GREEN JOBS - GREEN NEW YORK
OPERATING PLAN FOR SMALL BUSINESSESS AND NOT-FOR-PROFITS

I. Overview

A. Purpose of the Plan

The Green Jobs Green New York (GJGNY) Operating Plan for Small Businesses and Not-for-Profits outlines the New York State Energy Research and Development Authority's (NYSERDA) role and responsibilities in implementing the small business and not-for-profit components of the Green Jobs Green New York Act of 2009.

B. Background and Requirements of the Legislation

On October 9, 2009, Governor David Paterson signed into law the Green Jobs Green New York Act of 2009 (A.8901/S.5888 and chapter amendment A.9031/S.6032). The Act directs NYSERDA to establish and administer the Green Jobs-Green New York program (GJGNY) within six months of the effective date of the Act. NYSERDA is directed to implement the program 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 program is funded with $112 million from the proceeds of selling CO_2 allowances under the Regional Greenhouse Gas Initiative (RGGI).

The legislation directs NYSERDA to:

- Provide energy audits and establish a loan fund to provide loans to finance the cost of approved qualified energy efficiency services recommended in energy audits for residential, multi-family, and non-residential structures.
- Pursue the feasibility of other innovative financing mechanisms, such as on-bill financing and Property Assessed Clean Energy (PACE);
- Issue one or more competitive opportunities to solicit applications from partnerships or consortia comprised of constituency-based organizations which can connect community members to the program;
- Establish standards for energy audits based on building type and other relevant considerations;
- Establish a schedule of fees for energy audits that may include discounted fees for small businesses or not-for-profit corporations with ten or fewer employees;
- Enter in contracts to provide employment and training services to support the GJGNY program.
- Establish an Advisory Council; and
- Provide annual reports to the Governor, Senate, and Assembly.

II. Planning Process

The GJGNY Program has been developed with input from interested parties and stakeholders.

A. Advisory Council

The legislation calls for NYSERDA to establish an Advisory Council to advise the Authority on program design and implementation. As directed by the Legislature, the GJGNY Advisory Council is comprised of: 1) the President of NYSERDA; the Secretary of State; the Commissioner of Housing and Community Renewal; the Commissioner of Labor; the Commissioner of Temporary and Disability Assistance; the Chair of the Consumer Protection Board; the Chair of the Department of Public Service; the President of the Power Authority of the State of New York; the President of the Long Island Power Authority; the Commissioner of Economic Development; the Commissioner of Environmental Conservation; or the designees of such persons; and 2) representatives of Constituency-Based Community Groups, and 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. The President of NYSERDA serves as Chair of the Council. The Advisory Council input has been incorporated into this Plan.

B. Working Groups

NYSERDA has established Working Groups to address specific areas of focus in the development of GJGNY. The Working Groups include representatives of interested parties and stakeholders. These representatives are providing advice regarding the development of the Operating Plans in each of the following areas of focus:

- Workforce Development
- Small Homes
- Multifamily
- Small Business/Not-for-Profit
- Finance
- Outreach and Marketing

The Small Business / Not-for-Profit Working Group, is comprised of representatives from state agencies, utilities, energy service providers, HVAC and lighting contractors, constituency organizations, and business improvement districts. A list of the Working Group members is included as Appendix A.

III. GJGNY Financing

The legislation authorizes NYSERDA to establish a loan fund to finance qualified energy efficiency services and allows NYSERDA to establish the term and structure of loans offered as deemed appropriate, subject to maximum loan amounts of $13,000 per applicant for residential structures (four or fewer dwelling units), $26,000 per applicant for non-residential structures

(small commercial/not-for-profit facilities), and amounts as determined by NYSERDA for multifamily structures (five or more dwelling units).

GJGNY is expected to offer three types of loans: unsecured loans; loans to be repaid through property tax assessments of participating municipalities (assuming amendments to the Municipal Sustainable Energy Loan Program authorizes municipalities to enter into agreements with NYSERDA and use funding provided by NYSERDA); and loans where the consumer repays the obligation through an on-bill utility charge (initially through a pilot program that is being developed with National Grid and that may later be expanded to include other utilities).

IV. GJGNY Total Proposed Budget

The overall proposed budget for the GJGNY Program is presented below. Details on the Small Business / Not-for-Profit portion of this budget are provided in the Proposed Budget section of this Operating Plan.

GREEN JOBS GREEN NEW YORK TOTAL PROPOSED BUDGET	
Element	Budget
Workforce Development	$8,000,000
Outreach & Marketing	$8,000,000
Residential[1]	$41,280,000
Multifamily[1]	$16,512,000
Small Business / Not-for-Profit[1]	$24,768,000
Program Administration	$7,840,000
Program Evaluation	$5,600,000
Total	$112,000,000
[1]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 investors, and support for overall financing subsidies to cover differences between borrower loan interest rates and costs of financing.	

V. Implementation of the Small Business/Not-for-Profit Program

A. Purpose of the Program

The purpose of the Small Business/Not-for-Profit component of GJGNY is to:

- promote energy efficiency, energy conservation and the installation of clean energy technologies in the small business and not-for-profit sectors;
- reduce energy consumption and energy costs;
- reduce greenhouse gas emissions;
- support sustainable community and economic development; and
- create green job opportunities.

This Operating Plan addresses how NYSERDA will implement GJGNY for the eligible small businesses and not-for-profit organizations, including alignment with programs currently offered by NYSERDA using System Benefits Charge (SBC) and Energy Efficiency Portfolio Standard (EEPS) funds, as well as programs offered by utilities.

B. Eligible Audience

The GJGNY Act defines the non-residential sector as follows:

- Small Businesses, as defined in §131 of the Economic Development Law: one which is resident in New York State is independently owned and operated, not dominant in its field and employs 100 or less persons.
- Not-for-profit corporations, as defined in subdivision 5 of paragraph (a) of §102 of the Not-for-Profit Corporation Law: a corporation formed exclusively for a purpose or purposes, not for profit or financial gain, and where no part of the assets, income or profit is distributable to or benefits its members, directors, or officers, except as allowed by statute.

