

## Pellet Stove Guidance

The Combined Residential Application determines program eligibility for incentives based on household income. Households identified as Tier 1, are considered low-income households and are eligible to receive incentives through EmPower New York. Tier 3 households are considered moderate income households and are eligible to receive incentives through Assisted Home Performance with ENERGY STAR®.

With the sunset of NYSEERDA's Renewable Heat NY - Residential Pellet Stove program, NYSEERDA is providing access to pellet stove incentives and financing for Tier 1 and Tier 3 households .

### Eligible Project Requirements

- Residential sites used as a full-time residence (primary residence) that are not currently using natural gas are eligible.
- Incentives are to be used for the replacement of existing equipment.
- Resident must be either Tier 1 or Tier 3 income-eligible.
- Residence must be served by a non-municipal electric utility and pay into the Systems Benefit Charge (SBC).

### Incentives

Two incentive options, determined by income, are available to homeowners. Incentives are only available for primary residences.

- For Tier 1 [income-eligible](#) households:
  - \$2,000 for the purchase of a new pellet stove
  - An additional \$500 if an existing wood stove, pellet stove, or insert (with firebox) is recycled
- For Tier 3 [income-eligible](#) households:
  - 50% of the cost of a qualifying pellet stove capped at \$2,000
  - An additional \$500 if an existing wood stove, pellet stove, or insert (with firebox) is recycled

### Financing

Pellet stoves can be financed to assist eligible Tier 1 and Tier 3 households with the remainder of the project cost. NYSEERDA offers two loan options, through EFS/Slipstream, to assist eligible residents, the On-Bill Recovery Loan or the Smart Energy Loan.

To apply for financing, residents should work with their Participating Contractor. The following sites provide guidance on the application process:

- <https://www.nyserda.ny.gov/All-Programs/Programs/Residential-Financing-Options>

- [Energy Finance Solutions](#)

## Contractor Requirements

- Access to incentives and financing are reserved for participating EmPower and Assisted Home Performance contractors only.
- The pellet stove must be installed by a participating contractor or their sub-contractor meeting the certification requirements outlined in the current NY Residential Existing Homes Program Contractor Participation Agreement.

## General Project Requirements

- Pellet Stoves must have a particulate matter output of 2.0 grams per hour (PM 2.0 g/h) or less, an actual measured efficiency of 70% efficient or greater, and be compliant with Step 2 of the EPA's New Source Performance Standards. Please see the [US EPA Certified Wood Stoves](#) list for eligible equipment.
- All components installed as part of an approved pellet stove system must be new. The use of used or refurbished equipment is not permitted under program rules.
- The Participating Contractor is responsible for determining that a building is structurally capable of supporting the addition of a pellet stove at the specified location inside the home. The installation of the pellet stove should not over stress the structure and/or increase the dead load beyond acceptable limits as described in all relevant national and New York State codes and standards.
- All pellet stove equipment and accessories shall be installed in a neat and professional manner according to manufacturers' specifications and instructions. Any manufacturer warranties for workmanship and/or materials that are compromised and/or voided as a result of work performed by Participating Contractor will become the responsibility of the Participating Contractor. Labeling equipment and related controls is encouraged to ensure proper maintenance and design specifications. As with all heating systems, it is important that installation of all equipment is performed to manufacturer specifications to allow for routine maintenance to be conducted by other heating technicians.
- Participating Contractors are required to make homeowners aware of the level of noise associated with their selected pellet stove and its associated parts.
- Battery backup systems are permitted for the purpose of resiliency when grid electric power is not available. Where available, battery backup systems for a specific brand or series of stoves are the recommended option.

## Permitting Requirements

- The Participating Contractor is responsible for ensuring that all approved pellet stoves, accessories, and installations comply with any and all manufacturers' installation requirements, applicable laws, regulations, codes, licensing, and permit requirements, including but not limited to, the New York State Building Code and the National Electric Code (NEC), and all applicable state, city, town, or local ordinances or permit requirements.
- All permits must clearly reference installation of the approved pellet stove equipment at the installation site. If permit(s) are not needed for installation, each Participating Contractor is encouraged to obtain a signed letter from the Town Code Officer or Authority Having Jurisdiction (AHJ) stating that no building permit is required. The permit, an AHJ or third-party inspection certificate should be maintained on file with the Participating Contractor and shared with NYSERDA prior to or as part of any Quality Assurance inspection.

