



Renewable Heat NY Residential and
Small Commercial Biomass Boiler
Program Opportunity Notice (PON) 3010
\$9,750,000 Available

**Renewable Heat NY Residential and Small Commercial Biomass Boiler Program
Installer/Contractor Applications to Participate and Customer Project Applications
Open Enrollment through December 31, 2018
by 5:00 PM Eastern Time***

The New York State Energy Research and Development Authority (NYSERDA) requests applications from qualified Boiler Installers/Contractors to participate in a financial incentive program to install approved wood pellet boilers and advanced cordwood boilers with thermal storage for eligible residential and commercial customers. Additional funding may be made available depending on funding availability, customer demand, and program success. The program will be implemented on a first-come, first-served basis.

The RHHY Biomass Boiler Program is open to all New York State residents, businesses and other customers who are interested in installing approved biomass boilers that have an output of 300,000 British thermal units per hour (Btu/hr) or less. Applications must be submitted by an Eligible Installer/Contractor with a completed Project Application Form (Attachment B), which includes the customer's information and signature.

Applications for RHHY Installer Eligibility: To become an "Eligible Installer," a boiler installer/contractor must submit one [1] clearly labeled, completed and signed application package as detailed in the *Renewable Heat New York Biomass Boiler Installer/Contractor Eligibility Application and Instructions (Attachment F)*. Installers/Contractors can apply for eligibility at any time while the program is open. Once approved, the Eligible Installer/Contractor can then apply for financial incentives for the installation of approved boiler and thermal storage systems that meet the requirements of this Program.

Applications for Financial Incentives: To apply for financial incentives, Eligible Installers may submit for each project a clearly labeled, completed and signed Project Application as detailed in the Customer Step-by-Step Guide. Project Applications will be for: (i) **incentives for the installation of an eligible cordwood or wood pellet boiler** (ii) **and additional incentives for the replacement of an existing, operational outdoor or indoor wood boiler/furnace**. Project Applications will be accepted on a first-come, first-served basis. Funding will be available through December 31, 2018. The listed incentive rates will be in place for systems installed by September 30, 2016, at which time rates will be reassessed. Customers with access to natural gas service are not eligible.

All Applications should be mailed to:

**Renewable Heat New York Boiler Program (PON 3010) Attn: Program Manager;
NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399**

All Program and Applicant questions should be directed to Ryan Moore at (518) 862-1090, ext. 3267 or ryan.moore@nyserd.ny.gov

All Contractual questions should be directed to Elsyda Ahmed at (518) 862-1090, ext. 3232 or elsyda.ahmed@nyserd.ny.gov.

*Late, incomplete, or unsigned applications will be returned. Faxed or e-mailed applications will not be accepted. Applications will not be accepted at any other NYSEDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSEDA's website at www.nyserd.ny.gov.

I. INTRODUCTION

WHAT IS THE RENEWABLE HEAT NY (RHNY) BIOMASS BOILER PROGRAM?

The New York State Energy Research and Development Authority (NYSERDA) Renewable Heat NY (RHNY) Residential and Small Commercial Biomass Boiler Program provides incentives for the installation of qualified high-efficiency and low-emissions pellet boiler and advanced cordwood boiler heating systems in New York State. The goal of the program is to spur wider market adoption and foster a long-term commitment to help the high-efficiency and low-emission wood heating industry reach commercialization scale. **This program strongly encourages the retirement and proper recycling of polluting outdoor and indoor wood boilers with replacement by advanced technologies.** Today's biomass boiler technology has lower emissions and is much more efficient, thereby making advanced cordwood and wood pellet boilers a viable alternative to propane or fuel oil. However, fuel switching to wood or wood pellets from natural gas is not eligible for Program incentives or financing.

Customer Eligibility

The Program is open to all New York State customers without access to natural gas service. Customers with natural gas service are not eligible. Incentives are available for customers who install eligible pellet or cordwood biomass boilers that have an output of 300,000 Btu/hr or less. All customers must use an Eligible Installer/Contractor approved by NYSERDA to access incentives through the program. **All boiler installations must comply with all applicable state and local codes and standards.**

Biomass Boiler Incentive

Customers are eligible for financial incentives for eligible wood pellet boilers and advanced cordwood boilers to supplement or replace their existing heating system (except natural gas). The Program provides incentives of 25% of the installed cost, up to a maximum of \$5,000 for the installation of a qualified advanced cordwood boiler heating systems with full thermal storage; or incentives of 45%, up to a maximum of \$36,000 of the installed cost of a qualified wood pellet boiler heating system with full thermal storage. For large commercial installations of large biomass boilers (greater than 300,000 Btu/hr output), incentives are available through NYSERDA's Existing Facilities Large Commercial –PON 1219. For more information, e-mail outreach@nyserdera.ny.gov or call 1-866-NYSERDA.

