

## Energy Conservation Study ARRA Assistance

Program Opportunity Notice (PON) 0004 \$5 Million Available

Applications accepted on a first-come, first-served basis through March 15, 2010 5pm EST

#### I. Program Summary:

This Program Opportunity Notice (PON) provides funding to complete Energy Conservation Studies, which can be used to support applications to upcoming project implementation funding opportunities through NYSERDA's administration of American Recovery and Reinvestment Act (ARRA) funds. Eligible participants include: municipal governments, public K-12 schools, public universities or colleges (including SUNY, SUNY community colleges, CUNY, CUNY community colleges), hospitals, and not-for-profits (defined as 501(c)(3)).

Funding for this program is being provided under the American Recovery and Reinvestment Act (ARRA). If your organization receives funding under this PON, it may be subject to special terms and conditions, including but not limited to: detailed reporting requirements; audit of your use of ARRA funds; Buy American; and Davis-Bacon prevailing wage requirements for construction activities. Your organization will be required to provide certain information in a timely manner to meet ARRA requirements. See attachments for a list of special terms and conditions. Failure to comply may result in the loss of Federal grant funding.

**APPLICATION SUBMISSION:** All Applications should be clearly labeled and sent to:

NYS Energy Research and Development Authority Attn: Manager, Energy Conservation Study ARRA Assistance PON 0004 17 Columbia Circle Albany, New York 12203-6399

All program questions should be directed to Ben Fox, 866-NYSERDA (866-697-3732), ext. 3444, <u>bf2@nyserda.org</u>. All Contractual questions should be directed to Venice Forbes, 866-NYSERDA (866-697-3732), ext. 3507, <u>vwf@nyserda.org</u>.

\*Late, incomplete, or unsigned applications will be returned. Faxed or e-mailed applications will not be accepted. Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <a href="https://www.nyserda.org">www.nyserda.org</a>.

The New York State Energy Research and Development Authority (NYSERDA) is New York State's administrator of the Federal ARRA funds provided from State Energy Program (SEP) Formula Grants and Energy Efficiency and Conservation Block Grants (EECBG). The funding source of SEP and EECBG is the Federal government, and all projects funded must comply with all required Federal and State requirements for use of the funds. Pursuant to Plans submitted to the U.S. Department of Energy for use of the SEP and EECBG funds in New York, NYSERDA intends to issue two competitive solicitations for project implements grants. The follow table describes the anticipated time frame for release of the first project implementation solicitations and deadline for submission. Note: All projects for which ARRA funds are requested for eligible energy projects must be submitted by an eligible Applicant in response to one of these upcoming competitive solicitations noted in the Table below, regardless of whether the project was submitted previously to the Governor's Office.

Funds available	Eligibility	Anticipated Issue Date	Anticipated Close Date
\$74,000,000	Municipalities, Universities,	July 27, 2009	Round 1: 8/24/09
	Schools, Hospitals, and Not-for-		Additional rounds may
	Profits [501(c)(3)]		be held in the future,
			depending on the
			availability of funds.
\$24,069,789*	Small Municipalities	August 2009	November 2009
*Pending Department of	Energy approval		

Applicants for project implementation funds through the SEP and EECBG competitive solicitations noted above will be required to supply technical information to document energy savings and costs of proposed projects. This PON offers funding for eligible participants as defined above to conduct Energy Conservation Studies, which can be used to support applications for future SEP and EECBG project implementation opportunities being administered by NYSERDA. Note that participation in this Program is not a prerequisite for applying for the SEP and EECBG project implementation funds. Receiving funding though this Program for an Energy Conservation Study does not automatically qualify the Applicant for future SEP or EECBG project implementation funding opportunities. Furthermore, participation in this Program does not give the Applicant preferential treatment when applying for future SEP or EECBG project implementation funding.

For all	eligible Applicants, Energy Conservation Studies funded by this Program can address the
follow	ing topics (see the program rules in Section II for specific eligible measures categories):
	Energy efficiency
	Renewable energy (Solar thermal, biomass, fuel cells, and small wind)
	Vehicles
Small	municipalities (as defined by Appendix F) may also apply for funds to study the following topics
(see th	e program rules in Section II for specific eligible measures categories):
	Energy management personnel
	Material conservation
	Transportation

Under this Program, each Applicant may apply for funding up to the lesser of: \$30,000, or 100% of the cost of the study, or 25% of the annual energy cost of studied buildings (electricity, heating fuel), or vehicle fleets (vehicle fuel).

