

The Honorable Dereck E. Davis
231 House Office Building
6 Bladen Street
Annapolis, MD 21401

RE: FAVORABLE - House Bill 682 - Renewable Energy Portfolio Standard - Thermal Biomass Systems

Dear Chair and Members of the Committee,

As a business owner in the engineering, environmental permitting and carbon accounting field as well as the current Chairman of the Biomass Thermal Energy Council (BTEC), I respectfully ask for your FAVORABLE consideration of House Bill 682 (Renewable Energy Portfolio Standard - Thermal Biomass Systems).

BTEC supports the clean and efficient use of wood residues for heating to replace fossil fuels and enhance local economies. Your support of HB 682 ensures Maryland is able to meet its climate goals, drive local economies by keeping dollars spent on energy in-state, and help ensure healthy forests.

As you review this bill, BTEC would like to emphasize several points for your consideration:

- 1) The critical importance of markets for low-value residues from forest management, urban tree care, and the forest products industry. If there is not a market for these residues, then they become wastes that end up in a landfill or waste pile where they are converted into harmful methane emissions. With the loss of Maryland's paper mills, there is an immediate and dire need for markets for this material today.
- 2) The use of these materials for thermal energy to directly offset the use of natural gas, propane, or fuel oil for heating is the most efficient use of this by-product of forest management and sustainable forest products manufacturing. This use directly offsets the use of a fossil fuel for energy, substituting this residue material that needs a beneficial use for a fossil fuel, which is from carbon that was sequestered underground.
- 3) Maryland's Greenhouse Gas Reduction Act Plan heavily relies on continued and increased forest management to promote carbon sequestration, and increased production of long-life forest products to replace carbon intensive building materials such as steel and concrete. Increases in forest management and generation of sustainable products from local Maryland forests will, by definition, also increase the volume of residues. Ensuring markets for beneficially using these residue materials is critical to the viability of using forests for addressing climate issues.
- 4) Other states, such as Massachusetts, New Hampshire, Maine, and Vermont have all used their RPS as a tool to address greenhouse gas emissions through thermal RECs. These states have had success in reducing greenhouse gas emissions associated with their thermal energy use, and their programs have been seen widely as successful.
- 5) The Maryland Department of the Environment recently overhauled and modernized its air quality permitting rules very specifically on the use of this wood residue for thermal energy. The new rules were the result of the state's multi-year regulatory and rulemaking process, and are a

model for the US in addressing systems below 10 mmBtu/hr, given a gap in federal rules. The new rules ensure that beneficially using the by-products of forest management to address carbon emissions from Maryland's current use of fossil fuels for thermal energy can be pursued vigorously in a clean and effective manner.

In summary, continued and increased forest management to ensure healthy forests and meet the Greenhouse Gas Reduction Act Plan is critical to Maryland's economy, environment, and the social wellbeing of its citizens. This forest management results in a significant amount of by-product, low value wood residues, that need a beneficial use to avoid becoming treated as a waste. One of the best uses of forest management residues is replacing the use of fossil fuels for thermal energy.

Modern wood energy systems are highly efficient at converting these residues into thermal energy that directly replaces the use of fossil fuels, and often present opportunities for providing efficient combined heat and power (CHP). These systems are one of the few cost-effective alternatives for decarbonizing the thermal energy use in Maryland's commercial and industrial sectors. Further, the use of this material for thermal energy:

- i) Keeps dollars spent on heating directly in the local economy as opposed to exporting that wealth to states that produce gas and oil;
- ii) Enables forest management to occur; and
- iii) Enables forest businesses to operate.

The highly efficient and clean systems also involve high upfront costs. These are offset directly by energy cost savings over the 25-year system life, but typically result in a 10-year period or longer for payback, making investment difficult for many types of owners.

Maryland has already provided a thermal REC for wood residue systems that use 50% or more manure. Modifying this to allow systems that use 100% forest management by-products would provide some additional energy cost savings to schools, hospitals, universities, farms, industrial facilities, and small businesses that want to reduce their carbon footprint and save on thermal energy costs. Reducing the payback through the thermal REC for these facility owners would allow Maryland to leverage these owner's investments in order to keep forests healthy and meet the Greenhouse Gas Reduction Act Plan goals.

Thank you for the opportunity to testify in support of HB 682, and respectfully request a **FAVORABLE** committee report.

Respectfully,



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Vice President
Wilson Engineering Services, PC

Chairman
Biomass Thermal Energy Council