MAINE ENERGY SYSTEMS

June 17, 2025

Honorable Joseph J. Solomon, Jr.
Chairman, House Committee on Corporations
Rhode Island State House
82 Smith Street
Providence, RI 02903

Re: Support Testimony House Resolution **H6418 Creating a Special Legislative Commission to Study and Provide Recommendations for Increasing the Use and Building the Infrastructure for Alternative Fuels**

Dear Chairperson Solomon and Honorable Members of the Committee:

Maine Energy Systems (MESys) manufactures and distributes modern wood pellet central heating systems in North America and is based in Bethel, ME. We work with installation partners across the Northeast and are actively engaged with our Northeastern states' programs for rebates, renewable energy credits, and other incentives such as the federal tax credit available for eligible new installations. MESys central pellet heating systems are best-in-class, carry a 30-year warranty, have been in the North American market for well over a decade, and have been tried and tested in Europe for decades.

Rhode Island is currently positioned to create a residential and commercial rebate program modeled on successful and tested programs in Maine, New Hampshire, or Vermont. The opportunity exists to establish a framework to issue Thermal Renewable Energy Credits (T-RECs) for qualifying thermal systems as is being done in Maine and Massachusetts and is being created in New Hampshire. Rhode Island can also benefit from the federal tax credits available to eligible new installations by leveraging them to amplify state program impacts.

In the attached informational pages, we are providing overview information on modern wood heating systems including their potential to lower heating costs and for reducing greenhouse gas emissions. We also include detail on their efficiency, resources linked such as studies, research, white papers, and the U.S. Environmental Protection Agency's statement that wood pellets are carbon-neutral from the point of combustion, along with successful examples of regional state and federal support (with reference links). We hope that these resources will be useful for you during your work on H6418.

Thank you for your time and consideration in this matter, along with your dedication to ensuring a reduction in our overall heating carbon footprint in the Northeast. We are happy to provide further background or answer any questions that may arise.

Respectfully Submitted,

Maine Energy Systems, LLC

info@maineenergysystems.com | maineenergysystems.com | 207-824-6749

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Modern Wood Pellet Heating

The Northeast has the opportunity to substantially reduce CO2 emissions created by fossil fuels for building heat, nurture a homegrown energy economy that grows the fuel and builds, installs, and maintains the infrastructure, and encourage increased certification of New England's forests and logging practices, capable of producing a never-ending source of energy.

Modern Wood Heat

Central automated wood pellet heating systems (boilers and furnaces) are fully automated, have self-cleaning mechanisms, are bulk fed by pellets (no handling of bags), and are exceedingly efficient gasification technologies capable of reducing a home or business's heating carbon footprint. The top-of-line systems built by Maine Energy Systems in Bethel, ME are based on Austrian technology well tested and tried for over thirty decades. They do not require a backup system and have an industry leading 30-year warranty.[1]

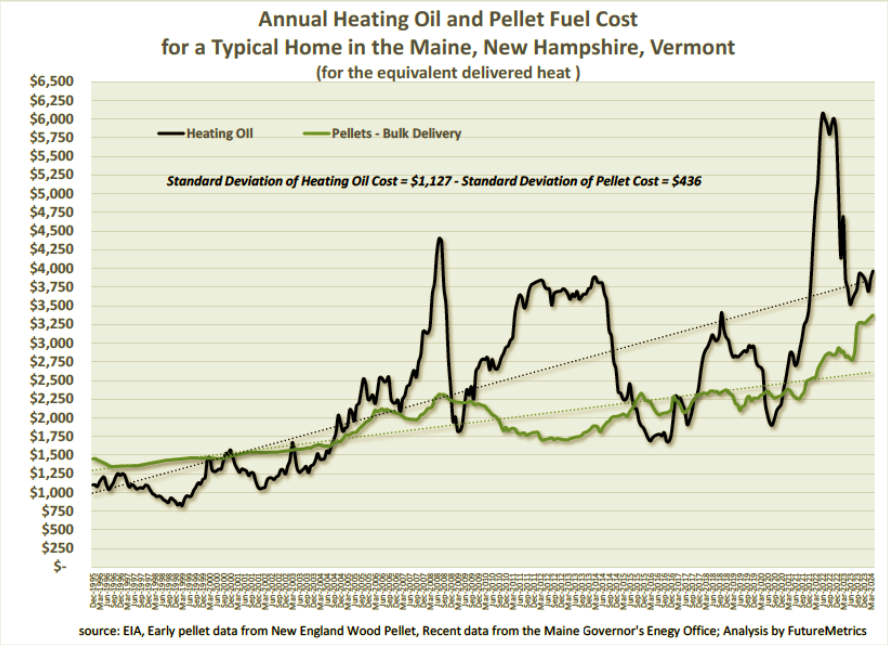
Lower Heating Costs

We are not arguing that wood pellet central heat is the only answer to the Northeast's goals to lower heating costs to residents or decrease emissions of CO2, but rather that pellet heating is one arrow in a quiver of resources that should not be discarded for impractical reasons which can do more harm than good. For a detailed analysis of the cost benefits of pellet heating in a Maine-based case study, see "Economic Impact in Maine by Switching from Heating Oil to Wood Pellet Fuel."[2]

