

Support H.853: An Act to Assure the Attainment of Greenhouse Gas Emissions Goals in the Alternative Portfolio Standard

Rep. Denise Provost, 27th Middlesex (New File)

WHAT H.853 DOES: H.853 would remove incentives for biomass and garbage incineration from the Massachusetts Alternative Portfolio Standard (APS) and should be amended as outlined below to include the Renewable Portfolio Standard (RPS). These technologies are more polluting than fossil fuels per unit of energy produced and should not be subsidized through Massachusetts' clean energy programs.

THE ISSUE: The APS was initially established to provide incentives for facilities that install energy-efficient heating technologies, such as combined heat and power. It was later expanded to include renewable thermal technologies, including solar hot air and water, air and ground source heat pumps, wood boilers and furnaces (biomass), and garbage incinerators that produce steam energy.

Combustion of biomass and solid waste releases large quantities of greenhouse gas emissions, fine particulates (soot) and other air pollutants. Low-income communities, communities of color, and sensitive populations such as children, the elderly, and people with respiratory ailments are particularly at risk. Massachusetts already has the highest levels of particulate pollution in New England from residential wood burning. Changes as proposed by H853 are needed to reduce greenhouse gas emissions, protect public health, prevent unsustainable logging activities, and to guide rate-payer and other financial incentives toward the installation of clean, non-polluting renewable energy systems.

BACKGROUND

Massachusetts established the Alternative Energy Portfolio Standard (APS) in 2009 to complement the state's Renewable Energy Portfolio Standard (RPS). The RPS is designed to increase the use of renewable energy and reduce greenhouse gas emissions from the electricity sector, while the APS is intended to achieve similar results for the heating sector. **However, the inclusion of biomass and garbage incineration in the APS undermines these goals.** Rather than achieving consistency between these two programs, the MA Department of Energy Resources (DOER) proposed APS regulations in 2017 that were substantially weaker than the RPS and fundamentally undermined our climate, clean energy, and sustainable forestry goals.

In response, the *House Committee on Global Warming and Climate Change* convened an oversight hearing in December 2017 to review the proposed DOER regulations. **The Committee Report recommended that the proposed biomass provisions be delayed "until further calculations are made regarding the greenhouse gas and health impacts" and urged DOER to "reopen the public comment period on the recently changed provisions".** Instead, DOER ignored this formal request from the legislature and proceeded, only days later, to issue a new and even weaker regulation on December 29, 2017. As a result, the APS now subsidizes dozens of polluting wood pellet boilers across the state, as well as the state's oldest garbage incinerator.

Health Impacts: The APS program now in effect does not adequately protect Massachusetts residents from conventional air pollutants such as fine particulates and other harmful emissions from combustion of wood and waste. Massachusetts residents are already exposed to high levels of particulate pollution from residential wood burning. According to the National Emissions Inventory, 2014 biomass emissions from heating accounted for 83% of all PM_{2.5} in Massachusetts, and a quarter of the state's total PM_{2.5} emissions.¹

In addition to particulates, biomass and waste incineration release large quantities of nitrogen oxides, sulfur dioxide, heavy metals and volatile organic compounds. The weak emissions standards and inadequate enforcement mechanisms for wood boilers in the APS will drive adoption of a technology that emits *hundreds to thousands of times more pollution* than the fossil-fueled boilers it replaces.²

Amend H.853 to include the RPS: After H.853 was introduced, the Baker Administration proposed sweeping new changes in May 2019 to the Renewable Portfolio Standard that now must be addressed as well. Massachusetts' RPS program currently has the most stringent, science-based standards in the nation for wood-burning power plants, and only a handful of small plants, with a combined capacity of less than 2 MW, presently qualify. The new rules proposed by the Baker Administration would significantly weaken the standards for biomass energy in the RPS and facilitate the construction – with the support of rate-payer dollars – of polluting utility-scale wood-fired power plants in Massachusetts.

Climate Impacts: The climate crisis compels us to take a closer look at what our clean energy programs are subsidizing. While included in the RPS as “renewable energy,” both garbage incinerators and biomass power plants release more CO₂ emissions at the stack per megawatt hour than coal-fired power plants. A recent PFPI study shows that even in the industry's “best case” scenario, where only wood residues are burned for energy (as opposed to whole trees), *biomass energy is a net source of carbon for decades*.³

Despite what is now known about the lifecycle carbon impacts from combustion of woody biomass and waste, these highly polluting and carbon-intensive technologies benefit from numerous regulatory loopholes and government incentives in Massachusetts and elsewhere that treat them as “clean,” “renewable,” or “carbon neutral.” As a perverse result, *more than 50% of the “renewable energy” in New England’s power grid last year came from biomass and garbage burning*.⁴

When the MA Legislature passed a 2% increase in renewable energy requirements last year, the goal was to encourage new clean energy generation, such as wind and solar. Instead, the Baker Administration’s proposal would “backfill” this requirement by subsidizing polluting wood-burning power plants that fail to meet the RPS program’s current efficiency and health-based standards. Rather than incentivizing the burning of trees for energy or heat, Massachusetts should be protecting its forests and growing more trees to enhance natural carbon sequestration, in keeping with the goals of the Paris Climate Agreement and recommendations of the U.S. Climate Alliance, of which Massachusetts is a founding member.

Support H853, An Act To Assure The Attainment Of Greenhouse Gas Emissions Goals In The Alternative Portfolio Standard: We urge you to (1) support H.853, and (2) support amending H.853 to also remove woody biomass fuel from the list of eligible renewable energy sources in the RPS. The Commonwealth should not be incentivizing technologies that will increase greenhouse gas emissions, air pollution, and forest destruction. H.853 would correct these shortcomings in our clean energy programs. Removing biomass burning and garbage incineration from the APS and the RPS will protect our health, our climate, and our natural environment, and will accelerate the transition to clean, renewable technologies.

*For further information please contact James McCaffrey, New England Legislative Director,
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¹ <http://www.pfpi.net/massachusetts-tops-northeast-in-air-pollution-from-wood-burning>

² PFPI et al.: [Joint Comments on Revised Proposed Changes to APS Regulations, August 7, 2017](#)

³ <http://www.pfpi.net/biomass-energy-has-big-climate-impact-even-under-best-case-scenario>

⁴ <https://www.iso-ne.com/about/key-stats/resource-mix>