New York Homeowner Incentives for Renewables and Efficiency

Financial

Energy Conservation Improvements Property Exemption

Last DSIRE Review: 06/13/2008

Incentive Type: Property Tax Exemption

Eligible Efficiency Equipment Insulation, Water Heaters, Furnaces, Boilers, Heat pumps, Air

Technologies: conditioners, Programmable Thermostats, Energy Mgmt. Systems/Building Controls, Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows, Doors

Eligible Renewable/Other Geothermal Heat Pumps, Biomass-fueled Stoves

Technologies:

Applicable Sectors: Residential

Amount: 100% of added assessed value to residence

Website: http://www.orps.state.ny.us/

assessor/manuals/vol4/part1/section4.01/sec487-a.htm

Authority 1: NY CLS Real Property Tax Law §487-a

Date Enacted: 1977

Summary:

Qualifying energy-conservation improvements to homes are exempt from real property taxation to the extent to the addition would increase the value of the home. The exemption includes general municipal property taxes, school district taxes, and special ad valorem taxes, but does *not apply* to special assessments. Eligible properties include single-family to four-family dwellings. The exemption applies directly to a variety of equipment and measures, but the statute also states that any conservation-related state or federal tax credit or deduction is also exempt from New York's property tax under this statute. The federal energy efficiency tax credit can be applied to energy efficient central air conditioners, electric heat pump water heaters, natural gas, propane, or oil water heaters, advanced main air circulating fans, and certain biomass-fueled stoves.

Contact:

Public Information Officer

Office of Real Property Services 16 Sheridan Avenue Albany, NY 12210-2714

Phone: (518) 486-5446 **Fax:** (518) 474-9276

E-Mail: nysorps1@orps.state.ny.us **Web site:** http://www.orps.state.ny.us/

Local Option - Solar, Wind & Biomass Energy Systems Exemption

Last DSIRE Review: 10/28/2008

Incentive Type: Property Tax Exemption

Eliqible Renewable/Other Solar Water Heat. Solar Space Heat. Solar Thermal Electric. Solar Thermal Process

Technologies: Heat, Photovoltaics, Wind, Biomass, Daylighting, Anaerobic Digestion

Applicable Sectors: Commercial, Industrial, Residential, Agricultural

Terms: 15-year exemption

Website: http://www.orps.state.ny.us/

assessor/manuals/vol4/part1/section4.01/sec487.htm

Authority 1: NY CLS Real Property Tax, Article 4 § 487

Date Enacted: 1977; amended 1990, 2002, 2006

Effective Date: Before 7/1/88 or between 1/1/91 & 12/31/2010

Expiration Date: 12/31/2010

Summary:

Section 487 of the New York State Real Property Tax Law provides a 15-year real property tax exemption for solar and wind energy systems constructed in New York State. As currently effective, the law is a *local option* exemption, meaning that local governments are permitted decide whether or not to allow it. The exemption was mandatory prior to a 1990 reenactment in which the local option clause was added. The exemption is valid unless a government opts out of the exemption, as opposed to the more common practice of requiring governments to "opt-in" in order to offer an exemption.

In September 2002, the property tax exemption was expanded (S.B 6592) to include farm-waste energy systems, defined as systems and related equipment that generate electric energy from biogas produced by the anaerobic digestion of agricultural waste -- such as livestock manure, farming waste and food processing wastes. The maximum rated system capacity for eligible farm-waste energy systems is 400 kilowatts (kW). Senate Bill 5966A, enacted in July 2006, extended the previous January 1, 2006 expiration date until January 1, 2011.

The exemption applies to systems that are (a) existing or constructed prior to July 1, 1988 (mandatory), or (b) constructed subsequent to January 1, 1991, and prior to January 1, 2011 (local option). The law intends to encourage the installation of solar, wind and farm-waste energy equipment systems and to ensure property owners that their real property taxes will not increase as a result of the installation of these systems. The amount of the exemption is equal to the increase in assessed value attributable to the solar, wind or farm-waste energy system. The exemption applies only to general municipal and school district taxes; it cannot be applied to special assessments or special ad valorem levies.

With respect to systems constructed after January 1, 1991, and before January 1, 2011, each county, city, town, village and school district (except the city school districts of New York, Buffalo, Rochester, Syracuse and Yonkers) may choose whether to disallow the exemption. The option must be exercised by counties, cities, towns and villages through adoption of a local law and by school districts through adoption of a resolution. Click here for a list of local bodies that have opted not to offer the exemption. Alternately, a local government is permitted to require the property owner to enter into a contract for payments in lieu of taxes, not to exceed the amount payable without the exemption.

Definitions and guidelines for the eligibility for exemption of solar and wind-energy equipment are available at the web site shown above. Guidelines for farm-waste energy equipment are available from New York State Energy Research and Development Authority (NYSERDA).

Contact:

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16 Sheridan Avenue
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E-Mail: nysorps1@orps.state.ny.us **Web site:** http://www.orps.state.ny.us/

Last DSIRE Review: 02/07/2008

Incentive Type: Utility Rebate Program

Eligible Efficiency

Technologies: Dehumidifiers, Lighting, Heat pumps, Air conditioners, Clothes Washer

Eligible Renewable/Other Geothermal Heat Pumps

Technologies:

Applicable Sectors: Residential

Incentive Amount: Split Central Air Conditioner: \$250-\$600, depending on efficiency rating

Air Source Heat Pump: \$250-\$600, depending on efficiency rating

Geothermal Heat Pump: \$200 - \$1,000/unit, varies by efficiency rating and whether the

unit is a replacement or a new installation

Clothes Washer: \$50 Dehumidifier: \$10

Cold Cathode Lights: \$2.00 per pack

Specialty Compact Fluorescents (CFLs): \$2.00 per pack

High Heat Reflector Lamp: \$2.50 per pack

Equipment Requirements: Central A/C: Minimum SEER 14, EER 12

Air Source Heat Pumps: Minimum SEER 14, EER 12, HSPF 8.2

Geothermal Heat Pumps: Minimum EER 13

Clothes Washer: Minimum Modified Energy Factor (MEF) of 2.2 or higher and Water

Factor (WF) of 4.5 or less

Dehumidifier: Energy Star qualified

Expiration Date: 12/31/2008

Project Customers must use participating Cool Homes Contractors to be eligible for rebates under

Review/Certification: that program

Website: http://www.lipower.org/cei/coolhomes.rebates.html

Summary:

Long Island Power Authority offers incentives for its residential customers to increase the energy efficiency of their homes through a variety of programs. The Cool Homes Program provides rebates for energy-efficient central air conditioning systems and air-source heat pumps. The minimum efficiency ratings for both items are SEER 14 and EER 12, which qualifies the owner for a \$250 per unit rebate. However, if the units have a SEER greater than or equal to 15 and an EER greater than or equal to 12.5, the rebate amount is increased to \$400 per unit and to \$600 per unit for systems with a minimum SEER of 16 and a minimum EER of 13. The units must be installed by a participating Cool Homes Contractor.

The Geothermal Energy Wise Program provides rebates for new and replacement geothermal heat pumps. Rebate amounts for 2008 range from \$200 - \$1,000 per *unit* depending on the efficiency rating and whether the unit is new or replacing an existing geothermal system. Rebates in preceding years were based on *size* (\$/ton) so the 2008 program year incentives are a significant change. In general, the new system will result in a smaller rebate to customers so LIPA has extended the submission deadline for the 2007 program until April 30, 2008. This applies only to installations started during the 2007 calendar year.

