



vFY2016
Advanced Wood Pellet Heating
System Incentive Reservation
Form

Vermont Small Scale Renewable Energy Incentive Program
ADVANCED WOOD PELLET HEATING SYSTEM
Incentive Reservation Form

SECTION A: CUSTOMER INFORMATION

FIRST NAME _____ LAST NAME _____
CUSTOMER BUSINESS NAME (IF APPLICABLE) _____
DAYTIME PHONE NUMBER _____
EMAIL ADDRESS _____
MAILING ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____

SECTION B: CONTRACTOR INFORMATION

COMPANY NAME _____
CONTACT FIRST NAME _____ CONTACT LAST NAME _____
CONTACT EMAIL _____
COMPANY MAILING ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____
DAYTIME PHONE NUMBER _____

SECTION C: INSTALLATION INFORMATION

INSTALLATION ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____
COUNTY _____
CUSTOMER TYPE RESIDENTIAL SMALL COMMERCIAL/INDUSTRIAL LOW-INCOME, MULTI-FAMILY
NEW CONSTRUCTION? YES NO (RETROFIT)

RERC USE ONLY:

Date Received:

Res. Number:

Date Approved:

SECTION C: INSTALLATION INFORMATION (CONT.)

EXISTING AND BACK-UP HEATING SYSTEM INFORMATION

Existing Heating Source Fuel Type (Check One)

ELECTRIC PROPANE OIL NATURAL GAS FIREWOOD OTHER: _____

Rated Capacity of Existing System (Btu/hr)

Average Annual Historical Fuel Usage (please specify Gallons, Cords, or Therms) for the Past Three Years

Back-Up Heating System Present?

NO YES, RETAINING EXISTING SYSTEM AS BACK-UP YES, NEW BACK-UP SYSTEM INSTALLED

NEW HEATING SYSTEM INFORMATION

Pellet System Manufacturer¹	Pellet System Model Number
Quantity (incentive limited to 2)	Installed Output (Btu/hr)
Unit Type (Check One) <input type="checkbox"/> BOILER <input type="checkbox"/> FURNACE	Thermal Storage?² <input type="checkbox"/> YES, GALLONS: _____ <input type="checkbox"/> NO
Pellet System Provides Domestic Hot Water Heating? <input type="checkbox"/> YES <input type="checkbox"/> NO	Type of Pellet Storage (Check One) <input type="checkbox"/> OUTDOOR SILO <input type="checkbox"/> ENCLOSED ROOM <input type="checkbox"/> FREE-STANDING FABRIC OR METAL BIN <input type="checkbox"/> OTHER (DESCRIBE)
Capacity of Pellet Storage (Tons)	Number of Days Storage is Designed to Provide Pellets to Heating Unit During Full Load Conditions (Min. 14)

¹ Pellet Heating System Manufacturer and Model Number must be included on the SSREIP Advanced Wood Pellet Eligible Equipment Inventory. If not listed, but meets minimum requirements, you must submit supporting documentation for approval.

² Applicants are strongly encouraged to discuss the benefits of thermal storage with their installer that may include: improved seasonal efficiency; reduced emissions; decreased frequency of boiler cycling; decreased wear and tear on moving parts; decreased power consumption and, higher occupant comfort. The ideal volume of thermal storage for pellet boilers is 15 gallons per 10,000 Btu of rated output capacity. It is essential that the thermal storage tank and the pipes between the boiler and tank be extremely well insulated.

SECTION D: HOME/BUILDING INFORMATION

HISTORIC INFORMATION

INSTRUCTIONS: Answer YES to all that apply. If you answer YES to any of the following questions, additional requirements may apply. See “Section G: State Historic Preservation Act” for more information.

Does installation involve ground disturbance (ex. external hoppers)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Is the building more than fifty (50) years old or located in a historic district, AND: <ul style="list-style-type: none"> • <i>Installation involves installing new equipment visible from a public right of way (ex. Chimneys or other ventilation); or</i> • <i>Installation alters the exterior of the building.</i> 	<input type="checkbox"/> YES <input type="checkbox"/> NO
Is the building listed on the State or National Register of Historic Places?	<input type="checkbox"/> YES <input type="checkbox"/> NO

BUILDING INFORMATION AND CALCULATIONS

Building Square Footage (Heated Space Only)	Estimated Average Annual Heat Load (Btus) ³	Calculated Peak Heat Load (Btu/hr)
% of <i>Peak</i> Heat Load that Pellet System is Designed to Meet	% of <i>Annual</i> Heat Load that Pellet System is Designed to Meet	

Provide adequate justification/calculations for how the above calculations were determined. Alternatively, you may attach a spreadsheet of calculations.⁴ These calculations should demonstrate that the installation is properly sized for the project.