## Venting Requirements

- Qualifying components and materials used in the installation of the venting or flue system must meet existing New York State Code and the National Fire Protection Association (NFPA 211) standards for solid fuel residential combustion units. Stove-specific venting systems and parts are allowable.
- Sealed combustion is the recommended installation design. Whenever possible the system should be installed with a combustion air intake that is connected directly to outside air. The only exception to this installation is when the distance to outside combustion air and the associated angles of venting to the exterior, would exceed manufacturer's recommendations. When a "skuttle" air intake is installed to bring in combustion air, this air intake must not be installed directly below the flue or on the windward side of the home, where during exceptionally cold days, the stove's emitted combustion byproducts from the flue/chimney, may be taken back into the fresh air of the household.

## Pellet Storage Requirements

- Wood pellets can produce high levels of dust and off-gas carbon monoxide (CO) during storage that present health and safety concerns. CO is a colorless, odorless gas that has health effects below the levels at which common CO detector alarms are triggered. Due to concerns regarding CO exposure and the absence of a documented effective ventilation strategy for pellet storage, all bulk pellet storage must be outside of the home (Figure 1).



**Figure 1. This 4.5-ton outside residential bulk wood pellet storage bin has a ventilated soffit and two ports for pellet delivery.**

(Photo courtesy of Vincent's Heating and Fuel Service LLC)

- Bagged pellets must be kept dry to burn properly. Do not store pellet bags directly on concrete, as most concrete can wick large quantities of water (and even the smallest holes in bagged pellets can allow added moisture. Excess moisture can condense from air when pellets are in contact with cold concrete or the ground.

## Warranty

- All Participating Contractors must warranty their complete installation including parts and labor for one full year from the date the project is approved for payment by NYSERDA. The warranty must cover the full costs, including labor and repair or replacement of defective components or systems. The warranty includes venting, and where an existing vent system is used, it is up to the Participating Contractor to deem the existing venting system as passing for applicable use for one full year into the future. If the venting does not pass the quality assurance review, the Participating Contractor will be responsible for covering the cost and labor of any repairs or upgrades deemed necessary. The system as a whole as installed and approved by the Participating Contractor must be able to function for one full year from the approval of the installation.
- The Participating Contractor must share a copy of the manufacturer's warranty of the pellet stove with the Customer. If the manufacturer needs to be notified to initiate the warranty, the Participating Contractor will be responsible for submitting verification of the installation and initiation of the warranty.
- If the installation includes a battery backup, the battery system must be covered by a full one-year warranty including labor and repair or replacement of the battery to the Customer. If the manufacturer needs to be notified to initiate the warranty, the Participating Contractor will be responsible for submitting verification of the installation and initiation of the warranty.

## Recycling Requirements

For projects retiring an old heating unit, proof that the retired unit was properly recycled is required. The Participating Contractor must recycle the old unit at a regional recycling center. The Participating Contractor is responsible for ensuring that destructive recycling of all materials is performed. The Participating Contractor must attach a receipt from the recycling centers that clearly states the following:

- Recycling center name
- Recycling center address
- Recycling date
- Name of Customer

The recycling incentive for proper retirement of the old heating unit will be paid directly to the Participating Contractor and must be passed on in the full amount to the Customer. NYSERDA reserves the right to follow-up with the recycling center/scrap yard to confirm the unit was properly destroyed. NYSERDA may request photos of a pre-existing installation at any time or as a part of Quality Assurance review for any project where recycling is required or applied. This proof would include:

- A photo of the old unit in working condition at the residence/business, noting the location of the stove/unit in the home
- A photo of the old unit at the recycling center/scrap yard, especially if proof of destructive recycling can be displayed
- A close-up photo of the name-plate photos that would aid in identifying the stove or its age in years.