#### **Program Steps**

- 1. The Applicant creates a Scope of Work, selects a Service Provider (as defined in Section II), and submits a program Application (Appendix A) together with the Scope of Work (each Scope of Work must comply with the requirements of Appendix B) to NYSERDA.
- 2. NYSERDA reviews the Application. If the Application is approved, NYSERDA reserves funds and issues a purchase order to the Applicant.
- 3. The Applicant's Service Provider performs the Energy Conservation Study.
- 4. The Applicant submits a copy of the completed Energy Conservation Study Final Report, a Project Summary (see Appendix D), a Project Metric Descriptions (Appendix E) and invoices to NYSERDA.
- 5. Upon approval, NYSERDA releases funds to the Applicant.

The Applicant is encouraged to apply for either SEP or EECBG project implementation funds from NYSERDA under soon-to-be-released solicitations.

Funding available in this program will be reserved for Applicants on a first-come, first-served basis, upon receipt and review of a complete Application.

Costs incurred and work conducted prior to authorization from NYSERDA (in the form of a NYSERDA issued Purchase Order), are not eligible for funding. Detailed engineering design is considered an implementation effort and is not eligible for funding through this program.

#### II. Program Rules

#### **Service Provider Selection**

An independent third-party Service Provider is required for all projects. Funding cannot be used for self-prepared studies. Program participants choose their own Service Provider to perform the energy conservation study. Potential Service Providers include, but are not limited to; energy service companies (ESCOs), energy consultants, engineering firms, and utility companies.

#### **Eligible Applicant**

Eligible Applicants are all New York municipal governments, public K-12 schools, public universities or colleges (including SUNY, SUNY community colleges, CUNY, CUNY community colleges), hospitals, or not-for-profits (defined as 501(c)(3)). Municipal governments must be included in the latest available Census of Governments as a currently incorporated government, the municipality must have a governance structure with an elected official and governing body, and the municipality must have the authority to implement the eligible activities. Sewer districts, water and wastewater treatment plants, and other subcomponents of eligible villages, towns, cities and counties are not eligible. Each eligible Applicant may apply for multiple Energy Conservation Studies, however, the total amount per eligible Applicant under this PON may not exceed \$30,000.

#### **Eligible Measures**

All e	ligi	ibl	e App	olican	its mag	/ appl	y foi	r Energy	Cons	ervation	Stu	dies	for	the	fol	lowing	measure	categorie	S
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- Energy Efficiency
   Facility and non-facility integrated measures are fundable. Measures include but are not limited to lighting, cooling, heating, motors, building envelope, building or facility optimization, combined heat and power, geothermal systems, other energy-efficiency technologies.
   Retro-commissioning services are eligible, but must be specifically focused on energy
  - efficiency. Retro-commissioning studies without the potential for significant energy savings are not eligible for funding.

□ Renev	vable Energy
	Solar Thermal (studies of solar electric systems are not eligible*), biomass, fuel cells, and
	small wind.
*N	ote: Photovoltaic projects may be funded through upcoming project implementation funding programs, but are
	eligible to be studied under this Energy Conservation Study Program. Photovoltaic projects may instead be
eva	aluated using NYSERDA's free on-line tool located at: <a href="www.powernaturally.org">www.powernaturally.org</a> .
	Eligible biomass technology is for high-efficiency indoor boiler applications, which use
	wood pellets, wood chips, or firewood. A minimum thermal efficiency of 83% will be
	required when applying for future SEP or EECBG project implementation funding. Wood-
	fired boilers should measure thermal efficiency using either the EN 303-5 or ASHRAE
	155P methods and use the lower heating value of wood.
	Eligible fuel cells are those commonly described as "behind the meter" generation, and
	refer to generation that is sited at the electric customer's location and used primarily to
	serve the electric customer's load (i.e., not primarily exported to the utility grid).
	Eligible wind power projects are those commonly described as "behind the meter"
	generation, and refer to generation that is sited at the electric customer's location and used
	primarily to serve the electric customer's load (i.e., not primarily exported to the utility
	grid). Wind turbine size is limited to be under 50 kW.
□ Vehic	les
	Alternative fuel vehicles (light, medium, and heavy duty). Alternative fuel refers to natural
	gas, propane, hydrogen, or electricity.
	Hybrid electric medium- and heavy-duty vehicles. Light-duty, hybrid-electric vehicles that
	are plug-in hybrid electric are also eligible.
	Refueling and recharging equipment for alternative fuel vehicles.
	Anti-idling equipment.
Small munici	palities (as defined by Appendix F) may also apply for Energy Conservation Studies for the
following me	asure categories:
□ Energ	y Management Personnel
	Studies on the need for and benefits of hiring: certified energy managers, regional
	planners, and code enforcers.

