



Modern Wood Heating Promotion

Overview of Legislative Report

December Board Meeting
December 17, 2025

LD 1212 Resolve: to Study Opportunities for the Efficiency Maine Trust to Support the Promotion and Use of Modern Wood Heating

- EMT in collaboration with the DECD, DACF, and DOER:
 - work with representatives of the modern wood heating system industry
 - study and make recommendations relating to programs and incentives encouraging the promotion and use of modern wood heating systems in Maine
- EMT submit a report to the EUT Committee by 12/3/25:
 - include recommendations for EMT programs and incentives supporting the promotion and use of modern wood heating systems in Maine

Participating Stakeholders

- Bill Bell, Maine Pellet Fuels Association
- Tony Woods, Maine Pellet Fuels Association
- Robert Fogg, Maine Pellet Fuels Association
- Jared Mulliner, Maine Energy Systems (MESys)
- Les Otten, MESys
- Mark Froling, Froling Energy
- Richard Grondin, Integrated Energy Systems, PLLC
- Lee Landry, True North Energy Services
- Mike Cassata, Biofine
- Jeremy Akers, Castlerock/Ensyn
- Maura Adams, Northern Forest Center
- Kendall Gray, Northern Forest Center
- John Bliss, Howell Labs
- Rich Hoch, Howell Labs
- Jonathan Parrot, BioThermal Energy Council
- Adam Cote, Drummond Woodsum, representing Maine Pellet Fuels Association
- Joe Short, Northern Forest Center
- Ellen Parent, Maine Forest Products Council
- Patrick Strauch, Maine Forest Products Council
- Dana Doran, Professional Logging Contractors of the Northeast (PLC)
- Ben Grant, PLC
- Frank Kvietok, Lignetics, Inc.
- Chris Gardner, MaineFlame and Player Design
- Tyler Player, MaineFlame and Player Design
- Ross Anthony, Department of Energy Resources (DOER)
- Caroline Colan, DOER
- Ben Sturtevant, Department of Economic and Community Development (DECD)
- Patty Cormier, Department of Agriculture, Conservation and Forestry (DACF)
- Jeff Crawford, Department of Environmental Protection (DEP)
- Efficiency Maine Trust (EMT) Staff

Summary of Activity

6/9/25 – Resolve enacted

7/30/25 – Preliminary meeting with EMT staff, Bill Bell and Tony Wood

8/19/25 – Preliminary planning meeting with state agency representatives (EMT, DOER, DCAF, DECD)

10/2/25 – Meeting with broader stakeholder group (state agencies, industry stakeholders)

10/17/25 – EMT shared annotated outline with stakeholder group

10/24/25 – Stakeholder group provided feedback on outline

11/3/25 – Meeting between EMT and stakeholder subset (Adam Cote, Dana Doran, Bill Bell) to discuss next steps

11/20/25 – EMT provided draft report to full stakeholder group

12/1/25 – Stakeholder comments on draft due

12/3/25 – Report submitted to Energy, Utilities and Technology (EUT) Committee of the Legislature

Report Contents

- Regulatory Framework
- Background
- Promotional Programs –Regional Context
- Recommendations for Consideration
- Resources

Background

- Definition of Modern Wood Heat
 - Report focuses primarily on Maine DACF definition of modern wood heat: “ultra-modern automated central heating boilers and furnaces using wood chips and wood pellets as fuel.”
- Scope of “programs and incentives encouraging the promotion of wood heat”
 - Report limits scope to initiatives that have the potential to increase consumer demand.
 - Focuses on demand-side initiatives that target commercially available equipment using financial incentives and related marketing and education.

