

Sustainable Energy Division

Topics

About the Sustainable Energy Division...

- [Our work ... more than just rebate and grant programs](#)
- [Results: how are we doing so far?](#)
- [Wood pellet rebate program earns SLICE award](#)

In the news

- [Solar = 100% Of New US Power Capacity In March](#)
- [Renewable Energy Provides Half of all New U.S. Electrical Generating Capacity in 2012](#)
- [More News](#)

Quick Links

- [PUC - Sustainable Energy](#)
- [PUC Rebate Programs](#)
- [NH Office of Energy & Planning](#)
- [Granite State Clean Cities Coalition](#)
- [NHenergy.org](#)
- [MyEnergyPlan.net](#)
- [DSIRE SOLAR](#)

Message from the Director

Welcome to the debut issue of the Sustainable Energy Division (SED) newsletter.

Since our inception in early 2009, the SED has communicated with interested parties (now numbering more than 2000!) through periodic emails concerning our sustainable energy rebate and grant programs. Over the years, we have expanded our program offerings, the sustainable energy sector has seen tremendous growth, and energy policy issues have been front and center in New Hampshire, New England and Washington, D.C.

Given all that is going on, it seemed like a good time to launch a new publication bringing you more information about the SED, its programs, and developments of note in the world of sustainable energy. We hope you will find our newsletter informative and useful, and, as always, we appreciate your interest in a clean energy future for New Hampshire.

Best regards,

Jack Ruderman
Director
Sustainable Energy Division

Our Work ... More Than Just Rebate And Grant Programs

Most of you know that the SED administers renewable [energy rebate and grant programs](#) that have helped the state make great strides in increasing the number of

renewable energy systems deployed in New Hampshire.

RPS law

But that isn't all that we do here. One of our chief responsibilities is to administer the state's [Renewable Portfolio Standard](#) (RPS) program. The RPS law ([RSA 362-F](#)) requires providers of electricity to acquire a portion of their load from renewable energy sources.

Electricity providers comply with the law by either purchasing Renewable Energy Certificates (RECs) from renewable energy facilities or making Alternative Compliance Payments (ACPs).



The Granite Reliable Wind project, located in Coos County, received Commission approval to produce RECs May 25, 2012.

Facilities seeking to generate RECs must be certified as eligible facilities. That's where we come in. The SED conducts a rigorous review of all applications for REC eligibility, presenting our findings and recommendations to the PUC's Commissioners. The Commissioners then decide whether certification is warranted.

Since 2008, the Commission has certified 353 renewable energy facilities located in New Hampshire, other New England states, and New York. A list of these facilities can be accessed at [Status of completed or pending Renewable Energy Facility applications](#).

Energy codes



Jon Osgood discusses [energy code compliance](#)

On another front, the Commission is charged with administering the [state's energy code](#) for residential and commercial buildings, pursuant to [RSA 155-D:4](#).

In practical terms, this means several things. First, in towns and cities, the community can request technical assistance from the Commission. These requests are fielded by the SED.

Secondly, many towns ask builders or homeowners to apply to the SED for certification that their plans meet the state's energy code for new homes, renovations or additions. Our Program Manager, [Jon Osgood](#), reviews approximately 1000 such applications each year to ensure that they comply with the [state energy code](#).

Third, the Commission is responsible for providing energy code training to architects, engineers and town building officials. The SED collaborates with New Hampshire's electric distribution utilities, code officials, and other stakeholders to offer training sessions on both the residential energy code and the commercial energy code. In 2012, eight training sessions were held around the state, attracting 170 participants. Three were designed specifically to provide insight to real estate professionals; the others were divided between commercial and residential codes and attracted builders, code officials, and other interested parties.

The SED is also an active participant in the [Energy Codes Collaborative](#), an initiative "to facilitate compliance with the State's building energy codes statewide and serve as a reliable and unbiased centralized source of information on building codes and code compliance in New Hampshire" according to its mission statement. The group brings together educators, realtors, state and local government representatives as well as individuals from the building industry, utilities, and finance community in part to assist in an effort to meet the state's expressed commitment to achieve 90% compliance with the energy code by 2017.

