

Testimony of Andrew Hinz for SB0616 – Renewable Energy Portfolio Standard – Eligible Sources – Waste-to-Energy and Refuse-Derived Fuel

Finance Committee Chair and Members,

Thank you for considering my testimony. Please vote **favorably wit amendments** for the SB0616 – Renewable Energy Portfolio Standard – Eligible Sources – Waste-to-Energy and Refuse-Derived Fuel.

I am frankly **appalled** you have not corrected this **waste, fraud, and abuse** already. The current RPS is a quarter billion boondoggle and tragic missed opportunity. Please amend the bill to remove all fuel-derived, polluting sources from the RPS and recommend enactment.

1. Local communities where trees are harvested to generate electricity are devastated:

- “I was covered in wood pellets while being interviewed in front of the plant. I became nauseous and my eyes and nose watered just standing at the fence alongside the plant where the residents live. Mrs. Carmella Wren-Causey has to use two different inhalers and take breathing treatments. She has lost her two beloved dogs.” – Kathy Eglund
- “The process is highly polluting, and a number of plants have been found to emit far more air pollution than their permits allow. The issue of siting polluting facilities in environmental justice communities is increasingly of concern to the Biden Administration.” - <https://environmentalpaper.org/2021/11/global-ngos-warn-cop26-that-burning-forest-wood-for-energy-sabotages-climate-action/>
 - “The wood pellet industry, including UK based biomass giant Drax, is cutting through U.S. forests almost at the speed of wildfires and committing human rights violations by deliberately siting their toxic wood pellets plants in low-income communities of color.” - <https://www.scoop.co.nz/stories/WO2111/S00127/global-ngos-warn-cop26-that-burning-forest-wood-for-energy-sabotages-climate-action.htm>
 - “the manufacturing of wood pellets pose significant dangers to human health from toxic levels of exposures to Particulate Matter (PM2.5), Volatile Organic Compounds (VOCs), Nitrogen Oxide (NOx), Carbon Monoxide (CO), Carbon Dioxide (CO2), methanol, formaldehyde, and noise pollution”- <https://naacp.org/resources/resolution-wood-pellets-opposition>
 - “The pine pellet plant industry, and specifically Enviva, has a documented history of environmental violations and fines. they are known polluters and they are known to be environmental regulation violators. Undisputable fact.” - <https://www.wlox.com/app/2022/01/04/stone-county-residents-speak-out-against-proposed-enviva-plant-location/>
 - “Air pollution from wood pellet plants comes from various sources. There’s the exhaust from a steady convoy of trucks. And, perhaps worst of all, the kiln that dries chipped trees to turn them into wood pellets, spewing loads of volatile organic compounds, or VOCs, that contribute to smog and ozone pollution; aggravate asthma and other lung conditions; cause cancer; and trigger itchy eyes and skin. In between, too, there are additional VOCs sent into the air when the hammermills shred trees and the pellets are fully processed. The wood pellet industry and regulators almost never account for that pollution in permitting.” - https://www.huffpost.com/entry/biomass-energy-power-plants_n_61bcb6cae4b0a3722477d16a
 - “Emissions calculations showed the Amite facility was emitting three times more pollution than allowed by its permit. A third facility in Louisiana — also in a low-income area — was

also in violation.” - <https://southerlymag.org/2021/02/25/mississippi-biomass-facility-fined-for-emitting-three-times-more-air-pollution-than-permitted/>

- “Like (in) North Carolina, Enviva’s current permit proposal with the Mississippi Department of Environmental Quality is equally devoid of substantive controls to protect public health and preserve quality of life.” – **Kathy T. Egland, Chair, Environmental and Climate Justice Committee, NAACP National Board of Directors**

2. Local communities where trees are burned to generate electricity are devastated:

- “The plant is a major emitter of carbon monoxide, sulfur dioxide, particulates, hazardous air pollutants, toxic air pollutants, and a range of other potentially dangerous emissions. When combined with other air sources in the area, Robeson County has some of the worst air impacts in the state. These emissions are direct causes of severe health issues.”
- “Burning these fuels (wood chips, poultry litter) is actually turning out to be dirtier than coal on a per-megawatt basis for most pollutants . . . The NCRP facility was (and still is) emitting pollutants at rates that exceeded the Clean Air Act’s major source threshold, but the facility never obtained the Title V major source permit necessary to protect air quality and public health . . . NCRP has Violated emission limits for fine particulate matter, sulfur dioxide, and nitrogen oxides; Routinely failed to operate required monitoring technology; Improperly removed necessary air pollution control; Failed to conduct required emissions testing in a timely manner; Committed numerous other monitoring and recordkeeping violations . . . The facility underestimates emissions of hazardous air pollutants, which are those that Congress has listed as toxic and/or carcinogenic even in very small quantities. This means, the facility is evading even more stringent pollution control technology.”- **Robeson County Cooperative for Sustainable Development, Lumber Riverkeeper, Waccamaw Riverkeeper, Winyah Rivers Alliance, Clean AIRE NC, Medical Advocates for Healthy Air, Dogwood Alliance, North Carolina Sierra Club, North Carolina Conservation Network, North Carolina Climate Solutions Coalition, Toxic Free North Carolina, Coastal Plain Conservation Group, Spruill Farm Conservation Project, the Rachel Carson Council, Partnership for Policy Integrity, Natural Resources Defense Council, Our Children’s Earth, Friends of the Earth, Environmental Integrity Project.**

3. Local communities hosting industrial extraction of methane from CAFO waste face a “subsidy rush” of unnecessary new industrial facilities:

“In an anaerobic system the majority of the chemical energy contained within the starting material is released as methane. The process is characterized by very strong odors and only a small amount of heat is generated meaning decomposition takes much longer and doesn’t reach sufficient temperatures to safely kill plant pathogens, weed and seeds. To overcome these limitations external (artificial) heat is normally added.”