Materi	al Conservation
	Alternative collection programs, such as volume-based pricing or single-stream recycling.
	New recycling capacity.
	Source reduction strategies.
	Methods to divert organic waste from landfills.
Transp	Recycled content procurement programs.
	Traffic signal timing and other intelligent transportation system projects.
	Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting.
	Bike and pedestrian paths where a reduction in automobile travel can be demonstrated.

#### Work that is Not Eligible for Energy Conservation Studies

The following types of activities are not eligible for funding under this Program:

☐ Detailed engineering and architectural design work.

□ New construction energy modeling and commissioning.

☐ Power quality, power factor, and power conditioning studies.

Note: Equipment purchases are not eligible for funding under this Program, except for metering equipment representing less than 50% of the amount provided by NYSERDA through this program. To be eligible for funding, the metering equipment must be a necessary component of the Energy Conservation Study.

#### **Eligible Facilities and Vehicles**

Eligible facilities and vehicles include existing facilities and vehicles owned or leased by the Applicant. New facilities, or those that have undergone substantial renovations, must have been occupied for more than one year at the time of Application to this Program to be eligible for funding under this solicitation.

#### **Available Funds**

Each Applicant may apply for funding through this Program up to the lesser of: \$30,000, or 100% of the cost of the study, or 25% of the annual energy cost of a studied building(s) (electricity, heating fuel) or vehicle fleets (vehicle fuel). No Service Provider can receive more than 25% of the total funds available under this Program. Funding through this Program will be awarded on a first-come, first-served basis through March 15, 2010 prior to 5 PM EST, or until the available funding of \$5 million is exhausted.

### Costs incurred and work conducted prior to authorization from NYSERDA (in the form of a NYSERDA issued Purchase Order), are not eligible for funding.

Once an Application is approved by NYSERDA, NYSERDA will issue a Purchase Order to the Applicant. Incomplete Applications will be returned to the Applicant.

#### **Project Payments**

To receive payment, the following shall be submitted to NYSERDA:

The Energy Conservation Study Final Report complying with the requirements of Appendix C and
consistent with the approved Scope of Work.
A Project Summary as described in Appendix D and a Project Metric Descriptions (Appendix E).
A copy of the Service Provider's invoice(s) to the Applicant indicating the total energy
conservation study cost.
An invoice from the Applicant to NYSERDA.

Materials must be sent to NYSERDA to the attention of Manager, Energy Conservation Study ARRA Assistance PON 0004 at the address listed at the beginning of this PON.

#### **Quality Assurance**

The quality and accuracy of the energy conservation study is the sole responsibility of the Applicant and its Service Provider. NYSERDA is not responsible for any representations made by the Applicant's Service Provider.

#### **Future Funds**

Participation in this program does not automatically qualify the Applicant for future SEP or EECBG project implementation funding. Participation in this program does not give the Applicant preferential treatment when applying for future SEP or EECBG project implementation funding.

#### **Matching Contributions**

Matching contributions or cost-sharing is not required for this Program. The Applicant may choose to spend more for an Energy Conservation Study than the funding amount provided through this program. The amount NYSERDA will award will not exceed the amount stated in the purchase order.

#### **Energy Conservation Study Final Report**

The Energy Conservation Study Final Report funded under this Program must be completed and submitted to NYSERDA by May 15, 2010, 5:00PM. The Energy Conservation Study Final Report must comply with the requirements in Appendix C and include a completed copy of Appendices D and E.