Energy audits and financing will be made available to applicants[1] to the GJGNY Program for non-residential structures which are buildings used or occupied by a small business or not-for-profit corporation.

The GJGNY Act allows use of GJGNY funds for the cost of energy audits for small businesses and not-for-profit corporations 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 to not-for-profit corporations, regardless of the number of employees, for installation of qualified energy efficiency services recommended in energy audits that meet the standards set by the Program.

As noted in Section F, NYSERDA intends to use SBC funds to subsidize the cost of energy audits for SBC-eligible small businesses and not-for-profit. Those with less than 100KW demand will receive free audits. Non-SBC paying small businesses or not-for-profit corporations with 10 or fewer employees will be eligible for subsidized energy audits using GJGNY funds, with those using 100 KW or less receiving free audits. Small businesses and not-for-profit corporations with more than 10 employees may be able to receive subsidized audits through the local utility that could be used to support an application for financing of qualified energy efficiency services.

There are thousands of diverse customers in New York State that meet the eligibility requirements for GJGNY energy audits and financing of energy efficiency improvements. For example there are 11,000 congregations in the state that can meet these definitions. A large portion of this target market operates in leased spaces or rented buildings, where they may be responsible for the operating costs (including utility costs) but have limited ability to control the use of energy since the landlord/owner pays the capital costs for the building and its energy-consuming equipment. In these situations the

[1] An applicant is defined as a person who owns, leases, or manages a structure and who has the authority to contract for the provision of qualified energy efficiency services to such structure.

building owner may perceive little, if any, benefit in making building improvements since, under many leases, costs associated with energy use are passed directly through to the tenant. This is known as a "split-incentive" and is a common issue faced by energy efficiency programs. Often the space is part of a mixed-use building or a building with multiple tenants. This is particularly common in large urban areas. Coordination amongst NYSERDA, the entity desiring to make energy efficiency improvements, and, where applicable, the owner of the structure will be required.

To reach this diverse audience and attempt to overcome the inherent barriers, NYSERDA will continue to refine various program implementation strategies, such as:

- Increase outreach through Constituency Based Organizations particularly to building owners;
- Devise a method through which building owners could assign authority to apply for program benefits to tenants;
- Provide free audits to small (less than 100kW) energy users;
- Coordinate efforts between commercial and residential programs for mixed use properties;
- 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.

C. Commercial Energy Audits

NYSERDA provides commercial energy audits and technical studies for small and large customers through the FlexTech Program, funded through the SBC, using engineering firms, under an approved scope of services. Customers are provided technical information on their buildings, energy use, energy systems, and recommended energy efficiency improvements. In addition, through its Business Partners Program, NYSERDA works with lighting, HVAC, and other contractors to train them on energy efficiency opportunities and encourage them to specify, design and install equipment for commercial customers to the highest efficiency and quality standards. More than 1,000 contractors, vendors or distributors of commercial equipment and technologies have been part of NYSERDA's Business Partner network.

Over three years, the Program is estimated to result in delivery of 7,500 small business and not-for-profit audits funded with GJGNY, SBC, and utility resources. This section of the Operating Plan outlines the initial Standards for these audits and a strategy for delivery of audits that builds upon and leverages NYSERDA's existing programs. The Standards may be modified in the future based on program experience.

D. Standards for Commercial Energy Audits

1. NYSERDA is proposing a two-tiered commercial audit standard in order to allow flexibility for small businesses and not-for-profits to receive the level of information that they need to support implementation of qualified energy efficiency services. The Full Walkthrough Commercial Audit will examine and provide recommendations for all systems and efficiency opportunities in a building. A Technology or Equipment

Specific Commercial Audit will provide basic information on energy use, and include recommendations on one or more of the systems, equipment replacement or upgrade opportunities in the building.

2. Minimum Content for all Commercial Energy Audits

To provide small business and not-for-profit customers of the Program with certain information about their energy use and current systems, all Commercial Energy Audits, whether Full Walkthrough or Technology/Equipment Specific, must be based on an on-site visit by a qualified auditor (See Section E), and must include the following:

a) Information on the building or space, including, where applicable, a description of the size, type of construction, number of stories, space types and functions, approximate square footage of occupied and unoccupied space, approximate age, location, occupancy type, number of staff employed, and hours of operation, to provide a sufficient overall snapshot of the property and its features.

b) Where records exist, a summary of the utility and fuel use bills for the most recent 12-month period addressing electric energy, heating and hot water fuel use, and process uses, if applicable.

c) Information on energy consuming systems, including the existing heating and cooling systems, lighting, building envelope, building controls, and plug load. If new, retrofitted, or expanded systems(s) will be recommended, a description of such systems should be provided.

d) The Level of Effort described by the Level 1 Walk-Through Analysis in the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Procedures for Commercial Building Energy Audits, RP-669, SP-56.

e) The use of software tools to benchmark energy performance, such as the U.S. EPA Portfolio Manager which provides an energy use index, is encouraged for those buildings where a benchmarking protocol is applicable.

3. Full Walkthrough Commercial Energy Audits

A Full Walkthrough Commercial Energy Audit should provide customers with a thorough examination of energy use, a set of recommendations for qualified energy efficiency services, and include installation cost estimates, and associated energy and cost savings. Each Full Walkthrough Commercial Energy Audit should result in a written report which must include the minimum content detailed in Section 1 above, plus the following, as applicable:

a) Identify potential qualified energy efficiency services that are recommended to reduce energy use and costs. Full Walkthrough Commercial Energy Audits shall focus on qualified energy efficiency services, based on appropriateness and customer needs, within the following categories. The recommendations must be included on the list of qualified energy efficiency services that meet the efficiency standards of the Program, and may include:

1) Heating, ventilation, and air conditioning (HVAC)
2) Lighting
3) Controls
4) Building Envelope
5) Domestic Hot Water
6) Plug Loads
7) Business Processes (e.g. Kitchens, Laundries, Air Compression, etc.)

b) Identify custom measures that are not included on the list of pre-qualified measures. In order to be eligible for financing, such measures must have an energy payback period that is equal to or less than the useful life of the measure.

c) A cost estimate for implementing those qualified energy efficiency services recommended by the Audit, based on readily available costing data and/or other accepted methodologies, the expected energy savings, the estimated energy dollar savings, and the payback period to recover the investment. The information should include a payback by measure and an overall project payback.

d) A description of the financing available through the Program to implement the recommended measures, including an analysis of incentives that can be used to reduce the cost of the project for which the financing would be applied. A preliminary cash flow analysis should be provided assuming average loan terms.

