



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary

February 23, 2021

The Honorable Delores Kelley
Chair, Finance Committee
3 East, Miller Senate Office Building
Annapolis, MD 21401

The Honorable Brian Feldman
Vice Chair, Finance Committee
3 East, Miller Senate Office Building
Annapolis, MD 21401

Re: Letter of Support - Senate Bill 549 - Renewable Energy Portfolio Standard - Thermal Biomass Systems

Dear Chair, Vice Chair, and Committee Members,

The Maryland Department of Natural Resources supports Senate Bill 549. This bill clarifies that certain forms of wood, food waste and animal manure are individually eligible as authorized fuels for thermal biomass systems, regardless of the relative mix of those fuel sources. Other eligibility requirements related to thermal biomass systems and their fuel components are unchanged.

Woody biomass is a preferable choice for renewable thermal energy because it is an abundant, inexpensive, price stable, clean, sustainable, and locally-procured and -purchased low-cost energy source that is an economic alternative to high-cost and high-emission fossil fuels. Neighboring states, the European Union, and many Pacific nations have incorporated wood-for-thermal into their energy portfolios with great success by keeping energy prices low and stable while accelerating reductions of greenhouse gas emissions. Recent U.S. Forest Service analyses demonstrate conclusively that wood thermal projects yield cost-effective greenhouse gas abatements. This is unlike the burning of other fuels due to the fact that wood and the forests that generate wood have a closed-looped cycle of carbon uptake, storage and release that increases carbon sequestration with certain practices such as forest management harvest.

The current Renewable Portfolio Standard statute authorizes the generation of Thermal Renewable Energy Credits (Thermal RECs, or TRECs) that, when accounting for their modest megawatt-hour cogeneration, can be converted to Tier I Renewable Energy Credits. Only the thermal energy verified through measurement to be usefully utilized within state borders qualifies for TREC issuance, therefore ensuring that Maryland ratepayers are investing only in in-State thermal projects. Most important of all, however, the TREC market is only a footnote in the State's overall RPS compliance, meaning no other Tier I sources are impacted by the much smaller TRECs. The result for other eligible TREC sources like geothermal and thermal solar is meaningful incentives for adoption without a cost to Maryland's overall electricity goals.

Current law only allows woody biomass to be an eligible thermal source only if it is less than 50 percent of an animal manure system. No such system is or has been economically viable in

smaller scale thermal systems needed for typical facilities in Maryland. With the advent of combined-heat-and-power (CHP) systems in Maryland and across the nation, however, wood energy can be readily used in thousands of installations domestically and globally in systems properly sized for schools, hospitals, hotels, industrial centers, office parks and other facilities of similar scale.

SB 549 would allow facilities to choose the organic energy source that best suits their specific situation, and many will take advantage of the overabundance of wood to apply it as useful thermal energy with lower costs and better emission profiles than fossil fuels. By doing so they will create markets for wood residues, benefiting family woodland owners and small businesses. The department estimates 500,000 tons of wood residues are annually produced in Maryland, and not utilized from routine activities such as manufacturing, roadside and utility tree maintenance and timber harvest. SB 549 would enable the conversion of these stranded production costs into new revenue, eliminate disposal issues, and create and preserve jobs.

In 2017, Maryland forests provided a carbon sink equivalent to 15 percent greenhouse gas emissions and could attenuate much more if markets for low-quality, low-value wood existed. Wood usage data of modern systems that would meet Maryland's air quality regulations implies we could repurpose the unused wood already available to renewably heat 80 schools and upgrade 10 hospitals to CHP systems. The total TRECs eligible for issuance from these conversions is estimated at just 1 million TRECs, or less than 0.05 percent of the total volume of RECs issued. The cash value of the TRECs to the individual facility would significantly improve the financial profile of the investment and therefore increase the number of wood thermal systems deployed.

Turning to the in-state benefits of authoring TRECs for exclusively woody biomass systems, an estimated 78 percent of every dollar spent on heating oil leaves the state. An obvious fiscal consequence is that money is not circulating in the local economies generating commerce, and not creating or supporting jobs. There are two primary effects of wood energy as an alternative with very strong positive economic effects: value-added from local resources and avoided costs that spur local growth. In terms of value-added from local resources, every 100,000 tons of wood residues used for energy creates 40 jobs. By using wood residues as a viable alternative, the export of wealth from the economy is stopped. Switching out just 20 percent of commercial and industrial fuel consumption from oil to wood would inject \$7 million annually into local economies, simultaneously preventing the export of \$14 million from our economy. As for avoided costs, wood fuels are significantly less expensive than all fossil fuels. For example, oil would need to cost less than \$0.51 per gallon to have the same dollar-per-MBtu value as wood chips at \$40 per ton.

For the above reasons, the department respectfully requests the committee to grant SB 549 a favorable report.

Respectfully submitted,

James W. McKitrick
Director, Legislative and Constituent Services