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July 2, 2024

To the Trustees, Efficiency Maine:

Our Maine Pellet Fuels Association is a standard 501 c (6) trade association comprised of Maine's four wood heating pellet manufacturing firms, Maine's pellet boiler assembly plant which distributes throughout North America, pellet boiler installers, several non-profit associations, retailers of wood heating pellets, and suppliers to our Maine industry.

We respectfully ask that Efficiency Maine reconsider and delete the staff recommendation that Triennial Plan VI discontinue rebates for purchase and installation of pellet boilers and furnaces. This Efficiency Maine recommendation is in large part based upon the allegation, as set forth in the proposed Plan VI, that the existing pellet boiler incentive "may frustrate near term goals for "gross" carbon reductions."

This allegation is further detailed in the Minutes of Efficiency Maine Trust's Meeting of March 27, 2024: "He (Mr. Burnes) highlighted that the Maine Climate Council measures **gross** carbon savings (not **net** carbon savings) when accounting for progress towards Maine's 2030 and 2050 statutory carbon reduction goals. One result of measuring gross carbon emissions is that biomass technically has a higher emissions rate than oil and coal."

We do not believe that the Maine Climate Council ever intended that its emphasis on gross carbon savings measurement was intended to place biomass heating systems at a disadvantage with regard to oil (or coal) based heating systems. In fact, the Climate Council's "Maine Won't Wait, a Four-Year Plan for Climate Action" of 2020 specifically states (page 48) "Modern high-efficiency wood heating is also an opportunity that supports Maine's forest products industry and heating with a renewable Maine-grown heat source, as compared to oil and propane systems."

The findings of the Climate Council are consistent with a peer-reviewed analysis of wood heating pellet production undertaken by the Spatial Information Group Natural Assets Laboratory (SIG-NAL) which focused on data specific to the Northern Forest (ME, NH, VT and NYS) and the region's harvest practices and pellet mills. This study concluded that using wood pellets **for heat** in the Northern Forest region **immediately** and very substantially reduces greenhouse gas emissions, with the reduction increasing over time as trees harvested (for other purposes) grow to maturity. Two of the three authors of the SIG-NAL study (Drs. John Gunn and David Saah) were also authors of the 2010 Manomet Report, which was highly critical of biomass-fueled generation of **electricity**.



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Dr. Gunn and a colleague, Dr. Thomas Buckholtz, the third author of the above SIG-NAL study of modern wood heat from the Northern Forest, also collaborated on an Economic Impact Assessment of Wood Chip Heat in Maine, prepared in 2017 for the Natural Resources Council of Maine. Modern wood heating with wood chips -- a technology very similar to heating with wood pellets—is used for heating large buildings, as opposed to residences. This study states that “Burning low-grade wood in high-efficiency heating systems would lower Maine’s non-transportation total CO2 emissions by about 750,000 metric tons per year by displacing heating oil and changing the state’s electricity emissions profile.” The study noted that “Cutting 750,000 metric tons of CO2 is equivalent to taking 160,000 cars off the road.”

In sum, the Maine Pellet Fuels Association believes that Efficiency Maine staff is completely in error by applying a Climate Council standard of “gross” carbon reduction to modern wood heating. To the extent that a “gross” emissions standard for combustion of wood might have been appropriate, it might have been a decade ago, when Maine’s electric power generation from combustion of wood was twice that of today. The Maine Climate Council, which began its work in the wake of the previous Governor’s support of such electricity generation by an ill-fated firm (Stored Solar) may have had this experience in mind when citing the need to calculate “gross” biomass emissions. **At any rate, the Council’s recommendation in support of “modern high-efficiency wood heating” clearly trumps Efficiency Maine’s citation of a need to utilize the “gross” emissions standard.**

Our Association is not in a position to counter Efficiency Maine’s assertion that the pellet boiler residential incentive program “does not screen cost effective.” During an otherwise congenial June 26 meeting, EMT staff did not share the details of their calculations, insisting (as was their prerogative) that **their** efficiency screening methodology is time-tested and similar to that utilized by other organizations. Our Association believes, however, that our measurements, such as for lifespan of pellet boilers and the efficiency of their combustion, are more up to date than those briefly cited by Efficiency Maine staff.

