

March 6, 2023

To: House Economic Matters Committee
Re: Testimony in support of HB0718

Position: SUPPORT

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I am a resident of District 9B and a Maryland electricity ratepayer. I strongly support HB0718 because it will stop the subsidy of highly polluting dirty energy derived from incineration of trash, biogas (from anaerobic digestion) or woody biomass. Every year, millions of RPS dollars from Maryland pay out-of-state companies to generate dirty power. If these funds were used instead to support clean renewable energy in-state, we could create jobs for hard-working Marylanders while advancing Maryland's climate goals.

It's crucial to distinguish "renewable energy" from "clean energy". Using these terms interchangeably has been an ongoing problem in the RPS and this is the crux of the issue addressed in SB590. Burning trash, landfill methane, biogas from poultry litter or wood biomass is technically "renewable" since there is a seemingly endless supply of trash, poultry litter and wood. However, these sources of energy are by no means "clean," and they should not be subsidized by Maryland ratepayers.

The initial [statute defining the RPS](#) asserts that that ensuring a certain proportion of renewable energy in the overall portfolio would benefit Marylanders through "LONG-TERM DECREASED EMISSIONS, (and) A HEALTHIER ENVIRONMENT." At that time, it may have seemed reasonable to think that energy from the renewable sources allowed in Tier 1 would be cleaner than electricity made by burning fossil fuels. Now we know that isn't true.¹

Why would we subsidize the following three forms of dirty energy and call the subsidy a climate solution when they each damage the environment and reduce the health of Marylanders?

1. Incineration of municipal solid waste releases even more hazardous air pollution than burning coal—17x more mercury, 5x more NO_x, and twice as much carbon monoxide (CO)¹. A large fraction of municipal waste is plastic, and we know that burning plastic releases some very hazardous volatiles and particulates into the air.

Advocates for the two incinerators in Maryland made some very misleading statements during their testimony against this bill in the hearing about SB590.

- Both Ms. McDonough (WinWaste) and Mr. Blaylock (Covanta) repeatedly characterized incineration as "clean" without providing any statistics on actual emissions of particulates, dioxins, VOCs or NO_x. In fact, Ms. McDonough touted her company's plan to spend \$40 million to control

¹ Public Employees for Environmental Responsibility. 2022. *Maryland's Clean Energy Program Isn't So Clean*. Accessed 2/26/23 from <https://peer.org/wp-content/uploads/2022/02/PEER-Report-Maryland-RPS-2.21.22-Final.pdf>.

air pollution from their “clean” incinerator. Even after those controls are installed, incineration will still be a far dirtier form of energy than wind or solar. Why not give the subsidy to them instead?

- Ms. McDonogh also emphasized the amount of electricity generated by the plant in terms of reduced use of fossil fuels. However, generating electricity through incineration is becoming less and less relevant as inexpensive wind and solar rapidly displace fossil fuel use.
- Both Ms. McDonough and Mr. Blaylock cited the EPA as stating that WTE is preferred relative to landfilling all trash, and both gave the impression that these are the only two alternatives for trash management. We know this isn’t true. As we move into the era of clean energy and a circular economy, it is far better to increase efforts to reduce the magnitude of trash generated, recycle as much and as effectively as possible, and compost all food scraps and yard waste.

In the [2019 Maryland Solid Waste Management and Diversion Report](#), MDE assessed GHG emissions from various treatments of MSW (composting is not included, despite its effectiveness in reducing methane from landfilled food scraps and yard waste). The data shown in Table 20 from this report (below) reveals that in comparison to landfilling trash, source reduction of trash and recycling both outpace incineration in GHG reduction. In fact, these data show that for glass and mixed plastic, incineration releases more GHGs than landfilling.

Table 20 – Per Ton Greenhouse Gas Emissions

Material	MTCO ₂ E* – Landfilled	MTCO ₂ E* – Source Reduced	MTCO ₂ E* – Recycled	MTCO ₂ E* – Combusted
Glass	0 **	(0.55) **	(0.30) **	0.01 **
Mixed Metals	0 **	(3.67) **	(4.41) **	(1.04) **
Mixed Organics	0 **	N/A **	(0.37) **	(0.36) **
Mixed Paper	0 **	(6.21) **	(3.69) **	(0.63) **
Mixed Plastic	0 **	(1.89) **	(1.05) **	1.24 **

* MTCO₂E = Metric tons of carbon dioxide equivalent. It is a measure of carbon dioxide emissions and is equal to a unit of mass equal to 1,000 kg (2,205 lbs.).