Promotional Programs – Maine

- **Efficiency Maine Trust**

- *Home Energy Savings Program* – rebates of 1/3 of cost up to \$6,000 for residential pellet boilers/furnaces
- *Thermal Energy Investment Program (launched FY2023)* – incentives of 35% of project costs for new thermal energy-derived projects for businesses, municipalities, educational institutions, and non-profit entities
- *C&I Custom Program* – incentives of 50% of project costs for retrofits, and 75% of incremental costs for replace-on-burnout or new construction projects

- **Public Utilities Commission – Thermal REC Program**

- Earn TRECs based on the volume of biomass fuels purchased
- Residential: access compensation through fuel suppliers
- C&I facilities: petition the PUC for Thermal Energy RPS certification
 - TREC amount: market price fluctuates with cap of \$25 each
 - average homeowner using about 8 tons of pellets per year, could mean grossing over \$700/year

Promotional Programs – Vermont

- **Efficiency Vermont**

- *Central Pellet Boiler or Furnace*: \$6,000 total cash back primary central heating systems in homes/ businesses less than 5,000 ft²
- *Custom Program*: incentives capped at \$25,000 or 100% of the total project cost, whichever is less, for qualifying wood heating projects in commercial spaces greater than 5,000 ft²

- **VT Department of Forests, Parks and Recreation**

- *Maintaining Markets Program*: schools can receive a 50% cost share up to \$25,000 in grant funds to install or upgrade advanced wood heat systems
- *Working Lands Advanced Wood Heating Initiative*: 50% of project costs, up to \$25,000

- **VT Public Service Department**

- *Vermont School Heating Assistance with Renewables & Efficiency (SHARE) Program*: \$20,000 - \$200,000 for new advanced wood-fueled heating systems, wood pellet/chip storage systems and/or heating system controls, or repairs and upgrades of existing wood-fueled heating systems in Title One Eligible schools

Other Promotional Programs – Regional/Federal

- **New Hampshire** (inactive)

- NH Department of Energy – Residential Bulk-Fed Wood-Pellet Central Boilers and Furnace Rebate Program; C&I Bulk Fuel-Fed Wood Pellet Central Heating Systems Rebate Program

- **New York** (inactive)

- NYSERDA – Renewable Heat NY Program

- **Massachusetts** (inactive)

- MassCEC – Residential Biomass Heating Program; MassCEC – Commercial-Scale Biomass Heating Program

