/industrial projects.
 - ix. There needs to be more engagement between agencies at a higher level. There is a state agency resource team so representatives of different agencies attend these meetings. A lot of great ideas happen at a local level, but then do not move forward once brought back to the councils.
 - x. This is a valuable activity for Outreach Contractors to be engaged in since the REDCs are setting priorities for the future of the region. This way, Outreach Contractors can be aware of upcoming programs and develop potential focus areas for outreach and lead generation.
- h. ***Consumer engagement and education - Will discuss during next call***
- i. ***Facilitating finance applications - Will discuss during next call***
- j. ***Outreach and marketing (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers) - Will discuss during next call***

10. Program Deliverables & Metrics

- a. Will discuss during next call

III. Next Steps and Adjourn (Kelly Tyler)

1. Timeframe:
 - a. Goal is to have last working group meeting March 24th
 - b. Provide report for review the following week with a review of the draft report the week of April 7th.
 - c. Shortly after this, we would look to finalize the report for submission to the GJGNY Advisory Council mid-late April.
2. Will discuss remaining tasks as outlined above during the next meeting as well as program deliverables and metrics.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Six**

Meeting Notes
March 17, 2016
3:00 pm - 4:00 pm

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe	Building Performance Contractors Association	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Karen Hamilton	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call
Silky Misra	Chhaya CDC	Attending via conference call

Participants met via conference call and webinar on March 17, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Jessica Waldorf introduced herself and performed a Roll Call for attendees. Jessica asked if everyone had a chance to review the meeting notes and if everyone had any changes. No changes were requested.

II. Discussion (All Attendees)

11. **Continue review of each of the proposed task and discuss each in detail.** Jessica sent out a document in advance of the meeting that summarized the working group’s progress to date including our discussion of future tasks for outreach organizations to perform. Jessica reviewed the document and then start
 - a. Regionally specific focused tasks
 - b. Connecting consumers to external programs and resources (packaging of resources)
 - c. Contractor engagement and education
 - i. Create unique ways to engage contractors
 - d. Partner development and engagement
 - e. Aggregation
 - f. Workforce development
 - g. Regional Economic Development Council (REDC) engagement

- h. Consumer engagement and education
 - i. Tabling at events – would count the number of events completed, what was the outcome of those events, what leads were generated, etc. Looking at these would allow LMI Outreach Organizations to target events that have proven to be the most successful.
 - ii. Community presentations
 - iii. One on one outreach to community leaders and elected officials
 - iv. Social media and other forms of outreach
 - v. Speaking at rotary clubs, chambers of commerce, community groups, church groups, etc.
 - vi. Pair up with a contractor after events or presentations are set up to leverage the interaction with contractors.
 - vii. Look for unique strategies such as events that do not tie back to clean energy, but use them as an opportunity to engage consumers on clean energy. Examples include Tupperware parties, music festivals, Home Depot, etc. Another example would be an active energy audit where contractors would invite end users to a live energy audit so they can walk through it with the contractor.
 - viii. Some items are challenging depending on where they are coming from. Many times events you are doing are one-off events that limit the ability to include every contractor. Often, it works better when contractors have events where they can invite the LMI Outreach Organization to.
 - ix. Contractors often engage in events on a routine basis. Try to engage in events where other contractors would not be (bridal shows, etc.).
 - x. Other measures of success could include the amount of individuals who attended an event in addition to just those that turn into leads for specific programs.
 - xi. Need to have a better system to associate and attribute leads back to LMI Outreach Organizations. The terminology needs to be simplified or the question on the application needs to be asked differently. A lot of consumers don't know what "CBO" means.
 - xii. Could have automated hyperlinks so that the applicant goes through the LMI Outreach Organization's website and the lead is directly attributed to them.
 - xiii. The window that existing LMI Outreach Contractors are targeting are 60-80% AMI and this is a very small window. Maybe this should be expanded above the 80% level to reach a broader audience. The next solicitation will focus on LMI, but LMI Outreach Organizations would get credit for market-rate leads. Assisted Home Performance money should be spread beyond the 80% range. This could be done at a sliding scale where the incentive differs depending on the income (AMI) range. EmPower and Assisted Home Performance are going to be combined into one program.
- i. Facilitating finance applications

