



NYSERDA’s Renewable Heat NY program identifies manufacturers of high-efficiency, low-emission (HELE) wood pellet-fired boilers that are eligible for installation in its program. To be listed as a manufacturer with a NYSERDA-qualified technology we ask you to submit information and data as described below to RHNY@nyserda.ny.gov.

NYSERDA seeks to qualify residential and commercial wood pellet boilers up to 2 million British thermal units (Btu/hr). Pellet boilers must be fully automatic, low mass (low volume) and have sensors and controls to optimize combustion performance. This is most easily achieved using a staged combustion design with lambda control. HELE pellet boiler heating systems must use bulk pellet storage (> 3 tons) and be designed to be fueled by an automatic conveyance system. If tested by United States Environmental Protection Agency (EPA) M28 Wood Hydronic Heater (WHH) or WHH-Partial Thermal Storage, the wood pellet boiler must have a minimum thermal efficiency of 85% at rated output using the higher heating value (HHV) of the pellet fuel if tested using an output/input method and emissions of less than 0.080 lb/mmBtu and < 270 ppm for PM2.5 and CO, respectively.

High-Efficiency and Low-Emission Wood Pellet Boiler Performance	
Thermal Efficiency (HHV)	85%
Particulate Matter Emissions	<0.080 lb/mmBtu
Carbon Monoxide (CO) EMISSIONS	<270 ppm at 7% O ₂

Alternatively, NYSERDA accepts applications for pellet boilers tested with thermal storage using the Integrated-Duty Cycle (IDC) protocol and certified for Step 2 of the EPA 2015 Residential Heater New Source Performance Standard using the IDC results.

Manufacturers must submit the following information for review to RHNY@nyserda.ny.gov:

1. Cover letter that includes a description of the unit, the date and location of testing, and a primary point of contact for questions (email and phone).
2. Copy of EPA letter certifying compliance with the 2015 Residential Wood Heater New Source Performance Standards.
3. Complete official test report using the EPA Method 28 WHH or EPA Method 28 WHH-PTS for boilers with partial thermal storage. Alternatively, NYSERDA accepts applications for pellet boilers tested with thermal storage using the Integrated-Duty Cycle (IDC) protocol that are certified for Step 2 of the EPA 2015 Residential Heater New Source Performance Standard using the IDC. While no minimum thermal efficiency threshold is required for boilers tested on the IDC, manufacturers need to submit test reports containing the overall thermal efficiency of the entire test run and for each test phase. No other test protocol results are considered. Test reports must not be more than two years old at time of application. Only design parameters can be designated as confidential business information (CBI).
4. Owner’s manual
5. Warranty description must include the length and limits of coverage for the boiler and components (e.g., pressure vessel, combustion chamber, computer processing unit, other components).

Manufacturers must submit emission performance verification results of the same boiler model and pellet fuel combination with the qualified technology application. Performance testing for thermal efficiency, particulate matter, and CO must have been performed by an EPA accredited laboratory. EPA Method 28 WHH, or EPA Method 28 WHH-PTS for boilers with partial thermal storage or the IDC for automatic feed units using thermal storage.

Application Evaluation

Applications are accepted through December 2020. Applications that meet application requirements are reviewed using the evaluation criteria below:

1. Were all required materials submitted with the application, including the cover letter, owner's manual, and complete warranty information?
2. Is the pellet boiler fully automatic with sensors and controls to optimize performance?
3. Is the pellet boiler low mass (i.e., low-volume water jacket)?
4. Does the unit utilize external thermal storage (i.e., buffer tank)?
5. Is the unit designed to be fueled by an automatic conveyance system and does it use bulk pellet storage (> 3 tons)?
6. Has the pellet boiler been certified by the EPA using EPA Method 28 WHH, M28 WHH-PTS, or the IDC for automatic feed units with thermal storage in the previous two years? Were both the completed official test report and the EPA certification letter submitted?
7. Does the application meet the requirements for thermal efficiency (HHV)?
8. Does the application meet the requirements for fine particle emissions?
9. Does the application meet the requirements for carbon monoxide emissions?

Questions may be submitted to RHNY@nyserda.ny.gov.