4. Technology/Equipment Specific Commercial Audit

A Technology/Equipment Specific Commercial Audit with a more limited scope can be provided to customers who are interested in an examination of a particular energy using system or opportunity to replace/upgrade a specific piece of equipment. A Technology/Equipment Specific Commercial Audit must include the minimum content described in Section 1 above, plus:

a) Identify potential qualified energy efficiency services recommended to reduce energy use and costs. The recommended measure must be included on the list of qualified energy efficiency services that meet the efficiency standards of the Program.

b) A cost estimate for implementing those qualified energy efficiency services recommended by the audit, based on readily available costing data and/or other accepted methodologies, the expected energy savings, the estimated energy dollar savings, and the payback period to recover the investment.

c) A description of the financing available through the Program to implement the recommended qualified energy efficiency services, including an analysis of incentives that can be used to reduce the cost of the project for which the financing would be applied. A preliminary cash flow analysis should be provided assuming average loan terms.

E. Standards for Qualified Commercial Energy Auditors

In order for a Commercial Energy Audit (either the Full Walkthrough Commercial Energy Audit or the Technology Specific/Equipment Commercial Audits) to qualify under the Program, it must be completed by an individual who meets one or more of the following qualifications:

a) Works for an entity, or its subcontractor, that has been competitively selected to perform Energy Audits under a commercial energy efficiency program of NYSERDA or a utility.

b) Works for an entity that has signed a Participation Agreement with NYSERDA as a Business Partner under one or more commercial energy efficiency programs, and meets the qualifications to conduct Commercial Energy Audits for the GJGNY Program that will be included in the Participation Agreement.

c) Is a Certified Energy Auditor or Certified Energy Manager through the Association of Energy Engineers (AEE), with at least two years experience conducting commercial energy audits, or is an individual who conducts commercial energy audits that are reviewed and approved by a Certified Energy Auditor or Certified Energy Manager with at least two years experience conducting commercial audits.

d) Meets other criteria or requirements to be established by NYSERDA. For example, under the Workforce Development plan for GJGNY, funding is expected to develop a new certification for small commercial energy auditors. Once a delivery mechanism to train and test individuals for competency related to such certification is in place, the certification will be added to this list of qualifications.

In the near term, to broaden the number of individuals qualified to perform Commercial Energy Audits for the Program beyond those that meet the qualifications outlined in a-d above , NYSERDA intends to develop and deliver Commercial Energy Audit training (through the GJGNY Workforce Development plan). Such training will not lead to certification, but is intended to provide technical and program information needed to conduct energy audits for the Program, including use of software tools. Individuals who successfully complete such training and who meet one of the following criteria will be qualified to conduct Commercial Energy Audits for eligible small businesses or not-for-profits under the Program:

a) Has a four year degree in Engineering or Architecture from an accredited college or university, plus a minimum of two years of verifiable experience in commercial energy auditing, energy systems, energy management, or facility management.

b) Has a four year degree in any technical or science discipline, or a two year technical degree, plus a minimum of 3 years of verifiable experience in energy auditing, energy systems, energy management or facility management.

c) Has one of the degrees described in (1) and (2) above, and have completed 25 or more commercial energy audits.

F. Commercial Energy Audit Implementation Plan

The increase in Commercial Energy Audits for small businesses and not-for-profits to be delivered as a result of GJGNY will be accomplished by modifying and using the FlexTech and Business Partners programs. In addition, many utilities in New York sponsor energy audits for small businesses and not-for-profits. Utility audits that meet the Standards for Commercial Energy Audits can be used to support an application for financing under the GJGNY Program.

1. FlexTech Program

NYSERDA conducts the FlexTech Audit program using firms that were competitively selected for five years to perform small commercial energy audits. There are currently four firms performing audits in specific geographic territories of New York, with contract terms that expire at the end of 2011. Under GJGNY, these firms will also provide audits to eligible small businesses and not-for-profits that do not pay the SBC. Two of the four firms currently serve the New York City area and their contracts will be amended to include Long Island.

It is anticipated that additional demand for audits could exceed the capacity of the four firms currently providing small commercial audits. To address this, NYSERDA will review the strengths of an additional 40 firms that have been competitively selected under its FlexTech program. These firms currently provide a range of energy studies and services to commercial and industrial customers. Firms from the FlexTech "pool" will be added to the program delivery network for small commercial energy audits as needed, particularly to include Long Island which is not geographically within current SBC operations.

NYSERDA also manages an open FlexTech Program Opportunity Notice (PON) through which customers select their own energy consultants to conduct audits and apply for NYSERDA cost-sharing (generally 50%). To serve GJGNY, customer eligibility under the FlexTech PON will be expanded to include non-SBC customers. All energy audits conducted under this PON will need to meet the Standards described above and will be reviewed for quality and completeness by NYSERDA. In order to increase the NYSERDA-contracted FlexTech capacity to provide energy audits, NYSERDA will review customer-selected energy consultants performing a qualifying number of successful audits under the FlexTech PON, and solicit their proposal to become NYSERDA contractors.

2. Business Partners Program

NYSERDA's Business Partners Program engages lighting, HVAC and motor contractors, vendors, and distributors, to promote energy efficiency and quality installations in commercial buildings. Program Implementation contractors train these Business Partners, provide field support, and process applications for eligible incentives that the Business Partners receive under the terms of Participation Agreements with NYSERDA. In order to develop further capacity to deliver Commercial Energy Audits for the small business and not-for-profit sector under

GJGNY, the Business Partners will be given the opportunity to conduct Audits for their customers. The Participation Agreements will be modified to include the qualifications required to conduct Audits, requirements for training, and a description of the process for Business Partners to receive a portion of the costs associated with conducting Commercial Energy Audits that meet the Standards of the Program. The Program Implementation contractors will assist NYSERDA in expanding the Business Partners Program to incorporate the Audit components, including coordination of training, and assuring that the Audits are of sufficient quality and meet Program Standards.

