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State of New Hampshire Department of Energy

21 S. Fruit Street, Suite 10, Concord, NH 03301-2429

STEP 1: REBATE PRE-APPROVAL APPLICATION

FOR RESIDENTIAL BULK-FUEL FED WOOD PELLET
BOILERS AND FURNACES
REVISED 05-16-2022

PROGRAM SUMMARY

The Department of Energy will provide a rebate payment of 40% of the system and installation cost, up to a maximum of \$10,000, 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 July 9, 2016.
 A supplemental adder of \$100 per ton for fuel storage systems larger than the three (3) ton minimum requirement, up to a maximum of \$500.
 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 (3) 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

Please submit application and all associated documents electronically to:

New Hampshire Department of Energy

Sustainable Energy

thermalrebates@energy.nh.gov

requirements will be placed on a waitlist. Projects placed on the waitlist are not guaranteed funding.

Funds for this program are made available through New Hampshire's Renewable Portfolio Standard (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 encouraged to consider the benefits of thermal storage which may include:

- 1) Improved seasonal efficiency;
- 2) 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 <u>Pellet Fuels Institute</u> website.

For questions regarding this rebate program, e-mail: ThermalRebates@energy.nh.gov

Revised May 16, 2022 Page **1** of **8**

PROGRAM ELIGIBILITY, TERMS AND CONDITIONS

Please read all Program Eligibility, 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 40% of the system and installation cost, up to a maximum of \$10,000. A supplemental adder of \$100 per ton for fuel storage systems larger than the three (3) ton minimum requirement, up to a maximum of \$500, is available to program applicants.
- 2. The rebate pre-approval expires <u>three (3) months</u> from the date this application is approved. An extension may be secured by contacting the Department of Energy.
- 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 New Hampshire 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 efficiency¹, 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.
 - b. The particulate matter emissions rating is 0.10 lb/MMBtu heat output or less.²
 - 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 <u>and</u> 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

Revised May 16, 2022 Page 2 of 8

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¹ 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.

² 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.

- iii. The pellet-fuel storage bin shall have a minimum capacity of three tons.
- 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. A carbon monoxide detector is not necessary for outdoor storage.
- f. Wood pellet fuel is a condensed, uniformly sized form of biomass energy. Wood pellets are compressed byproducts from the forest products industry, often woodchips and sawdust. Voluntary industry standards for wood pellets have been specified by the Pellet Fuels Institute.
- 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, and in each case who has received training from the manufacturer in the installation of the system installed.
- 7. Only systems that become operational on or after July 9, 2016 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 furnaces 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 <u>not</u> 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 Department 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.
- 14. Manufacturers must provide third-party testing data to verify that their systems meet the efficiency requirements specified on page 2.
- 15. Any wood-pellet central boiler or furnace system is subject to inspection and monitoring by the Department of Energy, the State Fire Marshal and local code authorities or their agents for safety and performance.

Revised May 16, 2022 Page **3** of **8**

- 16. Rebates are subject to the availability of funds; complete applications will be processed in the order in which they are received.
- 17. 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 Department of Energy to confirm that the system is operational and consistent with the application, with appropriate advance notice to the owner. For the purposes of this rebate, operation is defined as providing at least 75% of home heating load needs.
- 18. Certain information, including rebate recipients' 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, telephone numbers, and email addresses will remain confidential to the extent permitted under State law.
- 19. The Department of Energy 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.
- 20. 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.
- 21. Applicants must register for a New Hampshire Vendor ID number to be eligible for an incentive payment. 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.
- 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.

