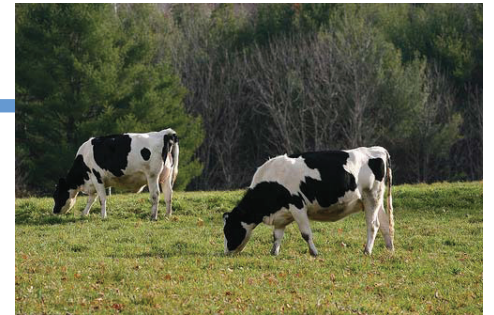
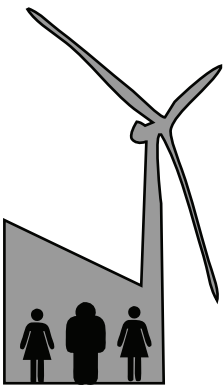
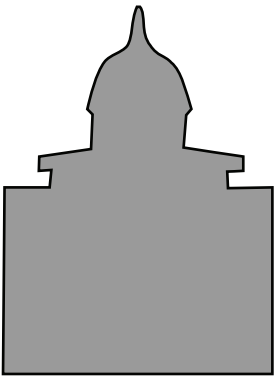
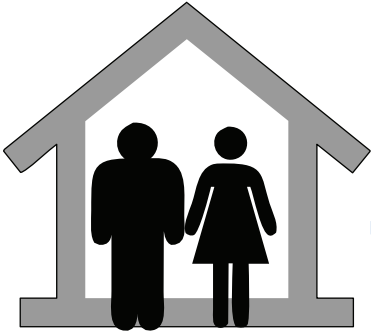


# CLEAN ENERGY

## GUIDE BOOK


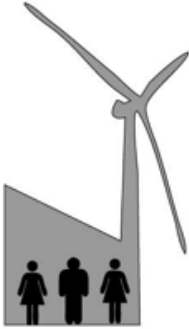

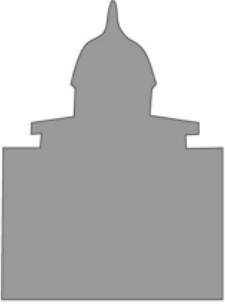
### UNDERSTANDING VERMONT'S CLEAN ENERGY RESOURCES



VPIREF would like to thank Rachel Bryant for her work researching and writing this citizen handbook with us and Drew Hudson for his editorial and design assistance.



















## How to use this guide

To find a program that might work for you, just look for the icon that best fits your group, organization or employer. Please note that lots of programs cover more than one type of applicant, and creative applications may be submitted to many of these programs.

	<p><b><u>Large Business</u></b></p> <p>Business or non-profit groups with more than 10 full time employees, major utilities or commercial energy generators.</p>
	<p><b><u>Small Business</u></b></p> <p>Business or non-profit groups with less than 10 full time employees, volunteer groups, most landlords and farmers.</p>
	<p><b><u>Citizens</u></b></p> <p>Individuals, homeowners, renters, and some small community associations.</p>
	<p><b><u>Government</u></b></p> <p>State, municipal and local government, some electric co-ops and banks.</p>

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## Acknowledgements

The Database of State Incentives for Renewables and Efficiency (DSIRE) hosts information representative of a collaborative effort between the North Carolina Solar Center and the US Department of Energy. DSIRE details federal and state funding opportunities in an organized fashion and can be accessed at [www.dsireusa.org](http://www.dsireusa.org). Preparation of the following manual relied heavily on this information and large portions are either paraphrased or cited directly from the DSIRE site. Please note the footnotes for more specific citations.

# Federal

## Energy Efficiency & Conservation Block Grants (EEBG)<sup>1</sup>

**The Purpose?** This Program, authorized in Title V, Subtitle E of the Energy Independence and Security Act of 2007 (EISA) and signed into Public Law (PL 110-140) on December 19, 2007, provides funds to units of local and state government, Indian tribes, and territories to develop and implement projects to improve energy efficiency and reduce energy use and fossil fuel emissions in their communities. The Program is administered by the Office of Weatherization and Intergovernmental Programs (WIP) in the Office of Energy Efficiency and Renewable Energy (EERE) of the U.S. Department of Energy (DOE).



### **What Activities Qualify?**<sup>2</sup>

Energy efficiency and conservation programs and projects community wide, and renewable energy installations in or on government buildings. Eligible projects include:

- Development of an energy efficiency and conservation strategy
- Building energy audits and retrofits, including weatherization
- Financial incentive programs for energy efficiency such as energy savings performance contracting, on-bill financing, and revolving loan funds
- Transportation programs to conserve energy
- Building code development, implementation, and inspections
- Installation of distributed energy technologies including combined heat and power and district heating and cooling systems
- Material conservation programs including source reduction, recycling, and recycled content procurement programs
- Reduction and capture of greenhouse gas emissions generated by landfills or similar waste-related sources
- Installation of energy efficient traffic signals and street lighting
- Installation of renewable energy technologies in or on government buildings
- Any other appropriate activity that meets the purpose of the program and is approved by DOE

### **Who Qualifies?**

#### Cities & Counties<sup>3</sup>

- Cities with a population of 35,000 or more
- Counties with a population of 200,000 or more
- The top ten highest populated cities and counties in each state, regardless of

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<sup>1</sup> US Department of Energy: Energy Efficiency and Conservation Block Grant Program, <http://www.eecbg.energy.gov/> (last accessed July 3, 2009)

<sup>2</sup> See WEATHERIZATION AND INTERGOVERNMENTAL PROGRAM: ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM, available at [http://www.eecbg.energy.gov/downloads/WIP\\_EECBG\\_Fact\\_Sheet\\_FINAL\\_Print.pdf](http://www.eecbg.energy.gov/downloads/WIP_EECBG_Fact_Sheet_FINAL_Print.pdf)

<sup>3</sup> See ATTACHMENT A: ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM – STATE AND LOCAL GOVERNMENT FORMULA ALLOCATIONS, available at [http://www.eecbg.energy.gov/downloads/full\\_allocation\\_states\\_and\\_locals.pdf](http://www.eecbg.energy.gov/downloads/full_allocation_states_and_locals.pdf) (providing state and local government formula allocations).

population

#### Indian Tribes<sup>4</sup>

- All Federally recognized Indian tribes and any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act

#### States<sup>3</sup>

- All states, the District of Columbia, and the US Territories of American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the US Virgin Islands
  - Each state must sub-grant *at least* 60% of its funding share to cities and counties ineligible for direct formula grants from DOE

**Deadlines?** Program applications due on June 25, 2009 (as of May 26, 2009)

#### **Procedural Steps?**

##### 1. Registration

- a. Obtain a Dun & Bradstreet Data Universal Numbering System (DUNS) number at [www.dnb.com/US/duns\\_update](http://www.dnb.com/US/duns_update)
  - i. If you already have a DUNS number, you do not need to apply for a new one
- b. Register with the Central Contractor Registration (CCR) at [www.ccr.gov](http://www.ccr.gov)\*
  - i. If you already have registered, reregistering is unnecessary – however, be advised that information must be updated.
- c. Register E-Business Point of Contact with FedConnect to submit their application at [www.fedconnect.net](http://www.fedconnect.net)\*
  - i. Click on “Register as a Vendor” on the main screen
  - ii. Be sure to “Register to Receive Notifications” and “Join” the Response Team (joining the team is mandatory to submit the application)
  - iii. To check status of registration click on “click here to check the status” or email FedConnect at [support@FedConnect.net](mailto:support@FedConnect.net) or call them at 800-899-6665

The funding opportunity announcement (FOA) and the application package are located on two different websites. These instructions were created to assist applicants in locating all essential documents needed to apply for the EECBG program.<sup>5</sup>

##### 2. Downloading Application Package

- a. To access the application package visit [www.grants.gov](http://www.grants.gov).
- b. Click on “Apply for Grants,” then click on “download a grant package”
- c. Use CFDA number 81.128 (proper version of Adobe required)
- d. Save the package to your computer

##### 3. Viewing the FOA

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<sup>4</sup> See ATTACHMENT A: ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM – TRIBAL FORMULA ALLOCATIONS, *available at* [http://www.eecbg.energy.gov/downloads/full\\_allocation\\_indian\\_tribes.pdf](http://www.eecbg.energy.gov/downloads/full_allocation_indian_tribes.pdf) (providing tribal formula allocations).

<sup>5</sup> See ACCESSING THE ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG) FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) – REVISED 4/24/09 *available at* [http://www.eecbg.energy.gov/downloads/eecbg\\_foa\\_instruction\\_for\\_downloading.pdf](http://www.eecbg.energy.gov/downloads/eecbg_foa_instruction_for_downloading.pdf) (information regarding the application process).

- a. To access the FOA and its attachments visit [www.fedconnect.net/FedConnect/](http://www.fedconnect.net/FedConnect/)
- b. Click on “Search Public Opportunities and Awards”
- c. Under “Search Criteria,” select “Issuing Office” and type in “NETL.” Click on “Search.”
- d. The EECBG FOA is titled “Recovery Act – EECBG Program.” Click on this link to open the FOA.
- e. On the right hand side of the page, click on “BODY” (underneath “BASE”) to view the FOA document
  - i. Make sure to view the most recent Amendment

#### 4. Submitting Application

- a. When you are ready to submit the application, you will “Create a Response”
- b. To submit the response go to [www.fedconnect.net/FedConnect/PublicPages/FedConnect\\_Ready\\_Set\\_Go.pdf](http://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf) to view the PDF guide established by FedConnect

\* Applicants who have not previously registered with CCR and FedConnect should allow at least 21 days to complete these requirements.

#### **Additional Contact?**

For more specific information, visit [www.eecbg.energy.gov/solutioncenter/default.html](http://www.eecbg.energy.gov/solutioncenter/default.html)<sup>6</sup>

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<sup>6</sup> For more information see [http://www.eecbg.energy.gov/downloads/DE\\_FOA\\_0000013\\_Amendment\\_000003.pdf](http://www.eecbg.energy.gov/downloads/DE_FOA_0000013_Amendment_000003.pdf) (providing more detailed information about program requirements)

## Renewable Electricity Production Tax Credit (PTC)<sup>7</sup>

### The Purpose?

Corporate tax credit that provides a per-kilowatt-hour tax credit for electricity generated by qualified energy sources and sold by taxpayer to an unrelated person during the taxable year.

### What Activities Qualify?

Commercial/Industrial (Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power (i.e., Flowing Water), Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal)

### Amount?

2.1¢/kWh for wind, geothermal, closed-loop biomass; 1.0¢/kWh for other eligible technologies. Generally applies to the first 10 years of operation. Taxpayers eligible for the PTC may take the ITC *or* receive a grant from the US Treasury Department *instead* of taking the PTC.<sup>8</sup>

### Who Qualifies?<sup>9</sup>

Facilities used to produce electricity or, in the case of coal production facilities, refined and Indian Coal. These include<sup>10</sup>:

- Wind facilities
  - Originally placed in service after 12/31/93 and before 1/01/13
  - Does not include any facility for which any qualified small wind energy property expenditure is used in determining the residential energy efficient property credit
    - “Qualified wind energy property expenditure” means an expenditure for property that uses a wind turbine to generate electricity for use in connection with a dwelling unit located in the United States and used as a residence by the taxpayer.<sup>10</sup>
- Closed-loop biomass facilities
  - Originally placed in service after 12/31/92 and before 1/01/14, or
  - Placed in service before 1/01/14 and modified to use closed-loop biomass to co-fire coal, with other biomass, or both
  - Expansions



<sup>7</sup> DSIRE: Federal Incentives/Policies for Renewables & Efficiency, <http://www.dsireusa.org/incentives/index.cfm?State=US&ee=1&re=1> (last accessed July 3, 2009)

<sup>8</sup> PART III – ADMINISTRATIVE, PROCEDURAL, AND MISCELLANEOUS: ELECTION OF INVESTMENT TAX CREDIT IN LIEU OF PRODUCTION TAX CREDIT; COORDINATION WITH DEPARTMENT OF TREASURY GRANTS FOR SPECIFIED ENERGY PROPERTY IN LIEU OF TAX CREDITS, *available at* <http://www.irs.gov/pub/irs-drop/n-09-52.pdf> (Treasury Department giving guidance on how to take one credit over another).

<sup>9</sup> IRS FORM NO. 8835: RENEWABLE ELECTRICITY, REFINED COAL, AND INDIAN COAL PRODUCTION CREDIT, *available at* <http://www.irs.gov/pub/irs-pdf/f8835.pdf>.

<sup>10</sup> Residential Energy Efficient Property, 26 U.S.C §25D *available at* <http://www.dsireusa.org/documents/Incentives/US37Fa.htm>.

- Units placed in service after the date of enactment in connection with a facility originally placed in service between 12/31/92 and 1/01/14
    - Only applies to the extent of the increased amount of electricity produced at the facility by reason of such new unit.
  - Open-loop biomass facilities
    - Facility uses agricultural livestock waste nutrients
      - Originally placed in service after 10/22/04 and before 1/01/14
        - Nameplate capacity rating must be at least 150 kilowatts
    - Facility does not use agricultural livestock waste nutrients
      - Originally placed in service before 1/01/14
    - Expansions
      - Units placed in service after the date of enactment in connection with a facility originally placed in service between 10/3/08 and 1/01/14 (for those using agricultural livestock waste) or a facility placed in service before 1/01/14 (for those not using agricultural livestock waste)
      - Only applies to the extent of the increased amount of electricity produced at the facility by reason of such new unit.
    - Credit Eligibility
      - *Note:* If the owner of such facility is not the producer of the electricity, the person eligible for the credit shall be the lessee or the operator of such facility.
  - Geothermal energy facilities
    - Originally placed in service after 10/22/04 and before 1/01/14
    - Exemptions
      - Equipment used to produce, distribute, or use energy derived from a geothermal deposit, but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage
        - Geothermal deposit means a geothermal reservoir consisting of natural heat that is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure).<sup>11</sup>
      - Qualified fuel cell property or qualified microturbine property
      - Combined heat and power system property
      - Qualified small wind energy property
      - Equipment which uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure, but only with respect to periods ending before January 1, 2017.
  - Solar energy facilities
    - Originally placed in service after 10/22/04 and before 1/01/06
    - Exemptions

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<sup>11</sup> 26 U.S.C.A §613 (West 2009).