G. Energy Audit Fees

The GJGNY Act directs NYSERDA to establish fees for Audits to be conducted through the Program. NYSERDA currently uses electric energy costs as the criterion for participation and customer contribution. Under GJGNY, NYSERDA will use electric demand (kW) in lieu of electricity costs for a fee structure, since demand is a more equitable criteria (not impacted by electric prices which can vary widely), and more representative of the actual cost to perform audits. Similarly, many utility programs for small businesses approved by the Public Service Commission use electric demand (kW) to define eligibility.

In order to stimulate early participation, Commercial Energy Audits, provided by the FlexTech Audit Program or the Business Partners Program, will initially be provided at no cost to customers with energy demand of 100kW or less. A customer audit fee may be implemented after the program is established and marketplace activity is increased. Audits will be funded with SBC funds for SBC-eligible customers, and with GJGNY funds for non-SBC customers.

Small business and not-for-profits with an energy demand above 100kW typically have more complex systems and require a higher level of effort. These customers will be eligible to receive a Commercial Energy Study on a cost-shared basis through NYSERDA's existing FlexTech Program. The cost of these studies is based on the facility and level of effort requested. NYSERDA's FlexTech program will provide funds to offset a portion, typically 50%, of the cost of these larger audits. SBC and GJGNY funds will be used depending upon customer eligibility.

H. Qualified Energy Services

The GJGNY Act defines "Qualified Energy Efficiency Services" as recommendations of measures and services contained in an energy audit that will increase the energy efficiency and conservation of an existing building or space. As Qualified Energy Efficiency Services, these measures and services will be eligible for financing under the GJGNY loan fund. Qualified Energy Efficiency Services may include installation of new efficient equipment, and testing and repairs of existing equipment.

NYSERDA programs have historically offered incentives and financing for a number of prequalified measures that have been determined to meet cost effectiveness criteria and program goals. Using these criteria, all prequalified measures have been deemed to pay for themselves through energy cost savings within the useful life of the measure,

assuming average operating hours and average energy costs. These measures are the basis for the Qualified Energy Efficiency Services available to small businesses and not-for-profits under GJGNY.

Energy audits will identify measures and operational improvements from the list of Qualified Energy Efficiency Services. Categories include:

- Heating, ventilation, and air conditioning (HVAC)
- Lighting
- Controls
- Building Envelope
- Domestic Hot Water
- Plug Loads
- Business Practices (e.g., Kitchens, Laundries, Air Compression, etc.)

The list of prequalified services will include the minimum efficiency standards that equipment must meet to be eligible for financing. A complete listing of the Qualified Energy Efficiency Services can be found in Appendix B**.**

While the list of Qualified Energy Efficiency Services is a comprehensive compilation of popular and frequently installed measures and operational improvements that have been deemed to be cost-effective, NYSERDA recognizes that some flexibility is necessary to address measures or processes that do not fit the prequalified categories. Custom measures may also be evaluated and considered for incentives and financing. In order to be eligible for financing, such measures must have an energy payback period that is equal to or less than the useful life of the measure.

VI. Financing for Qualified Energy Services

To pursue financing through the Loan Fund, an applicant must have a qualified energy audit that identifies the cost-effective energy efficiency services to be undertaken. In determining the amount eligible for financing, NYSERDA will consider the total cost of the project including removal of equipment or systems to be replaced, the purchase and installation of new energy measures, and the purchase and installation of any required ancillary equipment and related services. Project costs may also include the applicant's expense for an energy audit. The applicant may finance up to $26,000 of the out-of-pocket project expenses (i.e., the total project costs less any incentives received from any source for the project). The applicant can apply for financing for qualified energy services for more than one small business or not-for-profit corporation; however each applicant is limited to a total of $26,000.

NYSERDA is currently working with National Grid to establish a pilot On-Bill Recovery mechanism for National Grid gas and electric customers in these sectors. Customers who wish to finance these project costs must first receive a qualified audit. Process details, system upgrades, and other program details are being negotiated and must be proposed to DPS before the On-Bill Recovery pilot can be introduced.

VII. Installation of Measures

Applicants will be encouraged to use certified contractors to install Qualified Energy Efficiency Services, where applicable, and where third-party certifications exist. Use of trained and tested technicians and professionals who reach the level of competency required to be certified will help assure the quality and performance of the installations completed through the Program.

Currently, certifications are in place for installing and maintaining light commercial HVAC and refrigeration equipment through the North American Technician Excellence (NATE), and through the National Council on Qualifications for the Lighting Professions (NCQLP) for energy efficient lighting installations. Other certifications currently in place for the residential sector will be appropriate for installation of certain measures for small commercial buildings. NYSERDA will make available lists of those certified installers who are also NYSERDA Business Partners, and provide links to websites maintained by the certifying organizations.

NYSERDA will provide incentives for individuals to complete the certification process using GJGNY funds as specified in the GJGNY Workforce Development Operating Plan. NYSERDA will also issue a request for qualifications to develop additional third-party certifications in specialty building science areas. New installer certifications will address both hands-on and written assessments, and will be structured to verify proficiency in the type of installer-level work expected to be performed through the GJGNY program. These certifications may include: advanced lighting controls, window replacement, insulation installation, air sealing, duct work installation, and duct sealing for heating and ventilation applications.

VIII. Encouraging Participation and Quality Assurance

A. Targeting Customers

The target audience includes small businesses and not-for profits in the community with special outreach attention to customers in economically distressed areas, and energy intensive industries and facility types. Outreach and marketing efforts will: build awareness of the GJGNY Program; increase penetration of audits, energy efficiency retrofits, and financing; increase the number of audit contractors; and build the pipeline of New Yorkers participating in training.