Additional prescriptive rebates are available for certain lighting applications, clothes washers, and dehumidifiers. The latter two are mail-in rebates while the former is an in store rebate available at participating retail establishments. Click here to view further information on rebates for energy efficiency products and appliances.

Contact:

Customer Service

Long Island Power Authority 131 South Hoffman Lane Suite 100

Islandia, NY 11749 **Phone:** (800) 692-2626

Web site: http://www.lipower.org/

Long Island Power Authority - Solar Pioneer Program

Last DSIRE Review: 01/10/2008

Incentive Type: Utility Rebate Program

Eligible Renewable/Other Photovoltaics

Technologies:

Applicable Sectors: Commercial, Residential, Nonprofit, Schools, Local Government, State Government

Incentive Amount: Residential and Commercial: \$3.50/watt DC;

Schools, Nonprofits, Government agencies: \$4.50/watt DC

Eligible System Size: 10 kW maximum;

Systems should be sized to not exceed annual electricity consumption in kWh

Equipment Requirements: Systems must be new, UL-listed, and compliant with all applicable performance and safety

standards; minimum twenty-year warranty on the panels and a five-year warranty on the

inverter

Installation Installation must comply with all Federal, state and local codes; must be grid-connected

Requirements: and comply with New York's Standard Interconnection Requirements

Project Systems subject to post-installation inspection prior to issuance of a rebate and follow-up

Review/Certification: visits for monitoring performance.

Website: http://www.lipower.org/solar

Effective Date: 2000

Summary:

LIPA launched the Solar Pioneer Program in 2000 as part of the utility's five-year Clean Energy Initiative -- a \$32 million commitment to developing clean energy alternatives. In May 2003, LIPA announced that it would extend its Clean Energy Initiative for another five years and increase funding levels by \$5 million per year, to an annual investment of \$37 million and a total investment of \$185 million.

LIPA's Solar Pioneer program is designed to offer rebates that are approximately 50% of the costs for a PV system. As the PV market has been growing, the overall PV prices have been trending downward. LIPA's rebates are designed to reflect the current PV costs. LIPA grid connected customers are eligible for a rebate.

Currently, LIPA offers rebates for (PV) system installations of \$3.50 per watt (DC) for residential and commercial customers. In April of 2005, LIPA announced additional rebates of \$1 per watt above the current rebate levels (\$4.50/watt total) for school, not for profit, and government facilities to help compensate for tax incentives available to residential and commercial customers. For the extra dollar per watt, proof of non profit (501(c)3) or equal is required and tax credits/depreciation cannot be applied for the PV installation. The maximum eligible system size is 10 kW.

As of January 2008, LIPA has issued rebates for 1,133 PV systems, with an average PV system size of approximately 5.9 kW.

Contact:

Customer Service - LIPA Long Island Power Authority 333 Earle Ovington Blvd Uniondale, NY 11553

Phone: (800) 692-2626

Web site: http://www.lipa.state.ny.us

National Grid - Residential (Gas) Energy Efficiency Programs

Last DSIRE Review: 07/23/2008

Incentive Type: Utility Rebate Program

Eligible Efficiency Equipment Insulation, Water Heaters, Furnaces, Boilers, Programmable Thermostats,

Technologies: Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows

Applicable Sectors: Residential, Multi-Family Residential

Incentive Amount: Rebates: Vary by technology

Weatherization Program: 20% of costs

Maximum Incentive: Weatherization Program: Up to \$750

Website: http://www.thinksmartthinkgreen.com

Summary:

National Grid offers a number of programs to encourage energy efficiency amongst its residential customers.

National Grid's High Efficiency Heating Rebates are offered to any residential heating customer in Massachusetts, New Hampshire, Rhode Island and Metro New York. Eligible technologies include boilers and furnaces. Rebates of up to \$1,000 are available, depending on equipment type. All equipment must meet certain energy standards provided on the website. Applications are to be completed and sent in after equipment installation. The application form is available on the program's website.

National Grid also offers \$10 rebates to residential heating customers for every ENERGY STAR® replacement window with a U-factor of .35 or less installed in their home, and \$50 rebates are available for the purchase and installation of programmable thermostats. In addition, National Grid offers a rebate of up to \$300 for energy efficient on-demand tankless water heaters and high efficiency in-direct water heaters. Applications for all of these rebates can be found off the program website above or at the individual program websites.

National Grid Residential Weatherization Program is for heating customers in New England. The program provides a rebate covering 20% of the cost, up to \$750, for various weatherization measures, including: attic, wall, basement, crawl space, rim joist, and heating system duct insulation; attic ventilation; and air infiltration and ductwork leakage testing and sealing. Work must be completed by a National Grid approved contractor.

Contact:

National Grid Energy Efficiency

Phone: (800) 292-2032

Web site: http://www.thinksmartthinkgreen.com

National Grid - Solar Thermal Rebate Program

Last DSIRE Review: 07/16/2008

Incentive Type: Utility Rebate Program

Eligible Renewable/Other Solar Water Heat, Solar Space Heat, Solar Thermal Process Heat, Solar Pool Heating

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Multi-Family Residential, (National Grid

Customers Only)

Incentive Amount: Residential: 15% of project costs, up to \$1,500;

Commercial/Multi-family: \$3/therm based on estimated first-year savings

Maximum Incentive: Residential: \$1,500;

Commercial/Multi-family: \$100,000 per project, up to 50% of project costs

Website: http://www.thinksmartthinkgreen.com

Summary:

National Grid provides funding support to residential, commercial, industrial, and multifamily customers who install solar thermal technologies. Recommended solar thermal applications include solar hot water heating, solar pool heating, and in some cases solar space heating or high temperature process applications. Eligibility requirements are in place to ensure quality installation of solar thermal systems.

Residential customers: National Grid customers with eligible SHW systems can apply for a rebate of 15% off project costs up to a maximum of rebate of \$1,500 for solar water heating systems. This rebate requires that participating customers share their water heating usage data for a period of 12 months in order to receive funding. National Grid works directly with residential solar installers, who submit rebate applications on behalf of the customer.

Commercial & Industrial, and Multi-family customers: National Grid requires a free energy audit to interested participants to identify appropriate solar thermal technologies as well as estimated natural gas savings. Commercial, industrial, and multifamily customers receive a one-time rebate of \$3 per therm of estimated first-year savings, up to 50% of the project costs or \$100,000 per project.

Funding is limited. For further information please vist the program website or contact National Grid using the information below.

Contact:

General Information

Solar Thermal National Grid

Phone: (800) 292-2032 E-Mail: solar@us.ngrid.com

Web site: http://www.thinksmartthinkgreen.com

New York City - Property Tax Abatement for Photovoltaic (PV) Equipment Expenditures

Last DSIRF Review: 08/14/2008

Incentive Type: Property Tax Assessment

Eligible Renewable/Other Photovoltaics

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Multi-Family Residential,

Institutional

Amount: Installed from August 8, 2008 to December 31, 2010: 8.75% of system expenditures per

year for 4 years (total of 35%);

Installed from January 1, 2011 to December 31, 2012: 5% of system expenditures per year

for 4 years (total of 20%)

Maximum Incentive: \$62,500 annually or the amount of real property taxes owed during a year

Terms: Systems must be located within a city with a population of at least 1 million (i.e., New York

City)

Authority 1: A.B. 11202 **Date Enacted:** 08/08/2008 **Effective Date:** 08/08/2008

Summary:

In August 2008 the State of New York enacted legislation allowing property tax abatements for photovoltaic (PV) system expenditures made on buildings located in cities with a population of 1 million or more people. This essentially limits the abatement to systems installed within New York City. Eligible buildings include all real property except utility real property.