- i. Past discussions on consolidating applications have not been successful. This refers to consolidating incentive program applications with GJGNY loan applications.
- ii. CBOs have been prevented with discussing applications with EFS and it would be very helpful for applications to include a disclosure that allows CBOs to interact with EFS.
- iii. Assist people with paperwork, loan qualification, and understanding the process. Customers do not feel comfortable providing income tax information to contractors (not necessarily Home Performance Contractors, but other general contractors) so LMI Outreach Organizations fill a critical role in making loan applications successful.
- iv. NYSERDA should do a better job of separating out the different types of contractors, specifically separate out Home Performance Contractors, from plumbing, etc.
- v. Measurements of success could include number of applicants assisted with loan applications, successful applications, and completed loans.
- j. Outreach and marketing (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers)
 - i. Development of case studies to get more referrals in.
 - ii. Websites, brochures, flyers, etc.
 - iii. Changing materials to fit the needs of the community or group that you are conducting the outreach to.
 - iv. Past NYSERDA driven marketing materials have not included LMI Outreach Organization contact information. Including this would help keep the relationship of the LMI Outreach Organization with the end-user.
 - v. Something that is currently lacking is a focus on health and safety as well as quality assurance in case studies and other marketing materials.

12. Program Deliverables & Metrics

- a. Will discuss during next call

13. Characteristics of Successful LMI Outreach Organizations

- a. Next solicitation should include minimum standards for technical expertise. Not everyone needs to be Building Performance Institute (BPI) certified but proposers should have to demonstrate technical qualifications, trainings completed, etc.

III. Next Steps and Adjourn (Kelly Tyler)

- 3. Will discuss program deliverables and metrics and review the document outlining key elements for the next LMI Outreach Initiative.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Seven**

Meeting Notes
March 24, 2016
3:00 pm - 4:00 pm

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Jason Kulaszewski	PUSH Buffalo	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call

Participants met via conference call and webinar on March 24, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Jessica Waldorf introduced herself and performed a Roll Call for attendees. Jessica asked if everyone had a chance to review the meeting notes and if everyone had any changes. No changes were requested.

II. Discussion (All Attendees)

1. **Program Deliverables & Metrics:** Jessica sent out a document in advance of the meeting that summarized the working group’s progress to date including our discussion of future tasks for outreach organizations to perform. Jessica reviewed the document and then started discussion on remaining activities and associated metrics.
 - a. **Regionally specific focused tasks (Aggregation and Workforce Development) – not discussed**
 - b. **Connecting consumers to external programs and resources (packaging of resources)**
 - i. Outcomes and metrics could include: # projects generated for NYSERDA programs; amount of additional grant funds leveraged (HCR funding, HUD funding through municipalities, etc.); resulting energy savings and greenhouse gas emissions;
 1. Existing contractors do not have comprehensive lists of other external funding sources.

2. Suggest work scope that contractor develops include projected energy savings so that Outreach Organizations can access that information.
3. Future Outreach Organizations could reach out to homeowners to get before and after energy use information to get actual savings that result from projects. This could be an additional activity that future organizations do. However, Outreach Organizations do not want their performance to be measured based on resulting project energy savings, which they do not have any control over.
4. The weatherization program uses a fuel release form so that homeowners agree to allow access to utility information in the future. There have been problems working with the utility to access that information in the past but may not be an issue in the future.
5. Question: Can we clarify what the purpose of this activity is to identify tasks and resulting metrics? Will future organizations be asked to set these as performance targets? The purpose of this activity is to link applicants with all of the available funding possible to complete projects. Metrics may not be performance targets, but will have to be identified by the LMI Outreach Organization as a measure of success for each project worked on under this activity.

c. Contractor engagement and education

- i. Outcomes and metrics could include: the number of working relationships that exist with contractors, savings from the resulting projects, the recruitment of new contractors and MWBEs into the program, and job creation (are contractors able to hire new employees as a result of the relationship developed with the LMI Outreach Organization).
 1. Not every partnership results in contractors hiring new employees, but we should be able to count the ones that do as a measure of success.

d. Partner development and engagement

- i. Examples of this include block clubs, rotary clubs, etc.
- ii. Important to find organizations that are doing similar work and where you can share information where both parties benefit from the relationship.
- iii. Outcomes and metrics could include: The number of new partnerships that are formed, the number of resulting projects that come out of that partnership, and the resulting energy/greenhouse gas savings.
 1. Sometimes there is a costs to developing these partnerships. When you ask not-profit organizations, for example, they may want a reimbursement for referral to a program.
 2. We have been able to see success through other efforts with outreach organizations establishing relationships with organizations where there is an even exchange between the two entities of leads for different programs/activities.

