

SOLAR POWER INCENTIVE PROGRAMS AVAILABLE IN NEW YORK

Even in the Northeastern United States, solar energy can make a significant contribution to meeting demands for electricity. The New York State Renewable Energy Task Force has recommended that New York increase its generation of electricity from photovoltaics eight-fold by 2011. By 2013, twenty-five percent of all power used in New York is to come from renewable resources via the [Renewable Portfolio Standard \(RPS\)](#). Renewable resources include solar, wind, biomass, and some hydroelectricity. In order to achieve the RPS “25 by 2013” goal, NYSERDA (New York State Energy Research and Development Authority) offers grants and incentives to help bring down the costs of these clean resources.

SOLAR ELECTRIC INCENTIVE PROGRAM

The Solar Electric Incentive Program is an innovative program from the New York State Energy Research and Development Authority (NYSERDA) that provides cash incentives for the installation of new Solar Electric or Photovoltaic (PV) systems by Eligible Installers.

On February 16, 2010 the New York Public Service Commission (PSC) issued an [order](#) providing \$12 million (\$2 million per month) in interim funding to allow NYSERDA to continue the PV incentive program from January - June 2010. The order also provides that (1) applications that exceed the \$2 million monthly allocation will not be accepted; (2) incentive levels will be re-established each month; (3) incentive levels will be reduced by 10% whenever applications exceed available funding during the prior month; and (4) NYSERDA may increase incentive levels by 10% for the subsequent month if available funds from the prior month remain.

Customers who pay the state's RPS charge are eligible to participate in the PV Incentive Program. These include 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.

Incentive Overview and Payment Guidelines

Effective January 11, 2010, the following incentive structure will be in effect:

Residential

\$1.75 per watt up to a maximum of 5 kW per site/meter, and not to exceed 50% of the total installed system costs.

Commercial Not-For-Profit

\$1.75 per watt up to a maximum of 25 kW per site/meter, and not to exceed 50% of the total installed system costs.

Commercial – \$1.75 per watt up to a maximum of 50 kW per site/meter, and not to exceed 50% of the total installed system costs.

New York State ENERGY STAR® Labeled Homes and Building Integrated PV systems are still eligible for a \$.50 per watt added to these above incentives, not to exceed 50% of the total installed system costs.

Eligible Installer Companies are limited to submitting applications for incentives that total no more than 225 kW in total capacity in any given month. Applications received after this limit is reached will not be accepted.

The cash incentives are available for qualified systems and customers, through applications submitted to the Program by an “Eligible Installer.” Eligible Installers are those who have demonstrated technical competence in the PV field and who have signed written agreements with NYSERDA to abide by certain Program terms and conditions. The cash incentives are paid directly to the Eligible Installer, but must be passed on in full to the customers.

PACE FINANCING

Property-Assessed Clean Energy (PACE) financing effectively allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of years. In 2009 New York enacted two separate bills -- A.B. 8862 in August and A.B. 40004A in November -- authorizing local governments to offer these types of programs using different mechanisms.

In November 2009, the New York legislature enacted A.B 40004A, authorizing counties, towns, cities and villages (collectively referred to as "municipal corporations") to offer sustainable energy loan programs. Loans may be used to pay for energy audits; cost-effective, permanent energy efficiency improvements (i.e., appliances are generally not eligible); renewable energy feasibility studies; and the installation of renewable energy systems.

Eligible renewable energy systems include solar water heat, solar space heat, solar thermal process heat and photovoltaics. Loans are available for Commercial, Industrial,

Residential, Nonprofit, Multi-Family Residential, Agricultural and Institutional businesses.

In order to qualify for a loan, energy audits or renewable energy feasibility studies must be performed by a contractor certified according to standards set by the New York State Energy Research and Development Authority (NYSERDA) or by a local government under standards at least as stringent as those developed by NYSERDA. Energy efficiency improvements must meet cost-effectiveness criteria also established by NYSERDA.

PACE programs eliminate the upfront cost for energy efficiency improvements and renewable energy systems. A PACE bond or lien is a loan repaid over 15-20 years via an annual assessment on the homeowner's property tax bill. PACE bonds can be issued by municipal financing districts or finance companies. The payment plan for the property owner is transferable to the next property owner if the current owner decides to sell the property. Loans may not exceed 10% of the value of the real property upon which the improvements take place, or the cost of such improvements

For most energy retrofit projects completed with PACE financing, property owners can expect to realize an immediate energy savings of 20 to 40 percent. PACE bonds finance a range of energy efficiency upgrades including the installation of solar PV panels and solar thermal systems.