** Values vs. the landfilling of the material. Assigns MTCO₂E – Landfilled a value of 0. A negative value (i.e., a value in parentheses) indicates an emission reduction, while a positive value indicates an emission increase compared to the landfilling of a material.

The trash problem that is so often used to justify incineration can be solved much more sustainably by implementing waste reduction programs and disallowing all organic material (food and yard waste) from landfills, diverting it to greatly expanded modern composting facilities. These are key steps toward the circular economy we require for a sustainable future.

Yes, recycling is currently inefficient and inadequate and far too much food and yard waste goes to landfills. **But recycling is not only a problem we CAN solve, it’s a problem we MUST solve to build the circular economy we require for the future.** Subsidizing incineration makes it much harder for communities to do the hard work of dealing with trash sustainably by devising and implementing programs to reduce the overall volume of waste, recycle effectively and compost food and yard waste. We can’t keep throwing stuff away and then pretending to deal with it through incineration.

2. Anaerobic digestion of manure and poultry litter generates methane that can be burned for electricity, but there are significant drawbacks. This methane must first be refined, which itself requires electricity. Also, methane leakage during generation and storage is inevitable, releasing this powerful greenhouse gas into the atmosphere. Finally, using this methane for power justifies and enhances the natural gas infrastructure we need to move past. ***Why not eliminate this source of***

methane all together and turn food waste, manure and poultry litter into a valuable soil amendment in large-scale commercial composting facilities? That's a real solution that will speed the sustainable future we are trying to build. Continuing to subsidize landfill methane and biogas moves us backward by reducing the likelihood that real solutions will be developed and implemented at scale.

3. Burning woody biomass releases tremendous amounts of hazardous volatile and particulate matter, with major health impacts. Burning wood strikes people as a good solution because trees are natural and can be regrown. However, burning wood releases 187 hazardous volatiles as well as dangerous particulate pollution², and the health costs of smoke from burning wood are becoming all too clear. Finally, harvesting trees to burn for energy is not as renewable as it seems because it causes an immediate loss of sequestered carbon that takes decades for replanted trees to replace³.

Subsidizing these three forms of dirty energy with RPS funds is not a climate solution. They pollute the air and water, damage human health, speed climate change, and prolong our reliance on the infrastructure of natural gas. Moreover most of the RPS funds that support dirty energy don't support Maryland businesses or provide jobs for our workers!

Allowing dirty energy to be subsidized in the RPS is also deceitful. Maryland ratepayers pay for the RPS thinking that they are helping to curb climate change and speed the transition to clean energy while supporting Maryland businesses and workers. Instead, by including dirty sources of energy in Tier 1, Marylanders spend millions each year to enrich out-of-state companies that increase deadly air pollution and speed up climate change.

Maryland is better than this. As our legislators, you have the power to change the RPS so that it will function as it should. By using RPS funds to subsidize only *bona fide* clean energy sources like wind and solar, this legislation will help to speed the energy transition we so desperately need.

Moreover, once the cost of dirty energy from incinerators and landfill methane is no longer artificially lowered by RPS funds, it will be easier for communities to justify the cost of real climate solutions for waste. They can develop workable recycling programs and efficient ways to divert food and yard waste from landfills into composting facilities. The valuable soil amendment produced will enrich gardens and farmland and even increase the resilience of Maryland agriculture to climate change³.

The bottom line is that we simply don't need to generate energy anymore by burning trash, "biogas," methane refined from landfills or wood biomass. Technology for wind and solar is advancing so quickly and becoming so inexpensive that continuing to burn ANYTHING to make electricity is just regressive.

I look forward to the expansion of wind and solar in Maryland and the production of thousands of good-paying jobs in the clean energy industry for hard-working Marylanders.

Please help to facilitate the clean energy transition in Maryland by halting the misuse of RPS funds on dirty energy. Remove incineration, anaerobic digestion and wood biomass from Tier 1. Thank you!

² Partnership for Policy Integrity. *Air Pollution from Biomass Energy*. Accessed 2/26/23 from <https://www.pfpi.net/air-pollution-2/>.

³ Via, S. 2021. *Increasing Soil Health and Sequestering Carbon in Agricultural Soils: A Natural Climate Solution*. The Izaak Walton League of America and the National Wildlife Federation. Available at <https://www.iwla.org/soils-agriculture/soilhealthreport>.