- Equipment used to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat (exception for property used to generate energy to heat a swimming pool)
  - Equipment used to illuminate the inside of a structure using fiber-optic distributed sunlight but only with respect to periods ending before January 1, 2017
  - Qualified fuel cell property or qualified microturbine property
  - Combined heat and power system property
  - Qualified small wind energy property
  - Equipment which uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure, but only with respect to periods ending before January 1, 2017.
- Small irrigation power facilities
  - Originally placed in service after 10/22/04 and before 10/3/08
- Landfill gas facilities
  - Originally placed in service after 10/22/04 and before 1/01/14
- Trash facilities (other than landfill gas facilities)
  - Originally placed in service after 10/22/04 and before 1/01/14
    - May apply to facility placed in service on or before 10/22/04, but only to the extent of the increased amount of electricity produced at the facility by reason of such new unit.
- Refined coal production facilities
  - Facility produces steel industry fuel
    - Placed in service before 1/01/10
  - Facility does not produce steel industry fuel
    - Originally placed in service after 10/22/04 and before 1/01/10
- Hydropower facilities
  - Facility produces incremental hydropower production
    - Placed in service after 8/8/05 and before 1/01/14
  - Facility does not produce incremental hydropower production
    - Placed in service after 8/8/05 and before 1/01/14
- Indian coal production facilities
  - Placed in service before 1/01/09
- Marine and hydrokinetic renewable energy facilities
  - Originally placed in service after 10/3/08 and before 1/01/14
    - Nameplate capacity rating of at least 150 kilowatts

**Deadlines?**

Varies depending on technology (see above).

**Procedural Steps?**<sup>9</sup>

Varies.

**Additional Contact?**

Public Information – IRS

US Internal Revenue Service

1111 Constitution Avenue, NW  
Washington, DC 20224  
(800) 829-1040  
[www.irs.gov](http://www.irs.gov)

## Energy Efficient Commercial Buildings Tax Deduction<sup>7</sup>

### **The Purpose?**

Tax deduction for energy-efficient commercial buildings applicable to qualifying systems and buildings placed in service from 1/1/06 through 12/31/07.

### **What Activities Qualify?**

Equipment insulation, water heaters, lighting, lighting controls/sensors, chillers, furnaces, boilers, heat pumps, air conditioners, CHP/cogeneration, caulking/weather-stripping, duct/air sealing, building insulation, windows, doors, siding roofs, comprehensive measures/whole building

### **Amount?**

\$0.30 - \$1.80 per square foot, depending on technology and amount of energy reduction

### **Who Qualifies?**

Building Owners

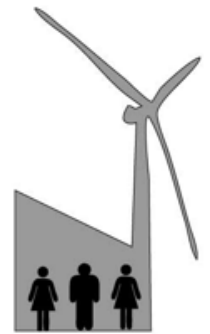
- Tax deduction of \$1.80 per square foot for owners of new or existing buildings who install (1) interior lighting<sup>12</sup>, (2) building envelope, or (3) heating, cooling, ventilation, or hot water systems that reduce the building's total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001.<sup>13</sup> Energy savings must be calculated using computer software approved by the IRS.<sup>14</sup>
- Tax deductions of \$0.60 per square foot are available to owners of buildings in which individual lighting, building envelope, or heating and cooling systems meet target levels that would reasonably contribute to an overall building savings of 50% if additional systems were installed.
- Parking garages *are* eligible; churches are not.<sup>15</sup>

Tenants

- Tenants may be eligible if they make construction expenditures. In the case of energy efficient systems installed on or in government property, tax deductions will be given to the person primarily responsible for the systems' design.

### **Deadlines?**

Effective for property placed in service after 12/31/05 and prior to 1/1/14.<sup>15</sup>



<sup>12</sup> Lighting Tax Deduction: The Energy Efficient Commercial Buildings Deduction EPAAct 2005's new incentive for lighting and building efficiency, <http://www.lightingtaxdeduction.org/> (last visited July 3, 2009).

<sup>13</sup> ASHRAE Standard 90.1-2001, <http://xp20.ashrae.org/frame.asp?standards/std90.html> (last visited July 3, 2009).

<sup>14</sup> US Department of Energy: Financial Opportunities, [http://www1.eere.energy.gov/buildings/qualified\\_software.html](http://www1.eere.energy.gov/buildings/qualified_software.html) (last visited July 3, 2009).

<sup>15</sup> Commercial Building Tax Deduction Coalition: About the Provision, [http://www.efficientbuildings.org/about\\_the\\_provision.html](http://www.efficientbuildings.org/about_the_provision.html) (last visited July 3, 2009).

**Procedural Steps?**

No special form to claim the deduction. When pertaining to business forms (1120 for corporations, 1120-S for S corporations, and 1065 for partnerships) deduction amount listed in the “other deductions” line of the tax return. A statement listing the types and amounts of “other deductions” should be attached to the return.<sup>15</sup>

**Additional Contact?**

Public Information – IRS  
US Internal Revenue Service  
1111 Constitution Avenue, NW  
Washington, DC 20224  
(800) 829-1040  
[www.irs.gov](http://www.irs.gov)

**Authority?**

26 USCA 179D

## Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation<sup>7</sup>

### **The Purpose?**

Allows businesses to recover investments in certain property through depreciation deductions. Property types are assigned class lives, ranging from three to 50 years, over which the property may be depreciated. Several renewable energy technologies are classified as five-year property, including:

- A variety of solar electric and solar thermal technologies
- Fuel cells and microturbines
- Geothermal electric
- Direct-use geothermal and geothermal heat pumps
- Small wind (100 kW or less)
- Combined heat and power (CHP)

Eligible renewable energy systems acquired and placed in service are potentially eligible for a 50% bonus depreciation.

### **What Activities Qualify?**

Solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaic's, landfill gas, wind, biomass, renewable transportation fuels, geothermal electric, fuel cells, geothermal heat pumps, municipal solid waste, CHP/cogeneration, solar hybrid lighting, direct use geothermal, anaerobic digestion, microturbines.

### **Amount?**

The owner is entitled to deduct 50% of the adjusted basis (the original cost or other basis of property, reduced by depreciation deductions and increased by capital expenditures) of the property in 2008 and 2009. The remaining 50% of the adjusted basis of the property is depreciated over the ordinary depreciation schedule. Before calculating depreciation for such a project, including any bonus depreciation, the adjusted basis of the project must be reduced by one-half of the amount of the energy credit for which the project qualifies.

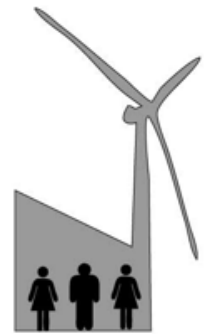
### **Who Qualifies?**

To qualify for bonus depreciation, a project must satisfy these criteria:

- The property must have a recovery period of 20 years or less under normal federal tax depreciation rules;
- The original use of the property must commence with the taxpayer claiming the deduction;
- The property generally must have been acquired during 2008 or 2009; and
- The property must have been placed in service during 2008 or 2009 (or, in certain cases, in 2010)

### **Deadlines?**

Varies depending on class life – see IRS instructions



**Procedural Steps?**<sup>16</sup>

Varies.

**Additional Contact?**

Public Information – IRS  
US Internal Revenue Service  
1111 Constitution Avenue, NW  
Washington, DC 20224  
(800) 829-1040  
www.irs.gov

**Authority?**

26 USC 168

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<sup>16</sup> 2008 INSTRUCTIONS FOR FORM NO. 4562: DEPRECIATION AND AMORTIZATION, *available at* <http://www.irs.gov/pub/irs-pdf/i4562.pdf>.

## Business Energy Investment Tax Credit (ITC)<sup>7</sup>

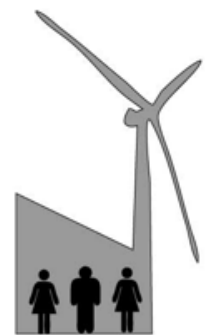
### The Purpose?

Expansion of the federal business energy investment tax credit available to commercial, industrial and utility sectors under 26 USC §48.

### What Activities Qualify?

Solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaic's, wind, biomass, geothermal electric, fuel cells, geothermal heat pumps, CHP/cogeneration, solar hybrid lighting, direct use geothermal, microturbines

- Eligible System Size
  - Small wind turbines: 100 kW or less
  - Fuel cells: 0.5 kW or greater
  - Microturbines: 2 MW or less
  - CHP: 50 MW or less
- Solar
  - Includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. Passive solar systems and solar pool-heating systems are *not* eligible.<sup>17</sup>
- Fuel Cells
  - Includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher.
- Small Wind Turbines
  - Includes turbines up to 100 kW in capacity
- Geothermal Systems
  - Includes geothermal heat pumps and equipment used to produce, distribute or use energy derived from a geothermal deposit. For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electric transmission stage. For heat pumps, this credit applies to eligible property placed in service after 10/3/08.
- Microturbines
  - Includes microturbines up to 2 MW in capacity that have an electricity-only generation efficiency of 26% or higher.
- Combined Heat and Power (CHP)
  - Includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use



<sup>17</sup> Solar Energy Industries Association has put together a 4 page document with FAQs for solar energy credits ([http://seia.org/galleries/pdf/SEIATaxManual\\_v3-0\\_FAQ.pdf](http://seia.org/galleries/pdf/SEIATaxManual_v3-0_FAQ.pdf))

biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems. Applies to eligible property placed in service after 10/3/08.

**Amount?**

30% for solar, fuel cells and small wind;

10% for geothermal, microturbines and CHP

(Maximum incentive)

Fuel cells placed in service after 10/4/08: \$1,500 per 0.5 kW

Fuel cells placed in service before 10/4/08: \$500 per 0.5 kW

Microturbines: \$200 per kW

Small wind turbines placed in service 10/4/08 – 12/31/08: \$4,000

Small wind turbines placed in service after 12/31/08: no limit

All other eligible technologies: no limit

**Who Qualifies?**

(Eligible system size)

Small wind turbines: 100 kW or less

Fuel cells: 0.5 kW or greater

Microturbines: 2 MW or less

CHP: 50 MW or less

**Deadlines?**

Energy property must be operational in the year in which the credit is first taken.

**Procedural Steps?**

See 26 USC 48

**Additional Contact?**

Public Information - IRS

U.S. Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

Phone: (800) 829-1040

Web Site: <http://www.irs.gov>

**Additional Info?**

Taxpayers eligible for the ITC may receive a grant from the US Treasury Department *instead of* the ITC.<sup>8</sup>

## Energy Efficient Appliance Tax Credit for Manufacturers<sup>7</sup>

### **The Purpose?**

Tax credit opportunity for manufacturers of high-efficiency residential clothes washers, refrigerators, and dishwashers.

### **What Activities Qualify?**

Clothes washers, dishwasher, refrigerators/freezers

### **Amount?**

Dishwashers: \$45 or \$75 per unit, varies by energy and water efficiency

- \$45 for models manufactured in 2008-2009 which use no more than 324 kWh per year and 5.8 gallons per cycle
- \$75 for models manufactured in 2008, 2009 or 2010 which use no more than 307 kWh per year and 5.5 gallons per cycle

Clothes washers: \$75 - \$250 per unit, varies by type and energy and water efficiency

- \$75 for residential top-loading models manufactured in 2008 which meet or exceed a 1.72 modified energy factor (MEF) and do not exceed a 8.0 water consumption factor (WCF)
- \$125 for residential top-loading models manufactured in 2008 or 2009 which meet or exceed a 1.8 MEF and do not exceed a 7.5 WCF
- \$150 for residential or commercial models manufactured in 2008, 2009, or 2010 which meet or exceed a 2.0 MEF and does not exceed a 6.0 WCF
- \$250 for residential or commercial models manufactured in 2008, 2009, or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF

Refrigerators: \$50 - \$200, depending on energy efficiency rating

- \$50 for models manufactured in 2008 which are between 20% and 22.9% more efficient than the 2001 energy conservation standards<sup>18</sup>
- \$75 for models manufactured in 2008 or 2009 which are between 23% and 24.9% more efficient than the 2001 energy conservation standards
- \$100 for models manufactured in 2008, 2009, or 2010 which are between 25% and 29.9% more efficient than the 2001 energy conservation standards
- \$200 for models manufactured in 2008, 2009, or 2010 which are at least 30% more efficient than the 2001 energy conservation standards.

Aggregate amount of credit allowed is \$75 million per taxpayer.<sup>19</sup>

### **Who Qualifies?**

Appliances must meet Energy Star 2007 requirements<sup>20</sup>, must be new and in compliance



<sup>18</sup> Text of 10 CFR 430.32, detailing energy standards (<http://frwebgate3.access.gpo.gov/cgi-bin/TEXTgate.cgi?WAISdocID=3022317028+55+1+0&WAIAction=retrieve>)

<sup>19</sup> Certain types of refrigerators (manufactured in 2008, 2009, or 2010 which consume at least 30% less energy than the 2001 energy conservation standards) and clothes washers (manufactured in 2008, 2009, or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF) will not add to the aggregate limit and have no separate credit limit. (DSIRE site)

<sup>20</sup> Find specifics at [www.energystar.gov](http://www.energystar.gov)

with all applicable performance and safety standards

**Deadlines?**

Varies based on equipment type.

**Procedural Steps?**

IRS Form 8909<sup>21</sup>

**Additional Contact?**

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<sup>21</sup> Available at [www.irs.gov](http://www.irs.gov) (2008 copy at <http://www.irs.gov/pub/irs-pdf/f8909.pdf>)

## Energy-Efficient New Homes Tax Credit for Home Builders<sup>7</sup>

### **The Purpose?**

Enables builders of all new energy-efficient homes, including manufactured homes constructed in accordance with the Federal Manufactured Homes Construction and Safety Standards, to qualify for tax credits of up to \$2,000.

### **What Activities Qualify?**

Comprehensive Measures/Whole Building. The home qualifies for the credit if:

- It is located in the United States;
- Its construction is substantially completed after August 8, 2005;
- It meets the energy savings requirements outlined in the statute; and
- It is acquired from the eligible contractor after December 31, 2005, and before January 1, 2010, for use as a residence.

### **Amount?**

\$1,000 - \$2,000, depending on energy savings and home type, calculated using approved software.<sup>22</sup>

### **Who Qualifies?**

Site-built homes qualify for \$2,000 credit if they are certified to reduce heating and cooling energy consumption by 50% relative to the International Energy Conservation Code standard and meet minimum efficiency standards established by the Department of Energy. Building envelope component improvements must account for at least one-fifth of the reduction in energy consumption.