Results...How are we doing so far?

When the SED launched its first rebate program in July, 2009 there were perhaps 75 – 100 grid intertied renewable energy systems in New Hampshire, most of them residential. The total installed capacity of all net metered renewable energy systems – residential and commercial – was

roughly 500 kilowatts (kW), or 0.5 megawatt (MW). No state rebate or grant funds were available for thermal renewable energy systems, such as solar hot water systems or biomass heating systems.

Today, the SED offers [four rebate programs](#) -- three for homeowners and one for the commercial sector – as well as a competitive grant program for the commercial and industrial sector. Rebates are available for a range of technologies: photovoltaic (PV) panels, wind turbines, solar thermal (hot water or hot air) systems, and wood pellet boilers/furnaces.

Since 2009 the SED has provided rebates for more than 1600 renewable energy systems. The installed capacity of the electrical renewable energy systems (i.e., PV and

For more information on SED rebate programs contact ...

- Commercial PV & Solar Thermal – [Liz Nixon](#)
- Residential PV – [Jon Osgood](#)
- Residential Solar Hot Water – [Barbara Bernstein](#)
- Residential Bulk-Fuel Fed Wood Pellet Boiler – [Barbara Bernstein](#)

wind) for which rebates were provided is 4.5 MW, nine times the installed capacity that existed in 2009. And, as hardware costs for PV systems have declined dramatically in the past few years, we have been able to reduce rebate amounts without seeing any decline in demand. Market transformation is working!

Rebate Program	# of Applications Approved	Rebate Funds Disbursed	Average Rebate Award	Aggregate Applicant Investment
Residential PV & Wind	975	\$ 4,102,600	\$ 4,208	\$ 19,147,676
Residential Solar thermal (hot water)	393	\$ 848,150	\$ 2,158	\$2,429,696
Residential Wood Pellet Furnaces/Boilers	141	\$ 673,918	\$ 4,848	\$ 2,546,806
Commercial PV & solar thermal	93	\$ 1,194,569	\$ 12,845	\$ 6,552,104
Total	1602	\$6,819,237	--	\$30,676,282

Does not include pending applications.

Wood pellet rebate program earns SLICE award



A Froling wood pellet boiler and three-ton storage bin.

This past fall, the SED's [rebate program](#) for residential, bulk-fuel fed wood boilers and furnaces was recognized by the Clean Energy States Alliance ([CESA](#)) with a State Leadership in Clean Energy (SLICE) Award. [SLICE awards](#) are given to recognize state projects and programs that demonstrate exemplary leadership and innovation in clean energy development.

NH's first-in-the-nation wood pellet rebate program was established in April 2010 with

federal American Recovery & Reinvestment Act (ARRA) funding from the Office of Energy and Planning. Now funded entirely by the Renewable Energy Fund, the program provides rebates of up to \$6,000 per home heating system. The program is designed to stimulate a new market for whole-house, wood pellet heating systems and, as importantly, to bolster the infrastructure for bulk delivery of wood pellets. The wood pellet rebate program is managed by the SED's Barbara Bernstein.



Jack Ruderman and Barbara Bernstein (second and third from the right) accepting the SLICE award.

In The News....

- [100% of electric capacity added in U.S. last month was renewable](#)
- [Renewable Energy Provides Half of all New U.S. Electrical Generating Capacity in 2012](#)

More News

- [NH Energy Efficiency Programs Earn Top Honors](#)
- [New Reasons to Change Light Bulbs](#)
- [Solar industry breaks records in 2012](#)
- [U.K. Renewable Power Grows 20% on New Offshore Wind Farms](#)
- [Maine Introduces Feed-in Tariff Legislation](#)
- [Wind Now 10% of Electricity in 9 States, Over 20% in Iowa, S. Dakota](#)
- [Wind Power Peaks in the UK, Denmark, U.S.](#)
- [Solar power set to shine in 2013](#)
- [U.S. Had \\$1.63 Billion Clean Energy Surplus with China](#)
- [100 GW of Solar PV Now Installed in the World Today](#)