3. We do not want to have one-off partners, but ones where ongoing relationships are established and there is an exchange of leads and referrals between the two entities.
- e. **Regional Economic Development Council (REDC) engagement**
 - i. This activity should be an optional activity.
 - ii. HCR is one of the groups that participates in the REDCs so LMI Outreach Organizations can be kept aware of opportunities through the relationship they have with HCR.
 - iii. Would like LMI Outreach Organizations to have an awareness and alignment with the REDCs and what they are doing.
 - iv. REDCs tend to focus on individual communities that are in need and it would be good for the LMI Outreach Organizations to be aware of what those are so they are aware of the additional resources that will be brought to that community.
 - v. REDCs are at a very high level and there isn't a lot of communication down to the community level and to community based organizations. If there was a better communication flow, it would be a lot easier for community based organizations to focus efforts based on REDC priorities.
 - vi. Outcomes and metrics could include: projects that come out as a result of REDC involvement/awareness; outreach that is focused based on REDC engagement; etc.
 - f. **Consumer engagement and education**
 - i. Outcomes and metrics: Number of attendees at events; number of leads generated for specific programs; resulting energy savings; case studies/white papers for different campaigns to show success; etc.
 - g. **Facilitating finance applications**
 - i. Outcomes and metrics: Measurements of success could include number of applicants assisted with loan applications, successful applications (free audits, subsidy application, credit application, grant application), completed loans, possibly energy savings, completed loans, number of people paying on loans, etc.
 - h. **Outreach and marketing (lead generation, tabling, events, referrals, public presentations, assisting contractors with troublesome customers)**
 - i. Past NYSERDA driven marketing materials have not included LMI Outreach Organization contact information. Including this as well as a logo would help keep the relationship of the LMI Outreach Organization with the end-user.
 - ii. More language diversity for program applications and marketing materials. There is not enough of this currently and current CBOs have had to create a lot of this on their own.
 - iii. Materials should be simple and attractive so that the information is not overwhelming, but also interesting to the end-user.
 - iv. There should be more media involvement and engagement at events to get the word out more to a broader audience.

- v. It would be good to get clean energy out as a public service announcement and have a higher level of importance focused on this activity. This is another role that utilities could play because they have routine marketing efforts that we could add information to.

III. Next Steps and Adjourn (Kelly Tyler)

1. For the next call, we will review progress to date and give people a chance to review the summary document in advance of our next meeting to provide comments on for discussion.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Eight**

Meeting Notes
March 31, 2016
3:00 pm - 4:00 pm

Attendee	Organization	Response and Location
Lisa Tyson	Long Island Progressive Coalition	Attending via conference call
Hal Smith	Home Energy Performance by Halco	Attending via conference call
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe	Building Performance Contractors Association	Attending via conference call
Euphemia Martin	PPEF-Southern Tier	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Alison Khachadourian	NYSERDA	Attending via conference call
Rebecca Hughes	NYSERDA	Attending via conference call

Participants met via conference call and webinar on March 31, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and performed a Roll Call for attendees. Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. The following changes were requested and made to the meeting notes:

1. Change item 1b under the “Discussion” section to insert the word “grant” in front of “funds leveraged.” We should be clear here that we are referring to grant funding specifically.
2. Add to item 1b-3 under “Discussion” that “However, Outreach Organizations do not want their performance to be measured based on resulting project energy savings, which they do not have any control over.”

II. Discussion (All Attendees)

14. **Review of “GJGNY Community Outreach Initiative Elements v4.0” document Jessica sent out prior to the meeting that summarizes progress made to date.** Jessica sent out an updated version of this document in advance of the meeting, which summarizes the working group’s progress to date including our discussion of future activities for outreach organizations to perform. Jessica reviewed the document and then started discussion each section of the document.