Manufactured homes qualify for \$2,000 credit if they conform to Federal Manufactured Home Construction and Safety Standards and meet the energy savings requirements of site-built homes described above. They may qualify for \$1,000 credit if they reduce energy consumption by 30% relative to the International Energy Conservation Code standard. In this case, building envelope component improvements must account for at least one-third of the reduction in energy consumption. Alternatively, manufactured homes qualify if they meet Energy Star Labeled Homes requirements.

### **Deadlines?**

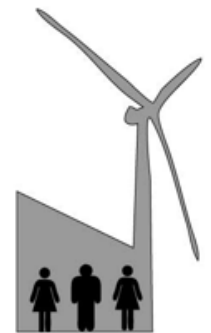
12/31/09 (as of 6/29/09)

### **Procedural Steps?**

IRS Form 8908<sup>23</sup>

### **Additional Contact?**

### **Additional Info?**



<sup>22</sup> Eligible software listed on the IRS website, <http://www.irs.gov/businesses/small/industries/article/0,,id=155445,00.html>

<sup>23</sup> Available at [www.irs.gov/pub/irs-pdf/f8908.pdf](http://www.irs.gov/pub/irs-pdf/f8908.pdf)

IRS Notice 2006-27<sup>24</sup> provides guidance for the credit of building energy-efficient homes other than manufactured homes. IRS Notice 2006-28<sup>25</sup> provides guidance for the credit for building energy-efficient manufactured homes.

## US Department of Treasury – Renewable Energy Grants

### **The Purpose?**

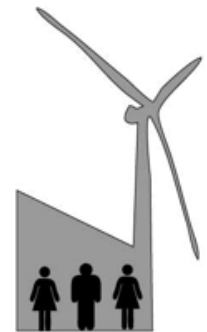
American Recovery and Reinvestment Act of 2009 created a renewable energy grant program to be administered by the US Department of Treasury. This grant may be taken in lieu of the federal business energy investment tax credit (ITC).

### **What Activities Qualify?**

Solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaic's, landfill gas, wind, biomass,

hydroelectric, geothermal electric, fuel cells, geothermal heat pumps, municipal solid waste, CHP/cogeneration, solar hybrid lighting, hydrokinetic, tidal energy, wave energy, ocean thermal, microturbines

- Solar
  - The grant is equal to 30% of the basis of the property for solar energy. Eligible solar-energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Passive solar systems and solar pool-heating systems are *not* eligible. Hybrid solar-lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible.
- Fuel Cells
  - The grant is equal to 30% of the basis of the property for fuel cells. The grant for fuel cells is capped at \$1,500 per 0.5 kW in capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher.
- Small Wind Turbines
  - The grant is equal to 30% of the basis of the property for small wind turbines. Eligible small wind property includes wind turbines up to 100 kW in capacity.
- Qualified Facilities
  - The grant is equal to 30% of the basis of the property for qualified facilities. Qualified facilities include wind energy facilities, closed-loop biomass facilities, open-loop biomass facilities, geothermal energy facilities, landfill gas facilities, trash facilities, qualified hydropower facilities, and marine and hydrokinetic renewable energy facilities.



<sup>24</sup> Available at <http://www.irs.gov/pub/irs-drop/n-06-27.pdf>

<sup>25</sup> Available at <http://www.irs.gov/pub/irs-drop/n-06-28.pdf>

- Geothermal Heat Pumps
  - The grant is equal to 10% of the basis of the property for geothermal heat pumps.
- Microturbines
  - The grant is equal to 10% of the basis of the property for microturbines. The grant for microturbines is capped at \$200 per kW of capacity. Eligible property includes microturbines up to two MW in capacity that have an electricity-only generation efficiency of 26% or higher.
- Combined Heat and Power (CHP)
  - The grant is equal to 10% of the basis of the property for CHP. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the grant may be reduced for less-efficient systems.

**Amount?**

30% of property that is part of a qualified facility, qualified fuel cell property, solar property, or qualified small wind property. 10% all other property

Max Limits:

- \$1,500 per 0.5 kW for qualified fuel cell property
- \$200 per kW for qualified microturbine property
- 50 MW for CHP property, with limitations for large systems

**Who Qualifies?**

Only tax paying entities. Federal, state and local government bodies, non-profits, qualified energy tax credit bond lenders, and cooperative electric companies are *not* eligible to receive this grant.

**Deadlines?**

Grant applications must be submitted by 10/1/2011. Payment of grant will be made within 60 days of the grant application date or the date property is placed in service, whichever is later.

**Procedural Steps?**

Currently being developed. Estimated that the Department of Treasury will have guidance and application materials available by July 2009.<sup>26</sup>

**Additional Contact?**

**Additional Info?**

Taxpayers eligible for the PTC or ITC may choose to receive a grant from the US Treasury Department *instead*.<sup>8</sup>

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<sup>26</sup> GRANTS FOR SPECIFIED ENERGY PROPERTY IN LIEU OF TAX CREDITS, *available at* [http://www.treas.gov/recovery/docs/Grants\\_Specified-Energy-Property.pdf](http://www.treas.gov/recovery/docs/Grants_Specified-Energy-Property.pdf).

## USDA – Rural Energy for America Program (REAP) Grants<sup>7</sup>

### **The Purpose?**

REAP promotes energy efficiency and renewable energy for agricultural producers and small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance.

### **What Activities Qualify?**

Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP/Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Microturbines

### **Amount?**

Max limit of 25% of the project cost – loan guarantee not to exceed \$25 million. Combined amount of a grant and loan guarantee may *not* exceed 75% of the project's cost. Congress has allocated funding in the following amounts: \$55 million for FY 2009, \$60 million for FY 2010, \$70 million for FY 2011, and \$70 million for FY 2012.

### **Who Qualifies?**

The program is designed to assist farmers, ranchers and rural small businesses that are able to demonstrate financial need. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area can also supply. Rural electric cooperatives may also be eligible.<sup>27</sup> Commercial, Schools, Local Government, State Government, Tribal Government, Rural Electric Cooperative, Agricultural, Public Power Entities

### **Deadlines?**

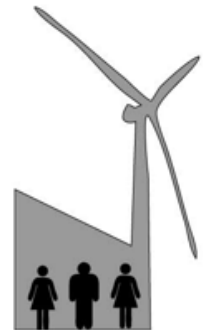
July 31, 2009 (as of June 30, 2009)

### **Procedural Steps?**

1. Potential applicants should contact the Montpelier Area Office at (802) 828-6031 to ask for a REAP Intake form to complete and return (via email)
2. When the Intake form is received back in the Montpelier Area Office (via email) an application package will be emailed out which has been tailored to fit the specific project

### **Additional Contact?**

Rural Development State Office (<http://www.rurdev.usda.gov/vt/>)  
Cheryl Ducharme, USDA Rural Development  
89 Main Street, 3rd Floor  
Montpelier, VT 05602  
802-828-6083



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<sup>27</sup> See USDA Rural Development: Business and Cooperative Programs, <http://www.rurdev.usda.gov/rbs/busp/9006grant.htm> (last visited July 3, 2009).

cheryl.ducharme@vt.usda.gov

**Authority?**

7 USC 8106<sup>28</sup>

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<sup>28</sup> Available at <http://www.dsireusa.org/documents/Incentives/FED46F1.htm>

## Clean Renewable Energy Bonds (CREBs)<sup>7</sup>

### **The Purpose?**

Clean renewable energy bonds (CREBs) may be used by certain entities – primarily in the public sector – to finance renewable energy projects. CREBs are issued – theoretically – with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest. CREBs differ from traditional tax-exempt bonds in that the tax credits issued through CREBs are treated as taxable income for the bondholder.

### **What Activities Qualify?**

Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal

### **Amount?**

Varies

### **Who Qualifies?**

Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative

### **Deadlines?**

Old CREBs (previously reserved allocations) December 31, 2009

New CREBs (new allocations) August 4, 2009

### **Procedural Steps?**

Participants must first apply to the IRS for a CREBs allocation, and then issue the bonds within a specified time period. Based on the recent IRS solicitation, bonds are to be issued within 3 years after the applicant receives notification of the approved allocation. For more specifics, see the internal revenue bulletin, section 3.<sup>29</sup>

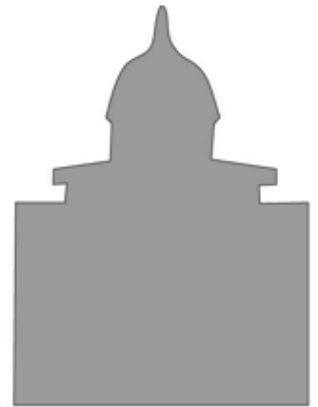
### **Additional Contact?**

IRS Office of Associate Chief Counsel (Zoran Stojanovic or Timothy Jones)  
(202) 622-3980

Questions on recent IRS Notice 2009-33 can be directed to Janae Lemley at (636) 255-1202

Old CREBs: 26 USC §54<sup>30</sup>

New CREBs: 26 USC §54A<sup>31</sup> & §54C<sup>32</sup>



<sup>29</sup> INTERNAL REVENUE BULLETIN: 2007-14, available at [http://www.irs.gov/irb/2007-14\\_IRB/ar17.html](http://www.irs.gov/irb/2007-14_IRB/ar17.html) (section 3 presents application requirements in general).

<sup>30</sup> Available at <http://www.dsireusa.org/documents/Incentives/US45f.htm>

<sup>31</sup> Available at <http://www.dsireusa.org/documents/Incentives/US45Fb.htm>

<sup>32</sup> Available at <http://www.dsireusa.org/documents/Incentives/US45Fc.htm>

## Energy-Efficient Mortgages<sup>7</sup>

### **The Purpose?**

Homeowners can take advantage of energy efficient mortgages (EEM) to finance a variety of energy efficiency measures, including renewable energy technologies, in a new or existing home. The federal Energy Star program has a partnership program for lenders whereby lenders who make EEMs available may become Energy Star lender partners.<sup>33</sup>

### **What Activities Qualify?**

Eligible efficiency technologies (not specifically identified), as well as Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Daylighting

### **Amount?**

#### FHA

The Federal Housing Authority (FHA) allows lenders to add up to 100% of energy efficiency improvements to an existing mortgage loan. The cost of the improvements that may be eligible for financing as part of the mortgage is either 5% of the property's value (not to exceed \$8,000) or \$4,000 – whichever is greater.<sup>34</sup> The FHA has a loan limit averaging \$300,000 for a single-family home in Vermont.<sup>35</sup> Loan amounts may not exceed the projected savings of the energy efficiency improvements.

#### Department of Veterans Affairs

Available to qualified military personnel, reservists and veterans.<sup>36</sup> The VA insures EEMs to be used in conjunction with VA loans either for the purchase of existing homes or for refinancing loans secured by the dwelling. Homebuyers may borrow up to \$3,000 if only documentation of improvement costs or contractor bids is submitted, or up to \$6,000 if the projected energy savings are greater than the increase in mortgage payments. Loans may exceed this amount at the discretion of the VA. Applicants may not include the cost of their own labor in the total amount. No additional home appraisal is needed, but applicants must submit a HER, contractor bids and certain other documentation. The VA insures 50% of the loan if taken by itself, but it may insure less if the total value of the mortgage exceeds a certain amount.

#### Conventional EEMs

Fannie Mae EEMs are available to single-family, owner-occupied units, and Fannie Mae provides EEMs to those whose income might otherwise disqualify them from receiving the



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<sup>33</sup> ENERGY STAR: LENDER BENEFITS FROM BEING AN ENERGY STAR PARTNER, *available at* [http://www.energystar.gov/index.cfm?c=bldrs\\_lenders\\_raters.c=bldrs\\_lenders\\_raters.c=bldrs\\_lenders\\_raters.pt\\_lender\\_benefits](http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.c=bldrs_lenders_raters.c=bldrs_lenders_raters.pt_lender_benefits).

<sup>34</sup> US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT: ENERGY EFFICIENT MORTGAGE PROGRAM, *available at* <http://www.hud.gov/offices/hsg/sfh/eem/energy-r.cfm>.

<sup>35</sup> FEDERAL HOUSING AUTHORITY: LENDING LIMITS FOR FHA LOANS INSURED FOR VERMONT COUNTIES, *available at* [http://www.fha.com/lending\\_limits\\_state.cfm?state=VERMONT](http://www.fha.com/lending_limits_state.cfm?state=VERMONT) (detailed information regarding single family, duplex, tri-plex and four-plex funding).

<sup>36</sup> US DEPARTMENT OF VETERANS AFFAIRS: GENERAL RULES FOR ELIGIBILITY, *available at* <http://www.homeloans.va.gov/elig2.htm> (military Service Requirements for VA loan eligibility).

loans by allowing approved lenders to adjust borrowers' debt-to-income ratio by 2%. The value of the improvements is immediately added to the total appraised value of the home.

### **Who Qualifies?**

All persons who meet income requirements<sup>37</sup> under FHA Section 203(b) and are capable of making the monthly mortgage payments qualify to apply. Cooperative units are not eligible; individual condos may be insured if they are in projects that have been approved by FHA or the Department of Veterans Affairs, or meet certain Fannie Mae guidelines. EEM can also be used with FHA's Section 203(h) program for mortgages made to victims of presidentially declared disasters. The mortgage must comply with both Section 203(h) requirements, as well as those for EEM. However, the program is limited to one unit detached houses.<sup>34</sup>

### **Deadlines?**

Varies.

### **Procedural Steps?**

The cost of the energy improvements and estimate of the energy savings must be determined by a home energy rating system (HERS) or an energy consultant. Up to \$200 of the cost of an energy inspection report may be included in the mortgage.<sup>34</sup>

### **Additional Contact?**

EEM is authorized under Section 513 of the Housing and Community Development Act of 1992. Frequently asked questions are presented on the FHA Resource Center website.<sup>38</sup> Email [info@fhaoutreach.com](mailto:info@fhaoutreach.com) or call (800) CALL-FHA. Additional mortgage information can be found on <http://www.resnet.us/ratings/mortgages/>.

