



State of New Hampshire  
Public Utilities Commission  
Sustainable Energy Division  
21 S. Fruit Street, Suite 10, Concord, NH 03301-2429



**STEP 1: INCENTIVE PRE-APPROVAL APPLICATION  
FOR RESIDENTIAL BULK-FUEL FED WOOD-PELLET CENTRAL  
BOILERS AND FURNACES**

**REVISED 02-11-15**

- The Public Utilities Commission (the Commission) will provide a rebate payment of 30% of the system and installation cost, or \$6,000, whichever is less, for investments in residential high-efficiency (80% or greater), bulk-fuel fed wood-pellet central heating boilers and furnaces that become operational, serving designed intent and installer-certified on or after May 1, 2012.
- Pre-approval is required to reserve your place in the funding queue. Once the facility has been installed at the site, applicant must then complete and submit the [Step 2](#) application to receive a rebate.
- The incentive pre-approval expires three months from the date this application is pre-approved and funding is reserved.
- When all available program funding has been reserved for approved projects, applicants that meet all program and project requirements will be placed on a waitlist. Projects placed on the waitlist are not guaranteed funding.

***\*\*Because this application requires original signatures,  
no electronic copies will be accepted\*\****

**Please submit application and all associated documents to:**

Sustainable Energy Division  
New Hampshire Public Utilities Commission  
21 S. Fruit Street, Suite 10  
Concord, NH 03301-2429

***Funds for this program are made available through New Hampshire's RPS statute, RSA 362-F, which requires each electricity provider to meet a percentage of customer load by purchasing or acquiring certificates representing generation from renewable energy based on total megawatt-hours supplied.***

## PROGRAM RECOMMENDATIONS

**Thermal Storage – Applicants are strongly encouraged to consider the benefits of thermal storage which include:**

- 1) Greatly improves seasonal efficiency
- 2) Greatly reduced emissions;
- 3) Decreased boiler run time;
- 4) Decreased wear and tear on moving parts;
- 5) Decreased power consumption for motors and fuel ignition;
- 6) Higher occupant comfort because a boiler and tank respond immediately to heating loads. (If the pellet boiler must first light itself and heat up before it supplies heat there can be a lag.)

The ideal volume of thermal storage for pellet boilers is 20 gallons per 10,000 Btus. It is essential that the thermal storage tank and the pipes between the boiler and tank be extremely well insulated.

**System Warranties – Carefully review all warranties** for the parts, labor and the pressure vessel. This will ensure that the system is handled and maintained according to manufacturer’s specifications.

**Premium Quality Wood-Pellets – Warranties for many systems require the use of premium pellets.** The life expectancy of the system will be significantly reduced and the operation and maintenance will be considerably greater if lower quality fuel is used. For more information on pellet fuel standards, visit the [Pellet Fuels Institute](#) website.

For questions regarding this rebate program, e-mail [rcphsrebates@puc.nh.gov](mailto:rcphsrebates@puc.nh.gov)

## PROGRAM ELIGIBILITY, TERMS AND CONDITIONS

Please read the Terms and Conditions carefully prior to completing the form.

Any applicant requesting a rebate payment for any renewable energy system is responsible for meeting all terms and conditions of the program as follow:

1. The rebate payment is 30% of the system cost and installation, or \$6,000, whichever is less.
2. The rebate pre-approval expires three months from the date this application is approved. An extension may be secured by contacting the Sustainable Energy Division.
3. Applicants must complete a Final Rebate Request Form (Step 2) to receive a rebate payment.
4. The wood-pellet central boiler or furnace system must be located within the applicant’s New Hampshire primary residence. Second homes do not qualify. A primary residence is defined as the place where the NH resident lives the majority of the calendar year and is used as the residential basis for tax or voting purposes. Owner-occupied apartment buildings of four units or less qualify for this program; all other multi-family buildings do not.
5. This one-time rebate payment must be used for the installation of new, commercially available, high thermal efficiency<sup>1</sup>, bulk-delivery capable wood-pellet central boilers and furnaces utilized as a central heating system where:
  - a. **The system** has a thermal efficiency rating of 80% or greater<sup>2</sup>.

