PFPI
driven by data

June 11, 2022

The Honorable Michael J. Barrett
Senate Chair, Telecommunications,
Utilities & Energy Committee

The Honorable Cynthia Stone Creem
Senate Majority Leader

The Honorable Bruce E. Tarr
Senate Minority Leader

The Honorable Jeffrey N. Roy
House Chair, Telecommunications,
Utilities & Energy Committee

The Honorable Tackey Chan
House Chair, Joint Committee on Consumer
Protection & Professional Licensure

The Honorable Bradley H. Jones, Jr.
House Minority Leader

Via Email

Re: Support for Removing Subsidies for Woody Biomass Energy (S2842/H4524)

Dear Members of the Conference Committee:

We write to ask that the conference committee include provisions in the final version of the Climate Change / Offshore Wind legislation which remove subsidies for woody biomass energy in the Massachusetts Renewable Portfolio Standard ("RPS") and the Alternative Portfolio Standard ("APS").

These provisions, included in **Sections 22-30** and **Section 82** of S2842, mirror legislation introduced by Senators Eric Lesser and Adam Gomez (S2197). The House version of that same bill (H3333) was introduced by Representatives Jay Livingstone and Orlando Ramos, and is cosponsored by 50 House members and supported by numerous others. At the TUE Committee hearing on H3333 (9/21/21), dozens of witnesses, including elected officials, environmental advocates, climate scientists, health professionals, and ordinary citizens from across the Commonwealth testified in support.

Importantly, the language we ask that you support removes rate-payer funded incentives for only ***woody*** biomass electricity and heat generation. It does **not** impact other potential forms of "biomass" energy (such as anaerobic digestion) that may be included in the RPS/APS.

<u>Woody Biomass: Data on Public Health and Environmental Concerns</u>

Biomass power plants burning wood to generate electricity *emit far more greenhouse gas and other pollutants than even coal.* Wood burning biomass energy is notoriously inefficient. When a tree is burned to produce electricity, only 25% of that tree actually ends up generating power. The majority of the tree pointlessly goes up in smoke, emitted as fine particulate matter, CO2, and harmful toxins that lead to asthma and a host of other health-related issues, particularly in children and at-risk populations.

Emissions from biomass power plants are 50% worse than coal per megawatt of energy produced and 400% worse than the emissions from natural gas.[1] Burning one ton of green wood emits about one ton of CO2. A medium-sized biomass plant will burn **one ton of trees per minute** and emit more carbon pollution than a coal plant per MW of energy produced.[2]

Burning residues does not reduce carbon emissions. The science is clear: Even biomass facilities that claim to burn "only residues" instead of whole trees to generate electricity will result in increased carbon emissions for decades. A peer-reviewed study[3] demonstrates that power plants burning residues are a net source of carbon pollution. Increased carbon emissions are precisely the opposite of what Massachusetts needs, especially when it is critical to reduce greenhouse gas emissions now. Biomass energy is also inconsistent with what the Legislature envisioned when it adopted the 2021 Climate Roadmap bill to expand the Commonwealth's CO2 reduction targets. According to experts, including leading climate scientists[4] and the 2022 report from the *International Panel on Climate Change* (IPCC),[5] forest ecosystems are better left intact and are increasingly necessary to absorb and sequester carbon to help mitigate climate impacts.

If biomass is not removed from the RPS and APS incentive programs, DOER's new regulations on biomass will exacerbate climate change rather than helping to mitigate it.

Biomass is Costly and Unsustainable Without Ongoing Ratepayer Subsidies

Other states in the Northeast, including Maine and New Hampshire, have sought to limit bailouts and subsidies for their own biomass power plants. In 2018, Governor Paul LePage announced he would oppose bills[6] that would have cost Maine taxpayers $45 million to bail out their declining biomass industry, calling it *"corporate welfare at the worst."* The following year, Governor Chris Sununu vetoed legislation[7] that would have cost New Hampshire ratepayers approximately $60 million over three years to subsidize failing biomass plants in that state, saying the bill "*picks winners and losers in a competitive energy market, and harms our most vulnerable citizens for the benefit of a select few."* Connecticut is engaged in a multiyear process to phase out its previously adopted RPS subsidies for biomass power.

If biomass is not removed from the RPS and APS incentive programs, **Massachusetts ratepayers will be the ones subsidizing biomass plants in Maine and NH**. At current Renewable Energy Credit ("REC") rates, Massachusetts ratepayers could be paying upwards of $15 million annually per 40-50MW biomass plant in other New England states.

Biomass in the RPS (Electricity Sector)

DOER recently filed regulations to weaken the RPS by *expanding* subsidies for biomass electricity generation, after having previously weakened the APS biomass regulations. In stark contrast to climate change initiatives in other New England States and efforts globally, the new DOER regulations will result in the funneling of clean energy dollars to dirty fuel sources, in this case biomass plants in New Hampshire and Maine. At the July 30, 2021 oversight hearing before the

[1] http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html
[2] https://www.pfpi.net/wp-content/uploads/2011/04/PFPI-biomass-carbon-accounting-overview_April.pdf
[3] https://iopscience.iop.org/article/10.1088/1748-9326/aaac88
[4] The 2009 Tim Searchinger et al *Fixing a Critical Climate Accounting Error* provides a concise description of why increasing forest harvesting for fuel in-turn increases carbon emissions. https://www.pfpi.net/wp-content/uploads/2011/03/Searchinger-et-al-2009.pdf
[5] https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SPM.pdf
[6] https://www.pressherald.com/2018/01/10/lepage-tells-lawmakers-he-will-oppose-borrowing-bills-aimed-at-helping-biomass-industry/
[7] https://www.nashuatelegraph.com/news/local-news/2019/08/06/sununu-scorns-biomass-bill-dems/