Recycling Incentive

Recycling incentives are available for customers replacing an outdoor/indoor wood boiler, or wood furnace. **Customers must at the time of application have an installed and functional outdoor or indoor cordwood boiler or wood furnace that may be recycled.** Such customers are eligible for incentives for the retirement and recycling of the existing wood boiler system (\$5,000) or wood furnace (\$2,500). Customers are required to verify removal and recycling of the existing wood boiler or wood furnace and should work with an Eligible Installer/Contractor to provide documentation (Recycling Form Attachment E).

Eligible Technologies

Pellet Boiler Heating Systems (<300,000 Btu/hr)¹ with Full Thermal Storage: Incentives are available for wood pellet boiler heating systems with full thermal storage per requirements outlined in Table 1. All pellet boiler heating systems must include a high-efficiency pellet-fired boiler with a thermal storage (buffer) tank meeting the

¹ Incentives for installation of large commercial pellet boilers (>300,000 Btu/hr) are provided as part of NYSERDA's Renewable Heat – Large Commercial Program – see: www.nyserdera.ny.gov/renewableheatny.
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requirements in the table below and as described in the Program Manual. Pellets must be stored outside of the building as outlined in the Program Manual (Attachment G).

Table 1: Pellet Boiler Heating System Minimum Requirements:

High-Efficiency and Low-Emissions Pellet Boiler Performance for All Systems	
Thermal Efficiency (HHV)	85%
Particulate Emissions	<0.080 lb/MMBtu ²
Carbon monoxide (CO) emissions	<270 ppm at 7%O ₂

Advanced Cordwood Boilers with Full Thermal Storage (<300,000 Btu/hr): Incentives are available for advanced cordwood boiler heating systems with full thermal storage. The installation must include full thermal storage as outlined in the Program Manual (Attachment G). All systems must include eligible boilers meeting the requirements provided in the Program Manual and must (i) meet testing requirements of the Brookhaven National Lab method for advanced cordwood boiler with partial thermal storage, and (ii) have been accepted by the New York State Department of Environmental Conservation (NYSDEC). Eligible boilers are listed at www.nysed.gov/renewableheatny

II. PROGRAM INCENTIVES

Incentives are available for systems meeting requirements of this PON, as outlined in Table 2 and 3 below.

Table 2: Incentives for Eligible Equipment

Advanced Cordwood Boiler with Thermal Storage	25% installed cost up to \$5,000 per unit. An additional \$5,000 for documented recycling (removal and destruction) of old outdoor or indoor wood boiler, or \$2,500 for recycling whole-house wood furnace.
Wood Pellet Boiler with Thermal Storage	45% installed cost up to \$36,000 based on system size. An additional \$5,000 for documented recycling (removal and destruction) of old outdoor or indoor wood boiler, or \$2,500 for recycling whole-house wood furnace.

Table 3: Maximum funding for Pellet Boiler by Size

Boiler Size (kW)	Boiler size (Btu/hr)	Maximum Incentive
≤25	≤86,000	\$10,000
≤35	≤120,000	\$16,000
≤50	≤171,000	\$23,000
≤88	≤300,000	\$36,000

III. HOW DOES THE PROGRAM WORK?

The Program requests applications from qualified Boiler Installers/Contractors to participate in a financial incentive program to install approved pellet boilers and advanced cordwood boilers with thermal storage for eligible residential and small commercial customers. Boiler Installers/Contractors are required to submit applications to become eligible installers under this Program. Installers can apply for eligibility at any time while the program is open. Once approved, Eligible Installers can then apply for financial incentives for the installation of approved boiler and thermal storage systems that meet the requirements of this Program. The program will be implemented on a first-come, first-served basis.

To attain Eligible Installer status, applicants must have demonstrated technical competence in the design and

² Pound per million British thermal units (lb/MMBtu)

installation of advanced cordwood boilers, pellet boilers, and thermal storage, and have signed a written Participation Agreement (Attachment F) with NYSERDA agreeing to the RHNY Program terms and conditions. Incentives are paid directly to the Eligible Installer/Contractor but must be passed on in-full to the customer as a reduction in the customer's out-of-pocket cost. The Eligible Installer/contractor is responsible for preparing and submitting all necessary incentive paperwork to NYSERDA.