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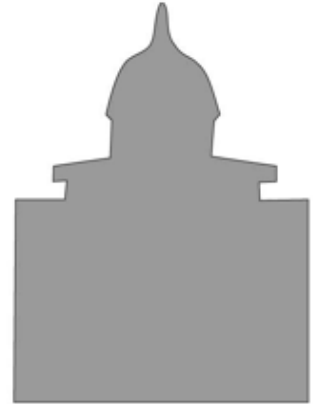
<sup>37</sup> See Ginnie Mae: Your Path to Homeownership, [http://www.ginniemae.gov/2\\_prequal/intro\\_questions.asp?Section=YPTH](http://www.ginniemae.gov/2_prequal/intro_questions.asp?Section=YPTH) (approximate estimate of how much a homebuyer qualifies for available at Ginnie Mae); See also The Brightway Team: Federal Housing Tax Credit, [http://www.brightwayteam.com/FHA\\_203b/page\\_2222762.html](http://www.brightwayteam.com/FHA_203b/page_2222762.html) (debt to income ratios not to exceed 31% (front end)/43% (back end)).

<sup>38</sup> FEDERAL HOUSING AUTHORITY: THE FHA RESOURCE CENTER, *available at* <http://www.hud.gov/offices/hsg/sfh/fharesourcectr.cfm>.

## Qualified Energy Conservation Bonds (QECBs)<sup>7</sup>

### **The Purpose?**

Qualified Energy Conservation Bonds (QECBs) are qualified tax credit bonds, similar to Clean Renewable Energy Bonds, which are authorized by the *Energy Improvement and Extension Act of 2008*. They may be used by state, local and tribal governments to finance capital expenditures that reduce energy consumption in public buildings by 20% or more and implement green community programs and rural development including the production of electricity from renewable sources.<sup>39</sup> QECBs are issued – theoretically – with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest. QECBs differ from traditional tax-exempt bonds in that the tax credits issued through QECBs are treated as taxable income for the bondholder.



### **What Activities Qualify?**

Energy efficiency capital expenditures in public buildings; renewable energy production (Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal); various research and development applications; mass commuting facilities that reduce energy consumption; several types of energy related demonstration projects; and public energy efficiency education campaigns (see HR 1424 for additional details). Renewable energy facilities that qualify for CREBs are also eligible for QECBs.

### **Amount?**

Varies.

### **Who Qualifies?**

Local Government, State Government, Tribal Government

### **Deadlines?**

Varies

### **Procedural Steps?**

Bond volume is allocated to each state based on the state's percentage of the US population as of July 1, 2008. Each state is then required to allocate a portion of its allocation to "large local governments" within the state (defined as those having 100,000 or more people).

### **Additional Contact?**

Timothy Jones or David White of the IRS Office of Associate Chief Counsel at (202) 622-3980.<sup>40</sup>

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<sup>39</sup> <http://education.tulane.edu/newsletter/documents/QECBonepager.pdf>

<sup>40</sup> See also PART III – ADMINISTRATIVE, PROCEDURAL, AND MISCELLANEOUS: QUALIFIED ENERGY CONSERVATION BOND ALLOCATIONS FOR 2009, available at <http://www.irs.gov/pub/irs-drop/n-09-29.pdf> (More detailed information).

## US Department of Energy – Loan Guarantee Program<sup>7</sup>

### **The Purpose?**

The US DOE is authorized to issue loan guarantees for projects that “avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.”

### **What Activities Qualify?**

Efficiency: Lighting, Windows, Roofs

Renewables: Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Fuel Cells, Manufacturing Facilities, Daylighting, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel

### **Amount?**

Varies. Program focuses on projects with total costs over \$25 million. No maximum limit stated. Full repayment is required over a period not to exceed the lesser of 30 years or 90% of the projected useful life of the physical asset to be financed.

### **Who Qualifies?**

Any non-federal entity, including commercial, industrial, nonprofit, schools, local government, state government, agricultural and institutional sectors. Davis-Bacon wage requirements apply to any project receiving a loan guarantee.<sup>41</sup>

### **Deadlines?**

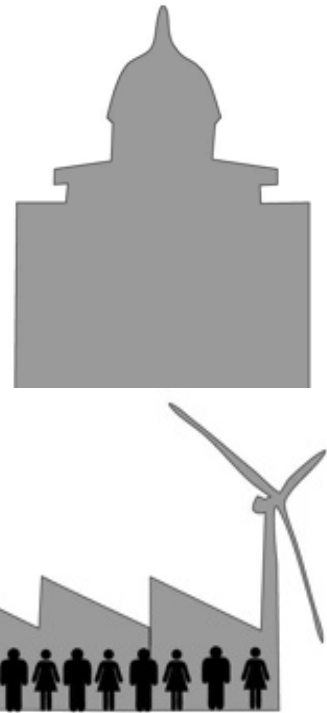
DOE may enter into guarantees until September 30, 2011.

### **Procedural Steps?**

If available, the Department will issue a technology specific solicitation. Once the solicitation has been issued, project sponsors have a defined amount of time to respond before the solicitation closing date.<sup>42</sup>

### **Additional Contact?**

Director, DOE Loan Guarantee Program Office  
1000 Independence Avenue, SW.  
Washington, DC 20585-0121  
(202) 586-8336  
LGProgram@hq.doe.gov



<sup>41</sup> US GOVERNMENT PRINTING OFFICE: GENERAL DECISION COUNTY INDEX, *available at* <http://www.gpo.gov/davisbacon/vt.html>.

<sup>42</sup> No open solicitations as of June 30, 2009 (check frequently at <http://www.lgprogram.energy.gov/apply.html>)

## USDA – Rural Energy for America Program (REAP) Loan Guarantees<sup>7</sup>

### **The Purpose?**

The REAP promotes energy efficiency and renewable energy for agricultural producers and rural small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance.

### **What Activities Qualify?**

Eligible efficiency technologies (not specifically identified), as well as

Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP/Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Microturbines

### **Amount?**

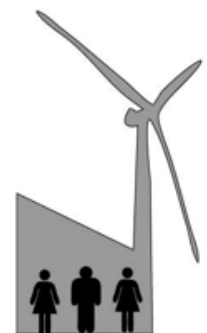
Varies. Grants limited to 25% of a proposed project's cost, and a loan guarantee must be at least \$5,000 and must not exceed \$25 million. The combined amount of a grant and loan guarantee may not exceed 75% of the project's cost. In general a minimum of 20% of the funds available for these incentives will be dedicated to grants of \$20,000 or less. Maximum percentages of guarantees (applying to the whole loan)<sup>27</sup>:

- 85% for loan of \$600,000 or less
- 80% for loans greater than \$600,000 but \$5 million or less
- 70% for loans greater than \$5 million up to \$10 million
- 60% for loans greater than \$10 million up to \$25 million

Congress has allocated funding in the following amounts: \$55 million for FY 2009, \$60 million for FY 2010, \$70 million for FY 2011, and \$70 million for FY 2012.

### **Who Qualifies?**

Agricultural producers and rural small businesses seeking to purchase renewable energy systems (including systems that may be used to produce and sell electricity), to make energy improvements, and to conduct relevant feasibility studies. Agricultural producers must gain 50% or more of their gross income from their agricultural operations and comply with small business standards.<sup>43</sup> Grants are also generally available to state government entities, local governments, tribal governments, land-grant colleges and universities, rural electric cooperatives and public power entities. These grants are to be used for conducting and promoting energy audits; and for providing recommendations and information related to energy efficiency and renewable energy.



<sup>43</sup> US SMALL BUSINESS ADMINISTRATION: SIZE STANDARDS, *available at* <http://www.sba.gov/contractingopportunities/officials/size/index.html>.

**Deadlines?**

July 31, 2009 (as of June 30, 2009)

**Procedural Steps?**

Contact Rural Development State Office  
Cheryl Ducharme, USDA Rural Development  
89 Main Street, 3rd Floor  
Montpelier, VT 05602  
802-828-6083  
cheryl.ducharme@vt.usda.gov

**Additional Contact?**

Authority: 7 USC §8106

## Qualified Advanced Energy Project Investment Tax Credit<sup>7</sup>

### **The Purpose?**

New investment tax credit to encourage the development of a US based renewable energy manufacturing sector.

### **What Activities Qualify?**

Qualified advanced energy projects (QAEPs) - advanced energy projects that establish, re-equip or expand a manufacturing facility that produces any of the following:

- Equipment and/or technologies used to produce energy from the sun, wind, geothermal or “other” renewable sources
- Fuel cells, microturbines or energy-storage systems for use with electric or hybrid-electric motor vehicles
- Equipment used to refine or blend renewable fuels
- Equipment and/or technologies to produce energy-conservation technologies (including energy-conserving lighting technologies and smart grid technologies)

Efficiency: Lighting, Lighting Controls/Sensors, Energy Conservation Technologies

Renewables: Solar Water Heat, Solar Thermal Electric, Photovoltaics, Wind, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Fuel Cells using Renewable Fuels, Microturbines

### **Amount?**

30% of qualified investment. Max limit of credits to be allocated is \$2.3 billion.

### **Who Qualifies?**

A taxpayer with a QAEP. However, any taxpayer receiving this credit may *not* also receive the business energy investment tax credit.

### **Deadlines?**

Varies.

### **Procedural Steps?**

To claim the credit, a QAEP must be certified by the Treasury Secretary, as follows:<sup>44</sup>

- The Treasury Secretary, in consultation with the Secretary of Energy, must establish a review and certification program within 180 days of enactment of ARRA;
- Each applicant must submit an application meeting the requirements of the program within 2 years after the date of the establishment of the program;
- Each successful applicant has one year to provide evidence to the Treasury Secretary that the requirements of the certification have been met;
- Each successful applicant has three years to place the project in service.

### **Additional Contact?**

Contact Rural Development State Office  
Cheryl Ducharme, USDA Rural Development



<sup>44</sup> MANHATTAN CHAMBER OF COMMERCE: QUALIFYING ADVANCED ENERGY PROJECT CREDIT, *available at* <http://www.manhattanccgreen.org/common/news/articles/detail.cfm?QID=6745&Classification=News&TopicID=0&ClientID=11072>.

89 Main Street, 3rd Floor  
Montpelier, VT 05602  
802-828-6083  
[cheryl.ducharme@vt.usda.gov](mailto:cheryl.ducharme@vt.usda.gov)

## Residential Energy Conservation Subsidy Exclusion (Personal)<sup>7</sup>

### **The Purpose?**

Energy conservation subsidies provided by public utilities, either directly or indirectly, are nontaxable. "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure."

### **What Activities Qualify?**

Eligible efficiency technologies (not specifically identified), as well as Solar Water Heat, Solar Space Heat, and Photovoltaics.

### **Amount?**

100% of subsidy

### **Who Qualifies?**

Residential or multi-family residential households that contain energy conservation measures. These include installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats and similar properties. Strong evidence that utility rebates for residential solar thermal and solar electric projects may be nontaxable. However, since the IRS has not definitively ruled on the issue, taxpayers are advised to consult with a tax attorney.

### **Deadlines?**

Varies.

### **Procedural Steps?**

You can exclude from gross income any subsidy you received from a public utility company for the purchase or installation of an energy conservation measure for a dwelling unit. Reduce the basis of the property for which you received the subsidy by the excluded amount.<sup>45</sup>

### **Additional Contact?**

Public Information – IRS  
US Internal Revenue Service  
1111 Constitution Avenue, NW.  
Washington, DC 20224  
Phone: (800) 829-1040

### **Authority?**

26 USC §136



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<sup>45</sup> For more specifics see: <http://www.irs.gov/publications/p17/ch13.html>

## Residential Energy Efficiency Tax Credit<sup>7</sup>

### **The Purpose?**

Provides a federal tax credit for energy-efficient home improvements. The credit applies to energy efficiency improvements in the building envelope of existing homes and for the purchase of high-efficiency heating, cooling and water-heating equipment.

### **What Activities Qualify?**

Efficiency: Water Heaters, Furnaces, Boilers, Heat pumps, Air conditioners, Building insulation, Windows, Doors, Roofs, Circulating fans used in a qualifying furnace

Renewable: Biomass, Stoves that use qualified biomass fuel

Building envelope improvements that qualify for the tax credit include:

- Insulation materials and systems designed to reduce a home's heat loss or gain
- Exterior doors and windows (including skylights) and
- Pigmented metal roofs designed to reduce heat gain, and asphalt roofs with appropriate cooling granules.

Heating, cooling and water-heating equipment improvements that qualify include:

- Electric heat pump water heaters
- Electric heat pumps
- Central air conditioners
- Natural gas, propane or oil water heaters
- Natural gas, propane or oil furnace or hot water boilers
- Advanced main air circulating fans
- Biomass stoves that use "plant derived fuel available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues (including wood pellets), plants (including aquatic plants), grasses, residues, and fibers."

### **Amount?**

Owners of existing homes receive a tax credit worth 30% of the cost of upgrading the efficiency of the building's envelope (labor costs not included). Aggregate amount for credit for all technologies placed in service in 2009 and 2010 combined is limited to \$1,500. Taxpayers who purchase qualified residential energy-efficient property qualify for a tax credit worth 30% of the system cost, *including* labor costs.

### **Who Qualifies?**

Efficiency improvements or equipment must serve a dwelling in the United States that is owned and used by the taxpayer as a primary residence. Performance and quality standards for tax credit eligibility vary by technology.<sup>46</sup>

### **Deadlines?**

Varies

### **Procedural Steps?**



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<sup>46</sup> More specific information can be found on the Energy Star website:  
[http://www.energystar.gov/index.cfm?c=products.pr\\_tax\\_credits#7](http://www.energystar.gov/index.cfm?c=products.pr_tax_credits#7)

To claim the tax credit for energy efficient products “placed in service” in 2009, must file the 2009 IRS Form 5695 and submit it with 2009 taxes (by April 15, 2010). Also save receipts and the Manufacturer’s Certification Statement (signed statement certifying the product or component qualifies for the tax credit) for records.

**Authority?**

26 USC §25C

## Residential Renewable Energy Tax Credit<sup>7</sup>

### **The Purpose?**

Provide taxpayers with a federal tax credit for residential energy property.

### **What Activities Qualify?**

Solar Water Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Other Solar Electric Technologies

Solar water heating property must be certified by Solar Rating Certification Corporation<sup>47</sup> or by comparable entity endorsed by the state in which the system is installed. At least half the energy used to heat the dwelling's water must be from solar. Geothermal heat pumps must meet federal Energy Star requirements.<sup>48</sup> Fuel cells must have electricity-only generation efficiency greater than 30%.



