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New Hampshire
Renewable Energy and
Energy Efficiency Incentives

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Climate change and energy security are major challenges of our time and the environmental implications are as much local as they are global. Reducing our use of fossil fuel-based energy reduces greenhouse gases that contribute to global climate change. EPA New England is providing this resource fact sheet as a starting point for residential, municipal and commercial energy consumers. It outlines the federal, state and utility incentives for energy efficiency and renewable sources of energy.

(left) UNH buildings received Energy Star plaques, photo courtesy of EPA New England

(center) Energy efficient atrium, photo courtesy of Gary Hall Photography

(right photo) Snow grooming machine powered by biodiesel fuel, photo courtesy of Cranmore Mountain









Energy Efficient &

Energy Improvement Mortgages

- Credits a home's energy efficiency in the mortgage itself
- Gives borrowers the opportunity to finance cost-effective, energy-saving measures
- Energy Efficient Mortgages (EEM) fund new homes that are already energy efficient
- Energy Improvement Mortgages (EIM) allow borrowers to include the cost of energy-efficiency improvements in existing homes without increasing the down payment
- Sponsored by federally insured mortgage programs
- Visit energystar.gov enter "Mortgage" in the search box

Residential Renewable Energy Tax Credits

Credit available for systems placed in service by 12/31/2016:

Applies to qualified systems for photovoltaics, solar water heat, wind, fuel cells, geothermal heat pumps, solar electric technologies.

Credit is up to 30% of the cost.

Credit limit:

- No limit on solar photovoltaic electric systems
- \$2,000 for solar water heating
- \$500 per 0.5kW for small wind (<100kW) up to \$4,000
- \$500 per 0.5kW for fuel cells
- \$2,000 for geothermal heat pumps
- Visit dsireusa.org click "Federal Incentives," then scroll to "Personal Tax Credit" and click on "Residential Renewable Energy Tax Credit"

Residential Energy Efficiency Tax Credits

Credit available until 12/31/2009:

Applies to qualified water heaters, furnaces, boilers, heat pumps, air conditioners, building insulation, windows, doors, roofs, circulating fans used in qualifying furnaces, stoves that use biomass fuel to heat a home or to heat water. Credit is up to 10% of cost of building envelope improvements, or up to 100% for qualified energy property.

Credit limit:

- No more than \$500 for all improvements combined
- \$50 for advanced main air circulating fans
- \$150 for natural gas, propane or oil furnace or hot water boilers
- \$200 for windows
- \$300 for electric heat pump water heaters
- \$300 for electric heat pumps
- \$300 for central air conditioners
- \$300 for natural gas, propane or oil water heaters
- \$300 for biomass stoves
- Visit energystar.gov enter "Tax Credits" in the search box

Residential and Corporate Energy Conservation Subsidy Exclusion

- Electric utility customers joining an energy conservation program may receive a:
 - Reduction in the purchase price of electricity
 - Non-refundable credit against the price of electricity
 - Rate reduction that is not included in income and not taxable
- Visit dsireusa.org click "Federal Incentives," then scroll to "Corporate Exemption" and click on "Residential Energy Conservation Subsidy Exclusion (Corporate)" or scroll to "Personal Exemption" and click on "Residential Energy Conservation Subsidy Exclusion (Personal)"

USDA Rural Energy for America Program (REAP)

- Promotes energy efficiency/renewable energy for agricultural producers and rural small business
- Grant program open to commercial, schools, local, state and tribal governments, rural electric cooperatives, agricultural, public power sectors
- Maximum limit of grant equals 25% of project cost with various caps
- Visit www.rurdev.usda.gov/rbs/farmbill

Tribal Energy Program

- Federal grant program to promote tribal energy efficiency with eligible systems, including passive solar space heat, solar space and water heat, photovoltaics
- Visit eere.energy.gov/tribalenergy



State

Property Tax Exemption for Renewable Energy

- · Passive solar space heat, solar water heat, solar space heat, photovoltaics, wind, wood-fired central heating systems
- Open to residential sector
- Property tax exemption in the amount of the assessed value of the renewable-energy system
- Visit nh.gov/oep click on "Renewable Energy Incentives"

Renewable Energy and Energy Efficiency Business Loan

- For structural and equipment improvements that can reduce energy consumption
- Open to commercial (small business) sector
- Low-interest loans of \$10,000 or more, with a prime rate minus 1% for a 7-year term
- Businesses use the revenue from energy efficient systems to pay back the loan
- Visit nheconomy.com enter "Business Loan" in the search box

Renewable Energy Rebate Program (available beginning July 2009)

- · Photovoltaics, wind
- · Open to residential sector
- For qualifying systems:
 - One-time incentive payment of \$3 per watt
 - Max amount \$6,000 or 50% of system costs, whichever is less
- · Eligible systems:
 - <5kW
 - Must be located at the owner's residence

Visit puc.state.nh.us – click on "Sustainable Energy," then "Renewable Energy Rebates," then select "Residential systems under 5 kilowatts"