Installer/Contractor Eligibility

Installer/Contractor Experience Requirements: Interested qualified Installers may apply to participate in the Program at any time while the program is open. To qualify to participate as an Eligible Installer/Contractor, an Installer/Contractor must meet one (1) of the following levels of experience:

- Have at least three (3) years of relevant experience with the design and installation of hydronic systems,
- Have at least two (2) years of experience installing hydronic systems including a minimum of one (1) successful installation of equipment meeting the requirements of this solicitation (i.e. solid fuel pellet boilers or advanced cordwood boilers defined as low mass (low water jacket volume), staged combustion (sometimes referred to as gasification) boilers with sensors and controls to optimize system performance) and thermal storage and outside bulk pellet storage;
- Be a licensed Master Plumber or Journeyman Plumber, with at least two (2) years of relevant experience with the design and installation of hydronic systems;
- Be a New York State-licensed professional (Registered Architect or Professional Engineer) and have at least two (2) years of relevant experience with the design and installation of hydronic heating systems.

Applicants will be evaluated on past experience installing boilers, including system design and sizing; customer satisfaction; and other relevant experience (i.e. installation of thermal storage). Once approved, Installers/Contractors will receive designation as a Provisional Eligible Installer/Contractor, and will then be eligible to apply for boiler system financial incentives as outlined in the Program.

Installer/Contractor Training Requirements

All approved Provisional Eligible Installers/Contractors must have completed manufacturer's training for the boiler brand they are installing. A certificate of completion or a letter from the manufacturer must be submitted as evidence of having successfully completed manufacturer's training. In addition, at least one individual from the company or firm must successfully complete Renewable Heat NY biomass training: "Hydronics for High-Efficiency Biomass Boilers" or other approved instructor-led training* within six (6) months of submission of your application to participate in the Program. No Project Applications will be approved until this training is completed and the Installer/Contractor is approved as a Provisional Eligible Installer/Contractor under the Program.

Renewable Heat NY biomass training: "Hydronics for High Efficiency Biomass Boilers" is recommended for all installers interested in participating in this Program, and at least one individual from the company or firm must successfully complete it. The training will help guide installers to ensure properly sized and safe installation practices, reduced component failure, lower operations and maintenance costs, increased system longevity and reduced system design and installation costs. Scheduled Instructor-led and online training will be available during the Program period, and registration is available from the website:

<http://www.nyserda.ny.gov/renewableheat>

- Future training will be announced on the NYSERDA RHNY website as it becomes available

***Note:** Online training, or other approved instructor-led training deemed by NYSERDA to cover required learning objectives previously established for the Hydronics for High Efficiency Biomass Boilers training must be approved in advance by NYSERDA to qualify for meeting this training requirement.

Installer/Contractor Business Requirements:

Minimum of two (2) years experience in business related to hydronic heating design and installation. An Eligible Installer/Contractor may use any business structure that is legal for conducting this type of business in the State of New York (corporation, LLC, sole proprietorship, etc). An Eligible Installer/Contractor must be able to meet all Program requirements including required insurance coverage and have the capability to provide warranty services on all installed systems, as required by the Program and NY State law. Eligible Installer/Contractor must comply with all local authority requirements for registration and licensing that apply to the installation of advanced cordwood or pellet boiler heating systems with thermal storage.

When completing the application, the Eligible Installer/Contractor should provide names and resumes of key personnel including ownership, management, sales, installation and design/engineering as well as three (3) company/business references. Eligible Installers/Contractors must employ at least one (1) individual who has met the training requirements as outlined above and in the Program Manual (Attachment G).

Three (3) verifiable customer references for specific projects should be accompanied by a brief description of the systems installed and the applicant's role in the project. Contact information for customers references must be provided to allow for verification. To demonstrate design capability, one sample Manual J heat load analysis calculation must be included with your Instructor/Contractor Eligibility Application (Attachment F).

Note: Manual J is the Air Conditioner Contractors of America (ACCA) approved method of calculating room-by-room and whole house heating and cooling loads.

Once NYSERDA approves an Installer/Contractor Application, NYSERDA will countersign the Participation Agreement and return the executed copy to the approved Installer/Contractor. The Installer/Contractor will be required to provide additional documentation, including proof of insurance in accordance with Article 7, Insurance, of the Participation Agreement.