TUE Committee, DOER Commissioner Patrick Woodcock confirmed that *"these regulations will yield increased biomass production **regionally**."*

Around the world, governments are recognizing that woody biomass energy is a costly and polluting fuel. Just last month, a committee of the European Parliament voted to significantly limit subsidies for woody biomass in the EU's renewable energy directive. That same week, Hawaii's Public Utilities Commission ruled against the proposed Hu Honoa biomass power plant, finding that it would not only be costly for ratepayers but it would also be a net emitter of greenhouse gasses for decades.

Biomass in the APS (Heating Sector)

We also want to emphasize the importance of removing subsidies for woody biomass from Massachusetts' other clean energy programs, specifically the APS[8]. The heating sector is the second largest source of greenhouse gas emissions in Massachusetts, and biomass power plants burning wood for heat generate nearly 25% of the state's fine particulate emissions.[9] Those emissions constitute a major health hazard, especially for children.

The biomass industry claims that "modern wood heating" is a benefit over conventional technologies. However, a 2021 report[10] by the *Northeast States for Coordinated Air Use Management* (NESCAUM) shows these claims are not substantiated. The report concluded that *"EPA's program as currently run allows the continued sale and installation of **high-emitting devices**, many of which will be in homes located in overburdened communities already suffering from environmental and other inequities. Once installed, these units will remain in use, emitting pollution for decades to come."* The Commonwealth should not be incentivizing polluting technologies with rate-payer funded clean energy programs.

Biomass and Municipal Light Plants in Massachusetts

We'd like to flag an issue that was not included in the biomass legislation originally filed as S2197/H3333, and regarding last session's Climate Roadmap bill which created a new *Greenhouse Gas Emission Standard* (GGES) for municipal lighting plants (MLPs). The MLP provision allows biomass to qualify as a *"non-carbon emitting"* energy source for this newly created program, beginning in 2026 and for MLP's only. This definition is completely at odds with the science. Worse still, it creates a new ratepayer subsidy for biomass power with *none* of the eligibility restrictions that are currently found in either the Massachusetts APS or RPS.

We strongly encourage the conference committee to remove woody biomass from the MLP GSES standard as well as the RPS and APS by deleting "biomass" from the list of defined "non-carbon emitting sources" in the Climate Roadmap law. This will ensure regulatory certainty and provide clear and consistent legislative directives to guide the implementation of our clean energy programs.

[8] https://www.pfpi.net/wp-content/uploads/2021/11/APS-RPS-explainer.pdf
[9] https://www.pfpi.net/wp-content/uploads/2019/04/PFPI-APS-to-legis-cte-Dec-11-2017.pdf
[10] https://www.nescaum.org/documents/nescaum-review-of-epa-rwh-nsps-certification-program-rev-3-30-21.pdf/

Biomass in Springfield, MA

A biomass power plant has been proposed for the environmental justice community of Springfield. In 2021, after 10 years of fierce community grassroots opposition, MA DEP finally revoked the developers' air quality permit. This was, at the time, cause for great celebration in Springfield and beyond. However, the developer has appealed that decision and related rulings in the courts. The final outcome – especially for the residents of Springfield – remains unclear.

Grandfathering: No Impact to Existing "Qualified" Facilities

PFPI shared our concerns with bill sponsors regarding a bill drafting error in H.3333/S.2197 which would have inadvertently limited the legislation's applicability to only *new* biomass power plants and boilers. PFPI supports the revised language as adopted in Section 82 of S.2842, which clarifies that the provision applies to all units that burn woody biomass, except for those units that are *currently qualified* by the DOER.

Support Biomass Language in S2842/H4524

Massachusetts stands out as the one state that has conducted a transparent, independent review of the science on the renewability and carbon neutrality of wood-burning biomass. The landmark "Manomet Study"[11] released in 2010 was the result of an extensive and transparent scientific and public-stakeholder process. It led to the development of strict science-based criteria for biomass in order to severely limit the REC eligibility of low-efficiency wood-burning biomass power plants. This science continues to inform policy makers around the world, as we hope it will Massachusetts decision-makers now.

Removing incentives for woody biomass from the RPS / APS will help ensure that our renewable energy programs are aligned with the Commonwealth's climate and environmental health goals, and that our clean energy dollars are directed towards cleaner forms of renewable energy like wind and solar.

We respectfully request that you support **Sections 22-30, and Section 82, of S2842** to end ratepayer subsidies for woody biomass in the RPS and APS, and to also consider revising the MLP Greenhouse Gas Emission Standard to ensure consistency with the latest climate science and to provide clarity across the Commonwealth's clean energy and climate initiatives.

Sincerely

James McCaffrey *and* Arline Isaacson, *for*
Partnership for Policy Integrity
www.pfpi.net

Attachments:
100-organizations letter to conference committee, 5/20/22
CLF-PFPI Comments to DOER on RPS Regulatory Changes, 4/1/22
PFPI Support Memo, S.2842, 6/9/22

[11] https://www.manomet.org/project/woody-biomass-energy/