

**GREEN JOBS - GREEN NEW YORK  
ANNUAL REPORT**

**OCTOBER 2010**

NEW YORK STATE  
ENERGY RESEARCH AND  
DEVELOPMENT AUTHORITY

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# Executive Summary

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On October 9, 2009, Governor David Paterson signed into law the Green Jobs - Green New York Act of 2009. The Act directs NYSERDA to:

- establish a revolving loan fund to provide loans to finance the cost of approved qualified energy efficiency services for residential, multifamily, and non-residential structures;
- pursue the feasibility of other innovative financing mechanisms;
- issue one or more competitive opportunities to solicit applications from partnerships or consortia comprised of constituency-based organizations that can connect community members to the program;
- target communities in areas where energy costs are particularly high in relation to a measure of median household income as determined by NYSERDA, or that have been designated as a nonattainment area for one or more pollutants pursuant to section 107 of the federal Clean Air Act;
- give preference in awards to applicants that include significant participation by minority and women owned business enterprises and/or to applications to serve economically distressed communities;
- establish standards for energy audits based on building type and other relevant considerations;
- establish a schedule of fees for energy audits including a sliding scale by which audit fees shall be waived for residential applicants based on median county income;
- enter into contracts to provide employment and training services to support the Green Jobs - Green New York Program (GJGNY);
- establish an Advisory Council; and
- provide annual reports to the Governor, Senate and Assembly.

The Act allocates \$112,000,000 in funding from New York's share of the Regional Greenhouse Gas Initiative to support the program. NYSERDA has further allocated the funding as follows:

<b>Element</b>	<b>Total Budget</b>
Workforce Development	\$8,000,000
Outreach & Marketing	\$10,000,000
One- to Four-Family Homes <sup>1</sup>	\$39,288,533
Multifamily <sup>2</sup>	\$15,692,550
Small Business/Not-For-Profit <sup>3</sup>	\$23,674,917
Program Administration	\$7,840,000
Program Evaluation	\$5,600,000
NYS Cost Recovery Fee	\$1,904,000
<b>Total</b>	<b>\$112,000,000</b>
<sup>1,2,3</sup> Budgets include costs of audits, implementation and financing for the respective sector. Additional details on these costs are provided in Section VII-IX.	

## **Planning Process**

NYSERDA has undertaken an extensive planning process involving significant input from the general public, various interested parties and program stakeholders. This process has included the development of and regular input from an Advisory Council, along with several Working Groups that were instrumental in developing several program component Operating Plans. The general public was able to participate in Advisory Council meetings, and also had access to the GJGNY website where materials and videos of Advisory Council meetings were posted and links were provided for comments.

## **Workforce**

The GJGNY Workforce Development activities will engage existing contractors to immediately expand capacity to deliver services and provide direct-entry, on-the-job, apprenticeship and internship incentives to help defray staffing costs. Initiatives will also help build New York's training infrastructure by working with community-based training organizations, through the expansion of existing training centers, furnishing new training equipment and tools, and restructuring field testing and certification examination protocols to help ramp up workforce participation in training and certification over the next year.

## **Outreach**

In addition to using statewide marketing, GJGNY has been designed to deliver outreach services in targeted communities through a network of Constituency Based Organizations (CBOs). CBOs will encourage participation in energy efficiency programs, facilitate awareness of workforce training opportunities available through GJGNY, and assist with enrollment in those efforts. Outreach, marketing, and education will target residents, small businesses, not-for-profit organizations (NFPs), multifamily building owners, and potential workforce participants.

## **Finance**

GJGNY Financing will initially be available through unsecured direct loans financed by the Revolving Loan Fund. In addition, in the near term, NYSERDA anticipates piloting an On-Bill Recovery Pilot with National Grid in its upstate service territory. NYSERDA will continue to monitor developments with other innovative financing options, such as expanded opportunities for on-bill recovery and resolution of issues related to Property Assessed Clean Energy (PACE) financing, and include them in the GJGNY financial offerings as they become available.

## **Energy Retrofits**

GJGNY financing and co-funding of audits will be offered through NYSERDA's Home Performance with ENERGY STAR<sup>®</sup> Program for the one- to four-family sector; through NYSERDA's Multifamily Performance Program for the multifamily sector; and through NYSERDA's existing network of FlexTech and Business Partner providers for the Small Business and Not-For-Profit sectors. NYSERDA is coordinating with investor-owned utilities, the Long Island Power Authority, the New York Power Authority, and municipal utilities to ensure their customers participating in GJGNY are also able to take advantage of their rebates and incentives where appropriate, and to support expanded marketing of the program.

## **Conclusion**

Significant public investment is occurring in New York State in the areas of energy efficiency retrofits, renewable energy resources, and energy efficiency and renewable energy workforce training and development. This investment includes resources such as the System Benefits Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Regional Greenhouse Gas Initiative (RGGI), Renewable Portfolio Standard (RPS); and federal resources such as the Weatherization Assistance Program (WAP), and the American Recovery & Reinvestment Act (ARRA). In addition, New York residents and businesses are making significant investments in energy efficiency and renewable energy resources, sometimes paying as much as 90% or 100% of the cost of work or purchases supported by public programs. The level of investment is commendable and necessary to overcome the energy challenges we face and to attain the State's aggressive energy goals. NYSERDA has a number of well-established programs in the marketplace that, given the opportunity to grow and evolve, will provide significant progress toward meeting the aggressive goals of GJGNY.

With this level of investment however, and with services delivered through a variety of programs, comes the need for programs to coordinate to minimize confusion in the market place, optimize program funds expenditures and to avoid duplication of program services. With this in mind, NYSERDA has undertaken an extensive planning process that recognizes and takes advantage of the significant progress obtained through existing market-based programs, enables coordination with existing and new rebate programs, and folds in the unique opportunities made available through GJGNY. As the programs begin their implementation phases, NYSERDA, in coordination with the Advisory Council, will monitor the effectiveness of the program delivery and make any adjustments needed to attain the very laudable and far-reaching program goals.

# I. Introduction

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On October 9, 2009, Governor David Paterson signed into law the Green Jobs - Green New York Act of 2009 ("the Act", A.8901/S.5888 and chapter amendment A.9031/S.6032). NYSERDA administers GJGNY in consultation with the Division of Housing and Community Renewal (DHCR), Department of Labor (DOL), Office of Temporary and Disability Assistance (OTDA), Department of Public Service (DPS), Power Authority of the State of New York (NYPA), Department of Economic Development (DED), and the Department of Environmental Conservation (DEC).

The Act directs NYSERDA to:

- establish a revolving loan fund to provide loans to finance the cost of approved qualified energy efficiency services for residential, multifamily, and non-residential structures;
- pursue the feasibility of other innovative financing mechanisms;
- issue one or more competitive opportunities to solicit applications from partnerships or consortia comprised of constituency-based organizations that can connect community members to the program;
- target communities in areas where energy costs are particularly high in relation to a measure of median household income as determined by NYSERDA, or that have been designated as a nonattainment area for one or more pollutants pursuant to section 107 of the federal Clean Air Act;
- give preference in awards to applicants that include significant participation by minority and women owned business enterprises and/or to applications to serve economically distressed communities;
- establish standards for energy audits based on building type and other relevant considerations;
- establish a schedule of fees for energy audits including a sliding scale by which audit fees shall be waived for residential applicants based on median county income;
- enter into contracts to provide employment and training services to support Green Jobs - Green New York;
- establish an Advisory Council;
- provide annual reports to the Governor, Senate and Assembly;

Significant public investment is occurring in New York State in the areas of energy efficiency retrofits, renewable energy resources, and energy efficiency and renewable energy workforce training and development. This investment includes resources such as the System Benefits Charge (SBC), Energy Efficiency Portfolio Standard (EEPS), Regional Greenhouse Gas

Initiative (RGGI), Renewable Portfolio Standard (RPS); and federal resources such as the Weatherization Assistance Program (WAP), and the American Recovery & Reinvestment Act (ARRA). In addition, New York residents and businesses are making significant investments in energy efficiency and renewable energy resources, sometimes paying as much as 90% to 100% of the cost of work or purchases supported by public programs. The level of investment is commendable and necessary to overcome the energy challenges we face and to attain the State's aggressive energy goals. NYSERDA has a number of well-established programs in the marketplace that, given the opportunity to grow and evolve, will provide significant progress toward meeting the aggressive goals of GJGNY.

With this level of investment however, and with services delivered through a variety of programs, comes the need for programs to coordinate to minimize confusion in the market place, optimize program funds expenditures and to avoid duplication of program services. With this in mind, NYSERDA has undertaken an extensive planning process that recognizes and takes advantage of the significant progress obtained through existing market-based programs, enables coordination with existing and new rebate programs, and folds in the unique opportunities made available through GJGNY. As the programs begin their implementation phases, NYSERDA in coordination with the Advisory Council, will monitor the effectiveness of the program delivery and make any adjustments needed to attain the very laudable and far-reaching program goals.

This report is prepared pursuant to Section 1899 of the Green Jobs - Green New York Act and provides an update on the progress of the program through the third quarter of 2010.

## II. Green Jobs - Green New York Budget

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The Act allocates \$112 million in funding from New York's share of the Regional Greenhouse Gas Initiative to support the program. The GJGNY budget supports free and reduced-cost audits; a revolving loan fund; workforce development activities; outreach and marketing through constituency-based organizations, social marketing and other means; program implementation; quality assurance; program administration; and program evaluation. NYSERDA has allocated the funding as indicated in Table 1 below. The budget provides approximately \$51 million to support the loan fund across three targeted property sectors – one- to four-family homes, multifamily properties, and properties owned, leased or managed by Small Business/Not-For-Profit organizations, provided that in each instance the applicant has the legal authority to contract for the provision of energy efficiency services.

*Table 1: Green Jobs - Green New York Budget*

<b>Element</b>	<b>Total Budget</b>
Workforce Development	\$8,000,000
Outreach & Marketing	\$10,000,000
Family Homes <sup>1</sup>	\$39,288,533
Multifamily <sup>2</sup>	\$15,692,550
Small Business/Not-For-Profit <sup>3</sup>	\$23,674,917
Program Administration	\$7,840,000
Program Evaluation	\$5,600,000
NYS Cost Recovery Fee	\$1,904,000
<b>Total</b>	<b>\$112,000,000</b>
<sup>1,2,3</sup> Budgets include costs of audits, implementation and financing for the respective sector. Additional details on these costs are provided in Section VII-IX.	

### III. Planning Process

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NYSERDA has undertaken an extensive planning process involving significant input from the general public, various interested parties and program stakeholders. This process has included the development of and regular input from an Advisory Council, along with several Working Groups that were instrumental in developing several program component Operating Plans. The general public was able to participate in Advisory Council meetings, and also had access to the GJGNY website where materials and videos of Advisory Council meetings were posted and links were provided for comments.

#### *a. Advisory Council*

NYSERDA has established an Advisory Council to provide input to the Authority on program design and implementation. As directed by the Act, the Advisory Council consists of eleven Ex-Officio Members and several Appointed Members represented by the following: 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.

*Table 2: Green Jobs - Green New York Advisory Council*

Name	Title/Organization	Term Expires
<b>Ex-Officio Members</b>		
Francis J. Murray, Jr., (Chair)	President and CEO, NYSERDA	n/a
Elizabeth R. Berlin	Executive Deputy Commissioner, Temporary & Disability Assistance	n/a
Mindy A. Bockstein	Chairperson and Executive Director, The Consumer Protection Board	n/a
Garry A. Brown	Chairman, Public Service Commission	n/a
Lorraine Cortes Vazquez	Secretary of State	n/a
Peter Grannis	Commissioner, Environmental Conservation	n/a
Richard Kessel	President, The New York State Power Authority	n/a
Kevin S. Law	President, The Long Island Power Authority	n/a
Dennis Mullen	Commissioner, Economic Development	n/a
Colleen C. Gardner	Commissioner, Department of Labor	n/a
Brian Lawlor	Commissioner, Department of Housing & Community Renewal	n/a

Name	Title/Organization	Term Expires
<b>Appointed Members</b>		
Trenton Allen	Citigroup	12/31/2012
Michael Atkins	Concerned Citizens Action Program	12/31/2011
Chuck Bell	Consumers Union	12/31/2012
Les Bluestone	Blue Sea Construction	
Judy Butler	Butler Building Performance	12/31/2012
Tria Case	City University of New York (CUNY)	12/31/2011
Richard Cherry	Community Environmental Center (CEC)	12/31/2011
Miquela Craytor	Sustainable South Bronx	12/31/2012
Dr. Charles S. Dedrick	Capital Region BOCES	12/31/2012
Emmaia Gelman	Center for Working Families	12/31/2011
Yolanda Gonzales	Nos Quedamos	12/31/2012
Dave Hepinstall	Association for Energy Affordability	12/31/2012
Alan Hipps	Housing Assistance Program of Essex County	12/31/2012
Thomas Holmes	Woodstock Energy	12/31/2012
Frank Hotchkiss	Steelworkers/Apollo	12/31/2011
Gerry Hudson	Service Employees International Union (SEIU)	12/31/2011
David Johnson	Laborers' International Union of North America (LIUNA)	12/31/2012
William Johnson	Green America Public Private Partnership, Inc.	12/31/2012
Jennifer Keida	Standard Insulation Co. Inc.	12/31/2012
Dick Kornbluth	Building Performance Contractors Assoc.	12/31/2011
Hannah Blitzer	Low Income Investment Fund	12/31/2011
Greg Hale	Natural Resources Defense Council (NRDC)	12/31/2011
Dr. Andrew Matonak	Hudson Valley Community College	12/31/2012
Jackson Morris	Pace Climate and Energy Center	12/31/2012
Ryan Moore	ZeroDraft	12/31/2011
Hugo Salinas	New York Energy Conservation	12/31/2011
Eric Walker	People United for Sustainable Housing (PUSH) Buffalo	12/31/2011

The Advisory Council held its first meeting on January, 26, 2010. The Advisory Council has been extremely active, meeting a total of ten times from January – September, 2010. Agendas for all Advisory Council Meetings are provided in *Attachment A: Advisory Council Meetings*.

Each Advisory Council Meeting included an opportunity for public input. All meeting materials and videos of the Advisory Council meetings were posted to the GJGNY portion of the NYSERDA website. Written comments were encouraged from Advisory Council Members and the general public via e-mail for up to two weeks following each meeting.

### ***b. Working Groups***

NYSERDA established six distinct Working Groups to address specific areas of focus in the development of GJGNY. The Working Groups include representatives of interested parties and stakeholders. The Working Groups are:

- Workforce Development
- Outreach & Marketing
- Finance
- One- to Four-Family Homes
- Multifamily Buildings
- Small Business/Not-For-Profit

The Working Groups have been extremely active, meeting regularly since October 2009 for months leading up to the development of the individual program component draft Operating Plans. Working Group activities also included significant public input in the form of participation in Working Group conference calls, posting of draft documents for comment, a calendar of events related to Working Groups, and review and consideration of submitted public comment. A listing of the individuals and their respective organizations for each Working Group are provided in *Attachment B: Green Jobs - Green New York Working Groups Members*. It is anticipated that at least some of the Working Groups may continue to have a role in reviewing program progress and making recommendations for overcoming any implementation challenges or market barriers as the program is implemented.

