

Governor Charlie Baker
Massachusetts State House
Office of the Governor
24 Beacon St. Room 280
Boston, MA 02133

March 20, 2019

Re: Subsidizing polluting wood-burning for heat and energy in MA clean energy programs

Dear Governor Baker,

Our groups, which represent tens of thousands of Massachusetts residents who care about the health of our environment and the air we breathe, are writing to express our strong opposition to your Administration's promotion of biomass heating ahead of clean, renewable technologies. The Administration's actions are inconsistent with your publicly stated positions on climate change.

On February 11, the Department of Energy Resources (DOER) awarded nearly \$3 million for biomass projects through Massachusetts' *Renewable Thermal Infrastructure Grants Program*, mostly in grants to support expansion of wood-chipping facilities and operations.¹ This grant program was intended to support all eligible renewable thermal technologies in the Alternative Portfolio Standard (APS), including solar heat, solar hot water, and air and ground source heat pumps,² but DOER gave the entire amount to combustion-based technologies that will accelerate climate change and negatively impact public health.

Contrary to the statements made in DOER's 2/11/19 press release announcing the awards, increasing the use of wood boilers for heating in Massachusetts will not "lower greenhouse gas emissions," nor is it "environmentally friendly," "sustainable" or "clean." To meet the state's greenhouse gas reduction targets and comply with the Global Warming Solutions Act, Massachusetts must limit its renewable energy subsidies to technologies that actually achieve these goals.

Wood burning is a major source of air pollution in Massachusetts, placing children, the elderly, and people with heart and lung disease particularly at risk. Wood boilers release large quantities of fine particulates (soot) and other air pollutants. According to the most recent data from EPA's National Emissions Inventory, biomass combustion accounted for 83% of all PM_{2.5} emissions from heating in Massachusetts in 2014, and a quarter of the state's total PM_{2.5} emissions.³ Overall, woody biomass fuels are many times more polluting than the fossil fuels they would replace. The question we must ask is: Why is the state giving public subsidies for this dirty type of energy in the name of reducing greenhouse gas emissions?

¹ Press Release, 2/11/19: <https://www.mass.gov/news/baker-polito-administration-announces-28-million-in-matching-funding-for-renewable-heating>

² Press Release, 1/19/18: <https://www.mass.gov/news/baker-polito-administration-announces-3-million-in-funding-updated-regulations-to-promote>

³ <http://www.pfpi.net/massachusetts-tops-northeast-in-air-pollution-from-wood-burning>

When the Legislature amended the APS in 2014 to include renewable heating technologies, it set very high standards for biomass to be considered eligible, including: emission standards that are protective of public health using only best-in-class commercially feasible technologies; a 50% reduction in life-cycle greenhouse gas emissions compared to a high efficiency unit using the fuel that is being displaced; and, for forest-derived biomass, requirements that the fuel be provided by means of sustainable forestry practices.⁴ However, at every step of the rule-making process, DOER weakened the proposed APS regulations to favor the biomass industry, despite enormous public outcry for stronger standards. The final regulations adopted at the end of 2017 failed to meet any of the statutory criteria. Among other things, DOER undercounted life-cycle greenhouse gas emissions, created loopholes allowing unlimited numbers of whole trees to be treated as low-carbon “residues,” and only required the most health-protective emission standards for a small subset of biomass installations. ***As a result of these lax regulations, the APS is now incentivizing wood-burning heating systems that could exceed emissions from the fuels they are replacing by orders of magnitude.***⁵

The lifecycle carbon impact from the harvesting, processing, and combustion of woody biomass fuel is not carbon neutral no matter how the wood is sourced.⁶ The Manomet study, which was commissioned by Massachusetts to assess the carbon impacts of forest biomass energy, found that net emissions from burning biomass sourced from logging residues exceed carbon emissions from fossil fuels for up to a decade for heating applications, and up to 30 years for electricity production.⁷ For whole trees, the emissions flux can exceed more than a century, depending on what fossil fuel is being replaced. Only after those timeframes does biomass begin to show a carbon “benefit” relative to fossil fuels. However, since the Manomet study was published, the science has become increasingly clear that we only have a few years to reduce carbon emissions – not decades.