Utility

New Hampshire Electric Co-Op Low-income Energy Assistance

- Clothes washers/dryers, dishwasher, refrigerators/freezers, lighting, programmable thermostats, caulking/weatherstripping, duct/air sealing, building insulation, windows, doors
- Grant program open to low-income residential sector
- Grant comes in the form of products or services, up to \$3,600
- · Applicants must qualify as co-op member and meet income guidelines
- Visit nhec.com/residential energyassistance home.php

New Hampshire Electric Co-Op—SmartSTART Energy **Efficiency Loan Program**

- Energy efficient lighting, duct/air sealing, building insulation, custom/others pending approval
- Open to residential and commercial sectors
- No money down options
- Loan payments equal to two-thirds of the monthly savings realized through the energy efficiency measure(s) will be applied to customer's utility bill
- Visit nhec.com/business energysolutions smartstart.php

PSNH Municipal SmartSTART Energy Efficiency Loan Program

- Energy efficient customized plans
- Open to municipalities/local governments
- A monthly charge less than the monthly savings is added to the municipal facility's monthly electric bill until all costs are repaid
- Visit psnh.com/Energy/Business_Efficiency/PaySave.asp

PSNH—Energy Rewards RFP Program

- Incentives for achieving energy savings through installation of energy efficient measures or products
- · Competitive grant program open to commercial and industrial sectors
- Minimum energy demand of eligible facilities must be 350kW
- Minimum total project cost must be \$200,000
- Visit psnh.com/Business/Efficiency/Rewards.asp

New Hampshire Electric Co-op -**Solar and Wind Energy Rebate Program**

- · Solar water heat, photovoltaics, wind
- Open to residential, commercial, nonprofit, schools, agricultural, institutional sectors

continued >

Utility, cont'd

- System must be installed by qualified installer
- Rebate up to 25% of installed project costs for solar water heat and wind, \$3.00 per installed watt (DC) for photovoltaics
- Maximum incentive is \$5,000 for wind, \$3,500 for photovoltaics, \$1,500 for solar hot water
- Visit smallsteps.coop/coop programs/

National Grid—Solar Thermal Rebate Program

- Solar water heat, solar space heat, solar thermal process heat
- Open to residential/multi-family, commercial, industrial sectors
- Residential customers receive 15% of project costs, with a cap of \$1,500 for solar water heating systems
- Non-residential customers receive up to 50% of project costs, with a cap of \$100,000 per project
- Must be National Grid customer
- Visit **thinksmartthinkgreen.com** for geographic coverage

State Contacts

New Hampshire Office of Energy and Planning

Joe Broyles (603) 271-8341 joseph.broyles@nh.gov

New Hampshire Business Resource Center (603) 271-2591

New Hampshire Public Utilities Commission (603) 271-2431

Federal Contacts

US Department of Agriculture REAP Grant (800) 670-6553

US Environmental Protection Agency EPA New England

> Cynthia Veit (617) 918-1666 veit.cynthia@epa.gov

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ENERGY STAR Product Rebates

- ENERGY STAR partners occasionally sponsor special offers, such as sales tax exemptions or credits, or rebates on qualified products
- Visit energystar.gov enter "Rebate" in the search box

Multiple Energy Efficiency Products Incentives

- Many state and local energy providers offer residents and businesses rebates and other incentives on energy efficient appliances and products such as water heaters, lighting, boilers, etc.
- Visit dsireusa.org click on "NH," then scroll to "Utility Rebate Programs" to find your provider:
 - National Grid
- PSNH
- New Hampshire Electric Co-op
- Unitil
- Northern Utilities

Success Stories

 $\label{lem:continuous} \textbf{University---} the \ \textbf{University of New Hampshire} \ \text{in Durham}$

earned Energy Star labels for five of its campus buildings. Through energy conservation efforts, UNH saved money and reduced harmful air pollution, including greenhouse gases. Over several decades, UNH has incorporated many energy-efficiency measures into the design and operation of campus buildings. Through a series of retrofits and educational programs, it is estimated that the university saves \$4 million annually in energy compared to the national average. Facility management efforts include energy-smart lighting, revamped building control systems and energy education for maintenance and operations staff as well as the broader university community. Story from energy.unh.edu/News2.htm

Non-Profit—By installing photovoltaic solar panels and a renewable wood-chip heating system, the Society for Protection of New Hampshire Forests has cut energy bills at its Concord, NH, headquarters by 23 percent. The nonprofit group has also opened a new 11,400 square foot wing built with native green-certified lumber and a super-insulated airtight exterior shell that uses 60 percent less energy than comparably-sized buildings. Story from forestsociety.org/ourproperties/ac-conservation-center.asp

Ski Resort—In 2004 **Cranmore Mountain** in North Conway, NH, became the first ski resort on the east coast to use biodiesel fuel to power its snow grooming machines. This project is a collaboration of the NH Department of Environmental Services and the Granite State Clean Cities Coalition, a statewide partnership aimed at increasing the use of alternative fuels across New Hampshire.