NOTE: The SSREIP provides a self-review tool on the [Applications](#) page of the RERC website. You may use this tool to assess if your application will be accepted as is or if you will be asked clarifying questions.

³ All prospective applicants must use less than 75,000 Btu/square foot of heated building space per heating season.

⁴ Systems are required to be sized for the respective heat load of the building. Systems that are determined to be oversized during the approval process will be returned for further information and potentially rejected.

SECTION E: INCENTIVE CALCULATION

CALCULATION

Base Incentive (\$2,500 x Quantity of Units, max 2 units)	<i>(max \$5,000)</i>
Thermal Energy Efficiency Adder ⁵ (\$500, if applicable)	<i>(max \$500)</i>
Pellet Storage Upgrade Adder ⁶ (\$500, if applicable)	<i>(max \$500)</i>
TOTAL REQUESTED INCENTIVE	<i>(max \$6,000)</i>

OTHER FUNDING

Is the customer applying for incentives for more than one system at this time?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Has the customer (or customer's household) received an Advanced Wood Pellet Heating System incentive reservation from the Vermont Small Scale Renewable Energy Incentive Program before?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Please include total amount of major funding of grants/incentives from other sources.	

INSTRUCTIONS: Mail, email, or fax signed and completed application to:

Vermont Small Scale Renewable Energy Incentive Program
128 Lakeside Avenue, Suite 401
Burlington, VT 05401

Email: info@rec-vt.org

Fax to ATTENTION: RERC (802) 658-1643

⁵ Please see Thermal Energy Efficiency Adder details in **Section F: Eligibility Requirements**.

⁶ Please see Pellet Storage Adder details in **Section F: Eligibility Requirements**.

SECTION F: ELIGIBILITY REQUIREMENTS

1. Pellet system base rebate limit: \$2,500 maximum per unit - \$5,000 total per customer; the incentive shall not be more than 50% of the installed cost to the customer.
2. Total Potential Maximum incentive per customer including adders is \$6,000 (\$5,000 total for two units + \$500 for one Thermal Efficiency Adder + \$500 for one Pellet Storage Adder).
3. There is a single wood pellet heating system size cap of 100kW (340kBtu) and a combined cap of 200kW (680kBtu)
4. Only systems installed after September 8, 2014 are eligible.
5. Invoice with rebate listed as credit or rebate to customer must be included. Alternatively, under limited circumstances, non-residential customers may receive the incentive payment directly; however, the customer must submit an up-to-date W-9 directly to the Clean Energy Development Fund. Please contact the Renewable Energy Resource Center at time of reservation application submission for incentives that need to be paid directly to the customer.
6. Incentives are for new, high-efficiency wood pellet boilers or furnaces utilized as primary central heating systems. System must include:
 - a. Fuel storage capacity such that the system may continuously operate for a period of at least 14 days under peak load conditions;
 - b. Automated fuel feed from a bulk storage container/area to the burn chamber in an integrated path;
 - c. Automated on/off fuel feed control based on a demand for heat;
 - d. Bulk fuel storage container systems must be able to receive automated bulk delivery of pellets.
7. Systems must have a documented efficiency rating of 85% or greater.
 - a. Pellet system efficiency shall be measured on a HHV basis for peak rating (not seasonal average) by accredited third party certification.
8. Systems must have documented emissions for particulate matter below 0.08 lbs/MMBtu for PM2.5 and comply with all applicable Environmental Protection Agency and Vermont standards for particulate matter emissions.
9. All prospective applicants (residential, commercial, or institutional) must use less than 75,000 Btu per square foot of heated building space per heating season. The SSREIP will not grant incentives to systems over-sized to compensate for inefficient buildings.
10. Systems must comply with all manufacturer requirements and any applicable state and local codes or ordinances.
11. Replacement of existing biomass systems and/or components (including wood stoves) qualify only if the existing system being replaced is non-EPA certified. Expansions of existing biomass systems and/or components can qualify for an incentive, but the customer will be limited by the Total Potential Maximum incentive per customer set forth in item #2 above.
12. Pellet units must be new. Used wood pellet boilers/furnaces are not eligible.
13. Systems classified as Outdoor Wood Boilers (OWB), Outdoor Pellet Boilers (OPB) or Outdoor Wood Fired Hydronic Heaters (OWHH) are not eligible.
14. All Systems must be listed on the *SSREIP Advanced Wood Pellet Eligible Equipment Inventory* found at the RERC website: www.rerc-vt.org To be included, systems must meet one of the following criteria:
 - a. Included on the NYSERDA list of approved systems for the Renewable Heat New York small commercial wood pellet boiler incentive program; or
 - b. For systems not on the NYSERDA list, but you have evidence to demonstrate compliance with the 85% efficiency and 0.08lbs/MMBtu for PM2.5 requirements, that evidence should be submitted to the RERC for evaluation and possible approval to be added to the *SSREIP Advanced Wood Pellet Eligible Equipment Inventory*.
15. Systems that utilize multiple fuels (corn, coal, cordwood, duel fuel systems that can burn oil, etc.) are not eligible.
16. The system installed must have rated heat output capacity that is less than the existing heating system's rated output. In the case of new construction, Reserving Installers must calculate the estimated annual