### ***c. Green Jobs - Green New York Website & Listserv***

To ensure transparency in the planning process and inform members of the public about GJGNY, NYSERDA dedicated a section of the NYSERDA website to GJGNY, including a direct link from NYSERDA's home page. The site can be viewed at: <http://www.nyserda.org/GreenNY/>. All GJGNY related documents, including Frequently Asked Questions, Advisory Council meeting materials, draft and final Operating Plans, comments received, and Monthly Updates are posted to the website.

The GJGNY website also includes a link to [www.GreenCareersNY.com](http://www.GreenCareersNY.com), a website developed in collaboration with NYSDOL and several other state agencies. GreenCareersNY was launched under GJGNY to match job seekers with green job and training opportunities. This website is a portal to help visitors find information on a variety of "green jobs" topics including information about green jobs and careers, how to get green training, and incentives for green job training. Each section of the portal is designed to meet the needs of job seekers, businesses, or workforce professionals. This site supports not only GJGNY, but all green career opportunities throughout the state.

Additionally, NYSERDA developed a Listserv that interested parties could subscribe to in order to receive timely updates on planning activities and program announcements. To date, the List-Serve has 615 subscribers.

## IV. Workforce Development

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### *a. Workforce Development Working Group*

NYSERDA established a GJGNY Workforce Development Working Group in November 2009 to help identify workforce development and training needs associated with the Green Jobs - Green New York Act. The Working Group included representatives from state agencies, training organizations, energy service providers, constituency based organizations, labor unions, and trade organizations. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. The Workforce Working Group was asked to identify the workforce training needs necessary to implement GJGNY, taking into consideration the specific requirements of the Act and workforce development and training activities already being implemented across the state.

The Working Group held five initial meetings before breaking into five Subgroups to further discuss workforce needs. The Subgroups met several times and developed recommendations in the following areas:

- Equipment and Training Infrastructure Needs
- Certifications and Company Accreditation
- Apprenticeships/Internships/On the Job Training (OJT)
- Curriculum Development and Non-Constructions Jobs

Recommendations were incorporated into the draft Workforce Development Operating Plan that was presented to the Advisory Council in February 2010 and later approved by NYSERDA's Officers.

The GJGNY Workforce Development activities will engage existing contractors to immediately expand capacity to deliver services and provide direct-entry, on-the-job, apprenticeship and internship incentives to help defray staffing costs. Initiatives will also help build New York's training infrastructure by working with community-based training organizations, through the expansion of existing training centers, furnishing new training equipment and tools, and restructuring field testing and certification examination protocols to help ramp up workforce participation in training and certification over the next year.

## ***b. Workforce Development Solicitations & Contracts***

NYSERDA is developing seven Program Opportunity Notices (PON) and Requests for Proposals (RFPs) to advance the workforce development goals of GJGNY. These solicitations seek proposals to fund efforts outlined in the Workforce Development Operating Plan, and aligned with the workforce training objectives of the Act, including, but not limited to: 1) incremental occupational training to unemployed workers; 2) work-readiness and entry-level technical training to individuals; 3) apprenticeship and labor-management certification training; 4) skills upgrading for incumbent weatherization workers; and 5) skills upgrading for new workers employed through GJGNY to help improve employee retention. While some solicitations are competitive in nature, others are "open enrollment" opportunities that fund eligible proposals on a first-come, first-served basis. Multiple contracts are expected to be in place by fall 2010 to support the needs assessment, curriculum development, and training services to be deployed in support of GJGNY.

The solicitation schedule, associated budgets, and any resulting contracts are presented in *Attachment C: Green Jobs - Green New York Solicitations and Contracts*.

## ***c. Coordination with New York State Department of Labor***

The New York State Department of Labor (NYSDOL) submitted an application under USDOL's Labor Market Intelligence Solicitation for Grant Applications (SGA/DFA P- 08-17) and was recently awarded \$1,112,207 in American Recovery & Reinvestment Act (ARRA) funds to measure employer demand for green jobs against the capacity of existing educational and training resources to address specific energy related training needs across New York State. The NYSDOL will collaborate with the New York City Labor Market Information Service (NYCLMIS) at the City University of New York (CUNY) Graduate Center, the Energy and Environmental Technology Application Center (E2TAC) at the State University of New York (SUNY) at Albany's College of Nanoscale Science and Engineering, the Advanced Energy Research Technology Center at Stony Brook University, and SUNY's Office of Business and Industry Relations to estimate the number of green jobs and to identify the new, emerging and enhanced skills needed to succeed in today's rapidly growing green jobs market. NYSDOL will survey about 20,000 firms to collect this data. More in-depth research will seek to understand the specific skills employers need, and identify existing education and training resources to fill those needs.

While the grant runs through May 2011, NYSDOL anticipates it will field the employer surveys in October 2010 and plans to release preliminary findings by early winter 2011. The NYSDOL data will be used to support the training inventory, needs assessment, and curriculum updates to be implemented by the contractor awarded under NYSERDA's RFP 2034 - GJGNY Training Inventory, Assessment, and Curriculum Updates. The breadth of information in the NYSDOL report will provide a comprehensive inventory of state-wide programs and generalized needs that NYSERDA can leverage to complete a more detailed training needs assessment and skills gap analysis planned in support of GJGNY.

The following model outlines key areas of coordination between NYSERDA, NYSDOL, and other workforce development partners as needed to deploy a comprehensive workforce development strategy for GJGNY.

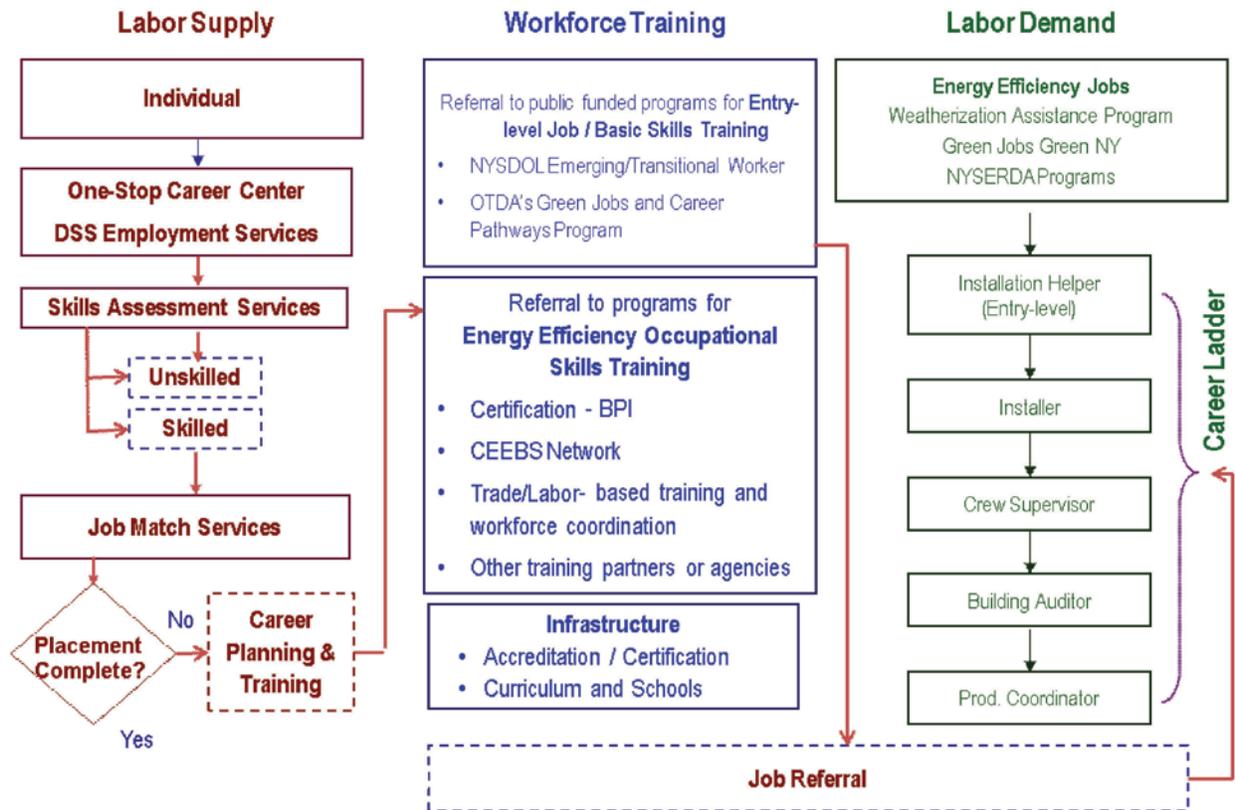


Figure 1. Green Jobs - Green New York Workforce Development Framework

NYSERDA continues to work with NYSDOL to leverage State and federal funds to develop training opportunities for the unemployed, new and emerging workers through the NYSDOL One-Stop Career Centers and the State's Workforce Investment Boards. The NYSDOL One-Stop Career Centers assist jobseekers to identify career goals and locate appropriate training and certificate programs to meet these goals. NYSERDA continues to collaborate with the NYSDOL to establish a comprehensive workforce development program for New York that supports existing and planned energy efficiency programs, and further leverages the "pathways out of poverty" program to engage disadvantaged communities. NYSDOL funding can provide training to new and emerging workers to prepare them with skills necessary for entry-level employment, while NYSERDA funding can provide more focused and specialized training related to energy efficiency programs.

## V. Outreach & Marketing

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GJGNY has been designed to deliver outreach services in targeted communities through a network of Constituency Based Organizations (CBOs). The Act defines 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."<sup>1</sup> CBOs will encourage participation in energy efficiency programs, facilitate awareness of workforce training opportunities available through GJGNY, and assist with enrollment in those efforts. Outreach, marketing, and education will target residents, small businesses, not-for-profit organizations (NFPs), multifamily building owners, and potential workforce participants.

### ***a. Outreach & Marketing Working Group***

NYSERDA established the GJGNY Outreach & Marketing Working Group in December 2009 to assist with the development of outreach, enrollment, and other related program support services called for in the Act. The working group included representatives from constituency based organizations, state agencies, community development organization, housing advocates, and energy service providers. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. The working group developed a plan to conduct outreach and marketing to reach individuals seeking workforce assistance and homeowners and businesses looking for energy efficiency programs. The working group held three open public conference calls on January 14, 21, and 28, 2010 to discuss and collect input specifically directed at the outreach effort to be conducted by the CBOs. The Outreach Working group held over a dozen meetings and gathered input from working group members leading up to the presentation of a draft Outreach and Marketing Operating Plan to the Advisory Council in March 2010 and later approved by NYSERDA's Officers.

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<sup>1</sup> Laws of New York, 2009. Chapter 487, page 2, section 1891, subsection 3.

**Table 3: Green Jobs - Green New York Outreach & Marketing Budget**

<b>Element</b>	<b>Budget</b>
Outreach Program – Delivered through CBOs	\$6,000,000
General Statewide Marketing	\$3,500,000
Training and Implementation Contractor	\$500,000
<b>Total</b>	<b>\$10,000,000</b>

***b. Constituency Based Organization Outreach***

NYSERDA has developed RFP 2038 Green Jobs - Green New York Outreach by Constituency Based Organizations and anticipates its release in October 2010. The RFP seeks proposals from eligible CBOs and coalitions of CBOs to assist in regional outreach services in 13 regions throughout New York State. Regional budget allocations have been made after an assessment of regional populations, housing, and employment data. CBOs may bid on either the Outreach component; the Workforce Enrollment and Recruitment component, or both. *Attachment D: Green Jobs - Green New York Outreach Program Regional Funding Allocations* details budget allocations for both components of the RFP. Contracts will be awarded on a regional basis. A map representing the GJGNY Regions can be found in *Attachment E: Green Jobs - Green New York CBO Regions*. The number of contracts awarded in each region will be directly related to an assessment of appropriate coverage and the ability to meet the goals of the program. It is expected that contracts resulting from RFP 2038 will begin in the first quarter of 2011.

***c. Aggregation***

Aggregation of potential energy retrofit customers has been identified as an innovative way to increase the number of energy retrofit projects conducted under GJGNY. For the purpose of the CBO outreach component of GJGNY, aggregation is defined as the collection of eligible property owners (homeowners, small businesses, or not-for-profits) in the same local neighborhood, brought to the program by the CBO under contract to NYSERDA to perform outreach services, and where the property owners have agreed from the outset to use the same contractor or contractor team to perform audits and retrofit work. Due to the challenges in developing and deploying aggregation, NYSERDA solicited members of the Advisory Council to form a small group to discuss the aggregation topic in depth. The group held several conference calls and reported back to the Advisory Council. Based on the input of the group as well as additional comments received in response to the Draft One- to Four-Family Operating Plan, NYSERDA found that the Aggregation model should provide benefits to the building owners, the contractors providing services, and the community.

NYSERDA anticipates piloting Aggregation in CBO regions. CBOs will be able to propose an aggregation model that meets the following criteria, aggregation must (i) provide enhanced benefits to the property owners that may include lower costs through standardized pricing and a simplified participation process; (ii) provide benefits to contractors by reducing costs associated with travel and marketing, enabling more efficient use of crews and bulk material purchases, and providing a ready audience of potential leads; (iii) complement ongoing market transformation efforts by expanding awareness, increasing education, and broadening the demographics of the audience participating in the current program and (iv) through the development of local job opportunities, provide benefits to the potential workforce within the targeted communities. NYSERDA has proposed that contractors and contractor teams participating in Aggregation pilots agree to certain community development standards. The final guidelines for establishing Aggregation pilots will be established prior to the release of RFP 2038, Green Jobs - Green New York Outreach by Constituency Based Organizations; and CBOs responding to that solicitation will have the opportunity to propose pilot Aggregation efforts.

#### ***d. Training and Implementation Contractor (TIC)***

NYSERDA released an RFP 2080 Green Jobs - Green New York Training and Implementation Contractor (TIC) in July 2010. This contractor will support the effective roll-out and ongoing efficiency of GJGNY Outreach activities through CBOs on a statewide basis. The TIC will be responsible for providing structured training for the CBOs; geographic coordination and support of CBO Outreach programs; effective communication across all regions; tracking of CBO goals including recruiting efforts; assessing and fulfilling CBO needs; assistance in planning and coordinating events, if necessary; tracking progress of referrals made to GJGNY; data gathering; and regular reporting of program activities and results to NYSERDA. CBOs will be required to work closely with the TIC in its fulfillment of these tasks. Proposals for RFP 2080 are due on October 6, 2010.

#### ***e. GJGNY Marketing***

NYSERDA will select a Full Service Marketing Contractor to develop and execute a statewide integrated marketing and communications program to support GJGNY. The contractor will be selected through a mini-bid process including contractors previously selected by NYSERDA as part of *RFQL 1224, Full Service Marketing, Public Relations, and Graphic Services*. The GJGNY Marketing initiative will identify opportunity segments, drivers, barriers, and messages; build awareness of GJGNY; increase participation in GJGNY; increase the number of contractors offering audit and retrofit services; and build the pipeline of New Yorkers participating in green jobs training. Initiatives to build program awareness will make the program broadly accessible through NYSERDA's hotline, website, participating contractors, and defined delivery channels.

The GJGNY Marketing initiative will begin in December 2010 and will be implemented for two years.