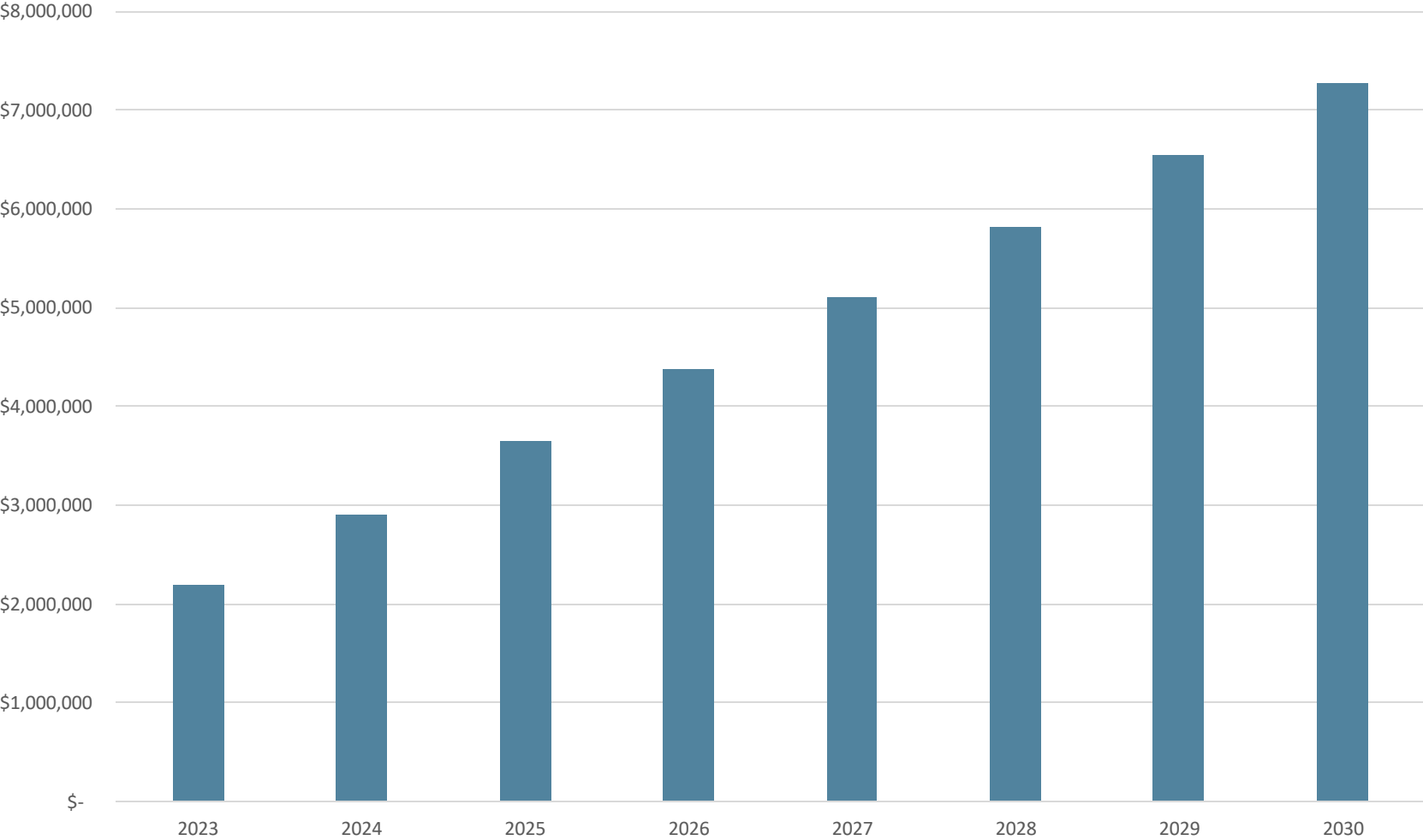
- **Federal**

- USDA grants and loans, federal tax credit, Investment Tax Credit (ITC)

Overview of Findings

- Efficiency Maine biomass programs show relatively low activity compared to other heating measures
- Efficiency Maine level of market activity is similar to other states
 - Exception is VT, which has a relatively high number of C&I projects
- Efficiency Maine programs show mixed results on project cost-effectiveness
 - primarily due to lack of clarity on total costs and benefits associated with various system permutations (e.g., bagged vs. bulk pellets, ancillary equipment like hopper, O&M costs)
- Limited public information on cost-effectiveness of other states' programs
 - VT evaluation showed average simple payback of 41.7 years for pellet boilers

Figure 1: Thermal Energy Investment Fund Revenue Projections



Recommendations for Consideration

- **Increase Marketing and Outreach**

- EMT extend marketing reimbursements to modern wood heating installers.
- EMT develop new collateral to distribute at outreach events, customer meetings, and online (brochures, case studies, website content).
- EMT promote new collateral (e.g., increase website visibility, boost on social media, use digital ads)
- EMT host a webinar for schools and make more concerted effort to highlight modern wood heating options
- PUC make TREC information more visible and consumer-friendly; EMT link to this info
- Reinstate dedicated Maine Forest Service staff person (similar to Vermont FPR's role) dedicated to outreach and promotion.

Recommendations for Consideration (continued)

- **Provide TEIP Financing**

- EMT design and offer a financing (loan) initiative for C&I facilities to complement the existing incentives and further promote investment in TEIP-eligible projects.

- **Increase TEIP Incentives**

- While sustaining a sufficient balance in the fund to support future rebate demand and the introduction of loans, consider increasing rebates to between 40%-50% of upfront project costs (closer to VT and NH levels).