#### **EPA ENERGY STAR® Portfolio Manager**

Energy Conservation Studies that include building energy-efficiency measures are strongly encouraged to benchmark the buildings using EPA ENERGY STAR® Portfolio Manager at <a href="www.energystar.gov">www.energystar.gov</a>.

Benchmarking may be part of the selection criteria for future ARRA funding opportunities.

#### **Energy Conservation Construction Code**

Governor David A. Paterson is currently advancing legislation to amend the existing Energy Conservation Construction Code of New York State to meet or exceed the commercial building requirements of ASHRAE 90.1 -2007, and the residential requirements of the International Energy Conservation Code (IECC) 2009, as required by ARRA. Applicants are encouraged to design their Scope of Work to meet these codes' requirements. Meeting these codes may be part of the selection criteria to obtain future ARRA project implementation funding. Thermal efficiency for wood-fired boilers should be measured using either the EN 303-5 or ASHRAE 155P methods and use the lower heating value of wood.

#### **Submitting an Application**

Applications will be accepted until 5:00 pm EST on March 15, 2010, or until funds are exhausted. Applications must contain original signatures. Faxed or e-mailed copies will not be accepted. Late, incomplete, or unsigned Applications will be returned.

To apply, send the completed Application (Appendix A) and a complete Scope of Work (see guidelines in Appendix B) to the attention of Manager, Energy Conservation Study ARRA Assistance PON 0004, at the address listed at the beginning of this PON.

#### Other NYSERDA Programs and Utility Programs

Energy Conservation Studies funded by this Program are not eligible for additional funding under NYSERDA's Technical Assistance or FlexTech programs, or any utility funded program.

#### PROPRIETARY INFORMATION

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2) (d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the Applicant wishes to have treated as proprietary and confidential trade secret information should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <a href="https://www.nyserda.org/nyserda.regulations.pdf">www.nyserda.org/nyserda.regulations.pdf</a>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

#### **Omnibus Procurement Act Of 1992**

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division For Small Business 30 South Pearl Street Albany, NY 12245 A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
30 South Pearl Street
Albany, NY 12245

#### Limitation

This solicitation does not commit NYSERDA to award a Purchase Order, pay any costs incurred in preparing an application, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

#### **Disclosure Requirement**

The Applicant shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When an Applicant is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the Service Provider may be subject to penalties for violation of any law which may apply in the particular circumstances. Applicants shall also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

#### **Contract Award**

NYSERDA may issue a Purchase Order based on applications without discussion, or following limited discussion, Scope of Work modifications or negotiations. NYSERDA may request additional data or material to support applications. NYSERDA expects to issue purchase orders approximately three (3) weeks from the receipt of a complete application.

Appendix A
PON 0004
Application Form
Energy Conservation Study
ARRA Assistance

APPLICANT INFORMATION	
Applicant Organization's Name:	
<ul> <li>□ Large municipal government</li> <li>□ Small municipal government (as define</li> <li>□ Public K-12 school</li> <li>□ Public university or college including: community colleges</li> <li>□ Hospital</li> <li>□ Not-for-Profit Corporations (defined as</li> </ul>	SUNY, SUNY community colleges, CUNY, CUNY
Federal ID Number:	301(0)(3))
D-U-N-S Number:	
Applicant Contact and Title:	
Address:	
City, State and Zip Code:	
Phone and Fax:	
E-Mail Address:	
ENERGY CONSERVATION STUDY TO	PICS (CHECK ALL THAT APPLY)
Appendix F)	plicant must be a small municipality as defined by sust be a small municipality as defined by Appendix F)
<ul> <li>□ Solar thermal, biomass, fuel cells, a</li> <li>□ Vehicles</li> <li>□ Energy management personnel (Ap Appendix F)</li> <li>□ Material conservation (Applicant must be a Transportation (Applicant must be a possible of the property of the propert</li></ul>	plicant must be a small municipality as defined by
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□ Solar thermal, biomass, fuel cells, a □ Vehicles □ Energy management personnel (Ap Appendix F) □ Material conservation (Applicant m □ Transportation (Applicant must be  SERVICE PROVIDER INFORMATION Service Provider:  Service Provider Federal ID Number:  Service Provider Contact and Title:  Address:	plicant must be a small municipality as defined by sust be a small municipality as defined by Appendix F)