## ***f. Solicitations & Contracts***

Details related to the GJGNY Marketing and Outreach Solicitations, including schedules, associated budgets, and any resulting contracts are presented in *Attachment C: Green Jobs - Green New York Solicitations and Contracts*.

## VI. Financing

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### *a. Finance Working Group*

NYSERDA established the GJGNY Finance Working Group in October 2009 to assist in the development of the innovative financing mechanisms called for in the legislation. The Act directed NYSERDA to establish a Revolving Loan fund with two accounts, one for one- to four-family residential buildings and multifamily buildings and a second for buildings occupied by small businesses and not-for-profit organizations. The Act requires the initial balance of the residential account to be at least 50% of the total balance of the two accounts.<sup>1</sup> The Finance Working Group included representatives from 20 organizations, including financial institutions and consultants, community-based organizations, energy suppliers, and state and local government. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. The first meeting of the working group was held on November 6, 2010. It was agreed that three financing options should be explored including direct consumer loans, On-Bill Recovery, and Property Assessed Clean Energy (PACE) financing. Following the second meeting of the Working Group, Subgroups were established to explore and develop each of these financing options. The Advisory Council was provided frequent updates on the activities and progress of the subgroups, which continue to meet to advance the overall financing plan.

NYSERDA has budgeted the financing across the sectors as represented in the Table below.

**Table 4: Finance Budget by Sector**

<b>Sector</b>	<b>Budget</b>
One- to Four-Family Homes	\$26,692,533
Multifamily Buildings	\$11,292,550
Small Business/Not- For- Profit Buildings	\$13,274,917
<b>Total</b>	<b>\$51,260,000</b>

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<sup>1</sup> Laws of New York, 2009. Chapter 487, page 5, section 1896. Subsection 1b ii.

## ***b. Revolving Loan Fund***

NYSERDA anticipates that some financing options will be available through the GJGNY Revolving Loan Fund in the fall 2010. Pursuant to the GJGNY Act, loans will be capped at \$13,000 per applicant for residential structures and \$26,000 per applicant for small business and not-for-profit structures<sup>2</sup>. NYSERDA has established limits for multifamily structures, not to exceed \$5,000 per unit and \$500,000 per building. NYSERDA will establish the terms of the financing, including the length in years and the interest rate to be charged to customers.

Availability of financing will be subject to borrowers' meeting loan underwriting criteria established by NYSERDA for each financing approach and sector. The underwriting guidelines for the unsecured residential loans have been finalized and are included in *Attachment F: Underwriting Criteria Direct Residential Loans*. The underwriting guidelines for the unsecured small business/not-for-profit and multifamily loans are under development. The application process will be integrated into NYSERDA's current Home Performance with ENERGY STAR Program, Multifamily Performance Program, and Small Business Audit Program.

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

## ***c. Unsecured Direct Loans***

Initially, unsecured residential loans will be provided statewide through Energy Finance Solutions, the current Home Performance with ENERGY STAR lender. Negotiations are underway to provide unsecured direct loans to small businesses and not-for-profit organizations through an initial lender.

NYSERDA has selected an interim loan servicer that will service residential loans originated by Energy Finance Solutions (EFS) until a solicitation can be prepared and issued to select a permanent master loan servicer. The master loan servicer will be responsible for monitoring collections on the loan portfolio and monitoring origination processes to ensure conformance to standards. After initial program launch in fall 2010, completion of the selection of the master loan servicer, and establishment of the origination-servicing system, NYSERDA will approve additional qualified financial institutions to offer loan origination and servicing of loans.

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<sup>2</sup> Laws of New York, 2009. Chapter 487, page 5, section 1896. Subsection 2b ii.

#### ***d. Property Assessed Clean Energy (PACE) Financing***

PACE financing permits the cost of comprehensive energy efficiency retrofits projects to be paid through a tax assessment on the property. The future of PACE financing for residential projects was cast in doubt in early July when the Federal Housing Finance Agency (FHFA) and the Office of the Comptroller of the Currency concluded that the senior-lien residential PACE programs violate standard mortgage provisions and trigger a mortgage default. Efforts to resolve the senior lien issue for residential property are being pursued with the regulators by energy efficiency advocates, the U.S. Department of Energy, Congress and others. As a result of these developments, NYSERDA has put on hold its plan for residential energy efficiency financing using a PACE-type financing approach pending resolution of these issues by the federal government. Meanwhile, the ability to develop PACE financing with a secondary lien with the consent of mortgagees is also being explored. Should the issues raised by federal regulators be resolved, State legislative amendments will be required, authorizing municipalities to enter into agreements with NYSERDA and to use funding provided by NYSERDA.

#### ***e. On-Bill Recovery (OBR) Financing***

NYSERDA and National Grid are partnering to offer a pilot program in the upstate National Grid territory that will allow residential and small commercial customers to repay the cost of the energy efficiency improvements through their utility bills. Customers must be both electric and natural gas customers of National Grid to participate. Representatives of NYSERDA and National Grid met with DPS staff on September 10, 2010 to provide an update on the development of the pilot. DPS staff advised that agreement to offer OBR will be subject to approval by the Commission.

Legislation to enable NYSERDA to work with additional utilities on a statewide basis to offer on-bill recovery financing as part of Green Jobs - Green New York was being considered but was not taken up before the end of the legislative session, in July 2010. This legislation included a meter obligation that would remain with the property upon transfer, apportionment of partial payments between the utility charge and the efficiency retrofit charge, and expanding termination of service provisions under Public Service Law to include provisions for failure to pay the energy efficiency retrofit charge, features not included in the pilot. NYSERDA continues to provide consultation to the Governor's Office and legislative staff on this legislation.

### ***f. US Department of Energy (DOE) Grant Award***

In May 2010, NYSERDA received a competitive award from the DOE to leverage new and existing energy efficiency retrofit and finance programs to create large-scale sustainable approaches to financing energy efficiency across the state. From the total award of \$40 million, New York City will receive a sub-award of \$21.4 million, which was planned to support PACE financing to commercial customers. Due to the unavailability of PACE as a viable option at the present time, New York City is evaluating options for using the funds to support alternative financing approaches. An additional \$5 million will be sub-granted to a coalition of Long Island towns to support energy efficiency outreach programs to encourage energy efficiency retrofits, with financing provided through GJGNY. The balance of the award, \$13.6 million, was originally to be used by NYSERDA to support a statewide PACE financing aggregation program by leveraging the DOE funds with private capital through the capital markets, and \$2 million that was allocated to support costs of upgrading utility billing systems to support on-bill recovery financing. NYSERDA expects to continue to use the funding to support financing approaches offered through GJGNY. This may include using funds as debt service reserves in support of a capital markets bond issuance to allow GJGNY funds used to fund loans to revolve more quickly to support additional loans, given the longer repayment periods required for many energy efficiency projects. It will also allow GJGNY and DOE funds to leverage additional private capital to further the goals of GJGNY.

### ***g. Contracts Entered Into***

NYSERDA competitively retained a financial advisor, Lamont Financial Services, that has been assisting with program design and structures for financing. NYSERDA competitively selected Hawkins, Delafield and Wood, as its bond counsel to provide advice on trusts and other financial matters. As part of developing legislation to support alternative financing approaches to be used in GJGNY, Hawkins was retained to provide legal assistance with regard to program design and structures for financing. Additionally, NYSERDA has entered into a contract with the Energy Programs Consortium to support a multistate effort to develop common standards for unsecured energy efficiency financing that will facilitate the securitization of such loans. Funding amounts for these contracts are detailed in *Attachment C: Green Jobs - Green New York Solicitations and Contracts*.

## **VII. One- to Four-Family Residential Buildings**

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### ***a. One- to Four-Family Working Group***

NYSERDA established the GJGNY One- to Four-Family Working Group in November 2009 to provide input to the challenges and opportunities of implementing GJGNY in the one- to four-family sector. The working group met seven times and included representatives from constituency based organizations, State agencies, energy services providers, labor unions, trade associations, and utilities. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. Three sub-groups formed to handle the following issues: (1) how CBOs can best identify customers, (2) how customers identified by CBOs may be referred to Home Performance contractors, and (3) issues related to energy audits subsidized by GJGNY. The three sub-groups met for a combined total of seven additional working sessions. The sub-groups provided recommendations to the main working group on the selection and use of contractor standards, content and deployment of customer screening tools, and methods for streamlining the audit process. Throughout the proceedings, much time was devoted to the role of the CBO network funded by GJGNY, specifically how CBOs may interact with and refer work to contractors. Due to the diversity of stakeholders, many of the discussions did not result in consensus or shared recommendations. Nevertheless, the proceedings did serve a valuable purpose in identifying key issues, representing the viewpoint of external stakeholders and laying groundwork for future discussions and program planning activities. Feedback was taken into consideration in the development of the draft One- to Four-Family Operating Plan presented to the Advisory Council in April 2010.

### ***b. Target Audience***

The GJGNY Act defines a residential structure as "a residential building that has four or fewer dwelling units."<sup>1</sup> The target audience for the one- to four-family sector is owners of buildings, with up to four residential dwelling units, with incomes typically above 60% of the state or area median income (whichever is higher). Building owners and tenants with lower incomes may be eligible for the federally-funded Weatherization Assistance Program or NYSERDA's EmPower New York<sup>SM</sup> program through which services could be provided at no cost to the households. NYSERDA will not turn away building owners that could be served through the federally-funded Weatherization Assistance Program or NYSERDA's EmPower New York<sup>SM</sup> Program if they choose to participate, however they will not be a targeted audience of GJGNY. A specific target audience of interest to NYSERDA is building owners who are customers of investor-owned utilities<sup>2</sup> and whose incomes are between 60% and 80% of the state or area median

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<sup>1</sup> Laws of New York, 2009. Chapter 487, page 3, section 1891, subsection 13.

<sup>2</sup> Central Hudson Gas and Electric, Inc., Consolidated Edison Company of New York, Inc., National Grid, New York State Electric and Gas Corporation, Orange and Rockland Utilities, Inc., Rochester Gas and Electric Corporation.

income. They may be eligible for a grant of 50% of the cost of the work, up to \$5,000, (or up to \$10,000 for buildings with two-to- four units) from NYSERDA.<sup>3</sup> Communities in areas where energy costs are high in relation to median income, or those in non-attainment for one or more designated pollutants under the Federal Clean Air Act, will also be targeted.

### ***c. Implementation Strategy***

GJGNY financing and co-funding of audits for the one- to four-family homes sector will be offered through NYSERDA's Home Performance with ENERGY STAR<sup>®</sup> Program (HPwES).<sup>4</sup> Therefore, NYSERDA intends to rely on the administrative processes used for HPwES. HPwES is a "whole house" program that uses building science to identify and install cost-effective measures to reduce energy consumption in New York State's one- to four-family housing stock. Contractors perform a Comprehensive Home Assessment (CHA), which includes health and safety testing prior to performing work, and also "test out" of the house after work is complete to ensure a safe and healthy environment after installation of energy efficiency measures. Participating households typically reduce their total energy use by 25%–30% after a participating contractor has completed work on their homes. The program currently offers low-interest financing<sup>5</sup> **or** a homeowner cash-back incentive<sup>6</sup> to encourage comprehensive work scopes. Under GJGNY participating households will be able to receive the homeowner cash-back incentive **and** finance the balance less any NYSERDA incentives or utility rebates through a GJGNY loan.

Audits and energy services for GJGNY will be carried out by HPwES contractors that have current Contractor Partnership Agreements with NYSERDA. It is anticipated that the number of participating contractors will increase as demand for program services also increases. Contractor Partnership Agreements currently used in the HPwES program will be updated to reflect new requirements of GJGNY. HPwES contractors are required to renew Contractor Partnership Agreements on an annual basis. The version of the Contractor Partnership Agreement in place for the program at any point in time is posted on NYSERDA's website.

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<sup>3</sup> The 50% subsidy is provided through the System Benefits Charge (SBC) or Energy Efficiency Portfolio Standard (EEPS)-funded Assisted Home Performance with ENERGY STAR program.

<sup>4</sup> The Home Performance with ENERGY STAR program began in 2001. To date, HPwES has completed more than 32,530 energy efficiency jobs, saving over 22,600,000 kWh and over 1,028,600 MMBtu, resulting in \$251,322,071 of private investment in energy efficiency.

<sup>5</sup> Low-interest financing currently offered in the program consists of ENERGY STAR Financing and the New York Energy \$mart<sup>SM</sup> Residential Loan Fund. ENERGY STAR Financing provides qualified owners of 1-2 family homes with approved Home Performance work up to financing for \$20,000 at a fixed 5.99% interest rate for up to ten years. The New York Energy \$mart<sup>SM</sup> Residential Loan Fund provides a 4% interest rate buy-down (up to ten-year term) to qualified residents to finance up to \$20,000 (\$30,000 in Con Edison territory) of approved Home Performance work.

<sup>6</sup> The homeowner cash back incentive is equal to 10% of the cost of the eligible work scope, up to a maximum of \$3,000.

Contractors delivering audits and performing services must be accredited by the Building Performance Institute (BPI), in accordance with NYSERDA's participation agreement. BPI accreditation includes a review of certain business standards and practices in addition to technical certification requirements. NYSERDA will work with NYSDOL to identify any recommendations for additional "due diligence" procedures and will incorporate them into the program. Contractor Participation Agreements will be updated accordingly.

NYSERDA performs quality assurance inspections on a sample of projects to ensure contractor work meets program standards. Apart from NYSERDA, BPI also performs quality assurance inspections to ensure work meets its technical standards. If projects fail to meet standards, BPI or NYSERDA follow up with the contractor to ensure remediation takes place. Failure to meet BPI or program standards may result in probation, suspension, loss of BPI accreditation or removal from the HPwES program, in accordance with BPI and NYSERDA processes.

Currently, in the service territories of New York's investor-owned utilities, HPwES is administered by NYSERDA. The Long Island Power Authority (LIPA) administers HPwES for its customers, and some municipal utilities also offer the program to their customers. NYSERDA will coordinate with LIPA and those municipal utilities to ensure there is no duplication of services or incentives, to make low and no cost audits and GJGNY financing available, and to minimize confusion of customers and contractors. In regions of the state where HPwES is not supported by NYSERDA or any utility, NYSERDA will reach out to the municipal utilities to coordinate customer and contractor outreach, and to ensure contractors are aware of any other incentives those customers may be eligible to receive from their utility. This outreach will be in addition to any performed by CBOs under contract to NYSERDA, as discussed in *Section V. Outreach & Marketing* and will be coordinated with CBOs that may be serving the region.

#### ***d. Energy Audit Fees***

The GJGNY Act requires that the program makes energy audits available to residential applicants. The fee for energy audits must be waived for New York households that have a demonstrated income 200% of the median county household income or less. For households with incomes 200% to 400% of the median county household income the applicant, "...shall pay a pro rata percentage of the audit fees." Only those households that have a county median income above 400% "pay the full fees."<sup>7</sup> HPwES will integrate free and sliding scale audits into the current structure by making payments directly to participating contractors. The income levels by county and the sliding scale are documented in *Attachment G: Green Jobs – Green New York One- to Four-Family Homes County Median Income Chart*.