and peak heat load requirements of the building and show that the pellet system to be installed is not oversized. Calculations must be supplied in the reservation applications and are subject to approval.

17. Customers are eligible for a Thermal Energy Efficiency Adder, up to \$500. Applicants must submit documentation showing that the project meets the eligibility requirements set forth below.
18. Eligibility for the Thermal Energy Efficiency Adder is based on receiving:
 - a. **Residential** (Documentation of the items below must be submitted with the Final Incentive Request):
 - i. Existing Homes:
 1. An audit completed by a BPI certified or Home Performance with ENERGY STAR participating contractor, State Weatherization service provider or Vermont Gas auditor; ***OR***
 2. Installation of thermal measures recommended in an energy audit report provided by a BPI certified or Home Performance with Energy Star participating contractor, State Weatherization service provider or Vermont Gas auditor. Energy audit report **must** recommend the installed measures in order for customer to be eligible (Thermal Energy Efficiency Adder is limited to 30% of the cost or \$500, whichever is less).
 - ii. New Construction:
 1. Participation in the Vermont Energy Star Homes or Energy Code Plus programs, and installation of at least one recommended/required thermal measures.
 - b. **Non-residential** (Documentation of the items below must be submitted with the Final Incentive Request):
 - i. Multifamily building audit by a State Weatherization service provider, participation in Efficiency Vermont Multifamily New Construction or VT Fuel Efficiency Partnership programs ***OR***
 - ii. ASHRAE Level 1 audit ***OR***
 - iii. Custom incentive agreement from Efficiency Vermont ***OR***
 - iv. Installation of thermal measures recommended in energy audit report completed by a qualifying BPI certified contractor. Energy audit report **must** recommend the installed measures in order for customer to be eligible (Thermal Energy Efficiency Adder is limited to 30% of the cost or \$500, whichever is less).
 - c. **Both Residential and Non-Residential Terms for the Efficiency Adder:**
 - i. Minimum requirements for an audit include: blower-door testing; full CAZ testing; a walk through assessment of areas that need to be insulated, and the existing effective R-value of those areas; and a written report of the audit from the contractor to be submitted with final project documentation.
 - ii. In order for a customer to access certain energy efficiency incentives through Efficiency Vermont and/or PACE financing the customer will be required to use a Home Performance with Energy Star participating contractor.
19. Customers are eligible for a \$500 Pellet Storage Upgrade Adder for pellet storage systems that have at least 20 days of storage under peak load conditions.