PROJECT FUNDING CALCULATION	
Funding Cap:	\$30,000
250/ of oursel or ones, and (alactricity)	
25% of annual energy cost (electricity, heating fuel, vehicle fuel) of studied	
buildings or vehicles. Leave blank if no	\$* 25% = \$
buildings or vehicles will be studied.	
Cost of the energy conservation study?	
(detailed budget shall be attached to the	
scope of work)	
The amount requested for this project shall be the lesser of the above three	
numbers:	
ADDITIONAL APPLICANT QUESTION	
Have you been indicted for or convicted	⊕Yes ⊕No
of a felony within the past five (5) years?	
If yes, explain on a separate page.  APPLICANT CERTIFICATION	
	Application (Appendix A), the identified organization is
interested in an energy conservation study and	is requesting NYSERDA funding for eligible costs in
conducting an energy conservation study throu	gh the Energy Conservation Study ARRA Assistance Program.
I certify that the information provided as part of	of this Application is true and accurate to the best of my
knowledge and that none of the work identified	I for funding herein has been undertaken and that no funds from
other NYSERDA or utility-funded programs w	rill be used to perform the work. I understand that Applications
shall meet the specified criteria described in th	is solicitation, and that all Applications may not be funded. I
understand that funding for the energy conserv	ation study and subsequent implementation programs are to be
funded under ARRA and that additional report	ing and other requirements will apply, including, but not limited
to: additional reporting requirements, such as E	Buy American, and Federal Davis-Bacon requirements for all
construction activities; and other requirements	as may be imposed by appropriate Federal or State oversight
entities. I agree to provide to NYSERDA any	and all required materials, documentation, and information, on
the schedule required by NYSERDA to meet a	ny such requirements. I understand that failure to comply with
ARRA requirements may result in loss of fund	ing.
APPLICANT SIGNATURE:	
NAME AND TITLE:	
ODGANIZATION AND BHONE.	

Appendix B
PON 0004
How to Create a Scope of Work
Energy Conservation Study
ARRA Assistance

The energy conservation study should prepare the Applicant for applying for ARRA funds for implementing energy conservation projects under the SEP and EECBG opportunities. For this reason, the Scope of Work shall cover the analysis that will be required to apply for project implementation funds. The energy conservation study shall follow the approved Scope of Work. The Scope of Work should be a stand-alone document and should not be in letter format. In general, a Scopes of Work ranges from four to eight pages.

The Scope of Work document shall contain the following:

- 1. BACKGROUND DESCRIPTION: The Scope of Work shall contain a description of the current facilities, vehicle fleet, material conservation system, transportation system, etc, to be studied.
- 2. DESCRIPTION OF STUDY: The Scope of Work shall contain a description of what will be covered in the energy conservation study. The Scope of Work shall explain why the Applicant is interested in the topics to be studied.
- 3. TASKS: Each measure to be studied shall be a single task. Each task shall include a description of what will be reviewed in regard to that energy conservation measure, the current conditions, and what will be evaluated as options. Studies that include building energy efficiency measures are strongly encouraged to include building benchmarking using EPA ENERGY STAR® Portfolio Manager as a task.
- 4. PROJECT ASSUMPTIONS: If necessary, a description of all the project assumptions should be included. Examples of this could be that the Applicant's facility staff would provide a knowledgeable guide to the Service Provider as they review the facilities, or note any information the Applicant has promised to provide the Service Provider for the completion of the study.
- 5. DELIVERABLES: A section describing the deliverables shall be included. Deliverables shall include the energy conservation study which shall follow the requirements described in Appendix C, a Project Summary as described by Appendix D, and a Project Metric Descriptions (Appendix E).

- 6. SCHEDULE: A schedule shall be completed for each of the tasks. This schedule should be in a "weeks from notice to proceed" format. For example: Kick-off meeting within two weeks of notice to proceed; Task 1.0 completed within four weeks of notice to proceed, etc. The energy conservation study report shall be completed and submitted to NYSERDA by May 15, 2010.
- 7. BUDGET: The Scope of Work shall contain a detailed project budget broken out by task. For each task, the number of hours and dollars to be spent should be clearly indicated. This will provide a clear understanding of how much emphasis is being placed on each task and therefore, the level of detail that can be expected.