Currently, under HPwES, contractors are free to set fees for the CHA. Costs of those fees have been known to range from approximately \$200 to \$800. Some contractors refund the cost if the homeowner goes forward with work. Others offer CHAs at no cost after carefully screening

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<sup>7</sup> Laws of New York, 2009. Chapter 487, Page 5, Section 1895, Sub-section 3

customers and others yet offer the CHA at no cost to all customers by building the costs into their overhead. Due to the statewide application of the law, the wide variety of existing building types and fee structures, and the need to contain program costs, a standard fee per audit will be established. The Program recognizes that larger, more complex houses may require more time to perform audits, however, there will be instances where performing audits on smaller less complex houses will take less time. It is important to acknowledge that HPwES is not just an audit program, but a program to deliver energy efficiency services. It is not intended for contractors to use the audit as a primary revenue (profit) source. Contractors should be working to sell comprehensive services needed by their customers and energy efficiency retrofits should be their primary revenue (profit) source. NYSERDA will work with the contractor community to establish a fair fee for the audit considering all of the points above. A percentage will be applied to this base fee to accommodate the "pro rata" rates.

### ***e. Contractor Standards***

The Act indicates that there is a role for

"contractors that have signed enforceable agreements to meet standards set by the authority including standards for local hiring and pre-apprenticeship and apprenticeship and other labor-management training program participation...."<sup>8</sup>

There has been much input from Advisory Council members as well as the general public on what types of standards might be established for the program, and how they would be applied. This issue is primarily focused on the one- to four-family sector.

Discussions took place in the One- to Four-Family Sector Working Group, in the Workforce Development Working Group, in the Outreach and Marketing Working Group, during the presentation of the One- to Four-Family Sector Draft Operating Plan to the Advisory Council, during conference calls with a subset of the Advisory Council members discussing customer aggregation, during presentations of the proposed "Aggregation Model" to the Advisory Council, and finally, at a special meeting of the Advisory Council to discuss standards on August 11, 2010. Several of the public provided comments at the August 11 meeting.

In addition, NYSERDA received a written "Common agreements on Green Jobs - Green New York contracting and job standards" document from the Center for Working Families (CWF), co-signed by a number of CBOs, which formed the basis of the August 11 discussion, as well as numerous written comments from contractors and other organizations in response to that document. Written comments regarding standards were also received by many parties commenting on the Draft One- to Four-Family Sector Operating Plan. Comments and discussions are documented in the GJGNY meeting notes which are posted on NYSERDA's

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<sup>8</sup> Laws of New York, 2009. Chapter 487, Page 4, Section 1894, Sub-section 1 (b)

GJGNY website, along with video recordings of the Advisory Council meetings and the documents and e-mails received from all parties.

The nature of the input varied widely, but with concurrence among essentially all parties that there is a desire to ensure that the following objectives are achieved:

- High quality work is done through the program,
- Workers are paid fair wages,
- Communities and populations targeted by the legislation benefit from program participation and job creation, and
- Targeted workers have the opportunity to grow on the job through career ladders.

Still, there was not concurrence on how to achieve those objectives. Suggested approaches ranged from using very strict, prescriptive standards for workforce development and wages; to not requiring any new standards beyond what NYSERDA already requires in the Home Performance with ENERGY STAR program. Many parties made very passionate appeals for their preferred approach based on their beliefs regarding potential success of the program, potential impacts on communities, and potential (positive or negative) impacts on contractor businesses. Some parties were not aware of some of the standards already in place for Home Performance with ENERGY STAR Program that relate to quality workmanship and business practices; current business practices of home performance contractors regarding wages and hiring from the community; and current status of targeted communities regarding their ability to participate in the existing programs. Regardless of whether consensus was reached on the issues, the extensive process that was undertaken provided an opportunity for all parties to gain a better understanding of the "full picture."

In addition, NYSERDA met with NYSDOL and DPS staff to better understand the existing opportunities provided by NYSDOL to contractors and workers, and to discuss the possible implications of standards on programs enabled by Public Service Commission Orders.

NYSERDA is taking all input provided into consideration in developing the approach that will be undertaken for GJGNY. This approach will be outlined in the Revised One- to Four-Family Operating Plan to be provided to the Advisory Council and NYSERDA's Officers in October, 2010.

### ***f. Coordination with Other Program Administrators***

NYSERDA will continue to work with other program administrators, including the Long Island Power Authority and utility service providers, to address coordination and minimize confusion where multiple incentive opportunities and loan products are available to residential customers.

***g. Program Area Budget and Anticipated Goals***

***Table 5: One- to Four-Family Homes Program Area Budget***

<b>Element</b>	<b>Budget</b>
Energy Audits	\$11,596,000
Implementation & Quality Assurance	\$1,000,000
Financing <sup>1</sup>	\$26,692,533
<b>Total</b>	<b>\$39,288,533</b>
<sup>1</sup> May include use of funds for interim loan financing, credit enhancement or reserves for loans securitized and sold to leverage additional funds from capital market investor, and support for overall financing subsidies to cover difference between borrower loan interest rates and costs of financing.	

***Table 6: One- to Four-Family Homes Program Area Anticipated Goals***

<b>Element</b>	<b>Goal</b>
Comprehensive Audits	46,000
Completed Projects	15,000
Anticipated Energy Savings	688 kWh/project; 31 MMBtu/project
Anticipated Dollar Savings	\$675 per year/project

While a portion of the GJGNY projects are expected to access a GJGNY Loan Program, a significant number of program participants may complete the installation of their energy-related improvements exclusively with alternative financial support. Development and delivery of the audits and work scopes by participating contractors will clearly result in employment opportunities, supported by the training delivered with GJGNY Workforce Development funding. The cost of construction for projects developed with GJGNY support, and the associated employment opportunities, can therefore be expected to exceed the impacts of the GJGNY one- to four-family financing budget by a significant factor.

## VIII. Multifamily Buildings

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### *a. Multifamily Working Group*

NYSERDA established the Multifamily Working Group in December 2010. The Working Group included representatives from energy service companies, financial institutions, community based organizations, affordable housing advocacy groups, and State agencies. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. The work of the group focused on two aspects of the multifamily component of GJGNY: 1) the administrative protocols and delivery model through which the GJGNY multifamily program should be deployed and 2) the project-level and per-apartment limits that should be applied to financing extended to projects using MF GJGNY funds. The group met via conference call on a monthly/semi-monthly basis through March 2010, at which point the results of its effort were used to develop the Draft Multifamily Operating Plan presented to the Advisory Council in March and subsequently approved by NYSERDA's Officers.

### *b. Target Audience*

The GJGNY Act defines a multifamily structure as "a multi-unit residential building with five or more dwelling units."<sup>1</sup> A multifamily project may include a single multifamily structure or a group of multifamily structures.

The needs of the multifamily sector will be addressed by working with developers, building owners and their representatives to improve the energy efficiency, health, safety, and security of multifamily residential buildings. The intention is to identify and target those potential participants<sup>2</sup> who are committed to implementation of energy-related improvements. As part of the GJGNY marketing and outreach efforts, provisions will be made to encourage referrals from CBOs.

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<sup>1</sup> Green Jobs - Green New York Act of 2009 (A.8901/S.5888 and chapter amendment A.9031/S.6032) Laws of New York, 2009. Chapter 487, Page 2, Section 1892, Sub-section 8

<sup>2</sup> Eligibility to apply and participate is limited to building owners and entities authorized by the owner to contract for the provision of qualified energy efficiency services. Singular dwelling unit residents or owners are not eligible to separately participate.

### ***c. Implementation Strategy***

GJGNY financing and co-funding of audits will be offered through NYSERDA's Multifamily Performance Program. (MPP) Therefore, NYSERDA intends to rely on the administrative processes used for MPP.<sup>3</sup> MPP is a comprehensive program that serves market-rate and low-to moderate-income projects using a common process, and relies on a network of energy service contractors who have demonstrated their ability to provide building performance services to multifamily buildings. These contractors are identified as MPP Partners, and must be employed by MPP participants to complete specific building performance services.

As the Program Administrator, NYSERDA has engaged an Implementation Contractor and a Quality Assurance (QA) Contractor to support program delivery. NYSERDA retains responsibility for the overall design and implementation of the program, establishes program guidelines, and is responsible for establishing and maintaining the network of MPP Partners. NYSERDA also reviews and approves customer applications, creates and executes the Participation Agreements, and processes incentive payments. NYSERDA has established GJGNY loan limits for multifamily structures not to exceed \$5,000 per unit and \$500,000 per building.

The Implementation Contractor will process customer applications, review Energy Reduction Plans (ERP)<sup>4</sup> and other program submissions, and provide reports on various program metrics. The QA Contractor will provide feedback on the program and monitor compliance with program guidelines. MPP Partners will assist participants with project implementation by completing the initial energy audit(s) and developing the ERP. The MPP Partner will also be responsible for verifying that the energy-related work scope is installed in compliance with Program requirements. The MPP Partner may be engaged by the participant, at their option, to additionally assist in related services such as preparation of construction documents, commissioning, and post-construction verification of savings.

NYSERDA, the Implementation and QA contractors will manage GJGNY-funded services as a seamless part of the MPP process, regardless of whether the participant intends to access MPP implementation incentives, utility program rebates, or other financial assistance, or simply intends to fund a portion or all of the energy-related improvements through GJGNY financing.

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<sup>3</sup> MPP has recently been redesigned and was re-launched in September 2010. The MPP processes have been streamlined to expedite the process and more effectively facilitate the installation of measures. These modifications, in part, address recommendations provided by various members of the Multifamily Working Group advising the GJGNY program development.

<sup>4</sup> An Energy Reduction Plan, the ERP, identifies the set of cost-effective energy-related improvements to be installed, and provides information necessary to guide installation of those measures. The ERP includes a detailed description of the proposed work scope, with the associated costs, projected energy saving, an outline for how costs will be financed, and a proposed schedule for construction.

#### ***d. Audit Fees***

Co-funding of the energy audit(s) and development of ERPs will be offered in two tiers, based on household income, with a higher level of funding available to buildings that satisfy NYSERDA's affordable housing criteria. To be eligible as an affordable housing project, the applicant must document that at least 25% of the residential dwelling units are occupied by families earning no more than 80% of the state or area Median Income (whichever is higher). NYSERDA allows reliance upon certain proxies to document compliance with this definition and those proxies are specified in the MPP program documentation. The current proxies include previously completed household income verification by housing regulators, such as the NYS Division of Housing and Community Renewal (DHCR), NYC's Housing Preservation and Development (HPD), the NYS Housing Finance Agency, and the U.S. Department of Housing & Urban Development (HUD).

The co-funding amount offered for completion of the audits and ERPs will be specified in the MPP program documentation. One ERP will be developed per project; however a single project may include multiple buildings. The co-funding amount is dependent on the size and complexity of the project, with higher co-funding offered if more than one unique energy audit must be conducted in support of a single project and the associated ERP. To be eligible to receive this co-funding and to access GJGNY financing, the participant must use an MPP Partner to complete the audit and ERP.

#### ***e. Coordination with other Program Administrators***

NYSERDA will continue to work with other program administrators, including utility service providers, to address coordination issues and minimize confusion where multiple incentive opportunities are available to customers. NYSERDA also coordinates with the NYS Division of Housing and Community Renewal's Weatherization Assistance Program (WAP), NYC Housing Preservation and Development (HPD), the U.S. Department of Housing & Urban Development (HUD), and others to leverage additional funding, as appropriate.

***f. Program Area Budget & Goals***

***Table 7: Multifamily Buildings Program Area Budget***

<b>Element</b>	<b>Budget</b>
Energy Audits	\$3,000,000
Implementation & Quality Assurance	\$1,400,000
Financing <sup>1</sup>	\$11,292,550
<b>Total</b>	<b>\$15,692,550</b>
<sup>1</sup> May include use of funds for interim loan financing, credit enhancement or reserves for loans securitized and sold to leverage additional funds from capital market investor, and support for overall financing subsidies to cover difference between borrower loan interest rates and costs of financing.	

***Table 8: Multifamily Buildings Program Area Anticipated Goals***

<b>Element</b>	<b>Goal</b>
Comprehensive Audits	50,000 units/~500 buildings
Completed Projects	40,000 units/~400 buildings
Anticipated Energy Savings	460 kWh per year/unit; 13 mmBtu per year/unit
Anticipated Dollar Savings	\$87 per year/unit; \$206 per year/unit

While a portion of the GJGNY projects are expected to access a GJGNY Loan, a significant number of participants may complete the installation of their energy-related improvements exclusively with alternative financial support. Development and delivery of the necessary energy audits and ERP by MPP Partners will clearly result in employment opportunities. Additionally, the costs associated with the construction of projects developed with GJGNY support are expected to exceed the GJGNY multifamily financing budget. Based on the participant having access to multiple funding sources to support completion of the work outlined in their ERPs, the construction jobs associated with the completed work will likely exceed the more limited impact of the GJGNY financing budget by a significant factor.

***g. Contracts Entered Into***

Contracts entered into related to the multifamily portion of GJGNY are detailed in *Attachment C: Green Jobs - Green New York Solicitations and Contracts*.

## **IX. Small Business & Not-For-Profit**

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### ***a. Small Business & Not-For-Profit Working Group***

NYSERDA established a GJGNY Small Business / Not-for-Profit Working Group in January 2010 to provide input to the challenges and opportunities of implementing GJGNY in the small business/not-for-profit sector. The working group included representatives from State agencies, utilities, energy service providers, HVAC and lighting contractors, constituency based organizations, and business improvement districts. A complete listing of Working Group members is included in *Attachment B: Green Jobs - Green New York Working Group Members*. The Working Group was very engaged in the process and held a total of six meetings in a two-month period. The working group tackled such issues as auditor standards, audit standards, eligible measures, and quality assurance. The group represented their individual sectors well and advised NYSERDA of concerns and needs specific to this sector that need to be addressed. The group reviewed and commented on the draft Small Business and Not-For-Profit Operating Plan that was presented to the Advisory Council in April 2010.

### ***b. Target Audience***

Energy audits and GJGNY financing will be made available for non-residential structures which, as defined in the GJGNY Act, are buildings used or occupied by a small business or not-for-profit corporation<sup>1</sup>. GJGNY funds will be used for the cost of energy audits for small businesses and not-for-profits with ten or fewer employees. Loans of up to \$26,000 per applicant will be available to small businesses with up to 100 employees, and not-for-profits regardless of the number of employees. An applicant is defined as a person who owns, leases, or manages a structure (i.e. a building, not a unit within a building) and who has the authority to contract for the provision of qualified energy efficiency services to such structure.

### ***c. Implementation Strategy***

To reach this diverse audience, NYSERDA will continue to refine various program implementation strategies, such as:

- Increase outreach through CBOs, particularly to building owners
- Devise a method through which building owners could assign authority to apply for program benefits to tenants
- Coordinate efforts between commercial and residential programs for mixed use properties

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<sup>1</sup> Laws of New York, 2009. Chapter 487, Page 2, Section 1892, Sub-section 9.

- Engage project expeditors to assist small businesses and not-for-profits with the installation process of an energy efficiency project, and
- Work closely with the regulated and non-regulated utilities on joint marketing and delivery strategies.

Standards for energy audits to be provided through GJGNY were developed with input from the Small Business/Not-For-profit Working Group. Energy audits will be provided through NYSERDA's existing network of FlexTech and Business Partner providers, comprised of qualified lighting and HVAC contractors. As a first step, contracts with four FlexTech Energy Audit firms will be modified to add the GJGNY funds and to expand the service territories that the firms can serve beyond the current SBC program area.