- a. **Goals**

- i. Another measurement would be majority/minority census track, which enabled you to help both higher income households and lower income neighborhoods as a way to focus efforts. There are LMI communities/census tracks, LMI households, and majority/minority census tracks (more than 50% of that area consists of minority households) that may not be LMI.
 - ii. Increase access to financing for LMI communities and households.
- b. Barriers to Success of Existing CBOs**
- i. Lack of good marketing tools to help customers understand value of program participation.
 - ii. Lack of quality education across all CBOs in energy efficiency and renewable energy.
 - iii. Lack of awareness of new contractors as they come on board and lack of relationships with existing contractors.
 - iv. Unclear service territory of contractors leads to confusion by CBOs and by customers of what contractors are available in each service territory.
 - 1. NYSERDA can look into improving the website selections by territory to make sure the correct contractors are showing based on customer information entry.
 - 2. Would ranking and rating of contractors based on quality of work be helpful?
 - a. CBOs find it hard to select contractors in the current web-based selection system on NYSERDA's website. CBOs have skepticism on whether or not the rating would be effective and useful. However, some sort of system and more detailed information that is also user-friendly to get a sense of quality of contractors would be very useful.
 - b. From a sales perspective, contractors want to be able to provide a simple list of options. For the CBOs, if you provide too many options, it can be overwhelming to the end-user who is trying to select a contractor. The CBO can put a customer out to a group of contractors and whoever contacts the customer first would be a good solution to simplifying the process for the customer and improving the relationship between the CBOs and the contractors.
- c. Connecting consumers to external programs and resources (packaging of resources)**
- i. Concern was brought up on whether or not savings should be tied to leads generated for programs since Outreach Organizations do not have any control over completion of projects and resulting energy savings.
 - ii. NYSERDA is trying to focus financial resources where we can get the most value for dollars invested so we want to be able to show energy savings/greenhouse gas emission savings as a result of this outreach effort. We have discussed showing dollars leveraged as a metric under this activity in past discussions, but we would also like to associate that with savings/greenhouse gas emission savings.

- iii. There are obstacles that prevent Outreach Organizations from getting projects completed.
 - iv. Suggested that we show an average savings per project so that detailed savings for each individual project is not something that has to be tracked and so that savings are normalized among all of the Outreach Organizations.
 - v. Contractors are forced to show every bit of outreach performed to be able to tie it to direct energy savings.
 - vi. Outreach Organizations, on the other hand, generate a lot of project leads that may not come to fruition if the contractors do not follow up with customers for project completion.
 - vii. Existing CBOs are not convinced that savings should be a measure of success of their outreach efforts.
- d. **Characteristics of Successful LMI Outreach Organizations**
- i. Next initiative should include minimum standards for technical expertise. Not everyone needs to be Building Performance Institute (BPI) certified but proposers should have to demonstrate technical qualifications, trainings completed, etc. (BPI Building Science Principles certificate, etc.).
 - 1. Suggested that NYSERDA set aside funding in future LMI Outreach Initiative for professional development for LMI Outreach Organizations to increase knowledge in energy efficiency and renewable energy sectors.
 - 2. Alternatively, NYSERDA could include this as part of webinars that are held on a routine basis with LMI Outreach Organizations.
 - 3. NYSERDA may be able to provide access to the BPI Building Science Principles certificate course at a reduced rate through its Workforce Development Team.

III. Next Steps and Adjourn (Kelly Tyler)

- 2. For the next call, we will continue review of the "GJGNY Community Outreach Initiative Elements v4.0" document.
- 3. The draft report will be sent out next week for review and final discussion at the April 14th meeting.

**Green Jobs Green New York (GJGNY)
Community Outreach Working Group
Meeting Nine**

Meeting Notes
April 7, 2016
3:00 pm - 4:00 pm

Attendee	Organization	Response and Location
Kathleen Langton	Affordable Housing Partnership Home Ownership Center	Attending via conference call
Conrad Metcalfe	Building Performance Contractors Association	Attending via conference call
Anthony Hazzan	NYSERDA	Attending via conference call
Sharon Griffith	NYSERDA	Attending via conference call
Kelly Tyler	NYSERDA	Attending via conference call
Jessica Waldorf	NYSERDA	Attending via conference call
Lori Clark	NYSERDA	Attending via conference call
Rebecca Hughes	NYSERDA	Attending via conference call

Participants met via conference call and webinar on April 7, 2016. The following meeting notes capture discussions, questions, and comments held at the meeting.