**ARRA** Assistance

**Executive Summary** - Concisely summarize the energy conservation study's intent, findings,

recommendations, and economics of the recommendations in narrative format.

Organization Description - Provide information about the Applicant and current facilities, vehicle fleet,

material conservation system, transportation system, etc.

**Project Description** - Include a description of the project intent, approach, and tasks performed as

defined in the project scope.

Project Results/Recommendations - Describe the project findings. Include reasons for

recommendations made. Include relevant energy and cost savings statistics. All analysis shall conform to

generally accepted engineering practices. Calculations and data shall be included as an appendix. Life-

cycle cost or other analyses may also be included, if desired. The study should include information on

additional potential project benefits, such as increased productivity, job creation or retention, and

environmental benefits.

For projects where computer modeling is used, reports shall also include: 1) a brief presentation of the

manipulations which the program performed; 2) input data for the building and for each measure should

be presented in a manner which allows easy identification of input parameters; 3) clear and precise

presentation of the results in both tabular and narrative forms, and; 4) verification that interaction effects

were taken into account.

**Data** - Energy conservation studies shall include:

• Monthly energy use and cost for all fuels for at least the previous 12 months of each facility or

non-facility integrated that is studied. Also included monthly kW for the previous 12 months as

applicable.

• Annual fuel use, cost, and mileage for vehicles studied.

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**Appendices** - This section will include supporting documentation for all recommendations not included in the previous section along with any energy benchmarking results, calculations for all measures reviewed, assumptions, conversion factors, items included in project implementation costs, and sources of cost estimates.

**Project Summary** – As a separate document, prepare a Project Summary as described in Appendix D.

Submit the following information to NYSERDA as a separate document along with the Energy Conservation Study.

Aggregate metrics for all measures:

Agglegate incules for all illeasures.
Total source mmBtu saved over the life of each measure*
Total CO <sub>2</sub> equivalent lbs saved over the life of each measure*
Total dollars saved over the life of each measure*
Total implementation cost of all measures
Implementation time (the number of months from start of
implementation to completion of all measures)
Zip codes of where measures will be implemented

<sup>\*</sup>For each measure, multiply the annual savings times the life of the measure. Then add together all the measures.

For each measure, fill in the following table. Be sure to include all fuels affected by the measure. For example, replacing a diesel bus with a compressed natural gas bus would decrease diesel use and increase natural gas use.

Measure #	Measure name	Measure #   Measure name   Life of the measure in	Annual savings in \$   Annual savings in		Annual CO <sub>2</sub>	Implementation
		years		source mmBtu	ent savings	cost \$
					in lbs	
	Fuel type	Fuel use, source	Annual fuel amount   Annual Source	Annual Source	Annual CO <sub>2</sub>	kW amount if
		mmBtu, CO <sub>2</sub> , kW,	(kwh, therms,	mmBtu amount	equivalent amount	applicable
		increase or decrease	gallons etc)		in lbs	
Fuel 1		□ Increase				
		□ Decrease				
Fuel 2		□ Increase				
		□ Decrease				

Refer to Appendix G for CO<sub>2</sub> equivalents and site-source conversions.

Appendix E
PON 0004
Project Metric Descriptions
Energy Conservation Study
ARRA Assistance

Projects must complete only the section that applies to their project type. FOR STUDIES THAT INCLUDE ENERGY EFFICIENCY, SOLAR THERMAL, BIOMASS, FUEL CELLS, OR SMALL WIND Total number of buildings studied or impacted: Total square footage of buildings studied or impacted: Electric distribution provider: (List company name) Gas, oil or other fossil fuel distributor: (List fuel type and company name) Total annual energy cost of spaces Annual \$: studied or affected: For buildings, annual cost (\$ per square Annual \$/sqft: foot): Electricity Cost (\$): Use (kWh): Peak Demand (kW): Natural gas Cost (\$): Use (Therms): Cost (\$) Oil Use (Gallons): Propane Cost (\$): Use (Gallons) Other Cost (\$) Use ( FOR STUDIES THAT INCLUDE ENERGY MANAGEMENT PERSONNEL(APPLICANT MUST BE A SMALL MUNICIPALITY AS DEFINED BY APPENDIX F) Type of personnel studied check all that ☐ Certified Energy Managers apply ☐ Regional Planners ☐ Code Enforcers Number of buildings covered: Total amount of square footage of buildings covered: Size of region to be covered: How many Certified Energy Managers,

Regional Planners, Code Enforcers does

the Applicant currently employ?