NYSERDA intends to issue a competitive solicitation to select Project Expeditors to provide hands-on assistance to small business and non-profit customers to encourage implementation of energy audit recommendations. The Project Expeditors will help customers apply for the loans to be provided through GJGNY as well as other NYSERDA and utility-sponsored programs that provide incentives for installation of energy efficient equipment.

#### ***d. Audit Fees***

It is NYSERDA's intention to provide energy audits at no cost for small businesses and not-for-profits with 10 and fewer employees with energy demand of less than 100 KW. The fee is yet to be determined for energy audits for small business and not-for-profits with more than 10 employees (but less than 100) with energy demand of less than 100KW.

#### ***e. Coordination with other Program Administrators***

Small business and not-for-profit customers can use the energy audits provided by regulated and un-regulated utilities as the basis for receiving loans through GJGNY, as long as the energy audits meet the standards outlined in the Small Business/Not-for-Profit Operating Plan. Customers who implement measures recommended in the qualified utility energy audits are eligible for GJGNY financing for the portion of the measure cost not covered by utility incentives. Discussions are underway with the utilities to coordinate marketing and service delivery for this customer sector.

***f. Budget and Goals***

***Table 9: Small Business and Not-For-Profit Program Area Budget***

<b>Element</b>	<b>Budget</b>
Energy Audits	\$5,600,000
Implementation & Quality Assurance	\$4,800,000
Financing <sup>1</sup>	\$13,274,917
<b>Total</b>	<b>\$23,674,917</b>
<sup>1</sup> May include use of funds for interim loan financing, credit enhancement or reserves for loans securitized and sold to leverage additional funds from capital market investor, and support for overall financing subsidies to cover difference between borrower loan interest rates and costs of financing.	

***Table 10: Small Business and Not-For-Profit Program Area Anticipated Goals***

<b>Element</b>	<b>Goal</b>
Energy Audits	4,200
Completed Projects	1,296
Anticipated Energy Savings	18,000 kWh per year/project, 160 mmBtu per year/project
Anticipated Dollar Savings	\$5,200 per year/project

While a portion of the GJGNY projects are expected to access a GJGNY Loan, a significant number of program participants may complete the installation of their energy-related improvements exclusively with alternative financial support. Development and delivery of the audits and work scopes by participating contractors will clearly result in employment opportunities, supported by the training delivered with GJGNY Workforce Development funding. The cost of construction for projects developed with GJGNY support, and the associated employment opportunities, can therefore be expected to exceed the impacts of the GJGNY small business and not-for-profit financing budget by a significant factor.

Based on NYSERDA's experience, the definitions included in the Act for the small business and not-for-profit sector (noted in the Target Audience section above) creates difficulties in designing a program and may limit the effectiveness of the GJGNY effort.

There are thousands of diverse customers in New York State that could potentially benefit from GJGNY energy audits and financing of energy efficiency improvements. The space involved is often part of a mixed-use building or a building with multiple tenants. This is particularly common in urban areas. Still, the law limits participation to the building owner, lessee, or manager of a structure (not a unit within a structure), **and** who has the legal authority to contract

for the provision of qualified energy efficiency services. For example, a restaurant and a bodega in the Bronx may each lease 1,000 sq ft of a 100,000 sq ft building. Each entity has energy efficiency needs unique to its business, such as commercial kitchen equipment and ventilation for the restaurant, and efficient refrigerated display cases for the bodega. But under the terms of the Act, each of these entities would have to obtain the building owner's permission to engage in an audit and financing, and the owner may not provide such authorization in many instances.

NYSERDA will monitor this issue as GJGNY is implemented over the next year, and if warranted, will recommend a statutory amendment to alleviate this issue at that time.

## X. Evaluation

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The GJGNY Budget includes an evaluation budget of 5%, consistent with direction provided in the Act.<sup>1</sup> NYSERDA presented the draft GJGNY Evaluation Operating Plan to the Advisory Council on May 26, 2010. A productive discussion occurred on several important aspects of the plan and the period for receiving written comments ended on June 9, 2010. Energy Analysis staff incorporated comments received and prepared a final draft of the Evaluation Operating Plan that was approved by NYSERDA's Officers. In the coming months, NYSERDA intends to initiate early evaluation activities, including compiling more detailed and program specific evaluation work plans and developing program theory and logic models. Planning any necessary baseline research will also be an important initial step. Details related to upcoming solicitations for the Evaluation component of GJGNY are summarized in *Attachment C: Green Jobs - Green New York Solicitations and Contracts*.

### ***a. Evaluation Goals and Implementation Approach***

The Evaluation Operating Plan describes NYSERDA's approach to evaluate GJGNY to show progress toward its stated goals and compliance with the Act. The overarching goals of NYSERDA's program evaluation efforts are to: (1) conduct credible and transparent evaluations, and (2) provide NYSERDA program staff and managers, the New York State Legislature, the Advisory Council, and other stakeholders with timely and unbiased information regarding program implementation progress in terms of impacts and the overall conduct of the program. NYSERDA and its evaluation contractors follow the American Evaluation Association's *Guiding Principles for Evaluators*, which calls for systematic inquiry, competence, integrity and honesty, respect for people, and responsibility for general and public welfare.<sup>2</sup>

As individual program operating plans are approved and implemented, NYSERDA and its evaluation contractors will develop program-specific detailed evaluation plans, monitor program progress and make adjustments to the evaluation plan, as necessary, to provide the most relevant and useful evaluation and feedback to program managers, the Advisory Group, the Legislature, and stakeholders.

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<sup>1</sup> Laws of New York, 2009. Chapter 487, Page 8, Section 1899, Sub-section 2

<sup>2</sup> American Evaluation Association (AEA), *Guiding Principles for Evaluators*, [www.eval.org](http://www.eval.org). See source for a full explanation of these guiding principles.

## ***b. Evaluation Areas***

NYSERDA's evaluation structure consists of four main areas –Market Characterization and Assessment (MCA), Process Evaluation, Impact Evaluation, and Survey Data Collection. This structure has served NYSERDA and its stakeholders well over the past several years and will remain in place, with some minor modifications, and will be expanded to serve the GJGNY evaluation needs.

### ***1. Market Characterization and Assessment***

The objectives of market characterization are: (1) to develop a comprehensive understanding of current and emerging markets, market structures, and market actors and (2) to provide baseline and background information to enable NYSERDA to define, deliver, and evaluate programs for these target markets. The objective of market assessment is to track changes in markets over time with a specific focus on market indicators that are likely to be impacted by program offerings.

### ***2. Process Evaluation***

The objectives of process evaluation are to: (1) review program design, oversight, and operations; (2) gauge customer satisfaction; and (3) provide recommendations for program and process improvements and efficiency. Process evaluation is also used to identify opportunities for program improvement and track program progress.

### ***3. Impact Evaluation***

The objectives of the impact evaluation are to: (1) determine program outcomes by evaluating energy and non-energy impacts that are attributable to the programs; (2) compare program outcomes to program goals, and (3) assess cost-effectiveness of programs. Impact evaluation involves measurement and verification of impacts and benefits attributable to the program, including an assessment of key non-energy impacts.

Historically, for the **New York Energy \$mart<sup>SM</sup>** programs, NYSERDA has conducted macroeconomic impact analysis to assess net job creation and other economic effects of program expenditures on energy efficiency. Options for analyzing this key metric along with other metrics such as carbon-emission reductions will be further explored and the specific approach will be identified.

### ***4. Survey Data Collection***

Survey data collection includes the design of data collection and sampling approaches and large-scale survey implementation, as needed, for all of the above evaluation areas.

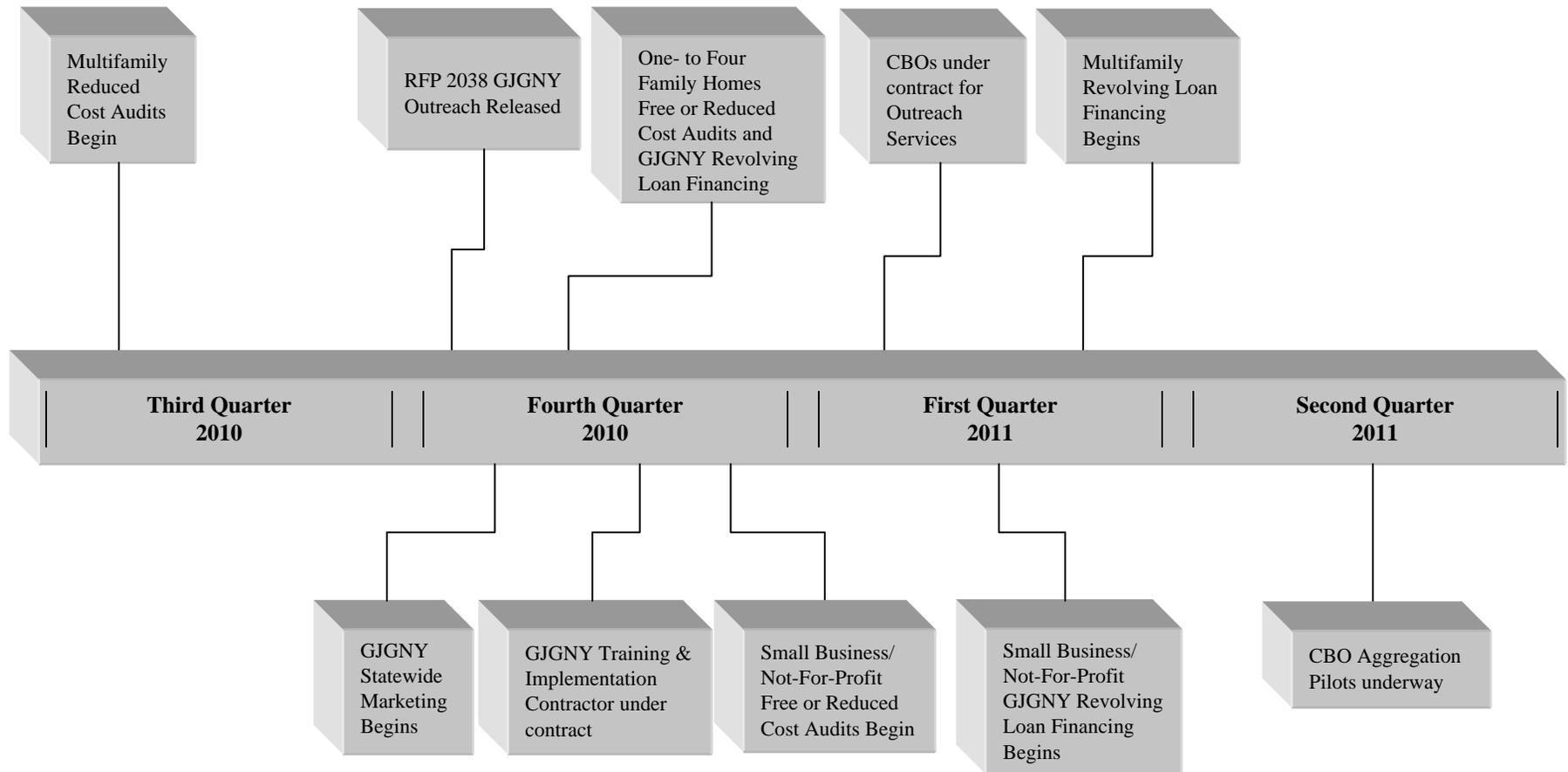
When primary research is conducted with program participants or other market actors, NYSERDA generally strives to meet 90/10 confidence/precision levels where appropriate.<sup>3</sup> Primary research is coordinated, to the extent possible, across the impact, process and MCA evaluation activities. This coordination is intended to reduce respondent fatigue, exercise economies of scale, and eliminate duplication. Confining all major survey data collection activities under one umbrella will ensure consistency in approach to sampling design, data collection approach, quality control/assurance, and data documentation.

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<sup>3</sup> Process evaluation is usually based on qualitative, in-depth interviews. Therefore, the confidence/precision levels may only apply to a small portion of this work. Where confidence/precision levels do apply, they will be determined for the entire survey effort, assuming a 50/50 proportion.

# XI. Green Jobs - Green New York Milestone Timeline

The graphic below represents the anticipated schedule for achieving major milestones related to GJGNY in the coming year.



# Attachment A. Green Jobs - Green New York Advisory Council Meeting Agendas

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January 26, 2010

- I. Welcome and Opening Remarks
- II. Introductions
- III. Overview of GJGNY
  - a. Legislation
  - b. NYSERDA Role and Requirements
- IV. Advisory Council
  - a. Membership
  - b. Role and Responsibilities
  - c. Charter
  - d. Meeting Schedule, Operations, Logistics and Open Process
- V. Program Development and Implementation Strategy
  - a. Timeline and Status
- VI. Working Groups
  - a. One- to Four-Family
- VII. Mission, Status, Next Steps
  - a. Multifamily  
Mission, Status, Next Steps
  - b. Small Commercial and Not-for-Profit  
Mission, Status, Next Steps
  - c. Workforce Development  
Mission, Status, Next Steps
  - d. Outreach  
Mission, Status, Next Steps
  - e. Finance  
Mission, Status, Loan Fund Strategy,  
Impending RFPs, Next Steps
- VIII. Budget
- IX. Discussion

Additional comments after the meeting can be emailed to Peggie Neville at [man@nyserda.org](mailto:man@nyserda.org)
- X. Next Steps

## FEBRUARY 18, 2010

- I. Welcome & Introductions
  - a. Advisory Council Member Additions
  - b. 1/26/2010 Meeting Notes
- II. Advisory Council Term Assignments
- III. Update on Public Process
- IV. Process for input into Operating Plan
- V. Workforce Development Operating Plan Presentation
  - a. Discussion
- VI. Outreach & Marketing Status
  - a. Discussion
- VII. Future Advisory Council Meeting Content & Schedule
- VIII. Public Input
- IX. Next Steps

## MARCH 10, 2010

- I. Welcome & Introductions
  - a. 2/18/2010 Meeting Notes
- II. Outreach & Marketing Operating Plan Presentation
  - a. Discussion
- III. Future Advisory Council Meeting Content & Schedule
- IV. Public Input
- V. Next Steps

## MARCH 26, 2010

- I. Welcome & Introductions
  - a. 3/10/2010 Meeting Notes
- II. Multifamily Operating Plan Presentation
  - a. Discussion
- III. CBO Working Group update
- IV. Revolving Loan Fund update
- V. Public Input
- VI. Next Steps

## APRIL 14, 2010

- I. Welcome & Introductions
  - a. 3/26/2010 Meeting Notes
- II. Small Commercial/Not-for-Profit Sector Operating Plan
  - a. Discussion
- III. Update on Advisory Council Outreach Working Group
- IV. Introduction of One- to Four-Family Sector Approach
- V. Status of Workforce Development Initiatives
- VI. Public Input
- VII. Next Steps

## APRIL 28, 2010

- I. Welcome & Introductions
  - a. 4/14/2010 Meeting Notes
- II. One- to Four-Family Homes Operating Plan Presentation
  - a. Discussion
- III. Master Schedule
- IV. Public Input
- V. Next Steps

## MAY 26, 2010

- I. Welcome & Introductions
  - a. 4/28/2010 Meeting Notes
- II. Budget Update
- III. Evaluation Plan
- IV. Aggregation Model
- V. Schedule and Reporting
- VI. Discuss 1-4 Comments
- VII. Public Input
- VIII. Next Steps

## JULY 20, 2010

- I. Welcome & Introductions
  - a. 5/26/2010 Meeting Notes
  - b. Aggregation Update
  - c. Master Schedule
- II. Budget Modification
- III. Update on Financing
- IV. Public Input
- V. Next Steps

## August 11, 2010

- I. Welcome & Introductions
  - July 20, 2010 Meeting Notes
  - Opening Remarks
- II. Presentations and Prepared Remarks
  - Emmaia Gelman, Center for Working Families
  - Rick Cherry, Community Environmental Center
  - Chuck Bell, Consumer Union
  - Dave Johnson, LIUNA
  - Miquela Craytor, Sustainable South Bronx
  - Judy Butler, Butler Home Performance
  - Eric Walker, PUSH Buffalo
  - Jennifer Keida, Standard Insulation
  - Dick Kornbluth, BPCA
  - Dave Hepinstall, AEA
- III. Discussion
  - Local Hiring Standards
  - Training Standards
  - Employment Standards
  - Contractor Standards
  - Wage Standards
  - Misc topics not addressed above
- IV. Public Comment
  - Lisa Tyson, Long Island Progressive Coalition
  - Taleigh Smith, Northwest Bronx Community Clergy Coalition
  - Rudy Scott, Energy Management Solutions, a BPI contractor
  - Ana Maria Archila, Co-Executive Director, Make the Road New York
  - Melanie Somberg Spaulding, VISTA Green Project Leader, Youth Build Schenectady

- Marquisha Page, Local 10 Member
- Thalia Willimas, Local 10 Member
- Phillip Arriaga, Local 10 Member
- Jes Rooks, Green Career Center, the Osborne Association
- John Valverde, Green Career Center, the Osborne Association
- Mark Gunther, President, Home Performance Technologies, Inc.