[1] https://maineenergysystems.com/products/autopellet-boiler/
[2] https://express.adobe.com/page/RtMTJyvmIxFVK/

In contrast to fossil fuels or fossil fueled power generation, wood pellets have remained relatively stable-priced over the last decade and are expected to remain so. The nature of the wood pellet bulk delivery market is driven by the demand for housing, lumber, and wood products; more woody byproducts and waste wood drives the cost of those residuals lower and is passed along to the wood pellet market.

It isn't financially viable in the northeast US to make wood pellets from timber especially with transportation costs (driven by the cost of diesel), so these residual markets are key to a sustainable cycle of using New England's natural resources responsibly while supporting the Northeast's vast economic powerhouse of forestry and land management industries.



Wood pellet central heat and hot water is more stable-priced, keeps dollars in-state, and supports homegrown industry unlike other heating and energy industries with strong ties to fossil fuels.

Reducing GHG Emissions

The US Environmental Protection Agency and US Department of Energy consider wood pellets a carbon neutral fuel from the point of combustion. To consider only "tailpipe emissions" of any fuel is illogical. At the least, all fuels and technologies should be examined with the same methodology. As demonstrated by example our Senior Engineer's testimony, his home is heated at 83.7% efficiency emitting just 0.0068 pounds per hour at full power; this is in stark contrast to large power plants which are producing CO2 at a rate more than double[3] that needed to make the same amount of heat energy as his central pellet boiler system does. It does not seem rational to compare the two and expect the Northeast to decarbonize at a rate consistent with its state-specific goals.

[3] https://www.eeagrants.gov.pt/media/2776/conversion-guidelines.pdf

It has also been well established that in order to properly manage a forest for its maximum health, harvesting is necessary[4] although logging can initially seem counter-intuitive to forest growth and carbon sequestration. Responsible forest management practices have shown that when a tree is harvested and another replanted or room is made for younger trees to grow, the forest as a whole can sequester far more carbon than if old trees are left to rot or burn[5]. When trees are left to die naturally, they release methane which is "second only to carbon dioxide in its importance as a greenhouse-gas emission linked to global warming."[6]

A tree or piece of wood will release the same amount of CO2 whether it rots on the forest floor, burns in a wildfire, or is put to use as lumber and wood pellets. It's worth noting that Maine's Department of Environmental Protection's 9th Biennial Report on Progress toward Greenhouse Gas Reduction Goals recognizes that wood products which are burned do not release any new GHG into the atmosphere compared with wood that decays naturally since this type of carbon emission is biogenic.[7] The Northern Forest Center commissioned an independent third-party study completed by The Spatial Informatics Group-Natural Assets Laboratory which concluded that "When all carbon impacts are considered, using wood pellets for heat immediately reduces greenhouse gas emissions by 54% compared to oil and 59% to natural gas"[8] – enhancing our concern for Maine's reliance on large-scale power generation for heat until it is truly renewably fueled.

Wood pellets have net neutral carbon impact and to view it otherwise is contradictory to other State and Federal agencies working to mitigate CO2 emissions.

Create (and Support) Stable Private Sector Jobs

The Northeast's forests are renewable and are certified as responsibly managed lands. In Maine alone, there are 8.5 million certified acres, with 100 logging companies harvesting 5.5 million tons annually under third party certification by the Rainforest Alliance, working collaboratively to sequester over 60% of the state's carbon emissions[9].