The abatement allows building owners to deduct from their total real property taxes* a portion of the expenditures associated with installing a PV system on an eligible building. Systems placed in service between August 8, 2008 (the effective date) and December 31, 2010 are eligible for an abatement of 8.75% of eligible expenditures annually for four years. Systems placed in service between January 1, 2011 and December 31, 2012 are eligible for an abatement of 5.0% of eligible expenditures annually for 4 years. Thus the total property tax benefit can amount to either 35% or 20% of the installed system cost depending on when it is built.

The maximum abatement during a year is \$62,500 or the amount of real property taxes owed during the year. Unused balances *may not* be carried forward to subsequent years. Eligible expenditures include reasonable expenditures for materials and labor associated with planning, designing, and installing the system. Expenditures incurred using a federal, state, or local grant are not eligible, nor are interest or finance charges.

The abatement program will be administered by the Department of Finance in cooperation with the agency or agencies designated for this purpose by the Mayor. Applications for the abatement may not be filed until the beginning of 2009, although systems placed in service on or after August 8, 2008 remain eligible for the abatement. It is important to note that claiming the abatement *does not* effect whether a building owner can claim New York's real property tax exemption on the value added by solar, wind, and farm-based biogas energy systems.

*This incentive is similar to an investment tax credit for renewable energy systems, which are frequently applied to personal or corporate income taxes. It is unique in that the tax benefits are recouped through reduced property taxes on the host building instead of through reduced income taxes.

Contact:

Customer Assistance

New York City Department of Finance Property Taxes P.O. Box 32 Church Street Station New York, NY 10008-0032

Phone: (212) 504-4080

Web site: http://www.nyc.gov/html/dof/html/home/home.shtml

Jen Becker

New York City Economic Development Corporation 110 William Street New York , NY 10038

Phone: (212) 619-5000 Phone 2: (888) 692-0100 E-Mail: jbecker@ncyedc.com

Web site: http://www.nycedc.com/Web/HomePage.htm

NYSERDA - Anaerobic Digester Gas-to-Electricity Rebate and Performance Incentive

Last DSIRE Review: 11/04/2008

Incentive Type: Production Incentive
Eligible Renewable/Other Anaerobic Digestion
Technologies:

Applicable Sectors: Commercial, Industrial, Residential, General Public/Consumer, Nonprofit, Schools, Local

Government, Tribal Government, Agricultural

Amount: \$500/kW capacity incentive for new equipment AND

\$0.10/kWh production payment for new systems OR

\$0.02/kWh maintenance payment on production from systems installed or substantially

upgraded since Jan. 1, 2003.

Maximum Incentive: \$1 million (combined production and capacity incentives)

Capacity incentive capped at lesser of \$350,000 or 50% of project cost

Terms: 3 years

Website: http://www.powernaturally.org/

Funding/funding.asp?i=2

Summary:

Note: While this incentive has been categorized as a production incentive, it is important to note that it includes a system capacity incentive designed to buy down the initial cost of the system and/or system upgrades. Since the production incentive can be expected to be the dominant form of assistance to digester facilities, the program has been categorized as such.

The Anaerobic Digester Gas-to-Electricity program is designed to support smaller sized electricity generation where the energy generated is used primarily at the electric customer's location. Eligibility is generally limited to customers that pay the RPS surcharge on their electric bills. The electricity generated under the program will be counted towards the Customer-Sited Tier (CST) portion of the state RPS (2%). The application period ends May 30, 2009 and a total of \$20.1 million* is available to fund incentive payments, limited to \$1 million per Anaerobic Digester Gas (ADG) system. Incentive payments are available for both new installations and for the installation of new equipment on existing facilities according to the guidelines discussed below. Incentives will generally be limited to the larger of:

- the customer's approximate Peak Connected Load
- 400 KW, the capacity eligibility limit on farm based electricity generating equipment under New York's net metering law.

In order to participate in this program, Applicants must comply with all program rules, procedures, and eligibility requirements, submit all required forms and supplemental documentation, and enter into a Standard Performance Contract Agreement with NYSERDA. Applicants must also adhere to measurement and verification requirements throughout the term of the Agreement.

Capacity Incentive

This incentive is available only for equipment installed on or after Feb. 12, 2007 and valued at \$500/KW. Eligible equipment includes controls, meters, biogas clean-up equipment, emissions control equipment, interconnection equipment, and costs associated with engineering services. New equipment installed into an existing system will be valued at the incremental increase it provides to the system capacity compared to the baseline generation, if any, existing at the host site on Feb. 11, 2007. This rule applies to replacements of existing equipment as well as system additions. The capacity incentive is capped at \$350,000 or 50% of new equipment costs, whichever is less. If a host site has received prior funding under a contract with NYSERDA for the electric generation equipment associated with the application, then that equipment will not be eligible for a capacity incentive.

Production Incentive

Performance incentives are offered for verified ADG-fueled electricity generation, and may be provided for up to three years. The incentive for electricity generated by equipment installed on or after Feb. 12, 2007 is valued at \$0.10/kWh. For systems installed or substantially upgraded on or after Jan. 1, 2003, but before Feb. 12, 2007, a Maintenance incentive payment of \$0.02 kWh is available. Significant upgrades are defined as those that:

- increase the generating capacity/electricity production of an existing system
- improve the operation of an existing system so that it may attain a Capacity Factor of 80%
- improve the operation of an existing system to bring it into compliance with state and federal emission standards

For system planning purposes, NYSERDA has included an incentive calculating tool in Section C of the application documents, available under PON 1146 at the website listed above.

*The original Customer-sited Tier Operating Plan authorizes \$11 million in funding for this incentive program. However, an additional \$1.5 million in discretionary funding was later added to keep pace with increasing market demand. A further allocation of \$7.6 million was added in October 2008 by order of the PSC, bringing total 2007-2009 funding to \$20.1 million.

Contact:

Sarah Osgood

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399

Phone: (518) 862-1090 Ext.3301 **E-Mail:** sjo@nyserda.org

Web site: http://www.nyserda.org/

NYSERDA - Distributed Generation as Combined Heat and Power (DG-CHP)

Last DSIRE Review: 07/15/2008

Incentive Type: State Grant Program Eligible Renewable/Other CHP/Cogeneration

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Institutional

Amount: Varies

Maximum Amount: Category A (Demonstration): 30-50% of project cost up to \$2 million

Category A-1 (Fleet Demonstration): 30-50% of project cost up to \$4 million Category B (Recommissioning Study): 50% of project cost up to \$75,000 Category C (Technology Transfer): 75% of project cost up to \$100,000

Equipment Requirements: Category A: The DG-CHP system must be designed and installed for grid independent

operation and be able to supply priority loads during a grid outage; Must have a projected overall thermal efficiency of 60% or more; and

Meet an air emission limit of of no more than 1.6 lb NOx/MWh

Project Category A: Commissioning requires a Project Installation Report; **Review/Certification:** NYSERDA may inspect system any time up to 4 years after commissioning

Funding Source: System Benefits Charge (SBC)

Program Budget: \$25 million

Website: http://www.nyserda.org/Funding/funding.asp?i=2

Expiration Date: Round 1: 08/14/2008

Round 2: 12/11/2008 Round 3: 04/16/2009

Summary:

The NYSERDA DG-CHP program is a multi-faceted initiative designed to support the advancement of DG-CHP technology within the state through new demonstration, existing facility improvement, and technology transfer. The available incentives are broken down into three unique categories in accordance with these goals.