To be Designated as Full Installer/Contractor: Installers/Contractors who have completed the training requirement and have successfully installed a minimum of one (1) pellet boiler or advanced cordwood boiler project with thermal storage that meets the minimum requirements for a quality installation will move from "Provisional" to "Full" status designation. The qualifying installation must meet quality installation requirements for eligible equipment, including pellet boilers and advanced cordwood boilers defined as low mass (low water jacket volume), staged combustion (sometimes referred to as gasification) boilers with sensors and controls to optimize system performance, and thermal storage.

More information on how to become an Eligible Installer/Contractor can be found in the **Installer/Contractor Eligibility Application and Instructions (Attachment F)**.

IV. PROGRAM REQUIREMENTS

The following rules apply to the Program:

Once a Participation Agreement with NYSERDA has been executed, an Eligible Installer/Contractor can submit projects to the Program for incentive consideration.

Incentives are available on a first-come, first served basis, and will only be reserved for customers once an application has been approved by NYSERDA. The Incentive Payment Request Form (Attachment C) and Recycle Form (Attachment E) must be submitted by an Eligible Installer/Contractor. Eligible installers may request 40% incentive payment up-front, after all approved system components have been delivered to a customer's site, all permits and approvals have been obtained, and the Incentive Payment Request Form (Attachment C) is completed and submitted to NYSERDA for approval. Incentives are paid directly to the Installer/Contractor upon approval of the Incentive Payment Request Form (Attachment C), and the incentives must be passed on in the full amount to the customer. Incentives will not be provided directly to customers purchasing or installing the new system. Incentives are only available for new equipment and systems that have

not been installed (partially or completely) prior to NYSERDA approval of a Project Application. NYSERDA reserves the right to adjust incentives without notice.

Installation Requirements

- **Heat Load Calculation Requirement:** The Air Conditioning Contractors of America (ACCA), Manual J protocol determines how much heating or cooling a house actually needs. A Manual J heat load calculation must be performed and submitted to NYSERDA along with the Project Application for approval in order to demonstrate proper sizing of the boiler and thermal storage system pursuant to the heating needs in the home. Manual J Heating Ventilation and Air Conditioning (HVAC) load calculations require entry of relevant data, such as the home's orientation, insulation levels, window types, areas of all the surfaces that gain or lose heat, and more. The output of the calculation is how much cooling and heating the house needs in Btu per hour for each room, each zone, and the whole house. A room-by-room heat load calculation is required to use the results and the equipment specifications to select equipment and design a duct system that will perform at its maximum efficiency using ACCA's other design protocols, Manuals S, T, and D, as appropriate.
- **Compliance with all State and Local Requirements:** The installations must 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 Environmental Quality Review (SEQR), the New York State Building Code, New York State Plumbing Code, the National Electric Code, and all applicable New York State, city, town, or local ordinances or permit requirements.

V. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise."

Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <http://www.nyserda.ny.gov/About-/media/Files/About/Contact/NYSERDA-Regulations.ashx>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division for Small Business
625 Broadway
Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
625 Broadway
Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain new procurement lobbying requirements which can be found at: <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf).

Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/2006/fillin/st/st220ca_606_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations. Each offer should Renewable Heat NY Biomass Boiler Program, Program Opportunity Notice (PON) 3010, Pg 7

be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the PARTICIPATION Agreement (Included in Attachment F) to contract successful Installer proposals. NYSERDA expects to notify applicants in approximately three (3) weeks from receipt of the Project Application Form (Attachment B) whether your application has been selected to receive an award.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

ADDITIONAL INFORMATION AND ATTACHMENTS

Information for Installers/Contractors and Customers

Customer Step-by-Step Guide	Attachment A
Project Application Form*	Attachment B
Incentive Payment Request Form*	Attachment C
Addendum to Customer Purchase Agreement	Attachment D
Recycling Form*	Attachment E
*Needs to be completed by Installer/Contractor	

Information on Becoming an Installer/Contractor

Installer/Contractor Eligibility Application, Instructions and Participation Agreement	Attachment F
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Specific Program Rules

NYSERDA RHNY Program Manual	Attachment G
Quality Assurance Checklist (Design and Installation)	Attachment H

<u>GJGNY Financing</u> – Contractor Application Package for EFS	Attachment I
- Contractor Application	
- Contractor Participation Agreement	
- ACH Authorization Form	

<u>Change Order Request Form</u> –	Attachment J
- Change Orders	
- Project Extensions/Cancellations	

<u>Pro-Forma Loan Calculator</u> –	Attachment K
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