- **Provide Rebates for Supplemental or Emergency Backup Biomass Heating**

- EMT consider promoting biomass *stoves* to supplement or back up a whole-home heat pump system.

Sample Case Study VT



Advanced Wood Heating For agricultural businesses

The Mettowe Mint garden center is saving almost \$9,000 a year in energy costs by switching to an advanced wood heating system.

Overview

Advanced wood heating systems are a proven and cost-effective way to heat your agricultural spaces. Your business could save a significant amount on annual energy costs by switching from fossil fuels like oil and natural gas to locally sourced wood. That's because wood is a cheaper fuel, and high-efficiency wood heating systems create very little wasted heat. Your space will be warmer, you'll reduce operating costs, and you'll be supporting the Vermont economy. What's not to love?

Key benefits

Save money. Your annual heating costs could decrease significantly compared to a traditional heating system.

Achieve energy independence. If you own forest land, actively managing for valuable forest products can result in a supply of wood for heating.

Support the local economy. When you buy local wood fuel, 80 cents of every dollar stays in Vermont, compared to 25 cents for fossil fuels. Using wood fuel is one way to support Vermont's working forested landscape.

Reduce climate impact. Burning local wood is more climate-friendly than burning fossil fuels.

Fuel options

There are three kinds of fuel used in advanced wood heating systems. Which fuel makes the most sense for you will depend on many factors, including space constraints and your desired level of fuel delivery automation.

Pellets. Wood pellets have the highest density of energy per pound, and the lowest moisture content. Pellets can be stored indoors or outdoors. They are the most highly processed form of wood fuel.

Woodchips. Woodchips are less processed than pellets. They can be green or dry. Dry wood chips have a lower moisture content and provide more energy per ton of fuel.

Cordwood. Cordwood is the least processed fuel option. It requires the most handling, and it must be well seasoned. For this reason, it is recommended to have two years of fuel on site.



Case Study
Mettowee Mint
Dorset, VT



Overview

Mettowee Mint is a garden center that provides Dorset and the surrounding community with the tools to create healthy, biodiverse landscapes and timeless ornamental gardens. The garden center includes a large retail space with a coffee bar and multiple greenhouses, each of which were historically heated by separate systems using a mix of heating oil, propane, and kerosene.

Challenge

Mettowee Mint's owner, Sarah Linford, says her plants were in high demand during the colder months, but it was becoming financially unsustainable to heat the greenhouses. Her energy bills exceeded the revenue generated by greenhouse plant sales, threatening to shut down that portion of the business. She wanted to spend less on heating the greenhouses and streamline the number of fuel types being used on-site.

Solution

With expert guidance from several partners, Sarah chose to install two high-efficiency cordwood gasification boilers. The new setup was designed as a mini district system, with central boilers providing heat to multiple buildings via insulated underground piping and zone controls in each space. One of the district zones utilizes a radiant slab to efficiently heat a greenhouse. The boilers, thermal storage tanks, and hydronic distribution components are housed in a new boiler house.

Heating with cordwood is labor intensive. Sarah purchases local log-length wood, and her team bucks, splits, and stacks it on the property. This allows her to provide year-round employment to community members. With this advanced wood heating system, Mettowe Mint is saving money, supporting the local forest economy, and positioning itself for future expansion of heated spaces.

Partners

SunWood Biomass Systems installed the advanced wood heat system and integrated it with the existing heat distribution system. It also helped with grant applications to the USDA Rural Energy for America Program.

Efficiency Vermont provided free energy modeling, economic analysis, and system design support. It also provided financial incentives.

Vermont Dept. of Forests, Parks & Recreation provides wood energy financial and technical assistance for working lands businesses.

East Rise Credit Union provided a Business Energy Loan to support Mettowe Mint's capital investment.



We could either pay members of our community that need employment, or we could pay fossil fuel companies.

- Sarah Linford, owner of Mettowe Mint garden center

Questions?