I. Welcome and Introductions (Kelly Tyler)

Kelly Tyler introduced herself and performed a Roll Call for attendees. Kelly asked if everyone had a chance to review the meeting notes and if everyone had any changes. The following changes were requested and made to the meeting notes:

3. Change item 1a under the “Discussion” section to revise language to state “There are LMI communities/census tracks, LMI households, and majority/minority census tracks (more than 50% of that area consists of minority households) that may not be LMI.”

II. Discussion (All Attendees)

15. **Review of “GJGNY Community Outreach Initiative Elements v5.0” document Jessica sent out prior to the meeting that summarizes progress made to date.** Jessica sent out an updated version of this document in advance of the meeting, which summarizes the working group’s progress to date including our discussion of future activities for outreach organizations to perform. Jessica reviewed the document and then started discussion on remaining sections of the document.

a. Assumptions/Hypotheses

- i. Deleted “great” in the following sentence: “Aggregation is a model that can create great relationships with contractors and lead to very successful outcomes, but it does not work in every area of the State.”

b. Barriers to LMI Consumer

- i. Changed “residents” to “homeowners” in the following sentence: “Lack of available capital for homeowners who are having difficulty paying utility bills and are hesitant to take on additional debt. Cost is a barrier that keeps projects from moving beyond the audit phase.”

- ii. Revised language in following sentence: “Lack of coordination across state-sponsored LMI focused initiatives and community organizations and financial institutions.
- c. **Key Considerations for a LMI Outreach Initiative (Revised language in following bullets)**
- i. Facilitate relationships between LMI Outreach Organizations, local economic development agencies, local community-based organizations, contractors, and other agencies and organizations to maximize the potential impact of outreach efforts to the LMI households and communities.
 - ii. Include quarterly plans to set flexible goals throughout the contract period. program. This will also allow LMI Outreach Organizations to adjust strategies as the program is being implemented.
 - iii. Next LMI outreach initiative should target regional coverage based on the ten (10) Economic Development Regions as defined by Empire State Development. Regions include: North Country, Capital District, Mid-Hudson, Long Island, New York City, Mohawk Valley, Southern Tier, Central New York, Finger Lakes and Western New York. This would help to align with other State efforts and allow for full Statewide coverage with LMI Outreach Organizations that can provide services throughout each region.
- d. **What types of outreach activities are essential to increase participation in LMI clean energy projects? Added to this section “SMART goals and objectives (Specific Measurable Achievable Relevant and Time-bound)”**
- e. **Connecting consumers to external programs and resources (packaging of resources):**
- i. Suggest including projected energy savings in the work scope developed by the contractor so that Outreach Organizations can access that information. Alternatively, Future Outreach Organizations could reach out to homeowners to get before and after energy use information to get actual savings that result from projects. LMI Outreach organizations may be able to access utility information through working with the weatherization program and/or directly with the utilities. However, past CBOs have had problems working with utilities. Added “NYSERDA has current effort to work with utilities to gather local energy savings data by community that could address this effort.” This was added based on the discussion that LMI Outreach Organizations should not have to spend time tracking down data when they could be making better use of their time working with customers.
 - ii. Continued discussion here on whether or not LMI Outreach Organizations should be measured based on energy savings.

- iii. Existing CBOs are not convinced that savings should be a measure of success of their outreach efforts. Added: "LMI Outreach Organizations do not have a direct impact on the completion of a project since they are not responsible for modeling the projects or for the eligibility of homeowners and tenants for incentives and financing to complete recommend home energy improvements."
- f. **Characteristics of Successful LMI Outreach Organizations**
 - i. Ability to access and leverage additional grant (local, state, and federal) funding for projects.

III. Next Steps and Adjourn (Kelly Tyler)

- 4. This was the last regularly scheduled call. NYSERDA will send out a draft of the report to the working group for review the week of April 18th. We will cancel weekly meetings and reconvene on April 28th to review comments and finish the final report.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit nyserderda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

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