As described in the GJGNY Outreach and Marketing Operating Plan, strategies include, but are not limited to:

- Outreach by Constituency-Based Organizations in economically-distressed communities;
- Collateral materials for targeting priority audiences including customizable materials for events and meetings;
- Multi-lingual materials to encourage participation by all eligible customers;
- Public relations to gain media exposure in traditional and online vehicles;
- GJGNY web site to promote the program and serve as an information delivery mechanism;
- Coordination with NYSERDA and utility programs;

- Formal referral program to encourage business program participants to refer others to the program;
- Alliances with Centers of Influence (COIs) such as Small Business Development Centers, local governments, trade organizations, and educational centers to extend the GJGNY Outreach and Marketing activity;
- Special events; and
- A customer Hotline.

Market research will be conducted to determine the segments of the small business and not for profit sectors that are good potential candidates for services, and marketing campaigns developed to enlist participants. NYSERDA will continue to work with stakeholders to promote and deliver the Program. An effort will be made to engage municipal utilities, Empire Zones, Business Improvement Districts, Small Business Development Corporations, oil and propane companies and their customers, Long Island constituent groups and customers, and gas and electric utilities.

Most investor-owned electric and gas utilities were authorized in 2010 to operate small commercial audit programs. In addition, there are approximately 50 municipal utilities and rural electric cooperatives in New York; many operate energy efficiency programs, or have been authorized to operate programs. There are several membership organizations that service municipal utilities and cooperatives. The Long Island Power Authority markets and delivers energy services on Long Island. NYSERDA will work with these organizations to coordinate program promotion and delivery strategies.

B. Project Expeditors

Project Expeditors will provide hands-on assistance to small commercial and non-profit customers to encourage implementing energy audit recommendations and to access financing. A Project Expeditor will be one or more independent contractors who will provide assistance to customers at no charge. Consideration will be given to targeting customer sectors and geographic areas. Services to be provided include, but are not limited to: reviewing energy efficiency recommendations from the energy audits; discussing project implementation options; analyzing project economics and benefits from existing NYSERDA and utility incentive programs; helping to prepare applications for financing; and following up with customers implementing measures.

C. Quality Assurance

NYSERDA will take actions to ensure the quality of services delivered by auditors and Project Expeditors. As noted above, NYSERDA will encourage the use of certified installers, as well as its network of Business Partners.

NYSERDA's FlexTech contractors are selected through a competitive process which evaluates the firms' qualifications, experience, costs and work products. Prior to initiating any work, the contractors' customer interaction, data collection, software tools and other processes are reviewed by NYSERDA staff or technical consultants. There are also periodic checks of audits and procedures.

To assure quality and cost-control, and consistency with Audit Standards, applications for Commercial Energy Audits will be reviewed before the audit is conducted. Completed Energy Audits from large volume firms will be reviewed for quality on a sampling basis. Small volume Energy Audit firms will have a higher percentage of Energy Audits reviewed for quality prior to issuing payment.

Separate quality assurance contractors will be hired to perform quality assurance services including on-site visits and other follow up activities for customers who implement projects to assure that efficiency measures are installed correctly and conform to industry standards. If problems are identified, NYSERDA will work with the customer and the installation contractor to rectify the situation.

D. Coordination with Other Program Administrators

NYSERDA continues 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.

IX. Budget and Goals

GJGNY Small Business and Not-for-Profit Budget	
Energy Audits	$ 3,200,000
Implementation	$ 4,000,000
Financing[1]	$17,568,000
TOTAL	$24,768,000

[1]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.

The goal of the Small Business/Not-for-Profit component of GJGNY is to provide 7,500 Commercial Energy Audits over three years, and to issue 1,600 loans for these customers to implement qualified energy services. Implementation of efficiency measures identified in the Audits through means other than the loans issued through the Program are also expected, and will be reported towards the overall success of GJGNY. A typical retrofit project is expected to yield annual energy cost savings of $5,200, and energy savings of approximately 18,000 kWh and 160 MMBTU per project.

X. Schedule for Implementation

2010 Q2	Publish Standards for qualified Commercial Energy Audits and for qualified Commercial Energy Auditors.
2010 Q2	GJGNY Eligibility added to the existing FlexTech Audit Program.
2010 Q2	Initiate small business and not-for-profit audits for the GJGNY program.
2010 Q2	Expand Existing Business Partner programs to allow for audit training of Business Partners.
2010 Q2	Issue a Request for Proposals (RFP) to select one or more Project Expeditors to assist

	in pathways to implementation of energy efficiency improvements.
2010 Q2	Issue mini-bid to FlexTech Contractors to add Full Walkthrough Commercial Energy Audits to their list of services.
2010 Q3	Rollout pilot on-bill financing program in conjunction with National Grid, depending on the timing of PSC approval and the time required by the utility to upgrade its billing system.
2010 Q3/Q4	In conjunction with the Financing Working Group offer other financing options, including unsecured loans and loans repaid through property tax assessments.
2010 Q4	Develop Commercial Energy Audit training in conjunction with NYSERDA's Workforce Development Working Group.
2011 Q3	Issue FlexTech Audit RFP for small commercial audit firms

The pace of the ramp-up of audit activities, the acceptance of the financing opportunities, and the repayment of the loans will impact the funding available for program operations beyond 2012.

XI. Evaluation Plan

NYSERDA will develop an Evaluation Plan describing its approach to evaluate the GJGNY Program. NYSERDA anticipates spending approximately 5% of total program funding to support evaluation activities designed to assess the effectiveness, progress, and outcomes related to the Program, including highlighting key finds, calculating estimated energy savings and providing recommendations for program improvement and expansion. Independent, expert evaluation contractors will conduct evaluation planning and implementation activities. Initial evaluation plans will be presented to the Advisory Council in April 2010 and will be submitted to NYSERDA's Officers for approval.