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<sup>1</sup> For the purposes of this program, high efficiency is defined as boilers/furnaces that operate at a minimum of 80% lower heating value (LHV) of wood. Efficiency rates may be determined by third party testing laboratories approved and recognized by authorities having jurisdiction in the United States, Canada, and/or the European Union.

- b. **The particulate matter emissions rating is 0.32 lb/MMBtu heat output or less.**<sup>3</sup>
- c. **Basic attributes include:**
- i. The heating system turns itself on in response to a demand for heat.
  - ii. The heating system is designed to be capable of being located inside the residence, either in a basement or a room designed specifically to accommodate the heating system, although if space does not permit, it may be installed in a separate structure.
  - iii. The heating system modulates to lower output and/or turns itself off when the heating load decreases or is satisfied.
  - iv. The system automatically cleans the burn chamber and the heat exchanger, or, the system requires routine cleaning for approximately each ton of premium pellets used, or more frequently to maintain optimal efficiency and safety.
  - v. Based on the consumption of premium pellet fuel, ash may be required to be automatically or manually removed from the system about once per month.
  - vi. Other routine maintenance, including cleaning, may be required annually and is strongly recommended.
  - vii. Fuel can be automatically conveyed from the bulk storage container/area (device) to the burn chamber in a planned/integrated path without operator intervention of any sort.
- d. **Bulk fuel capability features include:**
- i. The heating system has built-in fuel conveyance capability that can be pneumatic (suction) or mechanical (auger) or a combination of two transport mechanisms from the bulk storage device. The fuel conveyance can also be an add-on feature as long as it allows for seamless and safe conveyance of fuel from the storage device to the burn chamber without operator intervention of any sort;
  - ii. The heating system can convey fuel from almost any appropriately adapted bulk storage device to allow flexibility in placement and design. The heating system shall not be restricted to any one bulk storage device, for instance one made by the same manufacturer as the appliance;
  - iii. The pellet-fuel storage bin shall have a minimum capacity of three tons; and,
  - iv. Pellet fuel storage bin access (by pipe or auger or both) is located 100 feet or less from the street or driveway. Contact your local distributor of wood pellets to ensure that delivery is possible to your location.
- e. **Key safety features include:**
- i. There is a positive closure and/or fire extinguishing device and/or emergency disconnection device between the burn chamber and the bulk storage device to keep the fire from reaching the bulk pellets.
  - ii. The fuel fill pipe to the storage bin must be grounded or anti-static.
  - iii. A placard is attached to the bin with safety precautions.
  - iv. A carbon monoxide detector (CO) is installed in the room with the pellet boiler or furnace and internal pellet storage or hopper.<sup>4</sup>
- f. **Wood pellet fuel** is a condensed, uniformly sized form of biomass energy. Wood pellets are compressed by-products from the forest products industry, often woodchips and sawdust. Voluntary industry standards for wood pellets have been specified by the [Pellet Fuels Institute](#).

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<sup>2</sup> The New Hampshire Residential Central Pellet Heating System Rebate requirements are more stringent than those allowed under the previous federal tax credit. The federal program offered tax credits for systems with a lower heating value efficiency of 75%. According to a recently commissioned NYSERDA report, boilers at 90% lower heating value of the fuel (>85% HHV) represent the top 25% of the European market.

<sup>3</sup> Emissions may be determined by third party testing laboratories approved and recognized by authorities having jurisdiction in the United States, Canada, and/or the European Union.

<sup>4</sup> A carbon monoxide detector is not necessary for outdoor storage.