- Solar-electric property<sup>49</sup>
  - Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016.
  - The home served by the system does *not* have to be the taxpayer's principal residence.
- Fuel cell property
  - Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016
  - The fuel cell must have a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%.
  - In case of joint occupancy, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is \$1,667 per half kilowatt. This does not apply to married individuals filing a joint return. The credit that may be claimed by each individual is proportional to the costs he or she paid.
  - The home served by the system *must* be the taxpayer's principal residence
- Small wind energy property
  - Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2016.
  - The home served by the system does *not* have to be the taxpayer's principal residence.
- Geothermal heat pumps
  - Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2016.

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<sup>47</sup> Further information available at <http://www.solar-rating.org/>

<sup>48</sup> Geothermal Heat Pump standards available at:

[http://www.energystar.gov/index.cfm?c=geo\\_heat.pr\\_geo\\_heat\\_pumps](http://www.energystar.gov/index.cfm?c=geo_heat.pr_geo_heat_pumps)

<sup>49</sup> Solar Energy Industries Association has published a 3 page document providing answers to FAQs regarding federal tax credits for solar energy ([http://seia.org/galleries/pdf/SEIATaxManual\\_v3-0\\_FAQ.pdf](http://seia.org/galleries/pdf/SEIATaxManual_v3-0_FAQ.pdf))

- The geothermal heat pump must meet federal Energy Star program requirements in effect at the time the installation is completed.
- The home served by the system does *not* have to be the taxpayer's primary residence.

**Amount?**

A taxpayer may claim a credit of 30% of qualified expenditures for a system that serves a dwelling unit located in the United States and used as a residence by the taxpayer. Excess credit may be carried forward to succeeding tax year.

Maximum Incentives:

- Solar-electric systems placed in service before 2009: \$2,000
- Solar-electric systems placed in service after 2008: no maximum
- Solar water heaters placed in service before 2009: \$2,000
- Solar water heaters placed in service after 2008: no maximum
- Wind turbines placed in service in 2008: \$4,000
- Geothermal heat pumps placed in service in 2008: \$2,000
- Geothermal heat pumps placed in service after 2008: no maximum
- Fuel cells: \$500 per 0.5 kW

**Who Qualifies?**

The American Recovery and Reinvestment Act of 2009 does *not* allow taxpayers eligible for the residential renewable energy tax credit to receive a US Treasury Department grant instead of taking this credit.

**Deadlines?**

Varies. Any excess credit can be carried forward until 2016, but it is unclear whether the unused tax credit can be carried forward after then.

**Procedural Steps?**

Complete IRS Form 5695

**Authority?**

26 USC §25D

## Renewable Energy Production Incentive (REPI)<sup>7</sup>

### **The Purpose?**

Provides incentive payments for electricity generated and sold by new qualifying renewable energy facilities. REPI was designed to complement the federal renewable energy production tax credit (PTC), which is available only to businesses that pay federal corporate taxes.

### **What Activities Qualify?**

(Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal)

Qualifying systems must generate electricity using solar, wind, geothermal (with certain restrictions), biomass (excluding municipal solid waste), landfill gas, livestock methane, or ocean resources (including tidal, wave, current and thermal).

### **Amount?**

2.1¢/kWh (subject to availability of annual appropriations in each federal fiscal year of operation). Payments may be made only for electricity generated from an eligible facility first used before October 1, 2016.

### **Who Qualifies?**

Operators of qualified electric production facilities (which include not-for-profit electrical cooperatives, public utilities, state governments and political subdivisions thereof, commonwealths, territories and possessions of the United States, the District of Columbia, Indian tribal governments or political subdivisions or political subdivisions thereof) may apply.

### **Deadlines?**

Varies.

### **Procedural Steps?**

1. Applications are accepted between October 1 and December 31 (the first 3 months of the fiscal year).
2. Submit a letter, identifying your organization's name, address, phone, and REPI (if you already have one). Within this letter you must also address 451.8 am requirements. Please include a table with the net kWh by month.
3. If you are applying to REPI for the first time, you must register online with the federal Central Contractor Registration<sup>50</sup> and complete and submit a Vendor Data Form. After you register, you must wait until you receive a payment letter from DOE to complete the electronic transfer of funds.

### **Additional Contact?**

Christine Carter  
US Department of Energy  
1617 Cole Blvd.  
Golden, CO 80401-3393  
christine.carter@go.doe.gov  
<http://www.energy.gov>



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<sup>50</sup> Central Contract Registration information available at <http://www.ccr.gov/>

**Authority?**  
42 USC §13317

# State

## Business Tax Credit for Solar (Corporate)<sup>51</sup>

### **The Purpose?**

Taxpayers making a business solar energy investment in Vermont qualify to receive 100 percent of the amount of the Federal business solar tax credit as a credit against Vermont tax.<sup>52</sup>

### **What Activities Qualify?**

Equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems are those that use solar energy to illuminate the inside of a structure using fiber optic distributed sunlight.

(Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Solar Hybrid Lighting)

The credit is generally *not* available for public utility property, passive solar systems or pool heating equipment.

### **Amount?**

#### Corporate

30% for property placed in service on or before 12/31/2010 for C-corporations (that file a Vermont corporate return)

#### Personal

30% for property placed in service on or before 12/31/2010

7.2% for property placed in service on or after 01/01/2011 and on or before 12/31/2016

### **Who Qualifies?**

Individual and corporate taxpayers in the commercial and industrial sectors. Any taxpayer who receives funding from Vermont's Clean Energy Development Fund is *not* eligible to claim the tax credit for the project (for investments made on or after January 1, 2009). For investments made on or after October 1, 2009, the tax credit will only apply to "project costs not covered by any grants or similar funding from any public or private program that assists in providing capital investment for a renewable energy project."

### **Deadlines?**

December 31, 2010 for corporate taxpayers

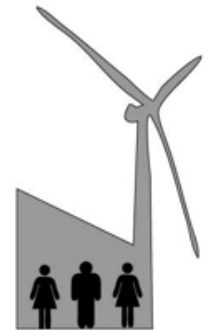
### **Procedural Steps?**

Individual taxpayers should refer to 32 VSA Sections 5822(c)(1)(B) and 5822(d). Corporate taxpayers should refer to form 5930z. The Vermont Department of Taxes has issued a Technical Bulletin that provides additional guidance.<sup>52</sup>

### **Additional Contact?**

Public Information – VT DOT

Vermont Department of Taxes



<sup>51</sup> DSIRE: Vermont Incentives/Policies for Renewables & Efficiency, <http://www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=VT> (last accessed July 3, 2009)

<sup>52</sup> VERMONT DEPARTMENT OF TAXES: TECHNICAL BULLETIN, *available at* <http://www.state.vt.us/tax/pdf.word.excel/legal/tb/TB45.pdf>

Corporate Income Tax  
133 State St.  
Montpelier, VT 05633  
(802) 828-5723  
[www.state.vt.us/tax](http://www.state.vt.us/tax)

## CVPS – Biomass Electricity Production Incentive<sup>51</sup>

### **The Purpose?**

CVPS offers a production incentive to farmers who own systems utilizing anaerobic digestion of agricultural products, byproducts or wastes to generate electricity. CVPS sells the renewable energy credits (RECs) generated under this arrangement as part of CVPS Cow Power, the utility's green power program. This program offers customers the opportunity to purchase renewable energy for \$0.04 per kWh above the retail cost of electricity.

### **What Activities Qualify?**

Anaerobic Digestion

### **Amount?**

95% of Locational Marginal Price of generation published by ISO New England + \$0.04 per kWh

### **Who Qualifies?**

Eligible systems must be connected to the grid, although net metering is *not* available under this arrangement

### **Deadlines?**

Varies

### **Procedural Steps?**

Contact CVPS to determine if system qualifies and to obtain applicable forms.

### **Additional Contact?**

Dave Dunn

Central Vermont Public Service Corporation (CVPS)

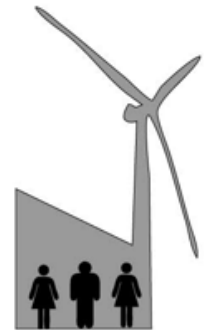
77 Grove Street

Rutland, VT 05701

(802) 747-5681

ddunn@cvps.com

www.cvps.com



## Green Mountain Power – Solar GMP<sup>51</sup>

### **The Purpose?**

Green Mountain Power offers a bonus payment to customers with net-metered photovoltaic (PV) systems. Customers with a PV system receive a payment of \$0.06 per kWh of electricity generated by the system.

### **What Activities Qualify?**

Photovoltaics

### **Amount?**

\$0.06 per kilowatt-hour

### **Who Qualifies?**

Available to all customers of Green Mountain Power. However, the system must be net-metered. In order to net meter, customers must first apply for and receive a “Net Metering Certificate of Public Good” from the Vermont Public Service Board (PSB). Net metering in Vermont is generally limited to systems up to 250 kW in capacity. An additional meter must be installed to record each system’s output. Green Mountain will reimburse customers for up to \$300 of the expenses associated with the additional meter. Customers retain ownership of the renewable-energy credits (RECs) associated with the electricity generated by PV systems.

### **Deadlines?**

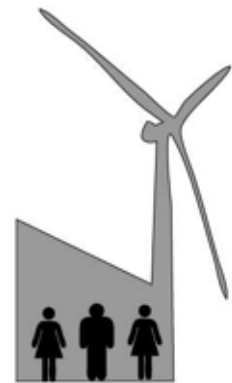
No specified duration or expiration date.

### **Procedural Steps?**

An enrollment form is available on the Green Mountain website.<sup>53</sup> Additional instructions and information are also accessible.<sup>54</sup>

### **Additional Contact?**

Customer Service – GMP  
Green Mountain Power  
163 Acorn Lane  
Colchester, VT 05446  
(888) 835-4672  
callcenter@greenmountainpower.biz  
www.greenmountainpower.com



<sup>53</sup> “Choose to Be Green: Sign up for *SolarGMP* and metering reimbursement!” available at [http://www.greenmountainpower.com/data/Unsorted/Solar\\_reimbursement\\_sign\\_up-20588-1.pdf](http://www.greenmountainpower.com/data/Unsorted/Solar_reimbursement_sign_up-20588-1.pdf).

<sup>54</sup> GREEN MOUNTAIN POWER: SOLAR GMP, available at [http://www.greenmountainpower.com/solar\\_GMP.html](http://www.greenmountainpower.com/solar_GMP.html).

## Vermont Standard Offer for Qualifying SPEED Resources<sup>51</sup>

### **The Purpose?**

The Vermont Energy Act requires all Vermont retail electricity providers to purchase electricity generated by eligible renewable energy facilities through the Sustainability Priced Energy Enterprise Development (SPEED) Program via long-term contracts with fixed standard offer rates. This policy, commonly known as a “feed-in tariff,” is intended to provide a reasonable return on investment to renewable energy facility developers, thereby spurring development of renewable energy.



### **What Activities Qualify?**

Certain qualifying SPEED resources (Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Municipal Solid Waste, Anaerobic Digestion, Small Hydroelectric) up to 2.2 MW in capacity that are commissioned on or after September 30, 2009.

### **Amount?**

Long-term contracts between 10-25 years for solar plants and between 10-20 years for other technologies. Average residential retail rate for a plant using hydro or wind > 15 kW or biomass.

\$0.12/kWh for a plant using methane (from a landfill or agricultural operation)

\$0.20/kWh for a plant using wind (capacity 15 kW or less)

\$0.30/kWh for a plant using solar

### **Who Qualifies?**

Commercial, industrial, and agricultural owners, as well as owners of qualified SPEED resources. Eligibility may change after review of the Vermont Public Service Board (PSB).

### **Deadlines?**

The PSB’s preliminary determination will be complete by September 15, 2009, and final rules issued by January 15, 2010.

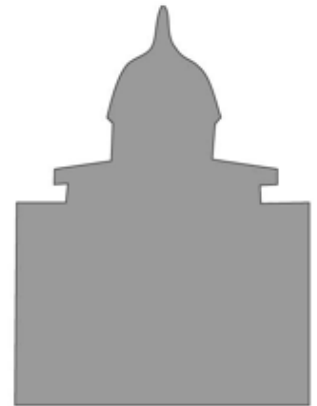
### **Procedural Steps?**

To be determined. The PSB has been directed to conduct an economic analysis either to approve or adjust the rates and terms of the initiative.

## Clean energy assessment district<sup>51</sup>

### **The Purpose?**

Vermont law allows municipalities to establish “Clean Energy Assessment Districts” also known as Property Assessed Clean Energy (PACE) projects. Implementation of a PACE program in your community would mean that property owners could make a significant energy efficiency or renewable energy improvement to their property and then pay for that improvement over up to 20 years through a special line on their individual tax bill. The PACE programs are voluntary in that only those in town who choose to be part of the program will be responsible for paying for its implementation.



### **What Activities Qualify?**

- measures or combinations of measures that are permanently attached to the property for which PACE financing is being secured
- measures that reduce the net energy requirements of the affected building
- energy-related repair, health and safety measures that may be required to be included in a comprehensive energy efficiency improvement project to secure the project energy savings

### **Amount?**

For resident owned properties, the cost of the project financed through PACE cannot exceed \$30,000 or 15% of the assessed value of the property, whichever is less. In addition, the loan-to-value ratio (any outstanding mortgages plus the amount of PACE financing) cannot exceed 90% of the assessed property value. For commercial properties, PACE financing cannot exceed 15% of the assessed property value and the loan-to-value ratio (any outstanding mortgages plus the amount of PACE financing) cannot exceed 90% of the assessed property value.

### **Who Qualifies?**

First, your town must choose to run a PACE program. Then, to be eligible for PACE financing, a property owner must have an analysis performed to quantify the project costs and energy savings and estimated carbon impacts of the proposed energy improvements, including an annual cash-flow analysis. This analysis may be conducted by Efficiency Vermont or Burlington Electric Department (in Burlington), as Vermont’s designated “Energy Efficiency Utilities,” or other qualified entities designated by participating cities and towns. All analyses will be reviewed by Efficiency Vermont or Burlington Electric Department.

**Deadline?** Varies

### **Procedural Steps?**

- The implementation of PACE in each municipality requires a public vote
- Prior to Town Meeting Day, municipalities will need to hold meetings with interested parties, and have public meetings to educate voters
- Each municipality will have to make decisions about the parameters of their particular program.
- Efficiency Vermont, VPIRG, VNRC, and the Vermont League of Cities and Towns will provide support and model documents to assist in the implementation.