## September 16, 2010

- I. Welcome & Introductions
  - a. 8/11/2010 Meeting Notes
- II. Brief updates
  - a. Small Commercial/Not-for-profit
  - b. Finance Strategy
- III. Annual Report
- IV. Public Input
- V. Next Steps

# **Attachment B. Green Jobs - Green New York Working Group Members**

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## Workforce Development Working Group Members

Adele Ferranti, Ruth Horton, Rhona Saffer, Vicki Colello, Kim Lenihan, Alison Neligan,  
Lee Butler, Lori Clark, Kelly Tyler, and Jaques Roth, NYSERDA  
Jeff Jones, Apollo Alliance  
Larry Zarker, Building Performance Institute  
Rebecca Lurie, Center for Worker Education  
Chloe Tribich, Center for Working Families  
Claudia Edwards, Community Environmental Center  
Lisbeth Sheperd, Clean Energy Corps  
Mike Bobker, CUNY BPL  
Ron Kamen, Earth Kind Energy  
Richard Kornbluth, Building Performance Contractors Association/NYS (BPCA/NYS)  
Paula Hayes, Hudson Valley Community College  
Rick Cataldo, IBW 236  
Myles Lennon, Laborers International Union of North America  
Melinda Mulawka, NYC Workforce Investment Board  
Phil Larocque, NYS Builders Association  
Tony Joseph, NYS Department of Labor  
John Levey, Oil Heat Associates  
Jackie Gentile, Peter Young Housing Industries, Treatment  
James Barry, SEIU Local 32BJ Thomas Shortman Training Programs  
William Bringham, Small Business Development Corporation  
Miquela Craytor, Sustainable South Bronx  
Virginia Carrig, Ulster County BOCES  
Paul Shatsoff, Workforce Development Institute  
David Hepinstall, Association for Energy Affordability, Inc.  
Barbara Drago, State University of New York  
Bill Macchione, Empire State Carpenters  
Michael Dunseith, Green Jobs Training Center

## Outreach & Marketing Working Group Members

Tom Lynch, Kevin Carey, Susan Moyer, Jeffrey Gordon, Heather Saunders, Ryan  
Moore, Kelly Tyler, Kelli Herndon, Robert McKeon, Kelvin Keraga, Angela  
Bush, Tina Blowers, and Susan Andrews, NYSERDA  
Samuel Sage, Atlantic Sales  
Chloe Tribich, Center for Working Families  
Corinne Hammons, Community Development Corporation Of Long Island  
Nancy Peters and James Plastiras, DHCR  
Christopher Pinheiro, Department of Labor

Outreach & Marketing Working Group Members (continued)

Ed Maitino, ESDC  
Michele Mattingly, Fiscal Policy Institute  
William Johnson, Green America-Public Private Partnership  
Alan Hipps, Housing Assistance of Essex County  
Dan Miner, Long Island City Business Development Corporation  
Amaria Archila, Make the Road NY  
Chris Hinseley, Metrojustice  
Taleigh Smith, NWBCCC  
Laura Haight, NYPIRG  
Adrian Gonzales, Orange County Rural Dev. Adv. Corp  
Lauren Melodia, Open Society Institute Fellow  
Wendy Fleischer, Pratt Center for Community Development  
Eric Walker, PUSH Buffalo  
Mike Dunleavy, RECAP  
Sheila Somashekhar, Sustainable South Bronx  
Art Wheaton, WNY Apollo Alliance  
Mike Patterson, Youth Constructive Initiative  
Brian Vattimo, New York Power Authority

Finance Working Group Members

John Ahearn, Jeff Pitkin, Ruth Horton, Marilyn Dare, Pat Fitzgerald, and Luke Falk,  
NYSERDA  
Peter Krajsa, AFC First Financial Corporation  
David Brown IV, Change Investments Management, LLC  
Emmaia Gelman, Center For Working Families  
Anthony Belsito, Department of Public Service  
Chris Kallaher, Direct Energy  
Tom Peters, Empire State Petroleum Association  
Nancy O'Brien, Energy Finance Solutions  
Howard Banker, Energy Programs Consortium  
George McCarthy, Ford Foundation  
Henry Lanier, Forsyth Street Advisors  
Kerry Quaglia, Home Headquarters, Inc  
Glenn Sharpe, IQ Venture Partners, Inc.  
Dorian Dale, Long Island Green Homes  
William Codner and Jed Sabio, National Grid  
Sarah Ludwig, Neighborhood Development Advocacy Project  
Neal Parikh, NYC Office Of Sustainability  
Arlo Chase, NYS Housing Finance Agency  
Greg Hale, NRDC  
Margot Brandenburg and Brinda Ganguly, Rockefeller Foundation

One- to Four-Family Homes Working Group Members

James Reis, John Ahern, John Schott, Mark Wyman, Michael Levitz, Bryan Henderson,  
Lee Butler, and Andrew VanGorder, NYSERDA  
Richard Kornbluth, Building Performance Contractors Association/NYS (BPCA/NYS)  
Larry Zarker, Building Performance Institute (BPI)  
David Palmer, Emmaia Gelman, Center for Working Families (CWF)  
Rick Cherry, Community Environmental Center (CEC)  
Mark Dyen, Conservation Services Group (CSG)  
Carlene Pacholczak, Department of Public Service  
Damian Hodkinson, Efficiency First  
Mike Lyons, Honeywell Utility Solutions (HUS)  
Myles Lennon, Laborers International Union of North America  
Sammy Chu, Long Island Green Homes  
Lisanne Altmann, Long Island Power Authority (LIPA)  
Lisa Tallet, National Grid Generation d/b/a National Grid  
Brian Paterson, New Buffalo Impact (NBI)  
Kevin Schmalz and Betty Weis, New York State Electric & Gas Corporation/Rochester  
Gas and Electric Corporation

Multi-Family Working Group Members

Pat Fitzgerald, Lindsay Robbins, Frank Mace, Jim Reis, Peggie Neville, Joey DeRosa,  
Michael Colgrove, and Luke Falk, NYSERDA  
Fred Fellendorf, Buffalo Energy  
Andy Padian, CPC  
Jodi Smits Anderson, DASNY  
Sam Marks, Deutsche Bank  
Dan Buyer, DHCR  
Abby Sigal, Enterprise  
Amy Barr, National Grid  
Michael Weisberg, M-Core Credit Corporation  
Margret Gans, PEACE  
Bob Noonan, RealLease  
Paul Rogers, Siemens

Small Business Working Group Members

Ruth Horton, Brian Platt, Marilyn Dare, Susan Andrews, Kim Lenihan, Peter Savio, and  
Liz Hanna, NYSERDA  
Les Bluestone, Blue Sea Development, Inc.  
Kate Shackford, Bronx Overall Economic Development Corporation  
Michael Conway, C.J. Brown Energy Engineering & Architecture, PC  
Terry Zima, Capitol District Supply Company  
Anthony Capese, Central Avenue (Albany) BID  
Michael Spector, Central Hudson Gas & Electric  
Jessica DiDonato, Con Edison

Small Business Working Group Members (continued)

Elizabeth Berger, Downtown Alliance (Lower Manhattan BID)  
Steve Cohen, Empire State Development  
Tom Peters, Empire State Petroleum Association  
Abby Jo Sigal, Enterprise Community Partners  
Abraham Neuhaus, Greenlight Energy Conservation  
Dennis Landsberg, L&S Energy Services, Inc.  
Michael Healy, Lime Energy  
John Franceschina, Long Island Power Authority  
Jon Gruchala, National Fuel Gas  
Jim Stapleton, National Grid  
Tzipora Lubarr, New York Industrial Retention Network  
Nicola Coddington, Interfaith Power & Light  
James King, NY Small Business Development Center  
Robert Melvin, Orange and Rockland Utilities, Inc.  
John D'Amico, TCBA Watson Rice LLP

Working Group of the Advisory Council on Aggregation

Dan Buyer, DHCR  
Dave Johnson, LIUNA  
David Hepinstall, AEA  
Dick Kornbluth, Building Performance Contractors Assoc.  
Emmaia Gelman, Center for Working Families  
Eric Walker, PUSH Buffalo  
Judy Butler, Butler Building Performance  
Les Bluestone, Blue Sea Construction  
Mike Atkins; Concerned Citizens Action  
Mario Musolino, NYS DOL  
Rick Cherry, Community Environmental Center  
Tony Joseph; NYS DOL  
William A Johnson, GAPPP  
Hugo Salinas, New York Energy Conservation  
Karen Villeneuve, NYSERDA  
Dave Munro, NYSERDA  
Kevin Carey, NYSERDA  
Ruth Horton, NYSERDA  
John Jones, NYSERDA  
Peggie Neville, NYSERDA  
Pat Fitzgerald, NYSERDA  
Susan Moyer, NYSERDA

# Attachment C. Green Jobs - Green New York Solicitations & Contracts Tables

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## SOLICITATIONS TABLE

Title/Description	Funding	Solicitation Release Date	Proposal Due Date	Status
<b>FINANCE</b>				
<b>RFP 1923 Financial Advisor Services</b> – Serve as financial advisor to NYSERDA for its implementation of financing structures and possible issuance of bonds for purposes of making loans under the GJGNY program.	\$228,100	2/16/2010	3/15/2010	13 proposals received. Contracted with Lamont Financial Services.
<b>RFP for Master Loan Servicer</b> – Monitor loan origination practices to ensure loans conform to program loan underwriting standards; service loans and perform collections for loans closed	Based on proposed fees	TBD	TBD	Under development
<b>PON for GJGNY Lenders</b> – Qualify financial institutions to originate loans pursuant to NYSERDA loan underwriting standards	Based on proposed fees	TBD	TBD	Under development
<b>RFP for Underwriting Services</b> – Select underwriter to market NYSERDA bonds.	Based on proposed fees	TBD	TBD	Under development
<b>WORKFORCE DEVELOPMENT</b>				
<b>PON 2011 Solar Thermal (ST) Training</b> - Develop ST training or ST module to integrate with existing EE training - curriculum development, equipment, code official training, and assistance to apply for ISP accreditation.	\$300,000	5/12/2010	6/30/2010	Four proposals were approved for funding by NYSERDA's Management Review Committee.

Title/Description	Funding	Solicitation Release Date	Proposal Due Date	Status
<p><b>PON 1817 Energy Efficiency Career Pathways Training and Technical Training</b> - Develop Small Commercial Energy Audit Training and Oil Heat Training under GJGNY, and develop EEPS Career Pathways and Tech Training.</p>	<p>\$1,850,000  (\$600,000 through GJGNY, balance through EEPS)</p>	<p>6/1/2010</p>	<p>8/3/2010</p>	<p>The Technical Evaluation Panel (TEP) met on 8/19/10 to review the 20 proposals received. TEP recommendations will be presented to NYSERDA's Management Review Committee in early 4<sup>th</sup> Quarter 2010.</p>
<p><b>RFP 2034 Green Jobs - Green New York: Curriculum Inventory, Assessment, and Curriculum Updates</b> – Conduct a curriculum inventory, contractor needs assessment, and curriculum updates</p>	<p>\$300,000</p>	<p>8/16/2010</p>	<p>9/21/2010</p>	<p>The TEP met on 9/20/10 to review the 9 proposals received. TEP recommendations will be presented to NYSERDA's Management Review Committee by early 4<sup>th</sup> Quarter 2010.</p>
<p><b>RFP 2014 Workforce Homeowner/Community Outreach Curriculum and Contractor Exchange Workshops</b>- Creation of standardized curriculum to educate those responsible for the outreach, field work, and related services for GJGNY and/or to hold three (3) Contractor Exchange Workshops.</p>	<p>\$300,000</p>	<p>8/16/2010</p>	<p>9/21/2010</p>	<p>Two proposals were rec'd. The TEP will meet in October 2010. TEP recommendations will be presented to NYSERDA's Management Review Committee by Early 4<sup>th</sup> Quarter 2010.</p>

Title/Description	Funding	Solicitation Release Date	Proposal Due Date	Status
<b>RFP 2032 Technical Workshops/Expand BPI Field Exam Capacity/Certification Standards</b> - Develop technical workshops, fund training centers to expand BPI field exam capabilities, fund third party to recognize/ approve and accredit technical curriculum and certification and develop certification standards.	\$1,480,000	10/2010	11/2010	Under development.
<b>RFP 2033 Internships/Apprenticeships/OJT-</b> Recruitment of entry-level workers, funding to support businesses hiring Green Jobs Work Readiness graduates and enhance standards for the NYS Registered Apprenticeship Programs and building trades programs to include weatherization and energy efficiency certified workers for GJGNY.	\$2,625,000	10/2010	12//2010	Under development in coordination with NYSDOL
<b>PON 1816 Workforce Development Training Partnerships for Energy Efficiency</b> – Expand the existing energy efficiency training infrastructure to serve the needs of EEPS and GJGNY.	\$1,650,000 of GJGNY funds to be added	Anticipated for November 2010	TBD	Under Development
<b>OUTREACH &amp; MARKETING</b>				
<b>RFP 2080 GJGNY Training &amp; Implementation Contractor</b> – to assist with the effective roll out and implementation of GJGNY Outreach services provided by CBOs, including trainings and coordination	\$500,000	7/20/2010	10/6/10	Currently Available