Category A: Demonstration

In general, Category A projects at single sites are eligible for grants up to the lesser of 30% of project costs or \$2 million. Category A-1 projects are multiple site projects where the where the sites have similar electrical and thermal load, and are under common ownership. These projects are eligible for a maximum award of \$4 million. However, an additional cost share of up to 20% (for a total of 50%) may be provided for both types under certain circumstances. Each of the characteristics listed below may increase maximum award by 10%.

- The project is located in ConEd service territory;
- The project is connected to a "spot network" (as opposed to a radial grid) outside of ConEd service territory;
- The project is powered by a renewable fuel or waste heat, but not eligible for incentives under the state RPS program; or
- The project is designed to provide seamless flicker-free between normal and back-up power when serving priority loads during periods of grid-outage;
- The system will be an integral part of a "facility of refuge", available during disaster or emergency;
- The project utilizes a pre-engineered, pre-packaged, factory tested DG-CHP system that integrates electric generation and thermal systems.

As with other programs funded out by the New York System Benefits Charge (SBC), projects must be located in New York within the service territories of one of New York's investor owned utilities (i.e., those that levy the SBC charge on customer bills). In addition, systems must be designed to have a projected thermal efficiency of 60%, have air emissions of less than 1.6 lbs of NOx/MWh of electricity produced, and be capable of grid independent operation to supply priority loads during periods of grid outage. Projects awarded funding under some prior NYSERDA DG programs are not eligible, nor are systems using commercially available fuel cells and DG systems fueled by anaerobic digester gas that are eligible to participate in the New York Renewable Portfolio Standard (RPS) program. However, proposals seeking to augment existing equipment to meet program eligibility requirements are eligible. Please consult program documents for information on additional restrictions and exceptions to some of these rules. All systems must be commissioned within one year of the NYSERDA award notification.

Category B: Recommissioning Studies

This category will provide the lesser of \$75,000 or 50% of the cost of recommissioning studies of existing DG-CHP systems for the purpose of identifying cost-effective changes that would increase the value of the system. To be eligible, a DG-CHP system must have received assistance under a previous NYSERDA demonstration program, have been put into service prior to June 1, 2005, and be presently operational or be able to be rendered operational with minimum effort. As the purpose of this solicitation is to provide for improved performance of existing systems, sufficient operational data must be available for an analysis to take place.

Category C: Technology Transfer Studies

Proposals for technology transfer studies designed to broaden the market penetration of DG-CHP systems are eligible to receive funding up to the lesser of \$100,000 or 75% of total costs. In general, proposers must be able to demonstrate that their study can build upon or be integrated into other NYSERDA DG-CHP efforts. Studies proposing to examine completed or ongoing efforts from outside of New York must emphasize a New York focus lacking in the original study. All studies must be completed within two years of the NYSERDA award notification.

A total of \$25 million is available for all aspects of this program. Proposals will be evaluated in three rounds according to the following proposal due dates: August 14, 2008; December 11, 2008; and April 16, 2008. None or all of the funding may be awarded in any one round. Further information on this program, including additional eligibility details, applications and informational workshop dates, is available under PON 1241 from the NYSERDA funding link at the top of this page. Click here for information on DG-CHP projects previously funded by NYSERDA.

Contact:

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Albany, NY 12203-6399

Phone: (518) 862-1090 Ext.3269 **Phone 2:** (866) 697-3732

Fax: (518) 862-1091 E-Mail: ebk@nyserda.org

Web site: http://www.nyserda.org/

Last DSIRE Review: 08/06/2008

Incentive Type: State Grant Program

Eligible Efficiency

Technologies: Refrigerators/Freezers, Lighting, Duct/Air sealing, Building Insulation, Heating Systems

Applicable Sectors: Residential, Multi-Family Residential, Low-Income Residential

Amount: No cost for income-qualified customers

Installation Services are delivered by Building Performance Institute accredited contractors and

Requirements: participating Weatherization Agencies.

Funding Source: System Benefits Charge

Program Budget: \$49.4 million (July 1, 2006 - June 30, 2011)

Website: http://www.getenergysmart.org/

LowIncome/EmPower.aspx

Summary:

The focus of EmPower New York is on cost-effective electric reduction measures, particularly lighting and refrigerator replacements, as well as other cost-effective home performance strategies such as insulation, and health and safety measures. The New York State Energy Research and Development Authority (NYSERDA) contracted with Honeywell DMC to implement the EmPower New York Program.

Funding is limited, and services will be targeted to customers on the basis of energy usage and the potential for energy-saving measures. In order to qualify for electric efficiency incentives, customers must live in a building with 100 or fewer units, and either participate in a utility assistance program or have a income at 60% or less of the median income. Income-qualified natural gas customers of Con Edison and National Grid residing in 1-4 family homes are eligible for additional gas efficiency incentives. Eligible measures may include building insulation, heating system upgrades, draft reduction, and fuel conversion for certain appliances.

With the exception of the gas efficiency incentives described above, participants must be electric customers of one of the following utilities to be eligible for this program: Central Hudson, Con Edison, National Grid, NYSEG, Orange & Rockland, or Rochester Gas and Electric. There is no cost to the customer for these efficiency improvements. In rental situations, certain measures that directly benefit the eligible tenant are eligible without a landlord contribution. Additional measures generally require a 25% landlord contribution.

Contact:

EmPower New York Honeywell International P.O. Box 2489 Syracuse, NY 13220 Phone: (800) 263-0960

Web site: http://buildingsolutions.honeywell.com/Cultures/en-US/

NYSERDA - Energy \$mart Loan Fund

Last DSIRE Review: 08/06/2008

Incentive Type: State Loan Program

Eligible Efficiency Clothes Washers/Dryers, Dishwasher, Refrigerators/Freezers, Dehumidifiers, Ceiling Fan, Technologies: Water Heaters, Lighting, Chillers, Furnaces, Boilers, Heat pumps, Air conditioners, Heat

recovery, Programmable Thermostats, Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows, Doors, Motors, Custom/Others pending approval

Eligible Renewable/Other Solar Water Heat, Photovoltaics, Wind, Biomass, Geothermal Heat Pumps

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Local Government, State Government, Fed.

Government, Multi-Family Residential, Agricultural, Institutional, Healthcare Facility

Maximum Amount: \$20,000 for 1-4 family homes

\$2.5 million (\$5,000/unit) for existing multi-family construction, plus an additional maximum

of \$2,500,000 for projects that include advanced meters

\$1 million per borrower for all other non-residential facilities (plus additional \$500,000 for

Green Building Improvements)

Terms: Up to 4.0% below the lender rate for ten years

Up to 6.5% below the lender rate for certain commercial and multi-family borrowers in the

Con Edison service area

Installation Work performed on a 1-4 family home must be completed by a Building Performance

Requirements: Institute (BPI)-certified home performance contractor, with the exception of the purchase

and installation of wind and PV energy systems, heat pump hot water heaters, and the

purchase of ENERGY STAR® appliances.

Funding Source: System Benefits Fund

Expiration Date Current terms available through 07/31/2009

Website: http://www.nyserda.org/loanfund/

Summary:

The New York Energy \$mart Loan Fund, administered by the New York State Energy Research and Development Authority (NYSERDA), provides reduced-interest rate loans through participating lenders to finance renovation or construction projects that improve a facility's energy efficiency or incorporate renewable energy systems. Any commercial, industrial, retail, agricultural, non-profit, residential, or multifamily facility that is an electric distribution customer of one of the State's six investor-owned utilities is eligible for this interest rate reduction program.