**Additional Contact?** <http://www.veic.org/resourcelibrary/PACE.aspx>

### **Authority?**

32 VSA §3845

## Renewable Energy Systems Sales Tax Exemption<sup>51</sup>

### **The Purpose?**

Vermont's sales tax exemption generally applies to systems up to 250 kW in capacity that generate electricity using eligible "renewable energy" resources, to micro-combined heat and power (CHP) systems up to 20 kW and to solar water-heating systems. The exemption is available for grid-tied systems and off-grid systems alike. Vermont's sales tax rate is 6%.

### **What Activities Qualify?**

"Renewable energy" is defined as "energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate." Biogas from sewage-treatment plants and landfills, and anaerobic digestion of agricultural products, byproducts and wastes are explicitly included. Solid waste that is *not* agricultural or silvicultural, as well as nuclear fuel, coal, oil, propane and natural gas are excluded.

(Solar Water Heat, Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, CHP/Cogeneration, Anaerobic Digestion, Fuel Cells using Renewable Fuels)

### **Amount?**

100% of sales tax for purchase

### **Who Qualifies?**

People in commercial, residential, general public/consumer or agricultural sectors who purchase qualifying renewable energy equipment.

### **Deadlines?**

Varies.

### **Procedural Steps?**

Contact town clerk for applicable information.**Error! Bookmark not defined.**

### **Additional Contact?**

Authority: 32 VSA §9741(46)

Andrew Perchlik

Renewable Energy Vermont

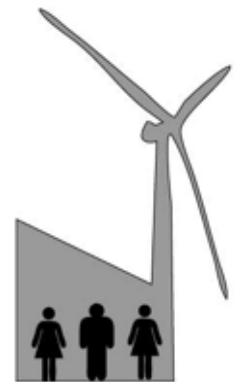
PO Box 1036

Montpelier, VT 05601

(802) 229-0099

perchlik@REvermont.org

www.revermont.org



## Clean Energy Development Fund (CEDF) Grant Program<sup>51</sup>

### **The Purpose?**

State grant program that promotes the development and deployment of cost-effective and environmentally sustainable electric power resources – primarily renewable energy resources and combined heat and power (CHP) systems – for the long-term benefit of Vermont electric customers. The CEDF will offer a portfolio of funding opportunities to accelerate the development, commercialization, and

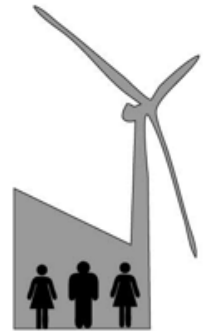


production of clean energy in Vermont, including: grants and contracts; loans; equity investments; and direct incentive payments to individuals, businesses, state and local government, and non-profit organizations.<sup>55</sup>

### **What Activities Qualify?**

Funding is available to four categories of projects: pre-project financial assistance, small-scale systems (microturbines, fuel cells, and CHP), large-scale systems and special demonstration projects. Proposed projects are required to have an electric generation component and be grid-connected. Off-grid projects and thermal projects (except CHP systems) are *not* eligible.

Photovoltaics, Wind, Biomass, Fuel Cells, CHP/Cogeneration, Anaerobic Digestion, Small Hydroelectric, Microturbines



### **Amount?**

The range of maximum awards, which varies by project category, is \$60,000 to \$250,000 for individual projects. Cost-share is required for all projects. In addition, there is a special funding opportunity in 2009 for municipalities, public schools, and colleges to explore renewable energy projects and feasibility up to \$5,000.

### **Who Qualifies?**

Individuals, sole proprietorships, partnerships, limited liability companies, corporations non-profit corporations, Subchapter S corporations, municipalities, and foreign corporations with Vermont subsidiaries/affiliates.

### **Deadlines?**

Two grant solicitation periods for 2009. First round of proposals due by February 27, 2009 and second round due by September 1, 2009.

### **Procedural Steps?**<sup>56</sup>

1. RFPs will be issued in mid-January and mid-July in 2009. Contact DPS for application instructions or download them from [www.publicservice.vermont.gov/energy/ee\\_cleanenergyfund.html](http://www.publicservice.vermont.gov/energy/ee_cleanenergyfund.html)

<sup>55</sup> VERMONT CLEAN ENERGY DEVELOPMENT FUND: STRATEGIC PLAN (May 2007), [http://publicservice.vermont.gov/energy/ee\\_files/cedf/CEDF%20Strategic%20Plan.pdf](http://publicservice.vermont.gov/energy/ee_files/cedf/CEDF%20Strategic%20Plan.pdf)

<sup>56</sup> VERMONT CLEAN ENERGY DEVELOPMENT FUND (CEDF): GRANT PROGRAM, *available at* [http://publicservice.vermont.gov/energy/ee\\_files/cedf/Grant%20Brochure%2010-7-08.pdf](http://publicservice.vermont.gov/energy/ee_files/cedf/Grant%20Brochure%2010-7-08.pdf) (detailing application process for the grant program).

2. Applications are due twice a year: March 1 and September 1 in 2009

**Additional Contact?**

Anne Margolis  
Vermont Department of Public Service  
112 State Street, Drawer 20  
Montpelier, VT 05620-2601  
(802) 828-4017  
anne.margolis@state.vt.us  
www.state.vt.us/psd

**Authority?**

10 VSA §6523

## Clean Energy Development Fund (CEDF) Loan Program<sup>51</sup>

### **The Purpose?**

State loan program that seeks to promote the development of clean electricity-energy technologies by providing funding for purchasing land and buildings (when specific to qualifying projects), purchasing and installing machinery and equipment, and working capital.

### **What Activities Qualify?**

#### Efficiency Technologies

CHP/Cogeneration

#### Renewable Technologies

Solar Thermal Electric, Photovoltaics, Wind, Biomass, Fuel Cells, CHP/Cogeneration, Anaerobic Digestion

### **Amount?**

\$50,000 - \$1 million

2% interest rate; loan terms vary depending on project type.

Loans may not be used for more than 90% of the cost of a project.

### **Who Qualifies?**

Individuals, sole proprietorships, partnerships, limited liability companies, corporations non-profit corporations, Subchapter S corporations, municipalities, and foreign corporations with Vermont subsidiaries/affiliates.

### **Deadlines?**

Varies. Applications due by the first Thursday of every month.

### **Procedural Steps?**<sup>57</sup>

1. Contact DPS for application instructions or download them from [www.publicservice.vermont.gov/energy/ee\\_cleanenergyfund.html](http://www.publicservice.vermont.gov/energy/ee_cleanenergyfund.html)
2. Applications are due by the first Thursday of every month

### **Additional Contact?**

Anne Margolis

Vermont Department of Public Service

112 State Street, Drawer 20

Montpelier, VT 05620-2601

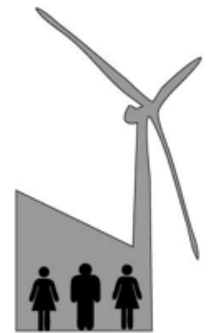
(802) 828-4017

[anne.margolis@state.vt.us](mailto:anne.margolis@state.vt.us)

[www.state.vt.us/psd](http://www.state.vt.us/psd)

### **Authority?**

10 VSA §6523



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<sup>57</sup> VERMONT CLEAN ENERGY DEVELOPMENT FUND (CEDF): LOAN PROGRAM, *available at* [http://publicservice.vermont.gov/energy/ee\\_files/cedf/CEDF%20Loan%20Brochure%20Nov%202008.pdf](http://publicservice.vermont.gov/energy/ee_files/cedf/CEDF%20Loan%20Brochure%20Nov%202008.pdf) (detailing application process for the loan program).

## Efficiency Vermont - Commercial Lighting Incentives<sup>51</sup>

### **The Purpose?**

Incentives for energy efficient commercial lighting equipment as well as commercial LED lighting equipment are available to businesses under the Efficiency Vermont Lighting Incentive Program.

### **What Activities Qualify?**

(Efficiency) Lighting, Lighting Controls/Sensors

### **Amount?**

\$10 - \$75 for listed measures

\$30 - \$100 for LED lighting

Up to 100% of cost, incentives that exceed \$2,500 should be submitted to Efficiency Vermont for pre-approval

### **Who Qualifies?**

Commercial customers who meet program guidelines.<sup>58</sup>

### **Deadlines?**

Varies

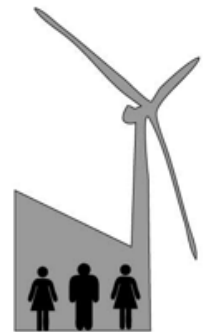
### **Procedural Steps?**

See applicable application.<sup>59</sup>

Note: if a customer has more than 10,000 square feet of space to renovate, or more than 100 items that could qualify for rebates, the customer should contact Efficiency Vermont directly for pre-approval. Otherwise, pre-approval is not required.

### **Additional Contact?**

Public Information Officer  
Efficiency Vermont  
255 S. Champlain Street, Suite 7  
Burlington, VT 05401  
(888) 921-5990  
info@efficiencyvermont.com



<sup>58</sup> See Efficiency Vermont: Rebate Center, <http://www.efficiencyvermont.org/pages/Business/RebateCenter/> (last visited July 3, 2009) (contains all applicable applications as well as product guidelines).

<sup>59</sup> 2009 REBATE APPLICATION: COMMERCIAL LIGHTING EQUIPMENT, *available at* [http://www.efficiencyvermont.org/stella/filelib/2009\\_LightingForm\\_FINAL.pdf](http://www.efficiencyvermont.org/stella/filelib/2009_LightingForm_FINAL.pdf)

## Efficiency Vermont - Compressed Air Systems<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers rebates to encourage the installation of efficient compressors. The compressed air incentive is new in 2009.

### **What Activities Qualify?**

Compressed Air Systems. There are incentives for variable frequency drive screw compressors (10 – 40 HP), air receivers/tanks for load/no-load compressors, cycling refrigerated dryers (up to 200 CFM capacity), no-loss drains, and air-entraining air nozzles.

### **Amount?**

Varies per technology; rebates exceeding \$2,500 must be pre-approved

### **Who Qualifies?**

Commercial customers who meet program guidelines.<sup>58</sup>

### **Deadlines?**

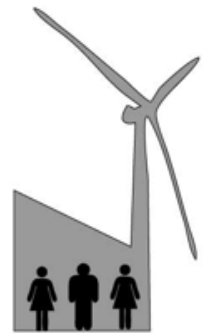
Varies.

### **Procedural Steps?**

See applicable application.<sup>60</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>60</sup> 2009 REBATE APPLICATION: COMPRESSED AIR SYSTEM EQUIPMENT, *available at* [http://www.efficiencyvermont.org/stella/filelib/2009\\_CompressedAirForm\\_FINAL.pdf](http://www.efficiencyvermont.org/stella/filelib/2009_CompressedAirForm_FINAL.pdf)

## Efficiency Vermont - Energy Efficient Motors and VFD Program<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers rebates to encourage the installation of efficient motors and variable frequency drives (VFD).

### **What Activities Qualify?**

Motor-ASDs/VSDs. Eligible VFDs are supply fans, return fans, exhaust fans and chilled water pumps, from 3 to 10 horsepower, that are used to control commercial HVAC equipment. UL-listed equipment VFDs must

be new and cannot replace existing VFDs. Motors must be new, meet or exceed the NEMA Nominal Efficiencies standards<sup>61</sup> and operate at least 2,000 hours per year.

### **Amount?**

Rebate amounts are dependent on the horsepower size and efficiency of the VFD or the motor.

\$500 - \$1,200 per VFD, depending on horsepower

\$45 - \$700 per motor, depending on efficiency

There is no set limit on the amount of rebates that a customer may take, but rebates exceeding \$2,500 must be pre-approved

### **Who Qualifies?**

Commercial customers who meet program guidelines.<sup>60</sup>

### **Deadlines?**

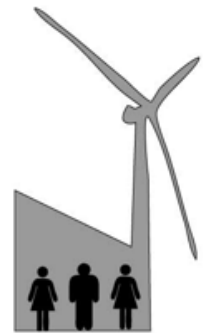
Varies.

### **Procedural Steps?**

See applicable application.<sup>62</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



<sup>61</sup> See Nema: The Association of Electrical and Medical Imaging Equipment Manufacturers, <http://www.nema.org/gov/energy/efficiency/premium/> (provides links to documents containing energy efficient product specifications and definitions).

<sup>62</sup> 2009 REBATE APPLICATION: 3-PHASE ELECTRIC MOTORS & VARIABLE FREQUENCY DRIVES, *available at* [http://www.efficiencyvermont.org/stella/filelib/2009\\_MotorsForm\\_FINAL.pdf](http://www.efficiencyvermont.org/stella/filelib/2009_MotorsForm_FINAL.pdf)

## Efficiency Vermont - HVAC Equipment Rebate Program<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers a rebate to businesses that purchase high-efficiency HVAC equipment and controls. This program is jointly sponsored by a number of utilities and energy efficiency organizations throughout New England and New Jersey to assist commercial and industrial customers.

### **What Activities Qualify?**

Chillers, furnaces, boilers, heat pumps and air conditioners. Equipment must meet SEER, EER, Energy Star and HSPF specifications found on application.<sup>63</sup>

### **Amount?**

\$50 - \$90 per ton for HVAC systems

\$75 - \$80 for water source heat pumps

Other rebates vary by technology. Rebates greater than \$2,500 require pre-approval.

### **Who Qualifies?**

Commercial customers who meet program guidelines.<sup>63</sup>

### **Deadlines?**

Varies.

### **Procedural Steps?**

See applicable application.<sup>63</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>63</sup> 2009 REBATE APPLICATION: CENTRAL HEATING & COOLING, COMMERCIAL, INDUSTRIAL & RESIDENTIAL HVAC EQUIPMENT, available at [http://www.encyvermont.org/stella/filelib/2009\\_HVACform\\_FINAL.pdf](http://www.encyvermont.org/stella/filelib/2009_HVACform_FINAL.pdf)

## Efficiency Vermont - Incentives for Integrated Design and High Efficiency Equipment<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers financial incentives for custom energy efficient measures and energy efficient design. Design incentives are used to help cover part of the cost of using integrated design methods. Often, these incentives are used to cover the costs of added meetings, advanced lighting design and whole building energy simulation modeling.