Title/Description	Funding	Solicitation Release Date	Proposal Due Date	Status
<b>RFP 2038 GJGNY Outreach Program</b> – to select CBOs in up to 13 regions to assist with outreach services	\$6,000,000	Anticipated for 10/2010	TBD	Under Development
<b>Marketing Mini-bid</b> – released to 11 full service marketing firms obtained through RFQL 1224 Full Service Marketing, Public Relations & Graphic Services	\$3,500,000	9/14/2010	10/12/2010	Currently Available
<b>EVALUATION</b>				
<b>RFP 1809 General Evaluation Assistance Contractor</b> – Obtain a contractor, or a team of contractors, to conduct general evaluation assistance activities to support NYSERDA’s evaluation staff in reporting, planning and coordination efforts.	\$2, 000,000 (includes SBC, EEPS, GJGNY and RGGI funding)	10/2010	11/2010	Under Development
<b>RFP 1810 Economic and Environmental Impacts Evaluation Contractor</b> – Procure one or more contractors to assist NYSERDA’s evaluation staff in assessing economic and environmental impacts (including benefit/cost analysis) of NYSERDA’s programs. Evaluation activities will address all program areas, including energy efficiency, renewable energy efficiency, renewable energy, distributed generation, workforce development, product development, market development, and business assistance.	\$2,500,000 (includes SBC, EEPS, GJGNY and RGGI funding)	10/2010	11/2010	Under Development

## CONTRACTS TABLE

Contract #	Contractor	Description	Contract Amount	Expenditures to Date
<b>Financial Services</b>				
17162	Hawkins, Delafield & Wood	Legal financial advisory services for GJ	\$120,000	\$54,713
18847	Lamont Financial Services Corporation	Financial Advisor Services	\$228,100	\$50,000
20209	Energy Programs Consortium	Financial Advisor Services	\$25,000	\$0
<b>Workforce Development Incentives</b>				
18675	NABCEP	PO for company accreditation	\$49,999	\$0
18854	BPCA NYS Inc.	PO for GJGNY research/training survey	\$25,000	\$0
<b>Multifamily Implementation Services</b>				
9628	TRC Engineers, Inc.	Program Implementer for Multifamily Buil	\$814,353	\$0
<b>Multifamily Performance Program Incentives</b>				
15083	Liberty View Condominium	Multifamily Building Performance Program - Incentive 1	\$6,940	\$0
15087	Liberty Terrace Condominium	Multifamily Building Performance Program - Incentive 1	\$6,470	\$0
15090	P & S 95th Street Associates LLC	Multifamily Building Performance Program - Incentive 1	\$6,800	\$0
15101	3039 Delaware, LLC	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15103	Dara Owners Corp.	Multifamily Building Performance Program - Incentive 1	\$9,340	\$0
15129	Jill Martin	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15139	Hudson View West Condominium	Multifamily Building Performance Program - Incentive 1	\$2,535	\$0
15140	447 Fort Washington Owners Corp	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15160	Darl K. Johnston & Arthur A. MacKnight	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15163	YWCA of Rochester & Monroe County	Multifamily Building Performance Program - Incentive 1	\$10,000	\$0
15171	Herkimer Housing Authority	Multifamily Building Performance Program - Incentive 1	\$19,000	\$0
15195	The Daniel Webster Owners Corp.	Multifamily Building Performance Program - Incentive 1	\$5,450	\$0
15196	Deerfield Apartments, Co., II, LLC	Multifamily Building Performance Program - Incentive 1	\$12,000	\$0
15197	City of Lockport Housing Authority	Multifamily Building Performance Program - Incentive 1	\$33,790	\$0
15208	417 Riverside Drive Inc.	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15253	Grove Street Apartments	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
15255	Cobblestone Square Apartments, LLC	Multifamily Building Performance Program - Incentive 1	\$12,560	\$0

<b>Contract #</b>	<b>Contractor</b>	<b>Description</b>	<b>Contract Amount</b>	<b>Expenditures to Date</b>
<b>Multifamily Performance Program Incentives (continued)</b>				
15261	Village of Canton Housing Authority	Multifamily Building Performance Program - Incentive 1	\$18,840	\$0
15263	Southern Boulevard Partners Phase I	Multifamily Building Performance Program - Incentive 1	\$10,000	\$0
15487	Whitman Owner Corp	Multifamily Building Performance Program - Incentive 1	\$9,575	\$0
15506	Regency Towers Associats	Multifamily Building Performance Program - Incentive 1	\$6,230	\$0
15516	Finkelstein Morgan Agency LP	Multifamily Building Performance Program - Incentive 1	\$10,000	\$0
15569	Shoreline Apartments, LLC	Multifamily Building Performance Program - Incentive 1	\$10,000	\$0
15870	Eagle Bay Condominium	Multifamily Building Performance Program - Incentive 1	\$4,943	\$0
15962	Royal Charter Properties - East, Inc.	Multifamily Building Performance Program - Incentive 1	\$24,570	\$0
16051	Cobblestone Square Apts. Co. III, LP	Multifamily Building Performance Program - Incentive 1	\$10,000	\$0
16291	Watervliet Housing	Multifamily Building Performance Program - Incentive 1	\$29,120	\$0
16321	City of Olean Housing Authority	Multifamily Building Performance Program - Incentive 1	\$25,370	\$0
17053	CLM Equities II, LP	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0
17060	CLM Equities LP	Multifamily Building Performance Program - Incentive 1	\$5,000	\$0

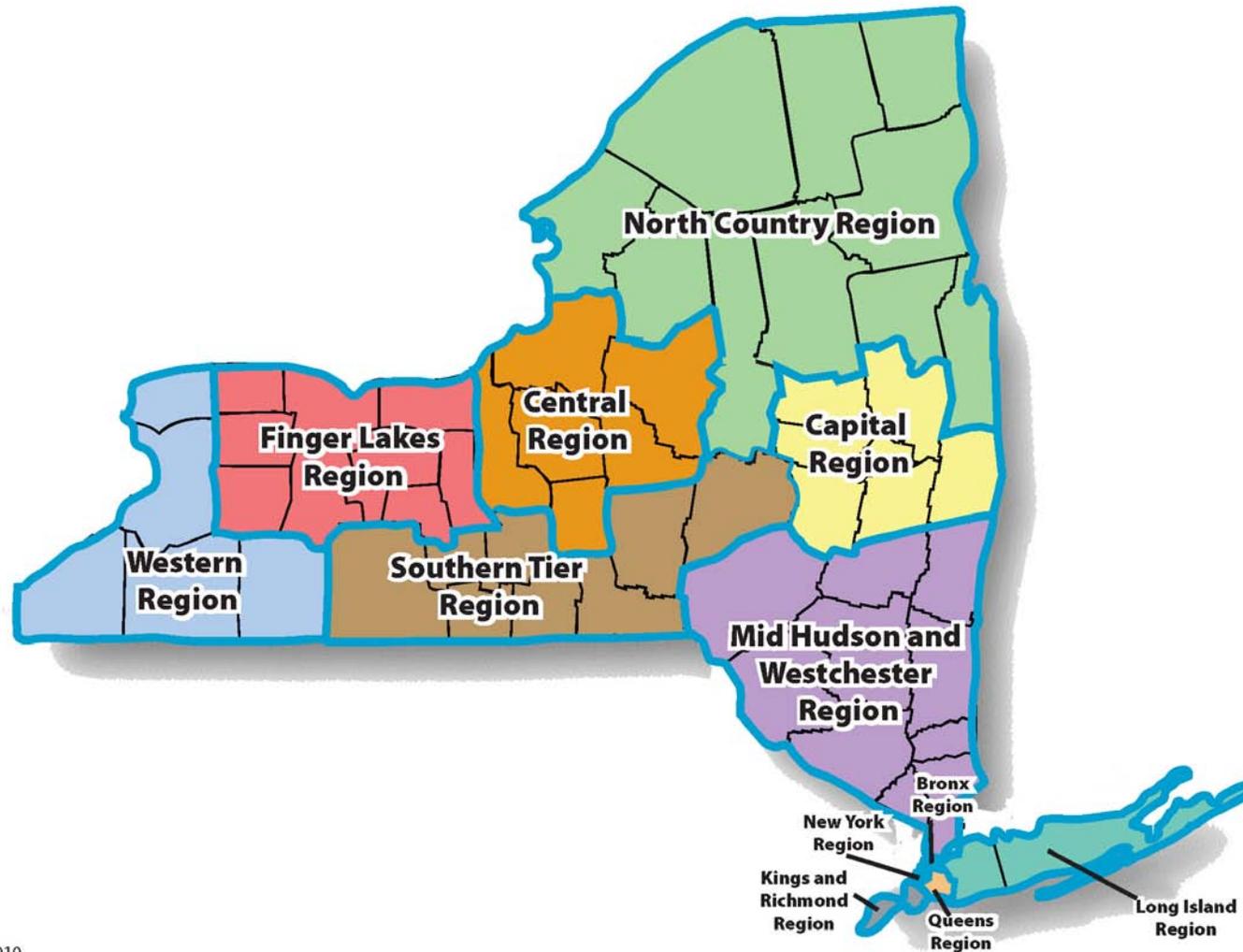
# Attachment D. Green Jobs - Green New York Outreach Program Regional Funding Allocations

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Region	Counties Associated with the Region	Outreach Budget	Workforce Enrollment and Recruitment	Total Two-year Budget
<b>North Country</b>	Hamilton, Jefferson, Franklin, St. Lawrence, Lewis, Essex, Washington, Clinton, Warren, and Herkimer Counties	\$258,049	\$34,703	\$292,752
<b>Bronx</b>	Bronx County	\$511,659	\$85,041	\$596,700
<b>Kings and Richmond</b>	Kings and Richmond Counties	\$640,016	\$167,240	\$807,256
<b>Queens</b>	Queens County	\$466,810	\$123,061	\$589,871
<b>New York</b>	New York County	\$395,005	\$93,213	\$488,218
<b>Southern Tier</b>	Schuyler, Steuben, Chenango, Broome, Otsego, Tompkins, Tioga, and Chemung Counties	\$245,967	\$33,400	\$279,367
<b>Western</b>	Chautauqua, Allegany, Cattaraugus, Niagara, and Erie Counties	\$578,498	\$73,788	\$652,286
<b>Finger lakes</b>	Seneca, Yates, Orleans, Genesee, Monroe, Livingston, Wayne, Ontario and Wyoming Counties	\$454,489	\$59,694	\$514,183
<b>Central</b>	Oswego, Oneida, Cortland, Cayuga, Onondaga, and Madison Counties	\$334,964	\$50,576	\$385,540
<b>Mid Hudson and Westchester</b>	Delaware, Greene, Sullivan, Ulster, Columbia, Dutchess, Orange, Rockland, Westchester, and Putnam Counties	\$504,715	\$107,545	\$612,260
<b>Long Island</b>	Nassau and Suffolk Counties	\$270,908	\$126,969	\$397,877
<b>Capital</b>	Rensselaer, Schenectady, Albany, Saratoga, Schoharie, Montgomery, and Fulton Counties	\$338,920	\$44,770	\$383,690
<b>Total</b>		<b>\$5,000,000</b>	<b>\$1,000,000</b>	<b>\$6,000,000</b>

# Attachment E. Green Jobs - Green New York Program Outreach Regions

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Rev. 9-17-2010

# Attachment F. Green Jobs - Green New York Program Underwriting Criteria Unsecured Residential Energy Efficiency Loans

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## Green Jobs-Green New York Program

### Underwriting Criteria for Unsecured Residential Energy Efficiency Loans

Loans will be available Statewide and will be originated through banks and other eligible financial institutions that have entered into a participation agreement with NYSERDA. However, a single loan originator, Energy Finance Solutions, will be used to launch the program and will originate all loans for a period of time (3-6 months) to finalize any changes in standards and to establish the system for loan servicing by a master loan servicer to be selected by NYSERDA.

Loans will be originated using underwriting criteria defined below, and the originator of the loan will be paid an origination fee by NYSERDA of \$175 per loan closed to cover its administrative costs. Loan originators may charge the borrower an additional fee to cover any additional costs, which the borrower may include in the amount financed. NYSERDA will include a list of participating lenders on its website and include information on any fees charged to the borrower.

Upon loan closing, the loan originator will disburse loan proceeds to the borrower's contractor and NYSERDA will then promptly reimburse the loan originator the loan proceeds and origination fee. Loans originators will transmit information on loans closed to a master loan servicer retained by NYSERDA, who will service the loans and be responsible for collections; for the initial launch of the program and until the master loan servicer is retained, loans originated by Energy Finance Solutions will be serviced by Concord Servicing Corporation. NYSERDA may consider allowing qualified loan originators to service their loans for a fee.

In order to make loans acceptable to the capital markets, loans that are expected to be securitized through the capital markets will be confined to applicants meeting stringent underwriting criteria ("Tier 1 Borrowers"). Applicants not meeting the criteria, but who meet alternate underwriting criteria ("Tier 2 Borrowers"), will be provided loans that will be funded through a separate revolving loan fund using a dedicated portion of GJGNY funding. As these loans perform satisfactorily, they may be pulled from the revolving loan fund pool and included in the loan pool which is securitized through bonds issued by NYSERDA.

Eligibility to finance energy efficiency measures will be based upon the recommendations contained in an approved energy audit.

**General Requirements for an Unsecured Financing:**

- The owner of a residential property (i.e., an existing residential building with 1 to 4 dwelling units) must participate in NYSERDA's Home Performance with ENERGY STAR (HPwES) program.
- No financing may exceed the statutory limit of \$13,000.
- The minimum financing amount is \$3,000 for HPwES and \$1,500 for customers that qualify for Assisted HPwES.
- A comprehensive energy audit must be completed by a NYSERDA-approved HPwES contractor. The HPwES contractor will make recommendations for the retrofit project based on the modeled performance of the home that includes proposed costs and energy savings. A signed scope of work shall be agreed upon by the homeowner and contractor and submitted to NYSERDA for review and approval.
- The loan is available for measures and accessories included on the attached list that are determined in the energy audit to be cost effective.
- Each scope of work must be approved by NYSERDA, and completed by HPwES contractors. All work will be subject to inspection by NYSERDA, or its contractor, at NYSERDA's option. About 10-15% of projects are inspected.
- All projects must be cost-effective with a Savings to Investment Ratio (SIR) greater than one. The SIR is equal to the present value of anticipated energy savings over the weighted useful life of measures installed divided by the total cost of the project.
- Each homeowner seeking financing must complete and sign the financing documentation, with an agreement that the loan originator or NYSERDA has the right to access a credit report(s), a FICO score, utility payment history, and perform similar credit related activities for the purpose of evaluating an applicant's creditworthiness.
- The proceeds from the loan will be assigned by the borrower to be paid directly to the HPwES contractor(s). Contractors will receive payment by the loan originator, after the borrower agrees the work is completed to his/her satisfaction and signs the Certificate of Completion.
- The homeowner may select a loan repayment period of 5, 10, or 15 years but subject to a loan repayment period that does not exceed the weighted average useful life of the financed measures.
- The loan will be for up to the net cost of the project after subtracting any homeowner deposit or progress payment and utility, NYSERDA, or other rebates or incentives which the borrower is receiving.