All facilities excluding 1-4 Family homes may also qualify for Green Building Improvement, up to \$500,000. To be eligible for a loan for Green Building Improvements, the borrower must provide evidence that the building has been registered for LEED certification with the United State Green Building Council. All existing multi-family buildings must have received technical assistance through the NYSERDA Multi-family Performance Program or another NYSERDA offered technical assistance program or solicitation.

For grid-connected photovoltaic and wind turbine systems, a customer must first be approved to receive incentives through NYSERDA's Powernaturally program. Once a customer has been approved to receive these incentives, they may then apply to the Loan Fund for a low-interest loan for their out-of-pocket expenses. Wind and photovoltaic (PV) systems are included as eligible measures for all customer classes.

To apply to the Loan Fund, complete the Loan Fund Borrower Package from NYSERDA in addition to the individual lender application. The current terms are available through July 31, 2009.

Contact:

Marcia Ruth

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399

Phone: (518) 862-1090 Ext.x3412

Phone 2: (866) 697-3732 **Fax**: (518) 862-1091 **E-Mail**: mcr@nyserda.org

Web site: http://www.nyserda.org/

Last DSIRE Review: 02/14/2008

Incentive Type: State Rebate Program

Eligible Renewable/Other Fuel Cells

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, Utility, State

Government, Institutional

Incentive Amount: Varies by size, sector, and performance, includes capacity and performance incentives

Maximum Incentive: Small systems (<25kW): \$50,000

Large systems (>25kW): \$1 million

Eligible System Size: None specified, though incentives are capped and generally not available for capacity in

excess of a customer's load

Equipment Requirements: Systems must be new and NYSERDA approved;

Customer must acquire 3-year enduring system warranty from the manufacturer; Large systems are required to have remote data collection capability and high-grade

monitoring and sensor equipment

Installation Must comply with all applicable national, state, and local code, permitting, and emission

Requirements: standards

Program Budget: Total: \$11.2 million

Small Systems: \$1.5 million (set aside, remaining funds available for projects of all sizes)

Ownership of Renewable NYSERDA retains environmental attributes for all electricity production that receives the

Energy Credits: performance incentive. Methane destruction credits earned by systems fueled with landfill

gas, biogas, and anaerobic digester gas are retained by the owner.

Funding Source: State RPS surcharge

Expiration Date 05/29/2009

Project NYSERDA may conduct post installation site inspection;

Review/Certification Annual reports required for 3-year management and verification period

Website: http://www.nyserda.org/funding/1150pon.asp

Summary:

Note: This incentive program contains both a capacity based up front rebate and a performance incentive.

Under PON 1150 The New York State Energy Research and Development Authority (NYSERDA) offers incentives for the purchase, installation, and operation of customer sited tier (CST, also called "behind the meter") fuel cell systems used for electricity production. Because such systems will help fulfill the CST component of the state RPS requirement, eligibility for incentives is generally limited to customers who pay the RPS surcharge on their electricity bills. Exceptions to this rule may be made on a case-by-case basis for projects that demonstrate significant public benefits consistent with program objectives. There are no minimum or maximum size limits for projects, though incentives will generally be granted only for installed capacity not exceeding the customer's electrical load. Exceptions to this rule may be made on a case-by-case basis and participants are permitted to install excess capacity at their own expense. Systems purchased and installed prior to February 12, 2007 are not be eligible to receive incentives under this program.

Incentive levels and limitations vary by system size, customer sector, and system performance. Bonus capacity incentives are available for projects that provide secure/standalone capability at sites of Essential Public Services (e.g., police stations, hospitals, public utilities). Performance incentives can be received for up to 3 years at different levels (\$/kWh) depending on the system capacity factor. The total value of incentives is capped at \$50,000 for systems smaller than 25 kilowatts (kW) and at \$1 million for larger systems. The incentive amounts offered to different types of systems are as follows:

Basic Capacity Incentive

- Small systems (less than 25 kW): \$2,000/kW up to \$20,000 per project site
- Large systems (greater than or equal to 25 kW): \$1,000/kW up to \$200,000 per project site

Bonus Capacity Incentive

- Small systems (less than 25 kW): \$500/kW up to \$2,500 per unit and \$5,000 per project site
- Large systems (greater than or equal to 25 kW): 500/kW up to \$100,000 per project site

Performance Incentive

- Annual capacity factor greater than or equal to 50%: \$0.15/kWh up to \$10,000/year for small systems or \$300,000/year for large systems
- Annual capacity factor less than 50%: \$0.05/kWh up to \$10,000/year for small systems or \$300,000/year for large systems

Projects will receive the first half of the basic capacity payment upon system installation and the remaining portion plus any bonus incentives after the system has been commissioned and approved by NYSERDA. The capacity factor for the performance incentive will be determined annually by dividing the net system output by the theoretical maximum output (rated capacity times 8760 hours/year). The performance incentive will be disbursed annually after the appropriate rate has been calculated based on performance data.

All systems, regardless of size, must be new and listed as an eligible system by NYSERDA. Participants must also acquire a 3-year enduring system warranty from the manufacturer. Systems larger than 25 kW are required to have high-grade monitoring and sensor equipment (e.g., revenue grade fuel and electricity meters) and remote data collection capability. Owners of small systems may elect to have their system monitored using quarterly, manual data collection by a NYSERDA agent. Systems are subject to post installation inspection by NYSERDA and all participants are required to abide by the 3-year monitoring and verification reporting requirements.

NYSERDA will own all RPS and environmental attributes for which a system is eligible for performance payments (i.e., for up to three years). However, in cases where the system is fueled by landfill gas, biogas, or anaerobic digester gas*, methane destruction credits are considered separate from electric power based RPS attributes and may be retained by the owner. Such credits could potentially have value under the Regional Greenhouse Gas Initiative (RGGI) in future years. Participants that receive *only* the performance incentive are eligible to terminate participation if they can provide evidence demonstrating that their RPS attributes are being sold into a voluntary green energy program in New York State throughout the 3-year monitoring and verification period. In such instances, applicants must still abide by the mandatory monitoring and verification requirements.

Interested parties should consult the program website for further details. In addition, fuel cell systems using waste heat for purposes that lower electricity demand may be eligible for incentives under the NYSERDA Peak Load Reduction Program.

*Fuel cell systems fueled exclusively by anaerobic digester gas (ADG) must apply first to the NYSERDA ADG-to-Electricity Rebate and Performance Incentive program. Such systems are only eligible under the fuel cell program when funds for the dedicated anaerobic digester incentives have been depleted.

Contact:

Scott Larsen

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17 Columbia Circle Albany, NY 12203-6399

Phone: (518) 862-1090 Ext.3208 **Phone 2:** (866) 697-3732

Fax: (518) 862-1091 E-Mail: LSL@nyserda.org

Web site: http://www.nyserda.org/

NYSERDA - Home Performance with Energy Star Loan Program

Last DSIRE Review: 08/06/2008

Incentive Type: State Loan Program

Eligible Efficiency Clothes Washers/Dryers, Dishwasher, Refrigerators/Freezers, Dehumidifiers, Ceiling Fan, Technologies: Water Heaters, Lighting, Furnaces, Boilers, Heat pumps, Air conditioners, Heat recovery,

Programmable Thermostats, Duct/Air sealing, Building Insulation, Windows, Doors,

Custom/Others pending approval

Eligible Renewable/Other Solar Water Heat, Photovoltaics, Wind, Biomass, Geothermal Heat Pumps

Technologies:

Applicable Sectors: Residential

Amount: Up to 100% in costs; \$2,500 - \$20,000

Maximum Amount: \$15,000 or \$20,000, depending on applicant's credit score

Terms: 5.99% APR; fixed loan terms of 3, 5, 7 and 10 years; Unsecured loan

Equipment Requirements: Measures installed must meet minimum energy specifications as set forth by loan

program; if a measure meets Energy Star qualifications, it is eligible.