### **What Activities Qualify?**

Lighting, Chillers, Furnaces, Boilers, Heat Pumps, Air Conditioners, Custom/Others pending approval

### **Amount?**

Construction and building incentives may cover up to half the incremental cost between standard equipment and energy efficient equipment.

### **Deadlines?**

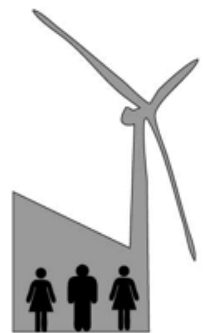
Varies.

### **Procedural Steps?**

Contact Efficiency Vermont (888-921-5990) to talk with a representative about how these incentives can apply to different projects and custom measures that are not covered by other Efficiency Vermont programs.

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



## Efficiency Vermont - Multifamily Apartment Rebate Program<sup>51</sup>

### **The Purpose?**

Efficiency Vermont provides financial rebates to rental property owners for purchasing and installing new, energy-saving equipment in apartments. In addition, Efficiency Vermont provides compact fluorescent light bulbs (CFLs), low-flow showerheads, and faucet aerators free of charge to rental property owners for installation in your rental units.

### **What Activities Qualify?**

Refrigerators/Freezers, Lighting, Ventilation Fans

### **Amount?**

Lighting: Free CFLs

Refrigerator: \$150

Ventilation Fans: \$110

Minimum Incentive of \$50

Total incentives of more than \$2,500 should be pre-approved by Efficiency Vermont. More than 15 CFLs per apartment, or 100 CFLs per project also should get pre-approval.

### **Who Qualifies?**

Managers of multifamily apartments may apply for rebates for new, efficient refrigerators and bathroom ventilation fans.

### **Deadlines?**

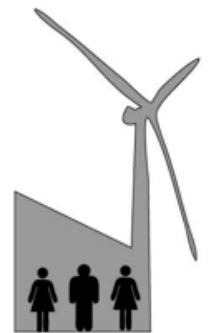
Varies

### **Procedural Steps?**

See applicable application.<sup>64</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>64</sup> 2009 REBATE APPLICATION: RENTAL PROPERTY OWNERS RESIDENTIAL LIGHTING, REFRIGERATION, VENTILATION & WATER CONSERVATION, *available at* [http://www.encyvermont.org/stella/filelib/2009\\_MultifamilyForm\\_FINAL.pdf](http://www.encyvermont.org/stella/filelib/2009_MultifamilyForm_FINAL.pdf)

## Efficiency Vermont - Residential Energy Efficiency Rebate Programs<sup>51</sup>

### **The Purpose?**

Efficiency Vermont provides financial incentives for its residential customers to install energy efficient equipment in their homes.

### **What Activities Qualify?**

Eligible ENERGY STAR equipment includes lighting, room air conditioners (seasonal rebates), dehumidifiers (seasonal rebates), refrigerators and freezers, clothes washers, forced hot air furnace with ECM fan motor and efficient central air-conditioning. (Clothes Washers, Lighting, Furnaces, Air conditioners)

### **Amount?**

CFL Bulbs: \$1.50 per bulb

Torchieres and Fixtures: \$10

Eligible LED: \$30

Clothes Washers: \$50

Refrigerators and Freezers: \$25 - \$40

Furnace with ECM fan motor: \$100

Central A/C: \$100

Equipment must be Energy Star rated.

### **Who Qualifies?**

Customers who purchase qualifying Energy Star equipment.<sup>65</sup>

### **Deadlines?**

Varies.

### **Procedural Steps?**

See applicable application.<sup>65</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>65</sup> See Efficiency Vermont: Residential Rebate Center, <http://www.efficiencyvermont.org/pages/Residential/RebateCenter/> (last visited July 3, 2009) (contains all applicable applications as well as product guidelines).

## Efficiency Vermont - Small Commercial Refrigeration Incentive<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers financial incentives to cover the incremental costs of energy efficient refrigeration for commercial, industrial, agricultural and institutional buildings.

### **What Activities Qualify?**

Refrigerators/Freezers. All solid door and reach-in refrigerators must be Energy Star approved; UL-listed.

### **Amount?**

Varies by equipment and efficiency. Incentives over \$2,500 must be pre-approved.

### **Who Qualifies?**

Only customers paying into the system benefits charge for Efficiency Vermont qualify to apply for this rebate.

### **Deadlines?**

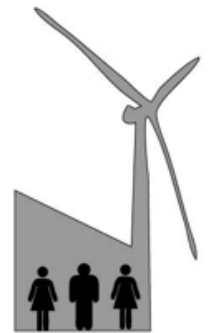
Varies.

### **Procedural Steps?**

See applicable application.<sup>66</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>66</sup> 2009 REBATE APPLICATION: COMMERCIAL REFRIGERATION EQUIPMENT, *available at* [http://www.efficiencyvermont.org/stella/filelib/2009\\_MultifamilyForm\\_FINAL.pdf](http://www.efficiencyvermont.org/stella/filelib/2009_MultifamilyForm_FINAL.pdf)

## Efficiency Vermont – Vending Machine Controller Incentive<sup>51</sup>

### **The Purpose?**

Efficiency Vermont offers a rebate for the purchase of a plug-in vending machine controller – specifically a VendingMiser product – that can power down a vending machine at low traffic periods and save up to 50% of energy costs.

### **What Activities Qualify?**

Lighting Controls/Sensors. The vending machine must be installed inside; outdoor installations require demonstration of energy savings to Efficiency Vermont.

### **Amount?**

\$45 per VendingMiser. Must be VendingMiser product (similar products will be deemed eligible on a case-by-case basis)

### **Who Qualifies?**

Those who pay the System Benefit Charge qualify to apply for this rebate; those who live in the City of Burlington can contact their city utility directly.

### **Deadlines?**

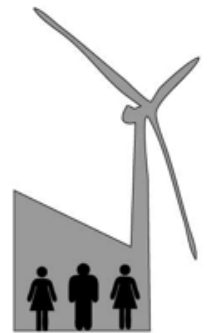
Varies.

### **Procedural Steps?**

See applicable application.<sup>67</sup>

### **Additional Contact?**

See Efficiency Vermont - Commercial Lighting Incentives.



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<sup>67</sup> VENDING MACHINE CONTROLLER INCENTIVE, *available at* [http://efficiencyvermont.com/stella/filelib/2009\\_VendingMachineRebateApplication\\_FINAL.pdf](http://efficiencyvermont.com/stella/filelib/2009_VendingMachineRebateApplication_FINAL.pdf)

## Vermont Small-Scale Renewable Energy Incentive Program<sup>51</sup>

### **The Purpose?**

Vermont's Small Scale Renewable Energy Incentive Program, initiated in June 2003, provides funding for new solar water heating, solar electric (photovoltaic), wind, and micro-hydro energy system installations.

### **What Activities Qualify?**

**PV:** New, grid connected; modules must be UL 1703 listed; inverters must be UL 1741 listed or listed by another nationally recognized testing laboratory.

**Solar water heating:** New equipment; collectors must have an OG-100 output rating from SRCC or an equivalent organization.

**Wind:** New, grid-connected; inverters must be UL 1741 listed or listed by another nationally recognized testing laboratory.

**Micro-hydro:** New, grid-connected; inverters must be UL 1741 listed or listed by another nationally recognized testing laboratory.

All systems: 5 year warranty required on major system components and installation, with the exception of batteries, for which a 2-year warranty is required.

### **Amount?**

#### Solar-electric systems (PV)

- Individuals, businesses, schools, farms, government: \$1.75/W DC, up to \$8,750;
- Multi-family low-income housing projects: \$3.50/W DC, up to lesser of \$35,000 or 50% of total installed cost

#### Solar hot water systems

- Individuals, businesses: \$1.75/100 Btu/day up to \$8,750;
- Multi-family low-income housing projects: \$3.50/100 Btu/day, up to lesser of \$35,000 or 50% of total installed cost

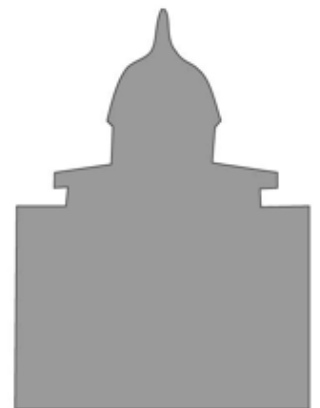
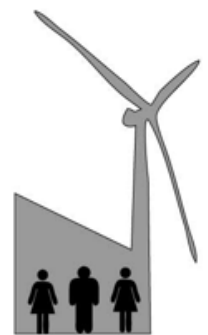
#### Small wind systems

- Individuals, businesses, low-income multi-family: \$2.50/W DC (up to \$4/W with commercially available Vermont-made components) up to \$12,500;
- Schools, farms, and local/state governments - \$4.50/W DC, up to lesser of \$20,000 or 50% of total installed cost

#### Micro-hydro systems

- Individuals, businesses: \$1.75 ft-gal/min, up to \$8,750;
- Multi-family low-income housing projects: \$3.50/3 ft-gal/min up to lesser of \$17,500 or 50% of total installed cost

Vermont Solar and Wind Partners must install all systems. Visit the program web site for a list of approved installers, and for the most recent program summary of incentives reserved.



**Who Qualifies?**

Single and multi-family residences, businesses, farms, schools, and local & state governments.

**Deadlines?**

Varies.

**Procedural Steps?**

Varies based on technology.<sup>68</sup>

**Additional Contact?**

Public Information (RERC)

Renewable Energy Resources Center

255 S. Champlain Street, Suite 7

Burlington, VT 05401

(877) 888-7372

erc@veic.org

www.erc-vt.org

**Authority?**

Act 69 of 2003

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<sup>68</sup> See The Renewable Energy Resource Center, <http://www.erc-vt.org/> (last visited July 3, 2009) (contains all applicable applications as well as product guidelines).

## CVPS – Biomass Grants<sup>51</sup>

### **The Purpose?**

Under terms of the sale of the Vermont Yankee Nuclear Power Corporation by multiple Vermont utilities, Central Vermont Public Service Corporation (CVPS) and Green Mountain Power – both electric utilities – receive refunds from Nuclear Electric Insurance, Limited (NEIL). In approving the sale, the Vermont Public Service Board determined that “a significant portion” of NEIL refund amounts received by CVPS and Green Mountain Power should be used toward the development and use of renewable-energy resources. The CVPS Renewable Development Trust Fund encourages the development of new renewable-energy projects that utilize anaerobic digestion of agricultural products, byproducts or wastes to produce electricity.

### **What Activities Qualify?**

Anaerobic Digestion

### **Amount?**

Varies; incentive packages awarded on a case-by-case basis. The fund provides grants and other incentives, and a dedicated project coordinator, to support project development, project operations and interconnection to the grid.

### **Who Qualifies?**

Varies – contact CVPS.

### **Deadlines?**

Varies.

### **Procedural Steps?**

Varies.

### **Additional Contact?**

Dave Dunn

Central Vermont Public Service Corporation (CVPS)

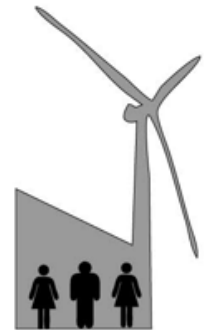
77 Grove Street

Rutland, VT 05701

(802) 747-5681

ddunn@cvps.com

www.cvps.com



## Vermont Gas – Residential Energy Efficiency Loan Program<sup>51</sup>

### **The Purpose?**

The Vermont Gas HomeBase Retrofit Program is designed to help customers with larger than average gas usage find ways to improve the efficiency of their homes. Typical measures include blown-in cellulose insulation for walls and ceilings and specific air sealing measures designed to make houses less drafty. In some cases, heating system and distribution improvements are also recommended.

### **Amount?**

Typically, Vermont Gas will rebate one third of the installed cost of the recommended measures and provide a reduced interest loan through the Opportunities Credit Union for the remaining balance. Currently, customers are offered loans at 0% interest for up to 3 years, 2% interest for up to 5 years, or 4% interest for up to 7 years.

### **Who Qualifies?**

Vermont Gas customers whose homes have used at least 0.6 Ccf per square foot of natural gas over the past year qualify for this program, as are multi-family buildings.

### **Deadlines?**

Varies.

### **Procedural Steps?**

Contact Vermont Gas to inquire.<sup>69</sup>

### **Additional Contact?**

Vermont Gas  
HomeBase Programs  
PO Box 467  
South Burlington, VT 05403  
(802) 863-4511  
efficiency@vermontgas.com  
www.vermontgas.com



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<sup>69</sup> See Vermont Gas: Residential Energy Efficiency Programs  
[http://www.vermontgas.com/efficiency\\_programs/res\\_programs.html](http://www.vermontgas.com/efficiency_programs/res_programs.html) (last visited July 3, 2009) (contains all applicable applications as well as product guidelines).

## Burlington Electric Department - NeighborSave<sup>51</sup>

### **The Purpose?**

Through the NeighborCare program, Burlington Electric Department (BED) provides products and advice to residential customers to help reduce electricity and water consumption. These free or low-cost improvements include energy-efficiency lighting upgrades, insulation for electric water heaters and pipes, and fixtures that reduce water usage. BED is Vermont's largest municipally owned electric utility.

### **What Activities Qualify?**

Equipment insulation, lighting

### **Amount?**

Free water heater insulation and CFLs

### **Who Qualifies?**

Residential customers meeting program requirements.

### **Deadlines?**

Varies.

### **Procedural Steps?**

Energy Efficiency Specialists can talk over the phone or visit in person to explain energy bills, review energy usage of heating, hot water and large appliances, or lend an appliance meter if appropriate. Call (802) 865-7362 if interested.<sup>70</sup>

### **Additional Contact?**

John Lincoln  
Burlington Electric Department  
585 Pine Street  
Burlington, VT 05401  
(802) 865-7362  
JLincoln@burlingtonelectric.com  
www.burlingtonelectric.com



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<sup>70</sup> See Burlington Electric Department: Energy Efficiency for Residential Customers [https://www.burlingtonelectric.com/page.php?pid=38&name=for\\_residential](https://www.burlingtonelectric.com/page.php?pid=38&name=for_residential) (last visited July 3, 2009) (contains program information)

## Vermont Gas - Commercial Energy Efficiency Program<sup>51</sup>

### **The Purpose?**

Vermont Gas Systems (VGS) Commercial Energy Efficiency Programs are available to assist business customers save natural gas. VGS offers two energy efficiency programs for commercial customers: the WorkPlace New Construction Program and the WorkPlace Equipment Replacement and Retrofit Program.