SIGNATURES/CERTIFICATIONS

CUSTOMER CERTIFICATION

I certify that I intend to purchase the advanced wood pellet heating system system described in this application, to be installed at the location indicated above. I certify that I meet the requirements listed in *Section F: Eligibility Requirements*. I understand that any deliberate attempt to misrepresent information in this application will disqualify me from all claims to incentives offered through Vermont's Small Scale Renewable Energy Incentive Program. I understand that the incentive will be **paid directly to the Reserving Installer, or approved non-residential customer, only after** that company has submitted the Final Project Documentation and Incentive Request and received final approval, including any necessary site visits. I also understand that the benefit of the incentive is mine and must be transferred from the Reserving Installer to me in a manner that is agreeable to both parties. I further certify that (**must be initialed by the customer**):

_____ **INSTALLATION HAS NOT BEGUN ON THE PROJECT DESCRIBED IN THIS APPLICATION.**

_____ **I HAVE READ, UNDERSTAND, AND WILL ABIDE BY ALL PROGRAM REQUIREMENTS LISTED IN SECTION F: ELIGIBILITY REQUIREMENTS.**

CUSTOMER SIGNATURE

DATE

CONTRACTOR CERTIFICATION

I certify that my company is a currently approved Vermont Advanced Wood Pellet Heating System Installer and is working with the customer referenced above to install the advanced wood pellet heating system described on the enclosed application at the location indicated above; this includes designing the system to be installed, being substantially involved with the customer, and employing a qualified installer (either employed by my company or under direct contract) to provide an on-site review of the installation and be on-site to complete the final inspection. The system will be installed in accordance with the Vermont Fire and Building Safety Codes. I understand that any deliberate attempt to misrepresent information in this application will disqualify my company from participation in the program and all claims to incentives offered through Vermont's Small Scale Renewable Energy Incentive Program. I further certify that (**must be initialed by the Reserving Installer**):

_____ **INSTALLATION HAS NOT BEGUN ON THE PROJECT DESCRIBED IN THIS APPLICATION.**

_____ **I HAVE READ, UNDERSTAND, AND WILL ABIDE BY ALL PROGRAM REQUIREMENTS LISTED IN THE FY2016 SSREIP ADVANCED WOOD PELLET INSTALLER PARTICIPATION AGREEMENT.**

COMPANY REPRESENTATIVE SIGNATURE

DATE

COMPANY REPRESENTATIVE NAME (PRINT)

SECTION G: STATE HISTORIC PRESERVATION ACT

The State Historic Preservation Act (22 VSA 14) requires that state agencies take into account the effect of projects on any historic property that is listed on the State or National Register of Historic Places or may contain scientific, historical, or archeological data. If the installation involves installing anything new (ex. chimneys or other ventilation) that is visible from a public right of way, or altering the exterior of a building more than fifty years old or located in a historic district, or if any installation requires ground disturbance, the project plans must be submitted to the Vermont Division for Historic Preservation for review **prior to starting the installation**. Applicants are encouraged to contact the Division early in the planning process to avoid any unnecessary project delays. **To start the review process, please complete this Section and** submit electronic versions of your project review materials to ACCD.projectreview@state.vt.us. Our preference is for the form and supporting documents to be sent as .pdf files.

Advanced Wood Pellet Heating System Installation Site/Address

Site/Property Owner Name

Installer Name

Installer Email

Phone

Please check all that apply:

_____ Installation does involve ground disturbance (ex. external hoppers)

_____ Building is more than fifty (50) years old or located in a historic district and:

- Installation involves installing new equipment visible from a public right of way (ex. chimneys or other ventilation); *or*
- Installation alters the exterior of the building.

_____ Building is listed on the State or National Register of Historic Places (leave blank if unknown)

Please email the following information, along with this form, to the address at the bottom of the page:

- Project Description.
- Project Location Map and Site Map, showing the location of the installation. *This can be as simple as a Google map annotated by hand to show the location of ventilation or external hoppers.*
- Project Plans (if available).
- Archeological and/or historic building reports (if available).
- Photographs of the project area and the structures involved. *For building mounted installations, please include a photograph of the entire front elevation of the house and photographs of the proposed installation area. Photographs can be annotated by hand to show the location and approximate scale of the installation.*

For Internal Use Only

Please email this form and supporting materials to ACCD.projectreview@state.vt.us

If you have questions contact: Jamie Duggan at 802-477-2288 or james.duggan@state.vt.us