Installation Equipment must be installed by approved Building Performance Institute (BPI) certified

Requirements: contractors

Project Signed Certificate of Completion by contractor, to be reviewed and approved by program

Review/Certification: administrator

Funding Source: System Benefits Fund

Website: http://www.getenergysmart.org/

SingleFamilyHomes/ExistingBuilding/HomeOwner/Financing.aspx#

Summary:

NYSERDA, in partnership with Energy Finance Solutions (EFS) offers an unsecured loan for the installation of qualified energy efficient and renewable energy measures in owner-occupied 1-2 family homes.

To initiate the loan, a Comprehensive Home Assessment (CHA) must be performed by a certified Building Performance Institute (BPI) contractor, which may cost a small fee. After the CHA is performed, the borrower will work with the contractor to decide what improvements should be made. For any improvements and replacement appliances, the borrower will sign a customer contract and a "Home Performance Work Scope." After a credit check and these forms are submitted, work may begin. Following completion of the work, a Certificate of Completion will be sent to the program administrator. Following review and approval, payment will be rendered directly to the contractor and the borrower will commence repaying the loan.

As with other programs funded by the state system benefits charge (SBC), eligibility is limited to homeowners who receive electric service from one of the following utilities:

- Central Hudson Gas & Electric Corporation
- Consolidated Edison Company of New York, Inc.
- New York State Electric and Gas Corporation
- National Grid
- Rochester Gas and Electric Corporation
- Orange and Rockland Utilities, Inc.

For further information on this program, please consult the program website(s) or use the contact information provided below.

Contact:

Public Information Officer Energy Finance Solutions 431 Charmany Drive Madison, WI 53719

Phone: (800) 361-5663 Phone 2: (800) 969-9322 Fax: (608) 249-5788

E-Mail: efs@energyfinancesolutions.com

Web site: http://www.energyfinancesolutions.com/

Last DSIRE Review: 06/17/2008

Incentive Type: State Rebate Program

Eligible Renewable/Other Wind Technologies:

Applicable Sectors: Commercial, Residential, General Public/Consumer, Nonprofit, Schools, Local

Government, State Government, Agricultural

Incentive Amount: Varies by the make and model of the wind turbine, the difference between the standard

tower height and the actual tower height, and the classification of the wind turbine owner

Maximum Incentive: \$150,000 per site Eligible System Size: 800 W - 250 kW

Equipment Requirements: Wind generation system must be a new, program-approved model;

Inverters require UL-1741, IEEE-929, and NY PSC certification;

System monitoring equipment is required, specifications vary by system size

Installation Must be installed by a program-approved installer;

Requirements: All systems must be grid-connected

Program Budget: ~ \$3.1 million (2007-2009)*
Funding Source: Public Benefits Fund

Expiration Date December 31, 2009, or until funds are fully committed

Project NYSERDA will not process any payments without proof that all required permits,

Review/Certification approvals, certificates, etc. from all jurisdictions having authority are secured. Final

payment will not be made until the wind system is grid-connected and approved by the responsible utility. NYSERDA reserves the right to review any installation prior to final

incentive payment being made.

Website: http://www.powernaturally.com/

Programs/Wind/incentives.asp?i=8

Summary:

The New York State Energy Research and Development Authority (NYSERDA) provides incentives for eligible small wind systems. Incentive payments are not paid directly to the owner of the wind system. Instead, they are paid to eligible installers that have been approved to participate in this program, but the entire incentive must be passed on to the owner of the wind system by the eligible installer.

NYSERDA has identified a total of 29 wind system models made by 12 different manufacturers as being eligible for the incentive. The eligible models range in size from 800 W to 250 kW. Each model is eligible for a different base incentive which can be increased or decreased depending on the height of the tower used for the system. Bergey Windpower's BWC XL.1, for example, has a base incentive of \$4,000 at a suggested tower height of 80 feet. If the installed tower is shorter than 80 ft, the incentive is decreased by \$30 for every foot decrease. Other wind system models have a different tower height adjustment factor which can be seen in the program details. All systems must be new and grid-connected. Equipment eligibility restrictions also exist for power inverters, monitoring equipment, and other system components.

The actual incentive can also be adjusted depending on the classification of the wind system owner. Residential, business, institutional and governmental participants receive the standard incentive, adjusted accordingly for the tower height. Commercial farms, non-profits, municipalities and counties, however, can multiply their incentive by 1.2. Schools or colleges that include wind in their curriculum can multiply their incentive by a factor of 1.4. Conversely, customers that perform more than \$2,000 worth of work on ther project receive a multiplication factor of 0.75 and sites with multiple wind generator receive a 0.4 multiplier. Commercial farms must provide evidence that they have at least \$10,000 of farm-related average gross sales, excluding any income from leasing land. Not-for-profits must show evidence that they have 501(c)(3) status. And schools and colleges that include wind in their curriculum must demonstrate sufficient educational benefits to NYSERDA to qualify for the higher incentive level.

Incentives are paid in two installments. Sixty-five percent (65%) of the incentive is paid after the equipment is delivered to the installation site and all required permits, approvals, certificates, etc. from all jurisdictions having authority are secured. The remaining thirty-five (35%) is paid when the wind system is grid-connected and approved by your utility. NYSERDA reserves the right to review any installation prior to final incentive payment being made.

Incentives provided to customers under this program may not be combined with any other incentive programs offered by NYSERDA, designed to directly offset the cost of a wind installation with the exception of the New York Energy \$mart Loan Fund.

*This program was originally funded at \$1.5 million annually for 3 years (2007-2009) under the Customer-Sited Tier Operating Plan. However, funding was reduced by \$1.4 million in order to meet demand for the photovoltaic (PV)program.

Contact:

Public Information Specialist

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399 **Phone:** (866) 697-3732 **Phone 2:** (518) 862-1090 **Fax:** (518) 862-1091

Fax: (518) 862-1091 **E-Mail:** info@nyserda.org

Web site: http://www.nyserda.org

NYSERDA - PV Incentive Program

Last DSIRE Review: 11/04/2008

Incentive Type: State Rebate Program

Eligible Renewable/Other Photovoltaics

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State

Government, Institutional, (Must be customer of investor-owned utility in NY)

Incentive Amount: \$3-\$5/watt DC, varies by sector, installed capacity, and system type;

Incentive may be reduced for potential production losses associated with shading, system

orientation, tilt angle, and other factors

Eligible System Size: No maximum size restriction, but residential incentives are capped at 10 kW and

non-residential incentives are capped at 50 kW per site/meter. Systems may not exceed

110% of demonstrated energy demand.

Equipment Requirements: Systems must be new, UL-listed, and compliant with all applicable performance and safety

standards; minimum five-year warranty on all equipment and two-year warranty on battery

back-up systems.

Installation Installation must comply with all federal, state and local codes; must be grid-connected

Requirements: and installed by a pre-approved contractor; must comply with New York's Standard

Interconnection Requirements

Program Budget: \$38.8 million (2008-2009)*

Ownership of Renewable

Energy Credits: NYSERDA for first 3 years of system operation, thereafter customer/generator

Funding Source: RPS surcharge

Project Systems may be inspected by NYSERDA and/or other authorities having jurisdiction; **Review/Certification** Performance monitoring and data reporting required for first 3 years of system operation

Website: http://www.powernaturally.org/

Programs/Solar/incentives.asp

Effective Date: 01/29/2008 Expiration Date: 09/30/2009

Summary:

The New York State Energy Research and Development Authority (NYSERDA) provides incentives of \$3 to \$5 per watt (DC) to eligible installers for the installation of approved, grid-connected photovoltaic (PV) systems. The maximum capacity supported by the program is 50 kW for non-residential systems and 10 kW for residential systems. Larger systems are permitted, but incentives are based on these capacity caps. Incentives are only available to eligible installers, and incentives must be passed on to customers. Once eligible, installers reserve incentives for approved systems, for specific customers, on a first-come, first-served basis for as long as funds are available.