We applaud your public commitment to climate mitigation, including membership in the U.S. Climate Alliance, but your Administration’s funding and promotion of forest bioenergy is in direct conflict with these goals. The Paris Climate Agreement, which you have endorsed, urges countries to take action to conserve and enhance sinks and reservoirs of greenhouse gases, including protecting and expanding forests. More recently, the IPCC 1.5 report showed that to limit catastrophic climate change, we must not only dramatically decrease CO₂ emissions over the next ten years but also achieve “negative” CO₂ emissions by increasing carbon sinks, primarily forests.⁸

⁴ MGL Chapter 25A, Section 11 F1/2(b)

⁵ PFPI Comments on DOER’s latest changes to APS bioenergy regulations, 12/1/2017

⁶ Booth, M.S. Not Carbon Neutral: Assessing the Net Emissions Impact of Residues Burning for Energy (*Environmental Research Letters*, Feb. 21, 2018), <https://iopscience.iop.org/article/10.1088/1748-9326/aaac88>

⁷ Walker, T., P. Cardellichio, J. S. Gunn, D. S. Saah and J. M. Hagan (2013). "Carbon Accounting for Woody Biomass from Massachusetts (USA) Managed Forests: A Framework for Determining the Temporal Impacts of Wood Biomass Energy on Atmospheric Greenhouse Gas Levels." *Journal of Sustainable Forestry* 32(1-2): 130-158. See Table 7 “Years for Biomass Energy Emissions to Reach Equal Flux with Fossil Fuel Energy Emissions.”

⁸ IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels.* <https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/>

Massachusetts has distributed millions of tax payer and rate payer dollars to promote wood heat through various state programs. Under the APS, eligible biomass systems can now receive grants for up to 80% of construction and installation costs and still receive rate-payer subsidies for energy generated. The APS is already supporting dozens of polluting wood burners across the state, and the program has only just begun.

The Commonwealth should not be incentivizing technologies that will accelerate climate change, worsen air quality, and use our forests for fuel. It is for this reason that legislation has been filed to withdraw the eligibility of wood-burning from the APS.⁹ In order to lead on climate protection, Massachusetts must focus on energy efficiency, clean renewable technologies, and protection of our forests and other natural carbon sinks.

We therefore call on your Administration to discontinue all state programs that incentivize wood burning for heat and electricity. We further request a meeting as soon as possible to discuss our concerns and ways we can work together to ensure Massachusetts is a national and even global leader in climate protection. Please contact James McCaffrey at Partnership for Policy Integrity, james.mccaffrey@pfpi.net or 617-388-7644, to follow up. Thank you for your consideration of this request.

Sincerely,

Cindy Luppi, New England Director
Clean Water Action

Eric Wilkinson, Director of Energy
and Climate Policy
Environmental League of Massachusetts

Janet Domenitz, Executive Director
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⁹ H.853, An Act to assure the attainment of greenhouse gas emissions goals in the alternative portfolio standard, introduced by Representative Denise Provost, 1/16/19, <https://malegislature.gov/Bills/191/H853>

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Ken Kipen
Hilltown Anti-Herbicide Coalition (Ashfield)

Emily Lewis
The Resistance Center for Peace and Justice
(Northampton)

Ryan and Sarah Violand
Red Fire Farm (Montague)

Miriam Kirkland
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Cc:

Secretary Matthew Beaton, Executive Office of Energy and Environmental Affairs
Judith Judson, Commissioner, MA Department of Energy Resources
Martin Suuberg, Commissioner, MA Department of Environmental Protection
Michael Judge, MA Department of Energy Resources
House Speaker Robert A. DeLeo
Senate President Karen Spilka
Senator Anne Gobi, Chair, Joint Committee on Environment and Natural Resources
Rep. Smitty Pignatelli, Chair, Joint Committee on Environment and Natural Resources
Senator Marc Pacheco, Chair, Senate Committee on Global Warming and Climate Change
Representative Finn, Chair, House Committee on Global Warming and Climate Change
Senator Michael J. Barrett, Chair, Joint Committee on Telecommunications, Utilities, and Energy
Representative Thomas Golden, Chair, Joint Committee on Telecommunications, Utilities, and Energy
Members of the Massachusetts General Court