APPENDIX A

Small Business and Not-for-Profit Working Group

Organization

Blue Sea Development, Inc.
Bronx Overall Economic Development Corp.
C.J. Brown Energy Engineering & Architecture, PC
Capitol District Supply Co.
Central Avenue (Albany) BID
Central Hudson Gas & Electric
Con Edison
Downtown Alliance (Lower Manhattan BID)
Empire State Development
Empire State Petroleum Association
Enterprise Community Partners
Greenlight Energy Conservation
L&S Energy Services, Inc.
Lime Energy
Long Island Power Authority
National Fuel Gas
National Grid
New York Industrial Retention Network
New York Interfaith Power & Light
NY Small Business Development Center
Orange and Rockland Utilities, Inc.
TCBA Watson Rice LLP
United Neighborhood Houses

APPENDIX B

Pre-qualified Energy Measures and Services	Minimum Standard
HEATING, HOT WATER AND AIR CONDITIONING (Electric Measures)	
Air-source heat pumps <5.4 tons Split system and single package units w/capacity under 65,000 Btu/H. No window units or other ductless systems. 3-phase-only	Split System: HSPF≥8.5, SEER ≥14.0, EER ≥12.0 Single Package: HSPF≥8.0, SEER≥14.0, EER≥12.0 *Source:* CEE Tier 2
Air-source heat pumps >5.4<11.25 tons Split systems and single package units w/capacity between 65,000 and 135,000 Btu/H	EER≥11.5, COP≥3.4 *Source:* CEE
Air-source heat pumps>11.25<20 tons Split system and single package units w/capacity between 135,000 and 240,000 Btu/H	EER≥11.5, COP≥3.2 *Source:* CEE
Air-source heat pumps >20<63 tons Split system and single package units w/capacity between 240,000 and 760,000 Btu/H	EER≥10.5, COP≥3.2 *Source:* CEE
Water-source heat pumps <5.4 tons Split systems and single package units w/capacity under 65,000 Btu/H	EER≥14.0, COP≥4.6 *Source:* CEE Tier 1
Water-source heat pumps >5.4<11.25tons Split systems and single package units w/capacity between 65,000 and 135,000 Btu/H	EER≥14.0, COP≥4.6 *Source:* CEE Tier 1
Water-source heat pumps >11.25<30 tons Split systems and single package units w/capacity over 135,000 Btu/H	EER≥14.0, COP≥4.6 *Source:* CEE Tier 2
Heat pump water heater and add-ons Hot water heating system replacing electric resistance heating system. Retrofit for existing electric storage with add-on heat pump water heater	≥2.37 Energy Factor Only units with storage tank of 50-120 gallons
High-efficiency central air conditioning Split system and single package units w/capacity under 65,000 Btu/H. No window units or packaged terminal units. Single phase only.	Split System: SEER≥14.0, HSPF≥8.5 Single Package: SEER≥14.0, HSPF≥8.0 *Source:* CEE Tier 2
Thermoelectric Solid State Cooling System Unit must replace a standard freon chiller and meet specifications	COP≥4.0 1200 watts of heat removal
High-efficiency electric water heating	<60 gallons: ≥ 0.93 Energy Factor ≥ 60 gallons: ≥ 0.91 Energy Factor *Source:* FEMP
Air-side economizers System automatically uses outside air to reduce cooling and heating loads.	Replacement must have 100% OA differential dry bulb. *Source:* ACEEE
Packaged Air Conditioning (Air Source) Factory-made direct expansion space cooling system with self-contained or matched split evaporator coils.	Single Package: ≤5.4 tons: 14.0 SEER, 11.6 EER Split System: ≤5.4 tons: 14.0 SEER, 12.0 EER 5.4 - 20 tons: 11.5 EER 21 - 63 tons: 10.5 EER >63 tons: 9.7 EER *Source:* CEE Tier 2
Packaged Air Conditioning (Water Source)	5.4 - 20 tons: 14.0 EER / 4.6 COP *Source:* CEE Tier 1
Packaged Terminal Air Conditioning(PTAC) and Heat Pumps (PTHP)	Equipment must have a minimum efficiency of: 0.58 tons: 11.7 EER / 3.3 COP 0.75 tons: 11.3 EER / 3.2 COP 1.00 tons: 10.7 EER / 3.1 COP 1.25 tons: 9.6 EER / 3.0 COP

Pre-qualified Energy Measures and Services	Minimum Standard
Water-side economizers System automatically uses water to reduce cooling and heating loads.	Replacement must be water cooled DX with water-side economizer. *Source:* ACEEE
AIR COOLED ELECTRIC CHILLERS *Source:* FEMP	
Scroll 30 - 60 tons	IPLV kW / ton ≤0.86
Reciprocating 30 - 150 tons	IPLV kW / ton ≤0.90
Screw 70 - 200 tons	IPLV kW / ton ≤0.98
WATER COOLED ELECTRIC CHILLERS *Source:* FEMP	
Centrifugal 150 - 299 tons	IPLV kW / ton ≤0.52
Centrifugal 300 - 2,000 tons	IPLV kW / ton ≤0.45
Rotary Screw > 150 tons	IPLV kW / ton ≤0.49
Ground Source Heat Pumps - *Source:* ENERGY STAR	
Closed Loop Systems with integrated water heating	EER ≥14.1, COP ≥ 3.3
Open Loop Systems with integrated water heating	EER ≥16.2, COP ≥ 3.6
DX Systems with integrated water heating	EER ≥ 15.0, COP ≥ 3.5
HEATING, HOT WATER AND AIR CONDITIONING (Non-Electric Measures)	
Furnaces and Boilers <300,000 Btu per hour	
Furnaces (natural gas or propane) Furnaces fired by natural gas or propane	AFUE ≥ 90%
Furnaces (oil) Furnaces fired by oil	AFUE ≥ 85%
Boilers (hot water) Boilers fired by natural gas, propane or oil	AFUE ≥ 85%
Boilers (steam) Oil-fired steam boilers	AFUE ≥ 84%
Boilers (steam) Gas-fired steam boilers	AFUE ≥ 82%
Condensing Unit Heaters Gas-fired condensing unit heaters	AFUE ≥ 90%
Boilers >300,000 Btu per hour - *Source :* FEMP	
Boilers (gas-fired hot water)	Thermal Efficiency > 80%
Boilers (gas-fired steam) 300,000 - 2,500,000 Btu/H: 2,500,001 - 10,000,000 Btu/H:	Thermal Efficiency > 79% Thermal Efficiency > 80%
Boilers (oil-fired hot water)	Thermal Efficiency > 83%
Boilers (oil-fired steam)	Thermal Efficiency > 83%
Water Heaters fired by natural gas, propane or oil - *Source :* FEMP	
48 - 86 Gallon < 75,000 Btu/H: >75,000 Btu/H:	≥ 0.61 Energy Factor Thermal Efficiency ≥ 82%
Tank Insulation of Storage Water Heaters	
Circulation Controls Applicable for reducing standby losses on domestic hot water.	
Space Heating – Other Space Heating Equipment	
Infrared Unit Heaters Applicable only for the replacement of standard efficiency gas unit heaters.	New low-intensity infrared unit heaters