A Single State Case Study Example

As of 2021, over 5,000 jobs could directly be tied to timber harvesting and hauling contractors in Maine and the industry and its investments contribute over $580 million annually to Maine's economy.[10] If just 15% of Mainers switched to wood pellet heating, wood energy production using existing Maine-based infrastructure and technology would reduce net carbon emissions by 85%[11], Maine would increase

[4] https://www.fs.fed.us/pnw/sciencef/scifi155.pdf
[5] Ibid.
[6] https://www.nationalgeographic.com/environment/2019/03/trees-release-methane-what-it-means-climate-change/#close
[7] https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/inline-files/9th_GHG_Report_FINAL%20%282%29.pdf
[8] https://northernforest.org/greenhouse-gases-and-wood-pellet-heat/
[9] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/MCC_STS_PhaseI_FINALWORKINGDOCUMENT_2.18.20.pdf
[10] Professional Logging Contractors of the Northeast
[11] https://www.futuremetrics.info/wp-content/uploads/2019/03/FutureMetrics%20-%20White%20Paper%20on%20the%20Benefits%20of%20Wood%20Pellet%20Heat%20for%20the%20State%20of%20Maine.pdf

income tax revenue by approximately $22.9 million annually, and the state would retain or create about 48,000 jobs.[12] For further research on the effect of a small percentage of Maine switching to modern wood pellet heating, see "A Climate Strategy with Short- and Long-Term Economic Benefits."[13]

Home Grown Heat

The Maine Energy Systems boilers and furnaces are made right here in the Northeast, carry 30-year warrantees, and have the following efficiencies at high heat value (full burn) rates:

PES 20 Boiler: 80.4%
PES 32 Boiler: 83.7%
PES 56 Boiler: 87.4%
AutoPellet Air Furnace: 89.4%
Smart XS Boiler: 94.5%

Official test reports are publicly available on our website[14] or on the US EPA wood heater listing (which also publicly lists an average efficiency percentage for each appliance listed above). We look forward to continuing to work with our Northeast states to ensure that accurate inputs and data are provided to help guide policy toward a successful and collaborative future.

[12] https://www.futuremetrics.info/wp-content/uploads/2019/03/FutureMetrics%20-%20White%20Paper%20on%20the%20Benefits%20of%20Wood%20Pellet%20Heat%20for%20the%20State%20of%20Maine.pdf
[13] https://express.adobe.com/page/wlwiocknpopZL/
[14] https://maineenergysystems.com

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Modern Wood Pellet Heating Rebate and Incentive Information

Modern wood heating systems offer a clean, reliable, and regionally sourced alternative to fossil fuels for space heating. Several Northeastern states, including Maine, Vermont, New Hampshire, Massachusetts, and New York, have already established successful rebate and incentive programs that support the installation of high-efficiency automated wood pellet boilers and furnaces. We encourage Rhode Island to explore a similar program, leveraging existing policy models to promote in-state renewable energy, reduce heating costs, and meet climate targets.

Why Modern Wood Heating?

Modern wood pellet systems are:
- Highly efficient, exceeding 80% thermal efficiency.
- Automated, with self-cleaning systems and bulk-fuel storage.
- Carbon-neutral at the point of combustion, according to the U.S. Environmental Protection Agency.
- Cost-effective, with stable fuel pricing and low lifetime costs.
- Made in the Northeast, supporting domestic manufacturing and local jobs.

Examples of Regional State Support

- Maine offers a rebate of up to $6,000 for homeowners toward wood pellet systems and issues Thermal Renewable Energy Credits (T-RECs) for pellet fuel, providing ongoing financial benefits.
- New Hampshire provides rebates covering 40% of installed costs for residential installations, up to $10,000, for residential pellet boiler systems.
- Vermont provides rebates up to $6,000 through its Clean Energy Development Fund.
- Massachusetts supports wood heat through MassCEC rebates and Alternative Energy Credits (AECs).
- New York leads the region with rebates of up to $16,000 through the Renewable Heat NY program.
- States also offer various levels of incentives for small commercial and municipal installations.

Federal Support

Under the Inflation Reduction Act, a 30% federal tax credit (up to $2,000) is available for residential biomass systems with a thermal efficiency rating of 75% or more. This complements state programs and lowers the net cost of installation.

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Opportunity for Rhode Island

Rhode Island's climate and energy goals require a diverse set of clean energy strategies. A state-supported incentive program for modern wood heating could:
- Reduce heating-sector emissions using a carbon-neutral, renewable fuel.
- Lower energy bills for residents and small businesses.
- Support forest stewardship and local fuel supply chains.
- Align Rhode Island with its regional peers in pursuing thermal decarbonization.

We recommend that Rhode Island:

1. Create a residential and commercial rebate program modeled on Maine or New Hampshire.
2. Establish a framework to issue T-RECs for qualifying thermal systems.
3. Leverage federal tax credits to amplify state impact.

Contact

For further information, please contact:
Maine Energy Systems
info@maineenergysystems.com
www.maineenergysystems.com
207-824-6749