



June 11, 2024

Suzanne MacDonald, Chair
Board of Directors, Efficiency Maine
168 Capitol St. Ste. 1, August, ME 04330

Re. Maintaining support for wood pellet heating

Dear Madam Chair,

I am writing about the following statement found within Triennial Plan VI:

"Pellet boiler/furnace measure(sic) in homes does not screen cost-effective, and frustrates near-term goals for "gross" carbon reductions. Staff recommends discontinuing the measure, concentrating available RGGI funds on weatherization. (Biomass measures in non-residential buildings will remain eligible through other programs.)"

Compared to other options, wood pellet heating is a one of the most cost effective means for completely removing fossil fuel central heat in homes and thus removing carbon emissions. One reason wood pellet heating is so cost effective is that wood pellet heating is one of very few renewable energy technologies, which can use the existing, ubiquitous baseboard heating without intensive and expensive retrofitting. Heat pumps and other technologies may take small bites at carbon removal, but pellet boilers and furnaces can remove nearly all residential, thermal, fossil fuel carbon. The versatility of wood pellet heat is especially attractive for homes at which weatherization is complicated and/or expensive, such as large and/or poorly insulated, energy-heavy homes. With heating needs making up 75% of residential energy use, replacing all of a home's heating load with renewable wood pellet fuel is an extremely effective way to reduce carbon emissions.

Wood pellet boilers and furnaces also last 20-30 years, so initial investments pay back for many years. The upfront cost of a new gas boiler or heat pump, which are likely to last less than 15 years cannot be compared to pellet boilers and furnaces without also considering durability.

Wood pellet heating does not "frustrate" any reasonable goal for reducing carbon emissions. On the contrary, wood has been instrumental in meeting Maine's carbon reduction goals according to its own report, "The Ninth Biennial Report on Progress toward Greenhouse Gas Reduction Goals, July 2022, Bureau of Air Quality, Maine Department of Environmental Protection." Wood heating fuels are a huge contributor to the successful reduction of distillate fuel consumption in the Maine residential sector between 1990 and 2019, according to the Biennial Report. The report also states that wood heating in Maine grew from 19% of residential energy consumption in 1990 to 24% in 2019. Petroleum use in the residential sector declined 50.1% from 2004 to 2019. Wood heat therefore played a large role in removing fossil fuel carbon emissions. The report further indicates that Maine could reach carbon neutrality by 2033, nearly 12 years before the 2045 statutory requirement. According to the State of Maine itself, wood heat is and has been part of a successful plan for removing carbon emissions. Your staff can read the report here:

<https://www.maine.gov/tools/whatsnew/attach.php?id=8402500&an=1>

Because the forests of Maine are absolutely essential to Maine meeting its carbon targets, the importance of support for the forestry sector, especially support for the energy component of the forest sector, is essential for successfully meeting carbon emission goals. Every ton of wood pellets burned offsets the equivalent of about 125 gallons of #2 oil

consumption or about 4,100 kWh. The biggest threat to Maine forests is not wood harvest. On the contrary, harvests have decreased since the paper heydays. What is clear is that Maine forests are sequestering less carbon than before and much of that has to do with development. When forests remain forested because they are valued for wood (energy especially), water, recreation, etc. climate goals will be easier to achieve.

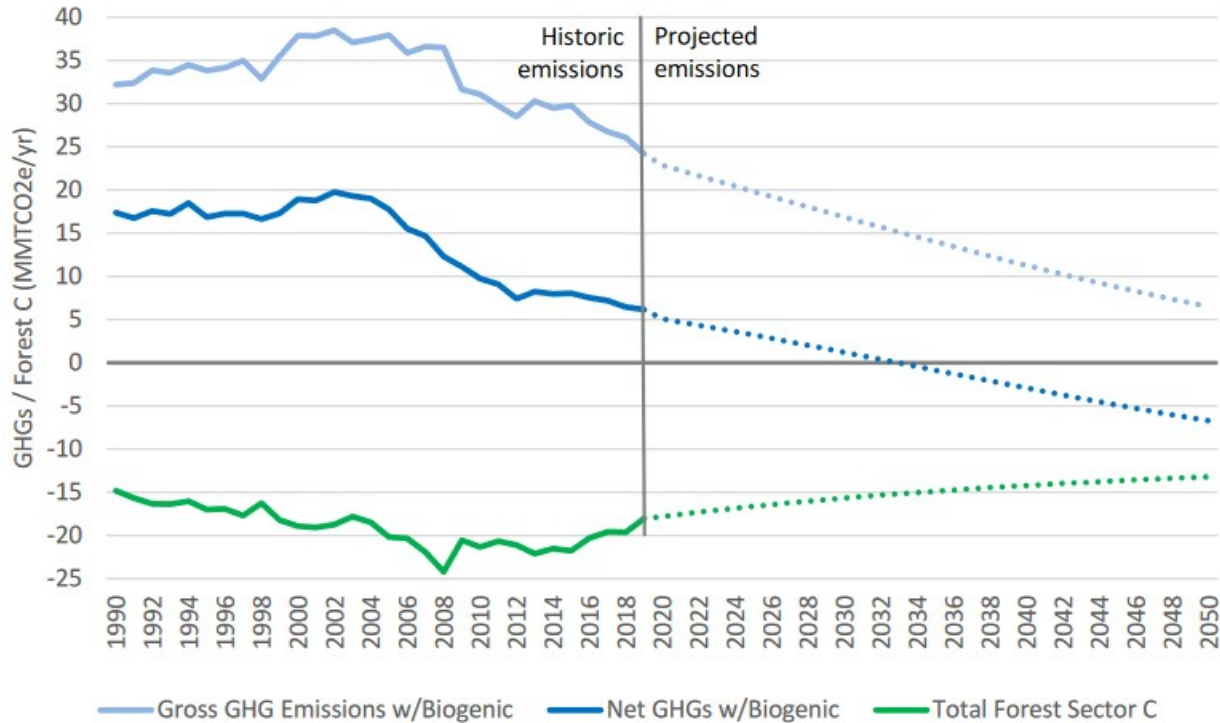


Figure 17. Maine GHG Emissions and Forest Sector Carbon (1990-2050)³¹

(Projected data are based on several assumptions listed at the bottom of page 22, including that Maine meets the statutory gross GHG reduction goals and the high rate of forest carbon sequestration continues.)

I cannot reconcile the claims made by your staff about wood pellet boiler and furnace rebates. The claims seem not only to be unsupported, but refuted by the State of Maine itself. Should you be able to share the analysis that your staff used to arrive at its conclusions about pellet boiler and furnace rebates, I welcome the opportunity to read it.

Sincerely,

Scott W. Nichols, President