In asking that Efficiency Maine Trust set aside its current Triennial Plan VI removal of incentives for residential pellet boilers, our Association would like to note several additional considerations:

1. The federal Inflation Reduction Act lowers to \$2,000 the previous federal credit for the installation of residential pellet boilers. **This severe cutback** (which we believe was the result of erroneous Congressional conflation of the cost of heat pumps and



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pellet boilers) **makes the Maine incentive payment critical to ongoing installation of modern wood heating in Maine homes.** We commend Efficiency Maine's success in promoting heat pumps. However, there are also homes in which the owner has reason to consider a pellet boiler as the logical replacement for a fossil fuel system. Removal of the Maine incentive would make such consideration virtually impossibility for all but the very upper segment of homeowners. In addition, removal of the incentive, previously provided by what is now a very popular Maine State Government agency, will suggest to homeowners that "there is something wrong" with pellet boilers, which is decidedly not the case. **Efficiency Maine cites "new federal tax credit for heat pumps (30% up to \$2,000)" as a reason to remove the Maine heat pump incentive unless applied to a whole house system. Per this logic, the pellet boiler incentive should be increased or at least maintained at the current level, not removed.**

2. For many years, Maine, New Hampshire, and Vermont have reduced carbon emissions by mirroring renewable energy incentives originating in each other's states. New Hampshire's Thermal Renewable Energy Credit program served as a model for enactment of a similar TREC program in Maine. Vermont will in early 2025 be finalizing into law Vermont Clean Heat Credits providing fuel payments for "high efficiency wood-burning equipment". **Vermont and New Hampshire currently provide incentive programs for pellet boiler installations which exceed Maine's. Should Efficiency Maine be going in the opposite direction?**
3. Climate strategies, both nationally and in Maine, are rapidly focusing on building construction with wood (embedded carbon), replacing steel and concrete. The Director of Yale's Center for Natural Carbon Capture has cited cross-laminated timber as one of the two most promising areas for such carbon reduction. In Maine, the very recent draft recommendations of the Maine Climate Council's Buildings Working Group emphasize the "manufacture and use of climate-friendly building products." Implementation of this recommendation will largely focus on wood. Increased use of wood will generate increased amounts of wood byproducts, particularly sawdust and woodchips. As stated in Maine DEP's 9th Report on Progress toward GHG Reduction Goals (pg 20), **"The decay of wood products (including wood combusted for energy) and agriculture are net GHG emitters."** **Pelletizing and combustion of wood in efficient pellet boilers, replacing fossil**



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fuels to heat Maine homes, is by all measures preferable to most alternatives for utilization or disposal of wood byproducts.

4. Public opinion has been understandably directed (“Don’t cut down trees to make wood pellets”) against wholesale harvesting of timber in the Southeastern U.S. for manufacture and shipment of industrial wood pellets to Europe and Japan. Such manufacture of industrial wood pellets simply does not take place in the Northeast, as is clearly documented by the U.S. Energy Information Densified Biomass Fuel Reports. Wood pellets purchased for pellet boiler heating in Maine are manufactured exclusively, or almost exclusively, from lumber processing residuals – sawdust and slabwood. 2% of the wood is derived from “tops and limbs”. Wood which has been in close contact with the forest floor is unacceptable, in that the soil particles would exclude the pellets from certification under the “ash content” requirements of the Pellet Fuels Institute, which is the pellet industry’s quality control certification for consumer assurance. **Most important to understand: In the Northeast, trees are not harvested for pellet production—this would be an economically unsustainable use of the forest resource.**
5. Efficiency Maine responds, correctly, that the draft Triennial Plan VI proposes to eliminate support for residential pellet heating but not commercial support because the latter—the Thermal Energy Investment Program (TEIP) -- is an entirely separate entity. **This invites the suggestion that the TEIP be amended to include residential installation of pellet boilers. However, such a revision would be problematic.** The TEIP is funded through the utilities’ Alternative Compliance Payments, the ongoing amount of which is uncertain. In addition, the TEIP was legislated with intent to stimulate heating system conversion of large facilities, although the operational rules of the program allow participation of smaller industrial, commercial, governmental, and educational facilities producing less than 600,000 BTU/hr. Opening the TEIP to cost sharing by residential users will logically incur opposition from supporters of the current law.

We thank Efficiency Maine staff and trustees for the opportunity to provide the above comment.

William Bell
Executive Director



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Addendum to MPFA Comment on Triennial Plan VI

To Page 3, Item 3. “Climate strategies, both nationally and in Maine...” please add at the bottom of the paragraph:

The Maine Climate Council Buildings Working Group Recommendation 3 “Promote the manufacture and use of climate-friendly building products” notes, under “Mitigation” that “Wood products contribute to reducing Maine’s **net** GHG emissions because they have dramatically lower GHG emissions than conventional building products and because they provide long-term storage of carbon sequestered during tree growth. In addition, encouraging sustainable wood products will extend Maine’s long tradition as a leader in the forestry sector, which has long supported many jobs and communities throughout the state.”

Given the Climate Council’s clear interest in reducing **net** GHG emissions and supporting Maine’s forest sector, we believe Efficiency Maine should not be terminating support for a program which provides beneficial usage of the major wood byproduct—sawdust and slabwood-- generated by increased manufacture and utilization of wood building products.