FOR VEHICLE STUDIES:	
Check all measures studied:	☐ Alternative fuel vehicles
	☐ Refueling and recharging equipment for
	alternative fuel vehicles
	☐ Anti-idling equipment
Number and type of vehicles in current	
fleet: (ex: 12 cars, 7 trucks, 10 buses)	
Number and type of alternative-fuel	
vehicles currently in fleet: (ex: 10 natural	
gas buses)	
Number of proposed new alternative-fuel vehicles:	
Capacity of proposed	
refueling/recharging equipment:	
Number and type of proposed anti-idling	
equipment installations:	
Primary use of the current vehicle fleet:	
Average annual mileage per vehicle:	
Average annual idling time per vehicle	
(Idling reduction projects only)	
Gasoline:	Current Annual Gallons:
	Current Annual Cost:
Diesel:	Current Annual Gallons:
	Current Annual Cost:
Other vehicle fuel:	Current Annual Units:
	Current Annual Cost:
Total current vehicle fuel cost:	\$
Total proposed alternative-fuel vehicle	\$
cost:	
Total proposed alternative-fuel volume to be used:	
EOD STUDIES THAT INCLUDE MATEL	RIAL CONSERVATION PROGRAMS (APPLICANT
MUST BE A SMALL MUNICIPALITY A	
Check all measures studied:	<ul> <li>□ Innovative programs, such as volume-based pricing or single-stream recycling</li> <li>□ New recycling capacity</li> <li>□ Source reduction strategies</li> <li>□ Methods to divert organic waste from landfills</li> <li>□ Recycled content procurement programs</li> </ul>

RECYCLED CONTENT PROCUREMEN	I PROGRAMS
Estimated number of people affected:	
Number of proposed products to include	
recycled content:	
Total procurement expenditures of	
organization:	
Incremental cost of recycled content	\$
materials:	
ALL OTHER MATERIAL CONSERVAT	ION PROGRAMS
Current annual landfill tonnage from	
municipality:	
Proposed annual landfill tonnage from	
municipality:	
Current annual recycled tonnage from	
municipality:	
Proposed annual recycled tonnage from	
municipality:	
Types of material currently recycled (eg.	
paper, glass, plastic):	
Additional types of meterial to be	
Additional types of material to be	
recycled, if any:	
recycled, if any: Estimated number of residents affected:	
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF	PPLICANT MUST BE A SMALL MUNICIPALITY AS
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF	☐ Traffic signal timing and other intelligent
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	☐ Traffic signal timing and other intelligent transportation system projects.
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F)	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AF DEFINED BY APPENDIX F) Check all measures studied	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AFDEFINED BY APPENDIX F) Check all measures studied  FOR TRAFFIC SIGNAL TIMING AND OPROJECTS	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> </ul>
FOR TRAFFIC SIGNAL TIMING AND OPROJECTS  Number of intersections with traffic lights	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
FOR TRAFFIC SIGNAL TIMING AND OPROJECTS  Number of intersections with traffic lights affected:	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
FOR TRAFFIC SIGNAL TIMING AND OPROJECTS  Number of intersections with traffic lights affected:  Number of lane miles of roadway	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AFDEFINED BY APPENDIX F) Check all measures studied  FOR TRAFFIC SIGNAL TIMING AND OPROJECTS Number of intersections with traffic lights affected: Number of lane miles of roadway affected:	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
FOR TRAFFIC SIGNAL TIMING AND OPROJECTS  Number of intersections with traffic lights affected:  Number of lane miles of roadway	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
FOR TRAFFIC SIGNAL TIMING AND OPROJECTS  Number of intersections with traffic lights affected:  Number of commuters affected:  Number of commuters affected:	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>
recycled, if any: Estimated number of residents affected:  FOR TRANSPORTATION STUDIES (AFDEFINED BY APPENDIX F) Check all measures studied  FOR TRAFFIC SIGNAL TIMING AND OPROJECTS Number of intersections with traffic lights affected: Number of lane miles of roadway affected:	<ul> <li>□ Traffic signal timing and other intelligent transportation system projects.</li> <li>□ Programs to reduce vehicle miles traveled, such as ridesharing or telecommuting</li> <li>□ Bike and pedestrian paths</li> </ul>

