



NEW HAMPSHIRE ELECTRIC COOPERATIVE'S (NHEC) 2009 SOLAR PHOTOVOLTAIC (PV) REBATE PROGRAM FREQUENTLY ASKED QUESTIONS

What is a Solar PV system?

A system that uses the energy from the sun to produce electricity for your home or business.

Can I use a Solar PV System for anything else?

You can use it for remote buildings such as chicken coops, sugar shacks, etc.

How much does a system cost?

A typical system costs approximately \$10,000 per 1 kW. Each additional kW will be lower due to economies of scale.

Are there any utility incentives/rebates, government incentives/rebates, or local property tax exemptions at this time?

Your New Hampshire Electric Cooperative's actions, comments, or written materials shall in no way be considered tax advice, rebate advice, or any other type of advice. Members should consult their personal tax advisor for a federal energy tax credit qualification determination. Also, members should consult the NH Public Utility Commission (Sustainable Energy Division) for qualification of renewable energy projects rebates.

NHEC is currently offering rebates of \$3.00 per Watt up to \$3,500 per member (capital account). Go to www.smallsteps.coop and the drop down of Co-op Programs for more details and an application or call Member Solutions at 800-698-2007. Rebates are given on a first come first served basis since there are a limited number of available rebates.

The 2009 American Recovery and Reinvestment Act made significant changes to federal energy tax credits, the most significant of which is the extension of a 30% tax credit of the cost of installation of a small renewable energy project. Contact your installer regarding federal tax credit equipment qualification or visit <http://www.energystar.gov>. Also, please consult your personal tax advisor to determine if you would qualify.

The State of NH is offering a rebate of \$3.00 per Watt up to \$6,000 for residential projects.. Go to www.puc.nh.gov and click on Sustainable Energy for more details.

The United States Department of Agriculture (USDA) offers loans and grants for renewable energy projects for qualified rural small businesses. Many NHEC businesses may qualify as a rural small business. Please call the USDA Business Programs Specialist at 603-223-6041 for more information.

Members may qualify for a local property tax exemption. Please contact your city or town to determine if you qualify and contact your personal tax advisor to see if you would qualify. See <http://www.nh.gov/oep/programs/energy/RenewableEnergyRebates.htm> for more information.

What about financing and other grants?

For residential projects, you may be able to take a home equity loan or line of credit. Check with your lender. See our list of lenders that offer energy loans. Go to http://www.smallsteps.coop/coop_programs/financing_options.php

Can I get a rebate if I am going off grid?

No. Only NHEC members can receive the rebate and you must be a member prior to and after the installation to receive the rebate.

Are there permits required?

Check with your local codes authority.

How much electricity does it generate?

Each 1 kW will generate approximately 1,200 kWh per year in most locations in NH. At \$0.16/kWh, this is a savings of approximately \$200 per year and will reduce carbon emissions by 400 pounds per year.

What does a system look like outside the house/building and where is it installed?

The system outside the house usually consists of several flat black panel plates. They can be installed on your roof or mounted on a rack on the ground. For example, a system could have 200 Watt panels that are 3 feet by 5 feet. You would need 5 such panels for a 1 kW (1,000 Watt) system.

What direction do the panels need to face?

From an azimuth between 165° and 225° magnetic (195° is solar south) and tilted 25° to 60° above the horizon. Your installer can assist you further with this issue. You must have a clear view of the south sky. Preferably, you will have complete clearance 25° and above the horizon facing south and 12° and above the horizon facing east and west.

What do I need for equipment inside the house?

An inverter and other electrical parts, wiring, etc.

What is the warranty and maintenance of a System?

You could receive up to a 25 year limited warranty on parts and a 5 year limited warranty on workmanship. Check with your installer. The panels require minimal to no maintenance. The inverter may require some maintenance over time.

How do I find an installer and does NHEC certify installers?

Go to www.nhsea.org and click on the yellow sun (Consumer Resource Guide). You may use any installer normally engaged in the business of installing small wind turbine systems. An installer does not need to be on our list for your project to qualify. NHEC does not certify or qualify installers.

Can I install it myself and still receive a rebate?

No. Systems must be installed by a qualified installer.

What is Net Metering and can I get paid to produce electricity?

NH's Net Metering Law allows your electric meter to spin backwards during periods of use when your electric production is greater than your usage. This credit will show on your electric bill. In effect, you will be storing kWh of electricity on NHEC's grid and will be credited the retail rate for production. You will never actually receive any payment from NHEC. To participate in net metering, you must fill out the NHEC INTERCONNECTION APPLICATION and a MUTUAL INDEMNITY FORM. These forms are included in your application. See CHAPTER Puc 900 NET METERING FOR CUSTOMER-OWNED RENEWABLE ENERGY GENERATION RESOURCES for more information.

What happens if there is a power outage, can I still use power from the Solar PV system as a backup?

No. The inverter will not allow power to flow up NHEC's power line. This is a safety feature to protect our line workers. You can have batteries installed and a transfer switch, which would give you backup power. This equipment is fairly expensive.

Can an NHEC representative come to my house to determine if I would qualify?

NHEC does not conduct site visits for pre-qualification.

Who do I call or where do I go for more information?

Call NHEC's Member Solutions at 1-800-698-2007 or go to www.smallsteps.coop (Co-op programs dropdown menu).

Could you provide any other links to Solar PV information?

To get a general idea of project cost and savings, you can use this Find Solar calculator <http://www.findsolar.com/index.php?page=rightforme>

NH Sustainable Energy Association
www.nhsea.org

Northeast Sustainable Energy Association
www.nesea.org

American Solar Energy Society
www.ases.org

Solar Energy Industries Association
www.seia.org

National Renewable Energy Laboratory
http://www.nrel.gov/learning/re_photovoltaics.html

U.S. Department of Energy's website
<http://www1.eere.energy.gov/solar/photovoltaics.html>

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