### **What Activities Qualify?**

Water Heaters, Furnaces, Boilers, Heat recovery, Steam-system upgrades, Kitchen Exhaust Hoods, Heat Exchangers, Modulating Burners, Pool Heaters

### **Amount?**

Hot Air Furnace 90% to 92% AFUE: \$100  
Hot Air Furnace 92.1% to 93.9 AFUE: \$300  
Hot Air Furnace over 94% AFUE: \$400  
Water Heater 0.62 Energy Factor (EF): \$100  
Water Heater over 94% Thermal Efficiency: \$500  
Tankless Water Heater over 0.80 EF: \$100  
Unit Heaters 130,000 BTUH: \$300  
Unit Heaters over 130,000 BTUH: \$400  
Infrared Radiant Heaters: \$400  
Boilers 300 MBH over 87% AFUE: \$550  
Boilers 300 MBH over 92% AFUE: \$1000  
CO2 Sensor Control NA: \$250  
Commercial Steam Cooker over 38% EF: \$750  
Commercial Oven over 40% EF: \$500  
Fryolator over 50% EF: \$500

If rebate amount exceeds \$1,000, prior approval and an incentive agreement will be required.  
Indirect-fired water heater standby must connect to \$87% AFUE boiler.

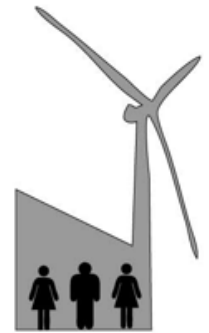
### **Who Qualifies?**

The VGS WorkPlace New Construction Program provides information, consultation, and financial assistance for owners, architects, engineers, or developers interested in making their new buildings energy efficient. The WorkPlace Equipment Replacement and Retrofit Program is designed for its commercial and industrial customers who are considering renovating buildings or replacing equipment.

### **Deadlines?**

Equipment must be purchased and installed between January 1, 2009 and December 31, 2009 in order to qualify. Rebate forms must be received at Vermont Gas or postmarked by January 31, 2010.

### **Procedural Steps?**



See website for details.<sup>71</sup>

**Additional Contact?**

Ray Keller

Vermont Gas

WorkPlace Programs

PO Box 467

South Burlington, VT 05403

(802) 863-4511 Ext. 389

rkeller@vermontgas.com

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<sup>71</sup> See Vermont Gas: Commercial Energy Efficiency Programs  
[http://www.vermontgas.com/efficiency\\_programs/comm\\_programs.html](http://www.vermontgas.com/efficiency_programs/comm_programs.html) (last visited July 3, 2009) (contains program information and rebate form)

## Vermont Gas - Residential Energy Efficiency Rebate Program<sup>51</sup>

### **The Purpose?**

The HomeBase Equipment Replacement program offers rebates for residential customers who replace their existing heating equipment or water heater with a more energy efficient one. Energy efficient new construction rebates are given to homeowners and builders through services provided to Vermont ENERGY STAR® Homes participants, including no-cost technical assistance and home energy ratings, assistance complying with Vermont's Residential Building Energy Standards (RBES), free construction inspection to identify potential insulation and air leakage problems (Vermont Gas participants only), final inspection and blower door test for air tightness, cash incentives for meeting minimum program standards, and bonus incentives for installing efficient appliances and additional high efficiency lighting.



### **What Activities Qualify?**

For new construction rebates, the home should achieve a Home Energy Rating score of 80 points or less using the National Home Energy Rating Scale (HERS). There must be a minimum of four energy efficient lighting fixtures installed with pin based fluorescent bulbs in moderate to high use locations (no closets, garages, unfinished basements, etc.).

If forced-air heating equipment is used, the hard-ducted cold air returns must be used above the first floor deck. Heating equipment must be sealed combustion or power vented and meet ENERGY STAR® qualifications. The house must use an efficient mechanical ventilation system that meets the RBES requirements and the Vermont Energy Code.

(Water Heaters, Furnaces, Boilers, Heat pumps, Duct/Air sealing, Building Insulation, Comprehensive Measures/Whole Building, indirect fired storage tank)

### **Amount?**

Hot Air Furnace 90% to 92% AFUE: \$100  
Hot Air Furnace 92.1% to 93.9% AFUE: \$300  
Hot Air Furnace over 94% AFUE: \$400  
Hot Water Boiler 87% to 91.9% AFUE: \$400  
Hot Water Boiler over 92% AFUE: \$600  
Steam Boiler over 82% AFUE: \$150  
Water Heater 40/50 gal. over .62 EF: \$100  
Indirect-fired hot water storage tank: \$100  
Tankless Water Heater over .80 EF: \$100  
Drain Water Heat recovery: \$200

### **Who Qualifies?**

Varies.

### **Deadlines?**

Varies.

### **Procedural Steps?**

See website for details.<sup>72</sup>

**Additional Contact?**

See Vermont Gas – Commercial Energy Efficiency Program

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<sup>72</sup> See Vermont Gas: Residential Energy Efficiency Programs  
[http://www.vermontgas.com/efficiency\\_programs/res\\_programs.html](http://www.vermontgas.com/efficiency_programs/res_programs.html) (last visited July 3, 2009) (contains program and rebate information)

# **FOUNDATIONS**

## Ben & Jerry's Foundation<sup>73</sup>

### **The Purpose?**

To support organizations that work to eliminate underlying causes of current social and environmental problems.

### **What Activities Qualify?**

There are no specific limitations on the types of activities that qualify for funding. However, focus is placed on organizations working to create social change.

### **Amount?**

Varies.

### **Who Qualifies?**

Grassroots, constituent-led organizations that are organizing for social change.

### **Procedural Steps?**

1. One-page letter of intent should be submitted along with a cover page that can be found from this page (<http://www.benjerry.com/company/foundation/apply/>). Note that grant requests of less than \$1,000 only require submission of the one-page letter of interest.
2. If the application is chosen for further consideration, a full proposal must be submitted. This full proposal must include the five-page National Network of Grantmakers (NNG) Common Grant Application. Applicants have one (1) year to submit the full proposal after receiving notice and must allow twelve (12) weeks for a funding decision once the full application has been received.

### **Additional Contact?**

Ben & Jerry's Foundation Inquiries: (802) 846-1543 ext. 7485

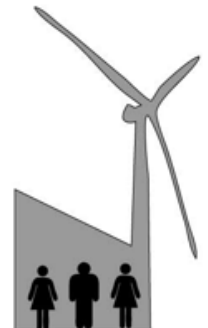
Applications should be submitted to:

Review Committee

Ben & Jerry's Foundation

30 Community Drive

South Burlington, VT 05403-6828



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<sup>73</sup> Ben & Jerry's Foundation, <http://www.benjerry.com/company/foundation/> (last visited July 5, 2009)

## Environmental Support Center<sup>74</sup>

### **The Purpose?**

Increase the effectiveness of organizations working on environmental issues and for environmental justice in order to promote environmental quality, human health and community sustainability.

### **What Activities Qualify?**

Please contact Peggy Mathews (pmathews@envsc.org) for specific eligibility requirements. Due to grant restrictions, your organization is

more likely to receive funding if it falls into a “priority area” of interest (<http://www.envsc.org/fundraising/priority-areas-for-funds-program>).

Additionally, it is recommended that your organization:

1. Has been operating for at least five years, and has an established track record
2. Is guided by a strategic plan and an active, engaged board of directors
3. Has staff time dedicated to carrying out development functions (not including the executive director)

### **Amount?**

#### Technical Assistance Grants (up to \$6,000)

For groups on the “planning track” to help develop and/or improve the fundraising plan

#### Grants (up to \$10,000)

For further development and implementation of fundraising plans

#### Low interest loans (up to \$50,000)

For capital investment in fundraising plans

### **Who Qualifies?**

State, local and regional governments and organizations

### **Deadlines?**

Varies.

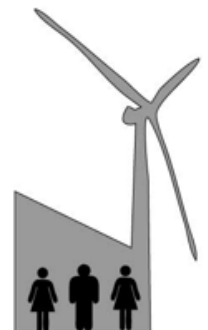
### **Procedural Steps?**

Varies.

### **Additional Contact?**

Peggy Matthews (pmatthews@envsc.org)

(202) 331-9700



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<sup>74</sup> Environmental Support Center, <http://www.envsc.org/> (last visited July 5, 2009)

## New England Grassroots Environmental Fund (Small Grants)<sup>75</sup>

### **The Purpose?**

Increase civic engagement, volunteerism, emerging leaders and community initiatives that create health, just, safe and environmentally sustainable communities at the neighborhood and town level in New England.

### **What Activities Qualify?**

Community-based work focused on solving environmental problems and/or developing sound environmental policies.

### **Amount?**

\$500 - \$2,500

### **Who Qualifies?**

A group is eligible if it:

1. Is doing community-based environmental work in CT, ME, MA, NH, RI or VT;
2. Has less than 2 full-paid staff or their equivalents;
3. Has an operating budget of less than \$100,000;
4. Has not received a NEGEF grant within one year of the application.

### **Procedural Steps?**

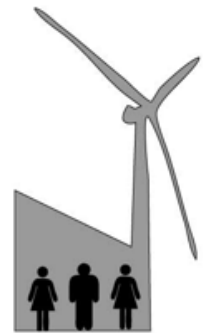
Applications and reports can be downloaded on the website.

### **Additional Contact?**

(802) 223-4622

General Information: [info@grassrootsfund.org](mailto:info@grassrootsfund.org)

Ginny Callan, MA & VT Program Officer & BGI Program Director: [callan@grassrootsfund.org](mailto:callan@grassrootsfund.org)



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<sup>75</sup> New England Grassroots Environmental Fund, <http://www.grassrootsfund.org/> (last visited July 5, 2009)

## Vermont Community Foundation<sup>76</sup>

### **The Purpose?**

Help build and manage charitable funds created by individuals, families, groups, organizations and institutions to improve the quality of life in Vermont.

### **What Activities Qualify?**

*Basic Human Needs:* Children, elderly and family services; housing, food and shelter, health

*Sustainable Communities:* Arts, humanities and cultural heritage; environment; economic development

*Successful Communities:* Civic engagement; diversity and equity; education

Several other grants are available for specific topics or regions. Please refer to the website for due dates and amounts of various grants.

### **Amount?**

Varies.

### **Deadlines?**

Varies.

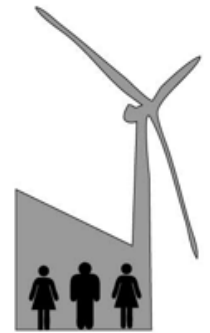
### **Procedural Steps?**

Varies.

### **Additional Contact?**

(802) 388-3355

For specific questions about the application process or grant eligibility, contact a Philanthropic Advisor.<sup>77</sup>



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<sup>76</sup> Vermont Community Foundation, <http://www.vermontcf.org> (last visited July 5, 2009)

<sup>77</sup> Vermont Community Foundation: Contact Advisors, <http://www.vermontcf.org/contact-advisors/> (last visited July 5, 2009)

## Patagonia<sup>78</sup>

### **The Purpose?**

To fund and support small, grassroots activist organizations with provocative direct-action agendas, working on multi-pronged campaigns to preserve and protect the environment.

### **What Activities Qualify?**

Organizations that identify and work on the root causes of environmental problems that approach issues with a commitment to long-term change.

### **Amount?**

Varies – most grants are in the range of \$3,000 - \$8,000

### **Who Qualifies?**

Small, grassroots activist organizations that generate strong citizen support and work to preserve and protect our environment.

### **Deadlines?**

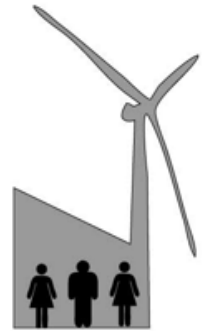
Online applications are accepted during April and August. Applications received before April 30<sup>th</sup> will be responded to in August and applications received by August 31<sup>st</sup> will be responded to in January.

### **Procedural Steps?**

Varies. Begin with online questionnaire.<sup>79</sup>

### **Additional Contact?**

(800) 638-6464



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<sup>78</sup> Patagonia, <http://www.patagonia.com/web/us/patagonia.go?assetid=2927> (last visited July 5, 2009)

<sup>79</sup> Patagonia Environmental Grants hosted by CyberGrants, [http://www.cybergrants.com/pls/cybergrants/quiz.display\\_question?x\\_gm\\_id=2853&x\\_quiz\\_id=1783&x\\_order\\_by=1](http://www.cybergrants.com/pls/cybergrants/quiz.display_question?x_gm_id=2853&x_quiz_id=1783&x_order_by=1) (last visited July 5, 2009)

## New Hampshire Charitable Foundation<sup>80</sup>

### **The Purpose?**

To improve the quality of life in New Hampshire and some adjoining communities in Vermont and Maine.

### **What Activities Qualify?**

Community-based efforts in New Hampshire and along the central NH borders with Vermont and Maine.

### **Amount?**

Express Grants: Up to \$5,000

Community Impact Grants: At least \$5,000

### **Who Qualifies?**

Grants are available to organizations across a wide variety of areas including:

- Arts and culture
- Education
- The environment
- Health and human services
- Public affairs

### **Deadlines?**

Express Grants: Monday March 2, 2009 and Tuesday, September 1, 2009

Community Impact Grants: Wednesday, April 1, 2009 and Thursday, October 1, 2009

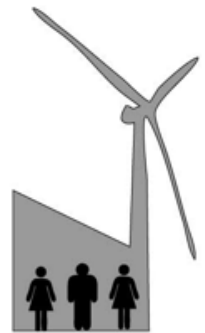
### **Procedural Steps?**

Applications and directions can be downloaded here: <http://www.nhcf.org/page16898.cfm>

Email application submissions are preferred; email address for submissions can be found in the instruction documents on the page link above. If application is sent via postal mail, application must arrive to NHCF offices by 5 PM on day of submission deadline.

### **Additional Contact?**

NHCF has multiple offices. Consult website for the office nearest you.



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<sup>80</sup> New Hampshire Charitable Foundation, <http://www.nhcf.org/page16898.cfm> (last visited July 5, 2009)