Pre-qualified Energy Measures and Services	Minimum Standard
Burner Replacements Applicable only for the replacement of burners on existing boilers and furnaces, where the boiler or furnace is not being replaced.	New burners for all boiler and furnace types. Rebuilt burners do not qualify.
Vent Damper Applicable only for vent dampers added to existing furnace/boiler installations; does not apply to new furnace/boiler replacements.	New vent dampers for all furnaces and boiler types.
Duct Sealing and Repair	Aerosol-based duct sealing for all furnace types.
Programmable Thermostats	All types.
Oxygen Trim Controls for Boilers	
Blow Down Heat Recovery for Steam Boilers	Boiler size must be >11,000 MBtuh
Stack Economizers for Boilers Applicable for stack economizers used to recover heat for boiler make-up water.	Boiler size must be >11,000 MBtuh
HVAC System Controls	
Programmable Thermostats	
Energy Management System (EMS) System controls for HVAC and lighting loads. Includes programmable thermostats	Provide square footage of area controlled by system. _____ sq. ft. (REQUIRED)
Differential Enthalpy Economizer Controls	Solid state electronic enthalpy sensors only installed with economizer logic module. Electro-mechanical sensors not eligible.
Demand Controlled Ventilation (DCV)Carbon Dioxide Sensors Single sensors or differential system where two sensors provide both indoor and outdoor air carbon dioxide sensing sensors.	Installed in conjunction with a fully functioning controls-governed economizer.
Test and Repair of Existing Heating and Cooling Systems	
Test and Repair of water heaters, economizers, and other components	
Operations and Maintenance Reviews	
Commissioning of Existing Systems	
Health and Safety Measures associated with HVAC	**Smoke Detectors, Carbon Monoxide Detectors, Radon Detectors**
Lighting	
High Performance T8 (HPT8) Fluorescent Lighting HPT8 system consisting of fixtures with qualifying four foot "high lumen" 32W lamps and qualifying low ballast factor ballast (For a list of qualified lamp/ballast products visit: www.cee1.org/com/com-lt)	HP T8 systems must have system efficacies of(MLPW = Mean Lumens per Watt): Instant start ballast: >90 MLPW Programmed rapid-start ballast: >88 MLPW
T-5 and T5HO Fluorescent Lighting Fixtures	All types of fixtures with T-5 lamps and electronic ballasts.
T-8 Retrofits - 28W Lamp Ballast retrofits. Electronic ballasts and reduced wattage four foot T-8 lamps for existing fixtures and any necessary louvers or baffles. (For a list of qualified lamp/ballast products visit: www.cee1.org/com/com-lt)	Ballasts and lamps must be new. For lamps <4500K: Mean system efficacy ≥90MLPW, CRI ≥ 80 Lamp life: ≥18,000 hrs. at 3 hrs. per start Lumen maintenance ≥ 94% Initial lamp lumens: ≥ 2585
T-8 Retrofits - 25W Lamp Ballast retrofits. Electronic ballasts and reduced wattage four foot T-8 lamps for existing fixtures and any necessary louvers or baffles. (For a list of qualified lamp/ballast products visit: www.cee1.org/com/com-lt)	Ballasts and lamps must be new. For lamps <4500K: Mean system efficacy ≥ 90MLPW, CRI ≥ 80 Lamp life: ≥ 18,000 hrs. at 3 hrs. per start Lumen maintenance ≥ 94% Initial lamp lumens: ≥ 2400