Revised May 16, 2022 Page 4 of 8

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STEP 1 APPLIC	AHON:	REBA	TE PRE-APPRO						FED WOOI	D PELI	.ETB	OILERS	AND F	URNACES
APPLICANT INFORMATION														
Contact Name	3													
Contact Name														
Mailing Addre	ess					City			State	te Zip				
Installation A	ddress (if	diffe	rent)			City St			State	- 1	Zip			
Talanhana					Cell									
Telephone					Cell									
Email Address	}							Co	ounty					
									•					
Briefly state y	our prim	ary re	eason for insta	alling	a pellet centra	al he	eating	syst	em:					
				D	WELLING INF	ORN	ΙΑΤΙΟΙ	N						
Please indicat	e the typ	e of o	dwelling being	g used	for the instal	llatio	on:		-					
Single Family Home Duplex/Townhouse Duplex/Town			Condo Other [- 🗆	☐ Please describe:							
Year Original Dwelling Built														
			EXIS	TING	HEATING SYS	TEM	INFO	RMA	ATION					
FUEL USED	Oil 🗆	☐ Natural Gas ☐		Propane \square	Wood □			Electric		ther	Plea	se desc	ribe:	
			'											
Estimated Annual Fuel Use (gallons/cords/etc.) o					war the nast three years			c						
				ars ago				3 years ago						
Last year 2 fed					4.3 480				o years ago					
A					Course of D	tina								
Approximate Age of Rated Burner or Existing System System Efficiency					Source of Rating:									
Zandania dystem E					New Installer □ Burner Service Other				er Please describe:					

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Revised May 16, 2022 Page **5** of **8**

Company \square

INSTALLATION INFORMATION						
Anticipated Start Date	Anticipated Date of Completion	Rated Efficiency of New System:				

NEW HEATING SYSTEM INFORMATION											
Manufacture	r	Appliance Type			Product (Mod	е	Model #				
Во		Boiler 🗆	Furnace								
Size of New	Heating	If your syst	em includes th				emoving your old heating				
System		Manufacturer:		Siz	e of Tank:	system?					
Btu/hour						Yes □		No	No □		
		PE	LLET FUEL STO	RAG	SE SYSTEM INI	FORMAT	TION				
Manufacture	r	Product Identification #			Capacity (Capacity (tons) Conveyan			ce		
							Auger □		Vacuum \square		
				INS	STALLER						
Installer Name					Company	Company					
Mailing Addr	ess				Town/City	Town/City				Zip Code	
Telephone					Email	Email					
Company Type:						Has the installer completed approved manufacturer or distributor installation training?					
HVAC □	Plumbing 🗆	Other 🗆 I	Please Describe:		Yes \square No \square Manufacturer approved installer training a program requirement.					staller training is	
					If the installation is being done by a New Hampshire licensed plumber, please			cense #			
					provide the		156				

Revised May 16, 2022 Page **6** of **8**

PROJECT COST SUMMARY A							
Project Components			Cost	Rebate			
Appliance (Boiler or Furnace)	\$						
Fuel Storage Bin	\$						
Fuel Conveyance	\$						
Controls & Circulators							
Thermal Storage Tank							
Indirect Hot Water Heater							
Labor	\$						
Carbon Monoxide Detector	Carbon Monoxide Detector						
Other - eligible components up to the point of int distribution system.	\$						
	Total Project Cost * 40% up to						
The rebate covers the entire installed system, conveyance, boiler or furnace, controls, thermal sup to the point where the system interconnection distribution system.	\$10,000						
	\$						
Wood Pellet Fuel Storage Adder	n Size		(#tons – 3) x \$100 up to \$500				
Add \$100/ton for bins over 3 tons up to \$500	t	cons	Total Storage Adder	\$			
	\$						

REQUIRED ATTACHMENTS							
Attached	These items (copies) must be attached to the application:						
	Signed contract with qualified installer.						
	Photos of the old system.						
	Documentation that the system will be installed by a qualified installer who is a sole proprietor, 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. If this documentation has been provided to the New Hampshire Department of Energy as of April 30 of this year, there is no need to re-submit this information. Check here \Box if this information has been filed.						

Revised May 16, 2022 Page **7** of **8**

Note: I	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 fuel storage system, and the carbon monoxide detector.						
	A copy of the 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.						
DECLA	RATION						
The Unc 1. 2.	the applicant intends to purchase and install the wood-pellet central boiler or furnace system described in this application; the applicant has read and understands the terms and conditions set forth in this application with attachments and has agreed to abide by all of those requirements; the information provided in this application is true and correct to the best of the applicant's knowledge and belief;						
4.	the applicant agrees that the system and documents supporting the application may be audited and inspected by the						
5.	Department of Energy or an agent of the Department; and, the applicant gives permission to the Department of Energy to contact the applicant's installer in order to notify the installer of pre-approval of the rebate.						
	Applicant Signature Date						
	Only one signature needed per household.						

Revised May 16, 2022 Page 8 of 8