During 2008 and 2009, this program will provide \$38.8 million in funding for PV systems.* The program continuously accepts applications from installers who seek to participate. The goal is to increase the network of eligible installers across the state, offering customers a choice of qualified or certified installers in their area.

Installer eligibility will be determined and maintained based on factors such as acceptance of all program terms and conditions, training, installation experience, track record related to utility interconnections, overall performance, monitoring, customer references, customer satisfaction, and commitment to become certified through a national certification program. NYSERDA is providing accredited training opportunities for PV installers to the greatest extent possible. Training opportunities are posted at www.powernaturally.org. The program web site (listed above) provides a list of eligible installers. There are currently approximately 75 installers on the list.

Program incentives effective January 29, 2008, based on direct-current (DC) module ratings at standard test conditions, are as follows:

Residential Incentives

- \$4.00/W up to 5 kW
- \$4.50/W for New York Energy Star homes up to 5 kW
- \$4.50/W for all building integrated PV systems up to 5 kW
- For additional capacity above 5 kW, all residential incentives will be reduced by \$1.00/watt and all
 residential incentives will be capped at 10 kW.

Non-Residential Incentives

- \$4.00/W up to 25 kW
- \$4.50/W for all building integrated PV systems up to 25 kW
- \$5.00/W for schools, non for profit organizations, and municipalities up to 25 kW
- All non-residential incentives will be reduced by \$1.00 per watt for additional capacity above 25 kW and non-residential incentives will be capped at 50 kW per site/meter.

Exemptions to the capacity caps may be provided on a case-by-case basis and NYSERDA reserves the right to limit the incentives available per customer/site. PV systems must be sized to meet specific site energy needs (local load or demand) and may not exceed 110% of the demonstrated energy demand for the site, taking into account any other on-site electrical power generation systems. Incentive levels will be reduced in proportion to potential output losses of greater than 20% for traditional PV systems and 40% for building integrated systems, as determined by the required installer system analysis.

Incentives will be paid to installers in two increments and are tied to specific installation milestones. The first incentive payment, or 75% of the total incentive amount approved by NYSERDA, will be paid after all system components have been delivered to a customer's site and the appropriate form is completed, submitted and approved by NYSERDA. The second incentive payment, or the remaining 25%, will be paid after a PV system has been connected to the utility grid and/or inspected by NYSERDA or its representatives and the appropriate form has been completed, submitted and approved by NYSERDA. The Energy Star Home bonus incentive will not be paid until the home has been registered with the New York State Builders Association.

Customers who pay the state's RPS charge are eligible to participate in the PV Incentive Program. These includes customers of the following utilities: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, and Rochester Gas and Electric Corporation. NYSERDA will hold the title to renewable energy credits (RECs) associated with the system's energy production for a period of three years, after which REC ownership will revert to the customer/generator.

PV incentives are available for many end-uses (building or non-building) and sectors, including the residential, commercial, industrial, agricultural, institutional, educational and non-for-profit facilities, and

government sectors. Incentives provided to customers under this program may not be combined with any other incentive programs offered by NYSERDA, such as a dollar-per-watt incentive, designed to directly offset the cost of a PV installation. However, commercial incentives may be combined with assistance from the Energy Smart Loan Fund to the extent such assistance is available.

* The original Customer-Sited Tier Operating Plan authorized \$13.8 million for this program during 2008 and 2009. However, discretionary funding amounting to \$4.4 million was later added in order to meet program demand. An additional \$20.6 million was added in October 2008 by order of the PSC, bringing total 2008-2009 funding to \$38.8 million.

Contact:

Public Information Specialist

New York State Energy Research and Development Authority 17 Columbia Circle

Albany, NY 12203-6399 Phone: (866) 697-3732 Phone 2: (518) 862-1090 Fax: (518) 862-1091

E-Mail: info@nyserda.org

Web site: http://www.nyserda.org

Riverhead - Energy Conservation Device Permitting Fees

Last DSIRE Review: 11/04/2008

Incentive Type: Green Building Incentive

Eligible Efficiency

Technologies: Yes; specific technologies not identified

Eligible Renewable/Other Photovoltaics, Any energy conservation devices which qualify for any federal, state or

Technologies: local tax exemption, tax credit or tax rebate

Applicable Sectors: Commercial, Residential

Website: http://www.riverheadli.com/building.html

Authority 1: Town Code § 52-10(F)

Date Enacted: 03/07/2006

Effective Date: 07/01/2005 (retroactive)

Summary:

The Town of Riverhead on Long Island has made a special allowance in its building permit fee structure to provide a discount to people wishing to install energy conservation devices on residential or commercial buildings. The provision in the town code applies to any energy conservation device "installed in or on a structure which qualifies for any federal, state or local tax exemption, tax credit or tax rebate", but explicitly mentions solar panels as eligible for favorable treatment. Those wishing to install such devices now pay a flat permitting fee of \$150, whereas prior to the code revision permitting fees for solar panel installations often approached \$1,000.

Contact:

Leroy Barnes Jr. **Building Departmnt Administrator** Town of Riverhead 201 Howell Avenue Riverhead, NY 11901

Phone: (631) 727-3200 Ext.264

E-Mail: barnes@riverheadli.com

Web site: http://www.riverheadli.com/building.html

Solar and Fuel Cell Tax Credit

Last DSIRE Review: 10/29/2008

Incentive Type: Personal Tax Credit

Eligible Renewable/Other Solar Water Heat, Solar Space Heat, Photovoltaics, Fuel Cells

Technologies:

Applicable Sectors: Residential, Multi-Family Residential

Amount: 25% for solar-electric (PV) and solar-thermal systems; 20% for fuel cells

Maximum Incentive: \$5,000 for solar-energy systems; \$1,500 for fuel cells

Carryover Provisions: Excess credit may be carried forward five years

Eligible System Size: 10 kW maximum for solar-electric systems*, except 50 kW for solar systems owned by

condominium or cooperative housing associations;

25 kW maximum for fuel cells

Equipment/Installation Systems must be new and in compliance with all applicable performance and safety

Requirements: standards

Authority 1: NY CLS Tax, Article 22 § 606 (g-1) et seq.

Date Enacted: 08/02/1997 (solar electric)

Effective Date: 01/01/1998 (solar electric); 01/01/2003 (fuel cells); 01/01/2006 (solar thermal)

Summary:

Enacted in August 1997, this personal income tax credit originally applied to expenditures on solar-electric (PV) equipment used on residential property. The credit, equal to 25% percent of the cost of equipment and installation, was expanded in August 2005 to include solar-thermal equipment. The solar-thermal provisions apply to taxable years beginning on and after January 1, 2006.

The credit is capped at \$3,750 for solar-energy systems placed in service before September 1, 2006, and capped at \$5,000 for solar-energy systems placed in service on or after September 1, 2006.

Any amount of credit that exceeds a taxpayer's liability in a given tax year may be carried forward for the five following taxable years. Any amount of the system cost provided by a grant from any source is not eligible for this credit.

Solar-energy equipment is defined as "an arrangement or combination of components utilizing solar radiation, which, when installed in a residence, produces energy designed to provide heating, cooling, hot water or electricity." The credit may not be used for pool heating or other recreational applications.

