

Vermont Small Scale Renewable Energy Incentive Program

Incentive Design – 2012 Program Year

January - 2012

Program design for the 2012 program year build on the success of the program in past years and reflect continuing market conditions. The key changes include:

- Incorporation of an efficiency adder to the incentive amount for those customers that have taken efficiency into consideration by having an audit performed on their home or business
- Encouraging well-sited wind projects through the return to an incentive that depends partially on actual production.
- Lowering of the incentive levels for PV in response to lower PV costs and strong demand.
- Limitation of higher special customer incentives to low-income housing non-profits, municipalities, and public schools.

New proposed incentive levels and structure are provided below, followed by discussion of these and other program elements.

2012 Incentive Levels – Solar

The following table lists proposed incentive levels, along with project size limits, and customer caps for PV and solar hot water projects.

Recommended 2012 Solar Incentive Levels			
Project Type	NEW Incentive:	Efficiency Adder	Other Requirements
Residential			
PV ≤ 10 kW	\$0.65/W	\$0.10/W	Customer cap = \$10,500 across both every 2 years. Adder capped at 3.5kW PV; 70 kBtu/day SHW. System size restrictions for PV.
SHW ≤ 200 kBtu/d	\$1.50/ 100 Btu/d	\$0.50/100 Btu/d	
Commercial & Industrial			
PV ≤ 60 kW	\$0.60/W	\$0.10/W	Customer cap = \$36,000 every 2 years. Adder capped at 4.5kW. System size restrictions.
SHW ≤ 1,100 kBtu/d	\$1.50/ 100 Btu/d	\$0.50/100 Btu/d	Customer cap = \$16,500 every 2 years. Adder capped at 90 kBtu/day. No swimming pool heating systems allowed. No space-heating.
Special Customers			
PV ≤ 60 kW	\$2.25/W to 10kW; \$1.50/add'l W from 10kW – 60kW	\$0.10/W	Incentive amounts limited to \$97,500 or 50% of project cost, whichever is lesser. Adder capped at 4.5kW. No leasing. System size restrictions.
SHW ≤ 1,500 kBtu/d	\$3.00/ 100 Btu/d	\$0.50/ 100 Btu/d	Incentive amounts limited to \$45,000 or 50% of project cost, whichever is lesser. Adder capped at 90kBtu/day. No leasing. No swimming pool heating systems allowed.

Given the continued very strong demand for PV projects, ongoing reductions in installed cost, the availability of the new solar adder, and changes to net metering, the lower incentive per watt is not expected to result in reduced demand for solar installations.

Recommended 2012 Production-based Incentives for Wind Projects

In order to encourage well-sited wind projects, the recommended new wind incentive is based on actual site production during the first year of operation. The incentive program had a similar performance based incentive in 2010 that was dropped due to ARRA’s tight time frame.

The need to calculate a production-based value to use for reserving an incentive, combined with a desire for administrative simplicity, resulted in the proposal for the two-step calculation methodology outlined below. In order to provide early support for the projects, a portion of the calculated target incentive will be paid at the time of successful installation, with the remainder available at the end of the first year of production.

The calculation methodology first applies a conversion factor to the turbine’s rated capacity to establish a production “target”. This factor was developed to give a kWh/year value that is closely equivalent to annual production assuming a 6m/s (13 mph) site. The final potential incentive amount is then based on this Target Annual Production and calculated in two size tiers. The calculations are made as shown in the table below.

Recommended 2012 Wind Incentive Levels	
Step 1: Calculate Target Annual Production (for all projects):	
Target Annual Production (TAP) = Rated capacity of turbine (at 11m/s) * 2.5	
Step 2: Calculate Total Potential Incentive Amount:	
Total Potential Incentive Amt. = Target Annual Production (TAP) * Incentive level as defined below	
Incentive	Other Requirements
Residential	
\$1.20/kWh for each kWh up to 25,000 kWh/year	Capped at 10kW
Commercial & Industrial	
\$1.20/kWh for each kWh up to 200,000 kWh/year	Customers limited to one turbine up to 100kW

The calculated total potential incentive amount is designed to represent the incentive expected to be paid for a well-sited wind project. This value will be used as the amount of incentive reserved for the approved project.

In order to provide early support for the projects, 60% of the calculated total potential incentive will be paid at the time of successful installation. The remainder of the reserved amount is available to be paid at the end of one year of production, based on the amount of kWh produced. The customer will submit measured kWh produced over the year, and the incentive will be recalculated according to the calculation above to determine the final total incentive. The final payment will be the difference between this final incentive calculation and the amount paid at the time of system installation. The maximum guaranteed incentive is the amount reserved. If the system produces more than the Target Annual Production during the first year of operation, additional incentive shall be paid on a case-by-case basis if funds are available.

Residential wind systems are limited to one turbine equal or less than 10 kW rated capacity; C&I projects are limited to one turbine up to 100 kW rated capacity.

Efficiency Solar Incentives

The new incentive structure provides an additional incentive to solar projects (PV and thermal) if the customer has had a professional level energy audit completed on their home or building. This additional incentive can be applied for up-front as part of the incentive reservation. Proof of the audit is required with the final project documentation; this can be an invoice from a certified contractor (certification requirements to be determined). Group net –metered projects must provide proof that at least one home/business in the group has had an audit. Audits performed prior to the reservation application can be used to show compliance as long as the audit was performed in the past two years. The added incentive for those that have at least had an energy audit communicates the importance of energy efficiency and sets the expectation that energy efficiency activities should be an integral part of any state supported energy related project.

Special Customer Category

This special category was designed to provide increased incentive support to the class of customers that cannot take advantage of other additional financial support for their projects (tax credits in particular) and who often require more attention/time from the installer because of complex procurement procedures, etc. Increased incentives for Special Customers will be continued, but only low-income housing non-profits, municipalities, and public schools will now be eligible. Other non-profit entities that were previously eligible will be encouraged to explore available third-party ownership models (leasing, power purchase agreements, etc.) designed to leverage the financial benefits not available to non-profits. The program should provide additional information to these customers and references to developers who can assist in these types of projects.

Leased Systems

Leased systems will receive the same incentives as the applicable customer classes above; any systems leased to non-profit or governmental customers, including housing authorities, are treated as C&I projects and will not be eligible for the increased Special Customer incentive. Leased systems are eligible for the efficiency adder. Leasing entities do not have a customer cap, but must comply with installer caps (see below). End-use leasing customers may not install systems that result in an incentive of more than:

- Residential customer: \$10,500 customer cap over 2 years
- Non-residential C&I and Special Customer: \$36,000 PV and \$16,500 SHW, over 2 years

Customer Limits, Installer Caps, and Reservation Time Limits

Limits to the total incentive amounts that a single customer may receive have not been changed materially (see information on caps in table above). There will also not be any changes to the total amount of reservations that any installer may hold at one time. The program has not experienced any need to increase these limits in the past as installers have rarely reached them. In addition, because the program budget will be greatly reduced, it would not make sense to allow any one installer to claim even more of the limited support now available. For clarity, installer caps should be established at \$150,000 each for

PV and solar hot water (with solar thermal installers also limited to no more than 100 reservations at any one time), \$275,000 for Special Customer incentives, and \$450,000 for wind incentives.

Reservations will continue to be held to a non-extendable six-month installation period for solar thermal and PV and nine-months for wind. These limits should not cause undue strain for the large majority of the market. Customers in the Special Customer category are the most likely to have more complicated and extensive procurement and administrative issues – these participants currently receive leeway as needed on a case-by-case basis and will continue to do so.