## Project Submission Requirements

- The following energy tools can be used to model the submission of pellet stoves: EmPCalc, SnuggPro, or OptiMiser (TREAT should not be used).
- Due to current NY HP Portal data checks, the existing heating system must be modeled as a wood pellet stove, even if the existing system is a wood stove in SnuggPro and OptiMiser. Notes should be added in the NY HP Portal when submitting to specify that the existing system is a wood stove, if applicable.
- The full equipment cost must be entered in the modeling tool. Program staff will apply the incentive(s). The customer will be responsible for any amount not covered by the Program. The recycling incentive for proper retirement of the old heating unit will be paid directly to the Participating Contractor and must be passed on in the full amount to the Customer as well.
- Use the customer's actual fuel costs when possible. If none are available, refer to the latest [NY HPwES Energy Pricing](#) document on the Contractor Support website.

- At project submission notes should be added in the NY HP Portal to
  - specify that the existing system is a wood stove, if applicable
  - indicate if the replaced unit is being recycled

For projects with NYSERDA financing:

- Prior to the start of work, participating contractor must provide a copy of the contract and Proforma to EFS/Slipstream.
  - Contractors should be using the latest version of the Proforma tool found [here](#).
- At project completion, a signed copy of the certificate of completion must be provided to EFS/Slipstream.

## Modeling

EmpCalc Procedures:

On the Cover tab, model Wood Pellets or Hard Wood for Heating Fuel Type:

|                   |              |
|-------------------|--------------|
| Heating Fuel Type | Wood Pellets |
|-------------------|--------------|

|                   |           |
|-------------------|-----------|
| Heating Fuel Type | Hard Wood |
|-------------------|-----------|

Enter the Usage and Price per Ton for Wood Pellets or Face Cord for Hard Wood:

|                          |           |
|--------------------------|-----------|
| Wood Pellet Cost per Ton | \$ 274.28 |
|--------------------------|-----------|

|                              |           |
|------------------------------|-----------|
| Hard wood Cost per Face Cord | \$ 225.00 |
|------------------------------|-----------|

|                                  |   |
|----------------------------------|---|
| Annual Wood Pellets Usage (Tons) | 3 |
|----------------------------------|---|

|                                     |    |
|-------------------------------------|----|
| Annual Hard Wood Usage (Face Cords) | 15 |
|-------------------------------------|----|

On the Heating System tab fully complete both the Heating System and Conversion/Replacement sections

Heating Systems:

|                        |                      |   |                   |
|------------------------|----------------------|---|-------------------|
| <b>Heating Systems</b> |                      | Estimated Annual Heating Load (In Fuel Units) | Unit Location     |
| Fuel                   | Heating System       | 15 Face Cords                                 | conditioned space |
| Hard Wood              | Wood or Pellet Stove |   |                   |

EmpCalc Procedures cont.:

Heating Conversion/Replacement:

| Heating Conversion/Replacement |             | Must provide Replacement Fu |                       |
|--------------------------------|-------------|-----------------------------|-----------------------|
| Existing Heating Fuel:         | Hard Wood   | Replacement Fuel:           | Wood Pellets          |
|                                |             | Replacement System          | Pellet Stove \$274.28 |
| Cost                           | \$ 2,000.00 | Replacement Make            | Pellet Star           |
|                                |             | Replacement Model#          | H57                   |
| Existing Efficiency            | 60%         | Replacement Efficiency      | 77%                   |

SnuggPro Procedures:

1. Select "Stove or Insert" for System Equipment Type

System Name  
Hvac System 1

System Equipment Type

- Heating Only
  - Boiler
  - Steam Boiler
  - Furnace with standalone ducts
  - Electric Resistance
  - Direct Heater
  - Stove or Insert

2. Select Replace with a newer model

System Name  
Hvac System 1

System Equipment Type  
Stove or Insert

Upgrade action

- Replace with a newer model
- Keep an existing system as is

SnuggPro Procedures cont.:

3. Select Fuel Type Pellets\*

Heating

Fuel Type

BASE

Pellets

Wood

Pellets

*\*Remember due to a HP Portal data check "Pellets" must be selected not "Wood"*

4. Model the proposed Heating System using specifications from manufacturer

IMPROVED

Pellets

IMPROVED

100 %

IMPROVED

2021 #

IMPROVED

80 AFUE

IMPROVED

55,000 BTU/h