Property owners who utilize PACE financing will benefit over time with real cash savings. The long term repayment mechanism results in annual energy savings that exceed the increased annual property tax cost thus making PACE financing highly attractive to home and building owners. Lowering monthly costs due to energy saving also increases the property's overall value and increases the creditworthiness of the existing mortgage holder.

PACE programs are a recent innovation in finance and have emerged nationwide over the past year during which time 15 states have passed enabling legislation. Current PACE-enabled states are: CA, CO, IL, LA, MD, NV, NM, NY, OH, OK, OR, TX, VT, VA, & WI.

SOLAR AND FUEL CELL TAX CREDIT

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 take effect beginning in the 2007 tax year, but as with other portions of the tax credit, they do not have an expiration date.

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.

LOCAL OPTION - SOLAR ENERGY SYSTEMS EXEMPTION

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.

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 definition of solar includes passive solar heating systems such as mass wall and direct gain systems. In the case of solar pool heating, solar energy collection, control, and distribution equipment is eligible; however, the pool itself does not qualify as a storage medium or otherwise.

NEW YORK CITY - PROPERTY TAX ABATEMENT FOR PHOTOVOLTAIC (PV) EQUIPMENT EXPENDITURES

In August 2008 the State of New York enacted legislation allowing a property tax abatement 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 5, 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. However, the amount of eligible expenditures is not reduced by federal, state or local tax credits, tax abatements, tax exemptions or tax rebates.

The abatement program is administered by the Department of Finance in cooperation with the Department of Buildings. Applications for the abatement must be filed by March 15 in order to be eligible for a tax credit during the year the application is submitted. Applications submitted after this deadline can be applied to taxes owed for the following fiscal year. It is important to note that claiming the abatement *does not* affect 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.

SOLAR SALES TAX EXEMPTION

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 also permits local governments (municipalities and counties) to grant an exemption from local sales taxes. 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 (Publication 718-S) is updated several times per year.

NYSERDA - Grants for Public and Non-Profit Energy Conservation Projects

The New York State Research and Development Authority (NYSERDA) has issued a competitive grant solicitation for energy conservation projects undertaken by municipal governments; public schools (K-12); public colleges and universities; public and private hospitals; Boards of Cooperative Educational Services (BOCES); and non-profits. Funding for the grant program comes from State Energy Program project implementation funds provided to New York under the American Recovery and Reinvestment Act (ARRA). Eligible projects include energy efficiency improvements, on-site renewable energy projects, and clean vehicle fleet projects.

Renewable Energy: Funding is available for up to 100% of project costs with a maximum of \$1 million. Total project costs must be less than \$8,000 per 10 million BTUs of energy generated or saved annually. In addition, projects must be located on the customer's premises, be used primarily to serve on-site energy needs, and be designed such that energy generation does not exceed annual on-site energy consumption. Solar electric (PV); solar domestic hot water and space heating and fuel cell systems are all eligible for grants. PV systems of 50 kilowatts (kW) or less must use NYSERDA approved equipment and be installed by a NYSERDA approved installer.

LONG ISLAND POWER AUTHORITY - PV REBATE PROGRAM

LIPA offers its customers rebates for grid-connected photovoltaic (PV) systems as part of the Solar Pioneer and Solar Entrepreneur programs. Residential PV systems up to 27.5 kW and non-residential PV systems up to 2 MW (the limits of LIPA's [net metering](#) policy) are eligible for an incentive ranging from \$1.00 - \$3.50 per watt depending on the customer sector and system size.

Systems should generally be sized so as not to exceed annual electricity consumption. Residential system size is specifically limited so as not to exceed 105% of on-site electricity consumption during the prior 12 months. Rebates are only provided for the first 10 kW on residential systems and the first 100 kW on non-residential systems. LIPA's rebates are designed to reflect the current PV costs. The rebate may not exceed the lesser of 50% of installed system costs, except 65% for municipal and non-profit systems, or the incentive value as determined by the rebate schedule.

Residential

- \$2.50/watt DC for first 10 kW

Commercial

- \$2.50/watt DC for first 50 kW
- \$1.00/watt DC for next 50 kW

Gov't, Schools, Nonprofits

- \$3.50/watt DC for first 50 kW
- \$2.00/watt DC for next 50 kW