Systems must comply with the 10 kW capacity limit on residential, net-metered solar-energy systems*. In 2007, legislation was passed increasing the capacity limit to 50 kW for condominiums and cooperative housing associations. In addition, members of condominium management associations and tenant stockholders of cooperative housing associations are now allowed to claim a proportionate share of the total system expense towards the tax credit. These changes are valid for the Jan. 1, 2007 tax year.

Fuel cells installed at a principal residence are eligible for a 20% tax credit, with a maximum credit of \$1,500. To qualify, fuel cells must provide a maximum rated baseload capacity of 25 kW and must utilize proton exchange membrane (PEM) technology.

*The language of the tax credit generally requires that PV systems conform to the state's net metering law, thereby limiting system size to 10 kW. In August 2008, the state net metering law was expanded by S.B. 7171 to permit net metering for residential PV systems up to 25 KW. It is unclear at this point whether the state intends for the new net metering limits to apply to the tax credit described above. Revised 2008 forms are due out at the end of November 2008 and should address this eligibility issue.

Contact:

Taxpayer Assistance

New York State Department of Taxation and Finance Taxpayer Assistance Bureau W.A. Harriman Campus Albany, NY 12227

Phone: (800) 225-5829

Web site: http://www.tax.state.ny.us

Solar Sales Tax Exemption

Last DSIRE Review: 04/07/2008

Incentive Type: Sales Tax Exemption

Eligible Renewable/Other Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics

Technologies:

Applicable Sectors: Residential

Amount: 100% Exemption

Authority 1: NY CLS Tax, Article 28 § 1115 (ee)

Date Enacted: 7/26/2005 **Effective Date:** 9/1/2005

Summary:

New York enacted legislation in July 2005 exempting the sale and installation of residential solar-energy systems from the state's sales and compensating use taxes. The exemption applies to solar-energy systems that utilize solar radiation to produce energy designed to provide heating, cooling, hot water and/or electricity. The exemption does not apply to solar pool heating or other recreational applications. There does not appear to be an expiration date* for this incentive.

The law allows municipalities the option of granting the local exemption. If a city with a population of 1 million or more chooses to grant the local exemption, it must enact a specific resolution that appears in the state law. The New York Department of Taxation and Finance publishes a variety of sales tax reports detailing local tax rates and exemptions, including those for solar energy equipment. The solar sales tax list is updated several times per year.

*The New York Code contains duplicate sections NY CLS Tax § 1115 (ee). The first pertains to the sales tax exemption for residential solar energy systems and contains no expiration date, while the second contains rules for a seemingly unrelated exemption with expiration dates of December 1, 2010 and December 1, 2012. This appears to be a mistake that will not affect the sales tax exemption for residential solar energy equipment.

Contact:

Taxpayer Assistance

New York State Department of Taxation and Finance Taxpayer Assistance Bureau W.A. Harriman Campus Albany. NY 12227

Phone: (800) 225-5829

Web site: http://www.tax.state.ny.us

Rules, Regulations & Policies

New York - Net Metering

Last DSIRE Review: 08/18/2008

Incentive Type: Net Metering

Eligible Renewable/Other Photovoltaics, Wind, Biomass, Anaerobic Digestion

Technologies:

Applicable Sectors: Commercial, Industrial, Residential, Agricultural

Limit on System Size: Solar: 25 kW for residential, 2 MW or peak load for non-residential;

Wind: 25 kW for residential, 500 kW for farm-based, and 2 MW or peak load for

non-residential;

Biogas: 500 kW (farm-based only)

Limit on Overall 1.0% of 2005 demand for each IOU for solar and on-farm biogas systems; 0.3% of 2005

Enrollment: demand for each IOU for wind

Treatment of Net Excess: Monthly NEG credited to customer's next bill at utility's retail rate with accounts generally

reconciled annually at the avoided-cost rate; annual NEG compensation for non-residential

customers is not addressed

Utilities Involved: All major investor-owned utilities

Interconnection Standards for Net Metering? Yes

Website: http://www.dps.state.ny.us/distgen.htm

Authority 1: NY CLS Public Service, Article 4 § 66-j and § 66-l

Date Enacted: 08/02/1997; amended repeatedly

Authority 2: S.B. 7171

Date Enacted: 08/05/2008

Effective Date: 08/05/2008

Authority 3: S.B. 8415

Date Enacted: 08/05/2008

Effective Date: 08/05/2008

Authority 4: S.B. 8481

Date Enacted: 08/05/2008

Effective Date: 01/01/2009

Summary:

Note: In August 2008, New York enacted a series of bills (S.B. 7171, S.B. 8415, and S.B. 8481) amending the state's net metering laws, most notably expanding net metering eligibility to non-residential PV and wind systems. The information in this entry reflects the changes made by these amendments (see History section for prior rules).

State utilities have three months to submit revised tariff schedules consistent with these amendments to the New York Department of Public Service (DPS), which then has an additional three months to render a decision. Some details of non-residential net metering are not specified in the new law and thus require further clarification. Until the DPS makes final determinations, interested individuals should contact their utility to discuss their net metering options.

Net metering is available on a first-come, first-served basis to customers of the state's major investor-owned utilities, subject to technology, system size and aggregate capacity limitations. Publicly-owned utilities are not obligated to offer net metering; however, the Long Island Power Authority (LIPA) offers net metering for residential solar systems smaller than 10 kW on similar terms to the state law. Below is listing of the system size limitations, organized by technology and eligible sector.

- Solar: 25 kW for residential, 2 MW or peak load for non-residential;
- Wind: 25 kW for residential, 500 kW for farm-based, and 2 MW or peak load for non-residential;

• Biogas: 500 kW (farm-based only)

The aggregate limit on net-metered PV and on-farm biogas systems combined is set at 1.0% of a utility's 2005 electric demand, while the limit on aggregate wind system capacity is 0.3% of 2005 demand. Individual utilities are authorized to place higher limits on aggregate net-metered capacity if they choose to do so. For all types of systems, customer net excess generation (NEG) in a given month is credited to the customer's next bill at the utility's retail rate. At the end of each annual billing cycle, most customers (i.e., residential and farm-based systems) will be paid at the utility's avoided-cost rate for any unused NEG. Compensation for non-residential systems is not addressed by the statute.

The New York Public Service Commission (PSC) has developed uniform interconnection rules for net-metered systems. The 2008 amendments added identical language providing for the development of interconnection standards for non-residential systems. See the PSC web site for more information, including a list of accepted (type-tested) inverters.

History

New York's original net-metering law, enacted in 1997, applied only to residential photovoltaic (PV) systems up to 10 kilowatts (kW). In 2002, the law was expanded (S.B. 6592) to indude farms that generate electricity from biogas produced by the anaerobic digestion of agricultural waste, such as livestock manure, farming waste and food-processing wastes. Farm-based biogas systems with a rated capacity of up to 400 kW may net meter. In 2004, S.B 4890-E (of 2003) further expanded the law to include residential wind turbines up to 25 kW and farm-based wind turbines up to 125 kW.

Prior to the 2008 amendments, PV systems, farm biogas systems and small wind systems (10 kW and less) with customer net excess generation (NEG) for a given month had it credited to the their next bill at the utility's retail rate. At the end of each annual billing cycle, such customers were paid at the utility's avoided-cost rate for any unused NEG. However, NEG from wind-energy systems larger than 10 kW was credited to the next month's bill at the state's avoided-cost rate. Large wind energy systems also received compensation for annual NEG at the avoided-cost rate.

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