- g. **A central heating system** provides warmth to the whole interior of a building (or portion of a building), through an air or water distribution system, from one point to multiple rooms, not direct space heating. A pellet central boiler or furnace to be funded under this rebate program must be capable of being the home's only or primary central heating system, though it may also provide domestic hot water through a heat exchanger and may be interconnected with a supplemental solar hot water heating system. There may also be other supplemental space heating sources or interconnected back-up systems in the home, though none should be required.
6. The wood-pellet central boiler and furnace system must be installed by a qualified installer who is a sole proprietorship, company, corporation, limited liability company, or other organization authorized to conduct business in the State of New Hampshire that is normally commercially engaged in the installation of wood-pellet central boiler and furnace systems or who is a licensed New Hampshire plumber who has received training in the installation of the system installed.
  7. Only systems that become operational after May 1, 2012 are eligible. Residents receiving this rebate may combine other local, state, or federal financial incentives with this rebate, but must meet the requirements of this rebate program.
  8. Outdoor wood-pellet boilers are eligible for this program if they meet the efficiency requirements listed on page 2. Wood pellet stoves, regular stick or cord wood stoves, and cord wood boilers and furnances are not eligible for this program.
  9. Replacement or expansion of system components does not constitute an eligible project unless it includes installation of a new eligible boiler.
  10. Do-It-Yourself installations do not qualify.
  11. Used parts cannot be included in the cost of the wood-pellet central boiler or furnace system used to calculate the incentive payment. The boiler or furnace and conveyance system must be new.
  12. Residents who choose to install systems, in whole or in part, prior to approval by the Commission may still apply for this rebate payment by submitting both the Step 1 and Step 2 applications, but the rebate payment is conditioned on meeting the requirements listed herein and available funding.
  13. Any wood-pellet central boiler or furnace system must comply with all manufacturers' requirements and the State Building Code pursuant to [RSA 155-A:1, IV](#) including the National Electric Code 2008 and any applicable local codes or ordinances. Manufacturers must provide third-party testing data to verify that their systems meet the efficiency requirements specified on page 2.
  14. Any wood-pellet central boiler or furnace system is subject to inspection and monitoring by the Commission, the State Fire Marshal and local code authorities or their agents for safety and performance
  15. Rebates are subject to the availability of funds; complete applications will be processed in the order in which they are received.
  16. All program requirements and documentation must be complete and submitted in order to receive approval for a rebate payment. Payment of the rebate may be subject to inspection of the facility by an agent of the Commission to confirm that the system is operational<sup>5</sup> and consistent with the application, with appropriate advance notice to the owner.
  17. Certain information, including rebate recipients names, system details, town or zip code, and total costs of systems installed with program support, may be available to the public and may be publicly posted. Additional information may be released upon official request. Specific personal information including Social Security number, telephone numbers, and email addresses will remain confidential to the extent permitted under State law.
  18. The Commission reserves the right to request system performance data for a period of ten (10) years after issuing the rebate. Such information may include fuel use, equipment service needs, and boiler cycling information.
  19. The rebate recipient may be liable to the State of New Hampshire for the entire amount of the rebate if the rebate is obtained fraudulently.
  20. Any rebate received under this program may be treated as taxable income by the IRS. It is the responsibility of the recipient of this rebate payment to consult with his or her tax advisor to determine the correct tax treatment of these payments.

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<sup>5</sup> For the purposes of this grant, *operation* is defined as providing at least 75% of home heating load needs.

21. Applicants who do not provide their social security number on the Step 2: Final Rebate Request Form will not be eligible for reimbursement.
22. The rebate covers the entire installed system, including pellet storage and conveyance, boiler, controls, thermal storage tank, and installation, up to the point where the system interconnects with the dwelling's heat distribution system.

## APPLICANT INFORMATION

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Installation Address (if different): \_\_\_\_\_

County: \_\_\_\_\_

Telephone: \_\_\_\_\_ Cell: \_\_\_\_\_

Email address: \_\_\_\_\_

<input type="checkbox"/>	Please check if you would like to receive periodic updates from the PUC Sustainable Energy Division's Email Alert Network regarding grant and rebate opportunities, educational events and news about renewable energy and energy efficiency in New Hampshire.
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Briefly state your primary reason for installing a pellet central heating system:	
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### DWELLING INFORMATION

Please indicate the type of dwelling being used for the installation:

Single family home  Duplex/Townhouse  Condo  Other

Year original dwelling built: \_\_\_\_\_

### INFORMATION ON THE EXISTING HEATING SYSTEM

FUEL USED:	Oil <input type="checkbox"/>	Natural Gas <input type="checkbox"/>	Propane <input type="checkbox"/>	Wood <input type="checkbox"/>
	Electric <input type="checkbox"/>	Other <input type="checkbox"/> (please describe)		
Annual Fuel Use (gallons) for each of the past 3 years:	Last year	2 years ago	3 years ago	
Approximate Age of System:				
Rated Burner or System Efficiency:				
Source of Rating: (e.g. your oil service company) or your new heating system installer):				

**INSTALLATION INFORMATION**

Anticipated start date:		Anticipated date of completion:	
Rated Efficiency of New System:			

**NEW HEATING SYSTEM INFORMATION**

Manufacturer:		Product Name:		Model #	
Please indicate if your new heating system will be a boiler or a furnace.				Boiler: <input type="checkbox"/>	Furnace: <input type="checkbox"/>
What size is your new heating system (Btu/hour)?					
Thermal Storage Product Identification and Size (volume)					
Heating System Distribution Description (number of zones, radiant, convectors, outlet temperature, inlet temperature)					
(For purposes of data collection only) are you removing your old heating system? Yes <input type="checkbox"/> No <input type="checkbox"/>					

**PELLET FUEL STORAGE SYSTEM INFORMATION**

Manufacturer:		Product Identification #:	
Capacity (tons):			
Conveyance: (how the pellets get from the storage vessel to the heating system)			

**INSTALLER**

Installer Name:		Company:			
Mailing Address:					
Town/City:		State:		Zip Code:	
Telephone:		Email:			
DUNS # or Employer ID #					
Company Type:	HVAC <input type="checkbox"/>	Plumbing <input type="checkbox"/>	Other <input type="checkbox"/>	Describe:	
Has the installer completed approved manufacturer or distributor installation training?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
If the installation is being done by a NH licensed plumber, please provide the license number.					

**REBATE CALCULATION**

<b>Project Components</b>	
Appliance (Boiler or Furnace)	\$
Fuel Storage Bin	\$
Fuel Conveyance	\$
Controls & Circulators	\$
Thermal Storage Tank	\$
Indirect Hot Water Heater	\$
Labor	\$
Carbon Monoxide Detector	\$
Other*	\$
<b>Total Project Cost</b>	<b>\$</b>
<b>NH Incentive (30% of system costs up to \$6,000, whichever is less)</b>	<b>\$</b>
<b>Total Incentive Requested</b>	<b>\$</b>

\*Other eligible components up to the point of interconnection with heat distribution system.

**WOOD-PELLET CENTRAL BOILER AND FURNACE SYSTEM INFORMATION**

**REQUIRED ATTACHMENTS**

<b>These items (copies) must be attached to the application:</b>	<b>Attached</b>
Signed contract with qualified installer	<input type="checkbox"/>
Photos of the old system	<input type="checkbox"/>
Installer's certification or approved authorization from the manufacturer or distributor	<input type="checkbox"/>

*Note: For the **STEP 2: REBATE REQUEST FORM** you will be expected to provide the following:*

- Paid invoices,
- Pictures of the final installation, including:
  - the heating system;
  - the storage system; and,
  - the carbon monoxide detector.
- A copy of your building permit and documentation that the system has been inspected by a local building code official and/or sign-off from a local fire jurisdiction.

**DECLARATION**

The Undersigned applicant declares under penalty of perjury that:

- 1) the applicant intends to purchase and install the wood-pellet central boiler or furnace system described in this application;
- 2) the applicant has read and understands the terms and conditions set forth in this application with attachments and has agreed to abide by those requirements;
- 3) the information provided in this form is true and correct to the best of the applicant's knowledge;
- 4) the applicant agrees that the system and documents supporting the application may be audited and inspected by the Commission or an agent of the Commission; and,
- 5) the applicant gives permission to the PUC to contact the applicant's installer in order to notify the installer of pre-approval of the rebate.

Applicant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Only one signature needed per household.

Subscribed and sworn before me this \_\_\_\_\_ (day) of \_\_\_\_\_ (month) in the year \_\_\_\_\_

County of \_\_\_\_\_ State of \_\_\_\_\_

\_\_\_\_\_  
Notary Public/Justice of the Peace

My Commission expires \_\_\_\_\_