Pre-qualified Energy Measures and Services	Minimum Standard
Metal Halide HID fixtures for interior or exterior use. Unit with pulse-start or electronic ballasts and matching metal halide lamps. For exterior use, fixture must be building attached.	Lamps must have minimum mean efficacy of: ≤150 watts: 40 lumens per watt 150 - 400 watts: 75 lumens per watt ≥ 400 watts: 80 lumens per watt
Hardwired Compact Fluorescent fixtures (CFLs) Fixture includes pin-based lamp and electronic or dimmable ballast. Retrofits are not eligible.	Permanently attached CFL fixtures. Ballasts must have THD<15 and PF>0.90.
High Pressure Sodium (HPS) fixtures for exterior use. Entire fixture must be new. Fixture must be building attached.	Lamps must have minimum mean efficacy of: ≤ 100 watts: 55 lumens per watt 100 - 400 watts: 80 lumens per watt >400 watts: 100 lumens per watt
ENERGY STAR LED Exit Signs	Permanently attached light emitting diode (LED) exit signs to replace standard incandescent signs or equivalent. Must be ENERGY STAR® qualified.
Lighting System Controls	
Lighting Occupancy Controls Installed where controls do not exist (wall-mounted or ceiling-mounted occupancy sensors)	Hardwired or Infrared or Ultrasonic occupancy sensors with interface for lighting. Occupancy sensors or installations with manual "ON" override capability are not eligible.
Daylight Dimming Controls Installed where controls do not exist	Occupancy and photocell control systems with dimming ballasts to adjust lighting levels. Each sensor shall consist of a photosensor that controls a minimum of 2 dimming ballasts and fluorescent lamps. Systems controlled by "ON/OFF Overrides" are NOT eligible.
Energy Management System (EMS) System controls for HVAC and lighting loads. Includes programmable thermostats	Provide square footage of area controlled by system. _____ sq. ft. (REQUIRED)
Windows, Insulation, Infiltration, Roofing	
Windows for Commercial Buildings Products must be rated, certified and labeled for U-value by the NFRC or, if NFRC certification is unavailable, by an independent certified test-lab.	U-Value ≤0.55 for glass and frame _____ total sq. footage of windows(REQUIRED)
ENERGY STAR Residential Windows, Exterior Doors, Skylights equivalent or better **Products must be rated, certified, and labeled for both U-Value and Solar Heat Gain by the NFRC** (1) **ENERGY STAR® windows, doors, and skylights--**equivalent or better Products must be rated, certified and labeled for both U-value and Solar Heat Gain by the NFRC.	Northern Region – Windows: U-value ≤ .30 SHGC: Any = .31 SHGC ≥ .35 =.32 SHGC ≥ .40 Skylights: U-Value ≤ .55 SHGC: Any North-Central Region – Windows: U-Value ≤ .32 SHGC ≤ .40 Skylights: U-Value ≤ .55 SHGC ≤ .40 Doors: Energy Star Labeled Source: ENERGY STAR . See the ENERGY STAR web site: www.energystar.gov.
Window Insulating Panels	Double glazed .07 (.0007 in.) clear film affixed to aluminum frame with vinyl or foam spline installed in existing window U-value ≤ 0.75
Weatherstripping	
Pipe Insulation: _____ lineal ft. (REQUIRED)	R-value ≥4
Insulation: Siding is not eligible	_____ R-Value _____ Sq. Ft. **(Both values REQUIRED)**
Duct Insulation (per lineal ft of pipe)	R-value ≥10

Pre-qualified Energy Measures and Services	Minimum Standard
Duct Sealing	R-value ≥10
ENERGY STAR roofing	Only ENERGY STAR® rated roofs qualify
Commercial Refrigeration, Washers, and Kitchen Equipment	
ENERGY STAR products Includes (but is not limited to): Non-Commercial Clothes Washers, Refrigerators, Dishwashers	Any ENERGY STAR® rated product is eligible. NON-ENERGY STAR rated products must have efficiency ratings equal to or better than ENERGY STAR(Refer to: www.energystar.gov)
High Efficiency Refrigerated Vending Machines	Equipment must have electronic ballasts and improved fan motor and compressor. *Source:* ENERGY STAR®
Vending Machine Occupancy Controls Occupancy controlled lighting in refrigerated vending machines	Occupancy sensor must power down/turn off lighting in refrigerated vending machine based upon occupancy
Commercial Ice Makers Check appropriate type of Ice Maker: CEE Tier 1 Commercial ____= FEMP CEE Tier 2 Commercial ____= 10% better than Tier 1	For a list of qualifying products visit: www.cee1.org/com/com-kit *Source:* CEE
Commercial Clothes Washers For a list of qualified products visit: www.cee1.org/com/cwsh/cwshspec.pdf	Must meet or exceed CEE Tier 2 standards Modified Energy Factor>2.00 Water Factor 6.0 or less
Commercial Reach-in Solid Door Refrigerator Check appropriate size: ≤ 19 cu. ft. ___ 19 to 30 cu. ft. ___ 31 to 60 cu. ft. ___ 61 to 90 cu. ft. ___	Must meet or exceed CEE Tier 2 standards For a list of qualified products visit: www.cee1.org/com/com-kit
Commercial Reach-in Glass Door Refrigerator Check appropriate size: ≤ 19 cu. ft. ___ 19 to 30 cu. ft. ___ 31 to 60 cu. ft. ___ 61 to 90 cu. ft. ___	Must meet or exceed CEE Tier 2 standards For a list of qualified products visit: www.cee1.org/com/com-kit
Commercial Reach-in Solid Door Freezer Check appropriate size: ≤ 19 cu. ft. ___ 19 to 30 cu. ft. ___ 31 to 60 cu. ft. ___ 61 to 90 cu. ft. ___	Must meet or exceed CEE Tier 2 standards For a list of qualified products visit: www.cee1.org/com/com-kit
Commercial Kitchen Appliances	
Electric Steamers Pressurized or Pressureless Compartments	≥ 70% Energy Efficiency
Commercial Combination Oven Standard Electric	≥ 60% Energy Efficiency
Commercial Convection Oven Standard Electric	≥ 70% Energy Efficiency
Commercial Electric Griddles Single or double sided	≥ 70% Efficiency
Commercial Electric Fryer Deep Fat, Open Kettle, Pressurized, or Flat Bottom	≥ 80% Efficiency
Low-Flow Pre-Rinse Spray Valves Any	Flow Rate <1.6 g.p.m. @ 60psi
Insulated Holding Cabinet Full Size (fully insulated) 3/4 Size (fully insulated) 1/2 Size (fully insulated)	≤20 Watts/cu. ft., Energy Rate (ER) <0.8kW ≤20 Watts/cu. ft., Energy Rate (ER) <0.6kW ≤20 Watts/cu. ft., Energy Rate (ER) <0.4kW
GAS MEASURES	
Food Service	
ENERGY STAR Gas Fryers Includes Open Deep Fat, Pressure/Kettle, Flat Bottom and specialty fryers	Cooking efficiency > 49%and idle energy rate < 9000 Btu/h
Broilers – Includes over-fired (uprights, salamander, cheese melters) and under-fired (char-broiler) gas broilers	Cooking efficiency ≥ 30%

Pre-qualified Energy Measures and Services	Minimum Standard
Full-size Convection Ovens	Cooking efficiency ≥ 40%
Gas Combination Ovens	Cooking efficiency ≥ 40%
ENERGY STAR Steamers	Cooking efficiency ≥ 37%
Griddle - 3 foot, flat gas griddle with infrared burners	cooking efficiency > 44% and idle energy rate < 14,500 Btu/h