**Unsecured Financing Underwriting Guidelines:**

**Residential Direct Loan Standard - Tier 1**

- FICO score of 640 or higher for non-self employed applicants (680 or higher if self-employed for two years or more; or 720 or higher if self-employed for less than two years);
- Debt-to-income ratio less than 50% (including the requested loan);
- No bankruptcy, repossession, or foreclosure within the last seven years; and
- No outstanding collections, judgments, or tax liens in excess of \$2,500.

**Residential Direct Loan Standard -Tier 2**

- Energy bill payments must be current for two consecutive months during each of the last two years;
- No energy or mortgage payments more than 60 days late in the last two years;
- Debt-to-income ratio less than 50%;
- No bankruptcy, repossession, or foreclosure within the last seven years;
- No outstanding collections, judgments or tax liens greater than \$2,500; and
- Current on mortgage payments for the last year.

**NYSERDA may waive certain elements of these underwriting criteria at its sole discretion.**

**Home Performance with ENERGY STAR<sup>®</sup>**  
Eligible Measures and Accessories

The Home Performance with ENERGY STAR<sup>®</sup> (HPwES) Program is designed to transform the delivery of energy efficiency services to Existing 1- to 4- Family Homes. To qualify for low interest financing offered through the Program, the energy efficiency improvements must be installed by a Participating HPwES Contractor, must meet the minimum energy efficiency requirements listed below, and one measure must be a major ENERGY STAR Qualified measure (boiler, furnace, insulation, etc.).

		Minimum Efficiency Requirements
Primary Heating System <sup>1,2</sup>	Furnace – Natural Gas or LP <sup>3</sup>	AFUE 90% (as long as not prohibited by local codes)
	Furnace – Fuel Oil <sup>3</sup>	AFUE 84% (below 85% AFUE, and not ENERGY STAR Qualified, requires that another major measure have the ENERGY STAR label)
	Boiler – Hot Water	AFUE 85%
	Boiler – Steam	AFUE 81% (size must be matched to cumulative capacity of connected radiators, per Institute of Boilers & Radiator Mfrs (IBR) standards)
	Air Source Heat Pump (electric split systems) <sup>3</sup>	14 SEER / 11.5 EER / 8.5 HSPF
	Air Source Heat Pump (gas-fired) <sup>3</sup>	1.2 COP (h) / 1.25 COP (e)
	Ground Source Heat Pump <sup>3</sup>	ENERGY STAR Qualified (closed-loop, open-loop, or direct expansion)
	Wood or Solid Fuel Pellet Stove	EPA Phase 2 (Solid fuel pellet stoves are exempt from EPA Phase 2)
	Distribution Replacement or Improvements	Installed in accordance with all applicable state and local codes
	Duct Sealing	UL 181B Mastic or other permanent sealant; use of duct tape is disallowed
Solar Thermal	Eligibility criteria to be developed	
Cooling Equipment	Central Air Conditioner (split system) <sup>4</sup>	14.5 SEER // 12 EER
	Room Air Conditioner	ENERGY STAR Qualified
Water Heater	Natural Gas, Propane or Oil	<51 gallon EF.63 / >51 gallon EF.53 Instantaneous: EF .82 Instantaneous: EF .78
	Electric	EF .93
	Indirect-Fired Tank	UL Approved
	Solar	OG-300 certification from SRCC. SF 0.5. Warranty: 10 years- collector, 6 years- storage tank, 2 years- controls, 1 year- piping and parts
	Wood Pre-Heat	Installed to National Plumbing Code
	Insulation (attic, wall, floor, band joist, basement, crawl space)	NYS Energy Conservation Code compliant, or to the Program Technical Specifications, or limits of construction
Building Shell	Air Sealing	Conducted by professional; blower door guided strongly recommended
	Replacement Windows or Glazing	ENERGY STAR (NFRC rated U-value of .35 or less) for climate/region
	Replacement Skylights	ENERGY STAR (NFRC rated U-value of .60 or less) for climate/region
	Storm Windows and Storm Doors	No minimum efficiency requirement
	Movable Window Insulation	R-3
	Exterior Doors	R-4.4

Green Jobs-Green New York  
Residential Financing  
Existing 1- to 4- Family Homes

		Minimum Efficiency Requirements
<b>Appliances and Lighting</b>	Refrigerator, Freezer, Dishwasher, Clothes Washer, Dehumidifier (must be combined with at least 1 major measure installed by the contractor, such as air sealing, insulation, a heating system, or water heater). <sup>5,6</sup>	ENERGY STAR Qualified
	Heat/Energy Recovery Ventilator	No minimum efficiency requirement
	Light Fixtures <sup>6</sup>	ENERGY STAR Qualified for compact fluorescent, or electronic ballast for fluorescent tubes
	Thermostats	ENERGY STAR Qualified
<b>Health and Safety Measures</b>	Smoke Detectors, Radon Detectors, and Carbon Monoxide Detectors	These measures can be either hard wired or battery operated
	Ventilation Fans (Whole house fans or similar attic exhaust fans are not eligible)	ENERGY STAR Qualified (must vent to exterior of building shell)
	Repairs/upgrades to venting systems and power venting kits	Per code and/or manufacturer specifications, as appropriate
	Measures to provide sufficient combustion air and prevent Combustion Appliance Zone (CAZ) depressurization, spillage or inadequate draft	Allowed when BPI-required combustion safety tests indicate problem(s) with CAZ depressurization, draft or spillage, per BPI standards
	Gas Oven Replacements <sup>4, 7</sup>	UL Listed Gas Ovens

- <sup>1</sup> Defined as the "primary heating system for the space being conditioned".
- <sup>2</sup> Addition/replacement of secondary heating systems are not eligible for Assisted Home Performance.
- <sup>3</sup> 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.
- <sup>4</sup> Non-eligible measure under Assisted Home Performance.
- <sup>5</sup> Maximum Assisted Subsidy for each appliance is: \$300 for refrigerators & freezers; \$200 for clothes washers; \$250 for dishwashers; and \$75 for dehumidifiers. 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.
- <sup>6</sup> Appliances and lighting, except ENERGY STAR hardware fixtures, are not eligible for PACE financing.
- <sup>7</sup> Assisted incentive available: 50% of the cost - maximum \$300 and only if replacement is required to meet BPI standards.

**Note:** NYSERDA reserves the right to modify the Minimum Efficiency Requirement for any measure during the term of the Home Performance with ENERGY STAR Partnership Agreement.

Green Jobs-Green New York  
Residential Financing  
Existing 1- to 4- Family Homes

**FINANCING REQUIREMENTS**

The maximum amount eligible for program financing is \$13,000 per property. The work scope must be cost-effective with a Savings to Investment Ratio (SIR) greater than 1.0 for the recommended package of improvements in the Comprehensive Home Assessment.

**ADDITIONAL SUPPORT**

Assisted Home Performance with ENERGY STAR offers a 50% work scope incentive of up to \$5,000 for a Single Family Home and up to \$10,000 for a 2- to 4- Family Home. The balance of the cost can be financed. Assisted Home Performance follows the same minimum efficiency requirements and measure eligibility except as noted in the list above.

**QUALIFIED ACCESSORIES**

- The costs associated with the installation of qualified accessories for Eligible Measures are eligible for incorporation into a reduced interest rate loan offered through the Program. These costs can also be included in the portion of the work scope being subsidized through the Assisted Home Performance work scope subsidy. Qualified Eligible Measure accessories include: grills, diffusers, chimney liners, air cleaners, furnace humidifiers, thermostats, moisture barriers and attic venting. Service contracts and extended warranties are **not eligible for Assisted work scope subsidies**, but are eligible for incorporation into a reduced interest rate loan offered through the Program.
- Accessory items included in work scopes that involve fuel switching (for example, electric baseboard heating to natural gas furnace) are eligible for incorporation into a reduced interest rate loan offered through the Program, provided the new heating system is installed through the HPwES Program, is an Eligible Measure and, if installed under Assisted HPwES, meets the cost-effectiveness requirement. Examples of these fuel-switching accessories are: gas main extensions, new oil tanks, service laterals, and piping.
- Services associated with the eligible improvements (Home Energy Rating, blower door test, Comprehensive Home Assessment or construction management) are eligible for incorporation into a reduced interest rate loan offered through the Program and the Assisted work scope subsidy incentives. A Participating Home Performance with ENERGY STAR Contractor must perform these services.

The first \$2,000 of costs associated with any combination of the following measures is eligible for incorporation into a reduced interest rate loan offered through the Program. However, these measures are **not eligible for Assisted Home Performance work scope subsidies**:

- Asbestos abatement or electrical service upgrade necessary when installing a new heating /cooling unit.
- Upgrade of knob and tube wiring in order to install insulation.
- Radon and lead abatement work.
- The cost of removing an oil tank when done in connection with a heating system replacement.
- 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.

**For more information please contact:  
Home Performance with ENERGY STAR  
c/o Conservation Services Group (CSG)  
2 Wall Street  
Albany, New York 12205  
Tel: 518-207-4500  
Fax: 518-207-4550**

# Attachment G. Green Jobs - Green New York

## One- to Four-Family Homes County

### Median Income

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The chart below has been compiled for use in determining the household income levels that will be eligible for free audits, sliding scale fees, and full-cost audits.

<b>GJGNY Median Family Income 2010</b>				
<b>County Name</b>	<b>Median Household Income</b>	<b>200%</b>	<b>300%</b>	<b>400%</b>
Albany	\$75,500	\$151,000	\$226,500	\$302,000
Allegany	\$49,800	\$99,600	\$149,400	\$199,200
Bronx	\$62,300	\$124,600	\$186,900	\$249,200
Broome	\$60,400	\$120,800	\$181,200	\$241,600
Cattaraugus	\$51,100	\$102,200	\$153,300	\$204,400
Cayuga	\$59,900	\$119,800	\$179,700	\$239,600
Chautauqua	\$51,400	\$102,800	\$154,200	\$205,600
Chemung	\$57,200	\$114,400	\$171,600	\$228,800
Chenango	\$53,000	\$106,000	\$159,000	\$212,000
Clinton	\$60,600	\$121,200	\$181,800	\$242,400
Columbia	\$65,700	\$131,400	\$197,100	\$262,800
Cortland	\$57,800	\$115,600	\$173,400	\$231,200
Delaware	\$52,500	\$105,000	\$157,500	\$210,000
Dutchess	\$83,400	\$166,800	\$250,200	\$333,600
Erie	\$63,700	\$127,400	\$191,100	\$254,800
Essex	\$55,100	\$110,200	\$165,300	\$220,400
Franklin	\$49,900	\$99,800	\$149,700	\$199,600
Fulton	\$51,700	\$103,400	\$155,100	\$206,800
Genesee	\$61,200	\$122,400	\$183,600	\$244,800
Greene	\$57,200	\$114,400	\$171,600	\$228,800
Hamilton	\$52,600	\$105,200	\$157,800	\$210,400
Herkimer	\$56,400	\$112,800	\$169,200	\$225,600

<b>GJGNY Median Family Income 2010</b>				
<b>County Name</b>	<b>Median Household Income</b>	<b>200%</b>	<b>300%</b>	<b>400%</b>
Jefferson	\$51,600	\$103,200	\$154,800	\$206,400
Kings	\$62,300	\$124,600	\$186,900	\$249,200
Lewis	\$51,400	\$102,800	\$154,200	\$205,600
Livingston	\$66,600	\$133,200	\$199,800	\$266,400
Madison	\$64,300	\$128,600	\$192,900	\$257,200
Monroe	\$66,600	\$133,200	\$199,800	\$266,400
Montgomery	\$54,100	\$108,200	\$162,300	\$216,400
Nassau	\$103,600	\$207,200	\$310,800	\$414,400
New York	\$62,300	\$124,600	\$186,900	\$249,200
Niagara	\$63,700	\$127,400	\$191,100	\$254,800
Oneida	\$56,400	\$112,800	\$169,200	\$225,600
Onondaga	\$64,300	\$128,600	\$192,900	\$257,200
Ontario	\$66,600	\$133,200	\$199,800	\$266,400
Orange	\$83,400	\$166,800	\$250,200	\$333,600
Orleans	\$66,600	\$133,200	\$199,800	\$266,400
Oswego	\$64,300	\$128,600	\$192,900	\$257,200
Otsego	\$55,100	\$110,200	\$165,300	\$220,400
Putnam	\$62,300	\$124,600	\$186,900	\$249,200
Queens	\$62,300	\$124,600	\$186,900	\$249,200
Rensselaer	\$75,500	\$151,000	\$226,500	\$302,000
Richmond	\$62,300	\$124,600	\$186,900	\$249,200
Rockland	\$101,600	\$203,200	\$304,800	\$406,400
Saratoga	\$75,500	\$151,000	\$226,500	\$302,000
Schenectady	\$75,500	\$151,000	\$226,500	\$302,000
Schoharie	\$75,500	\$151,000	\$226,500	\$302,000
Schuyler	\$54,900	\$109,800	\$164,700	\$219,600
Seneca	\$54,600	\$109,200	\$163,800	\$218,400
St. Lawrence	\$50,500	\$101,000	\$151,500	\$202,000
Steuben	\$54,400	\$108,800	\$163,200	\$217,600
Suffolk	\$103,600	\$207,200	\$310,800	\$414,400
Sullivan	\$57,500	\$115,000	\$172,500	\$230,000

<b>GJGNY Median Family Income 2010</b>				
<b>County Name</b>	<b>Median Household Income</b>	<b>200%</b>	<b>300%</b>	<b>400%</b>
Tioga	\$60,400	\$120,800	\$181,200	\$241,600
Tompkins	\$71,100	\$142,200	\$213,300	\$284,400
Ulster	\$70,100	\$140,200	\$210,300	\$280,400
Warren	\$59,600	\$119,200	\$178,800	\$238,400
Washington	\$59,600	\$119,200	\$178,800	\$238,400
Wayne	\$66,600	\$133,200	\$199,800	\$266,400
Westchester	\$104,700	\$209,400	\$314,100	\$418,800
Wyoming	\$59,200	\$118,400	\$177,600	\$236,800
Yates	\$53,100	\$106,200	\$159,300	\$212,400
<b>NOTES:</b>				
Residential customers participating in Home Performance with ENERGY STAR <sup>®</sup> , with incomes below 200% of the County Median Income will receive the comprehensive energy audit at no cost.				
Residential customers participating in Home Performance with ENERGY STAR <sup>®</sup> , with incomes between 200%– 300% of the County Median Income will be charged 50% of the actual cost of the comprehensive energy audit and those with incomes between 301% and 400% will be charged 75% of the actual cost of the audit.				
Residential customers participating in Home Performance with ENERGY STAR <sup>®</sup> , with incomes greater than 400% of the County Median Income will be charged the full cost of the comprehensive energy audit.				
Data Source: <a href="http://www.huduser.org/portal/datasets/il/il2010/select_Geography_mfi.odn">http://www.huduser.org/portal/datasets/il/il2010/select_Geography_mfi.odn</a>				

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## **GREEN JOBS - GREEN NEW YORK ANNUAL REPORT**

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**OCTOBER 2010**

**STATE OF NEW YORK**

**DAVID A. PATERSON, GOVERNOR**

**NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY**

**VINCENT A. DEIORIO, ESQ., CHAIRMAN**

**FRANCIS J. MURRAY, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER**