PROGRAMS TO REDUCE VEHICLE MILES TRAVELED, SUCH AS RIDESHARING OR				
TELECOMMUTING				
Number of commuters affected:				
Average monthly vehicle mileage:				
Anticipated vehicle miles travelled savings:				
BIKE AND PEDESTRIAN PATHS				
Number of miles of roadway/pathway				
affected:				
Anticipated vehicle miles travelled				
savings				

Appendix F PON 0004 Definition of Small Municipality Energy Conservation Study ARRA Assistance

Under the Federal American Recovery and Reinvestment Act's Energy Efficiency and Conservation Block Grant (EECBG) Program, the Department of Energy has made a distinction between large and small municipalities. Large municipalities receiving direct EECBG formula grants from the Department of Energy are listed in the table below. Under the EECBG program, NYSERDA will receive funds from the Department of Energy to distribute among municipalities not listed below, which can apply for project implementation funding. All New York municipalities not on this list are considered small municipalities for the purposes of this program.

Large Municipalities Re	Large Municipalities Receiving Direct Formula Grants From DOE						
Name	Level	County	Name	Level	County		
Albany	City	Albany	New York	City			
Amherst, Town of	City	Erie	Niagara Falls	City	Niagara		
Babylon, Town of	City	Suffolk	North Hempstead, Town of	City	Nassau		
Binghamton	City	Broome	Onondaga	County			
Brookhaven, Town of	City	Suffolk	Orange	County			
Buffalo	City	Erie	Orangetown, Town of	City	Rockland		
Cheektowaga, Town of	City	Erie	Oyster Bay, Town of	City	Nassau		
Clarkstown, Town of	City	Rockland	Penfield, Town of	City	Monroe		
Clay, Town of	City	Onondaga	Perinton, Town of	City	Monroe		
Clifton Park, Town of	City	Saratoga	Poughkeepsie, Town of	City	Dutchess		
Colonie, Town of	City	Albany	Rochester	City	Monroe		
Dutchess	County		Rockland	County			
Erie	County		Schenectady	City	Schenectady		
Freeport, Village of	City	Nassau	Smithtown, Town of	City	Suffolk		
Greece	City	Monroe	Southampton, Town of	City	Suffolk		
Greenburgh, Town of	City	Westchester	Suffolk	County			
Hamburg, Town of	City	Erie	Syracuse	City	Onondaga		
Hempstead Town of	City	Nassau	Tonawanda, Town of	City	Erie		
Hempstead, Village of	City	Nassau	Troy	City	Rensselaer		
Henrietta, Town of	City	Monroe	Ulster	County			
Huntington, Town of	City	Suffolk	Utica	City	Oneida		
Irondequoit, Town of	City	Monroe	Webster, Town of	City	Monroe		
Islip, Town of	City	Suffolk	West Seneca, Town of	City	Erie		
Monroe	County		Westchester	County			
Mount Vernon	City	Westchester	White Plains	City	Westchester		
Nassau	County		Yonkers	City	Westchester		
New Rochelle	City	Westchester	Yorktown, Town of	City	Westchester		

# Appendix G PON 0004 CO<sub>2</sub> Equivalents and Source Energy Conversions Factors Energy Conservation Study ARRA Assistance

The following factors are included for reference.

CO2 Equivalents					
Fuel Type	Unit	Lbs. CO <sub>2</sub> e per			
		Unit			
Electricity	kWh	1.09200			
Natural Gas	kBtu	0.11638			
All Types of Fuel Oil	kBtu	0.15966			
Propane	kBtu	0.13830			
Diesel	Gallon	22.38400			
Gasoline	Gallon	19.56400			

Source Energy Conversion Factors				
Fuel Type	Unit	Btus/Unit		
Electricity	kWh	9,668		
Natural Gas	Therm	100,000		
#2 Fuel Oil	Gallon	140,000		
#6 Fuel Oil	Gallon	152,000		
Propane	Gallon	91,333		
Diesel	Gallon	138,327		
Gasoline	Gallon	125,070		