

New York State Energy Research and Development Authority (NYSERDA)

Solar Electric and Thermal Programs

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Overview of NYSERDA's Solar Funding 2010 - 2015

PON 2112 RPS Solar PV (2015) \$144M

PON 2149 RPS/ RGGI Solar Thermal (2015) \$24.965M

PON 1686 ARRA Solar PV (2010-2011) \$10M

PON 2156 RPS Geographic Balancing (2015) \$150M

RFP 10 ARRA Grants to Municipalities (2010-2011) \$24 M

PON1613 ARRA Municipalities & Schools (2010-2011) \$8.3M

Total NYSERDA Funding \$361.025 Million

ARRA Funded programs:

- Awarded in 2010
- Must be completed by 2012
- Federal Davis Bacon Act applies
- PON 1686, Although contractors are selected – projects are still being selected
- PON 1613 \$6.7 of \$8.3 was for NYC

RPS Funded Programs:

- PON 2112 & PON 2149 – Solar PV & ST must pay RPS to a participating utility
- PON 2156 – Geographic Balance, pay RPS in Con Ed Territory

RGGI Funded Programs;

PON 2149 ST, has \$ 240,000 for Fossil Fuels

Public Service Commission and Long Term Goals - PV

For PON 2112 the primary goal of New York's Renewable Portfolio Standard (RPS) is to promote the development of new renewable energy resources. The 2010 Customer-Sited Tier Operating Plan sets forth the plan through **2015**. As part of this plan, \$144 million has been allocated to the installation of PhotoVoltaic (PV) Systems. The goal of the program is:

Capacity in MW Encumbered by 12/31/2015	Total Generation in MWh Encumbered by 12/31/2015
82.29	93,806

GUIDELINES:

- The PV Program (PON 2112) will initially have a monthly incentive budget of \$2 million.
- The Program will be offered through an open enrollment solicitation and include the following elements:
 - a. The incentive level for all systems will start at \$1.75 per watt.
 - b. The caps will be:
 1. 7 kW for residential
 2. 25 KW for not-for-profits
 3. 50 kW for commercial systems



INCENTIVE HIGHLIGHTS:



Incentives are paid directly to Eligible Installers, but must be passed on in the full amount to the customer.

Net Metering :

Since PV systems only operate during daylight hours you need a back up power supply such as batteries. But batteries are expensive and require a lot of maintenance. Net Metering allows you to stay connected to the utility grid essentially selling your daily excess , then buying power at night when the PV system is down. Your meter runs backwards.

NYSERDA - PON Information

- You can find it at: <http://www.nyserda.org/>
- Click on: Funding Opportunities
- Look for: PON 2112 – Solar PV Program
Financial Incentives way down at the bottom

**SOLAR PV PROGRAM MANUAL: - Available on the
NYSERDA website**

**The Solar PV Program Manual is a compilation of
all pertinent information.**



Public Service Commission and Long Term Goals - ST

The primary goal of New York's Renewable Portfolio Standard (RPS) is to promote the development of new renewable energy resources. The 2010 Customer-Sited Tier Operating Plan sets forth the plan through **2015**. As part of this plan, \$24.725 million has been allocated to the installation of Solar Thermal (ST) Systems. The goal of the program is:

Capacity in MW Encumbered by 12/31/2015	Total Generation in MWh Encumbered by 12/31/2015
45.54	51,923

GUIDELINES:

PON 2149 the Solar Thermal Program will be offered through an open enrollment solicitation and include the following elements:

The incentive level for all systems will start at \$1.50 per displaced kWh.

The caps are:

1. \$4,000 per site/meter for Residential
2. \$25,000 per site/meter for non-Residential



INCENTIVE HIGHLIGHTS:



Incentives are calculated based upon estimated displaced electrical usage. Typical Solar Thermal systems can only displace 50-80% of the thermal load. Therefore, the displaced kWh cannot exceed 80% of the total calculated existing thermal load.

INCENTIVE HIGHLIGHTS:



Incentives are paid directly to Eligible Installers, but must be passed on in the full amount to the customer.

More on Incentives:

Incentives are based on displaced electrical usage based upon Solar Rating and Certification Corporation (SRCC) OG-300 estimates of system production and/or standard industry software such as RETScreen, or SolarPathfinder thermal program. For solar panel manufacturers who have SRCC OG-100 panel ratings and have applied for a SRCC OG-300 system rating but have not yet received a rating, an estimate based on the panel's SRCC OG-100 rating and along with calculations from RETScreen, Solar Pathfinder Thermal or other approved method may be provided. In such cases, a meter must be installed on the system and the amount of energy produced in kilowatt hours must be measured every 3 months for the first year and reported to NYSERDA. NYSERDA will review the energy production data to determine the accuracy of the estimated production. Estimates of system production that are determined to be highly inaccurate may result in the manufacturer or installer being disqualified from participation in the Program.

HOW DOES THE PROGRAM WORK?

Incentives are available for qualified customers who wish to install ST systems.

On average, incentives for a typical residential or commercial system are expected to cover approximately 15 to 20% of the installed cost of a ST Systems

State and Federal Tax Credits for PV & ST – How they work:

IMPORTANT - Always consult with your accountant regarding tax as everyone's tax liability is different.

The Federal tax credit is 30% of the cost after any rebate is applied. There are also in some cases federal grants in lieu of tax credits.

The State tax credit is 25% not to exceed \$5000 after rebates and federal credits , and must be your primary residence.

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- Click on: Funding Opportunities
- Look for: PON 2149 – Solar Thermal Program

Questions???



New York State Energy Research and Development Authority (NYSERDA)

All Program questions should be directed to:

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