4. Local communities hosting municipal incineration suffer from higher rates of asthma and cancer. I live 3 miles from one of the incinerators and must subsidize attacks on my health every time I pay my utility bill--here is a poem I wrote in 2017:

one 800 cellular violence

oxygen honeycombs
human estuary of gas exchange
cytoplasmic veils gently vibrating
air and carbon glide through
macrophagia angle toward contagion
so we on the edge like reeds in the salty mud

breath air and music for
every second song of the universe

(in 2013 a massachusetts institute of technology study revealed the wheelabrator bresco trash incinerator has killed roughly eight thousand baltimore city residents since it began operating in 1985—destiny watford organized the curtis bay community to prevent an incinerator from being built there in 2016)

If I were presenting this testimony in person I would here ask that we all pause to honor Destiny and Shashawnda Campbell and the other members of the South Baltimore Community Land Trust and all other young people all around our state fighting for their communities and to overcome many years of BAD decisions (e.g., subsidizing the pollution of the air they must breathe every second of every day).

Here are twenty-two more reasons to stop this pernicious subsidy to polluters:

5. we are in a climate crisis
6. we cannot afford to be spending our renewable energy money on facilities that emit greenhouse gasses
7. burning trash, chicken litter, and wood waste and manufacturing methane all pollute the environment, harm nearby communities' health, and contribute to climate change
8. Maryland ratepayers are being deceived: investment of public dollars was advertised to voters and ratepayers to be for wind, solar, and geothermal (by definition, actually renewable)
9. the subsidies are an egregious waste of public money working at cross-purpose to our legislated climate goals
10. Maryland ratepayers are going to be very unhappy to learn that they will have wasted half a billion dollars of their hard-earned money on waste management 'solutions' masquerading as renewable energy; they could be entitled to refunds
11. common sense is being ignored: we are wasting millions of dollars on a Virginia biomass facility that is too dirty to qualify for Virginia's own recently-enacted RPS; we are wasting money buying credits for burning "biomass gas" from DC's Blue Plains wastewater treatment plant, which makes fertilizer from sewage sludge with extremely high levels of toxic per- and polyfluoroalkyl Substances (PFAS) that is sold to the public for a profit
12. evidence shows the RPS as currently configured is NOT working: "PJM-wide CO2 emissions per MWh in 2017, the latest year available, were approximately 0.8% lower than they would have been absent the Maryland RPS, assuming all retired RECs supported resources that would not have operated otherwise."
13. the harm from the RPS as currently configured is REAL and WIDESPREAD: the pollution from combustion-based energy sources included in the RPS is so great that Maryland RPS energy sources, on average, pollute as much or more SO2 and NOx than the grid as a whole
14. air pollutants from waste incinerators increase the risk of pre-term births, cancers of the blood and lung, and emergency room visits. The process of incinerating trash creates an especially dangerous set of compounds called dioxins, declared by the World Health Organization as a known human carcinogen; dioxins are linked to diseases of the immune system, endocrine system, nervous system, and reproductive system
15. In 2015, the BRESKO incinerator in Baltimore emitted about twice as much greenhouses gasses per amount of energy produced, on average, as each of the coal plants located in Maryland

16. anaerobic digestion of factory farm waste, animal waste and other materials by methane-producing microorganisms that can only thrive in the absence of oxygen generates **SIGNIFICANTLY** more methane than composting the same waste
17. if we are to survive, we **MUST** cut methane emissions: leaks along the natural gas supply chain are significantly higher than original EPA estimates
18. biogas facilities are **EXTREMELY** costly, especially when compared with the alternative of composting which returns value from investment **IMMEDIATELY** and sustainably—biogas manufacturing plants are not profitable without subsidies
19. digesters **DO NOT** mitigate the significant air quality issues associated with factory farms
20. digester digestate **IS NOT** any less harmful to land spread than manure
21. biomass and wood have the fastest-growing share of early deaths in the major energy-consuming sectors
22. burning wood for electricity produces as much or more pollution than fossil fuels, including coal
23. biomass facilities emit high levels of particulate matter (PM), nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO₂), lead, mercury, and other hazardous air pollutants
24. newly planted trees have far less benefit to the climate and local air quality than a mature tree or a fully functioning forest ecosystem
25. biomass burning carbon isn't recaptured unless and until newly planted replacement trees grow to maturity over many decades
26. 97+% of Maryland's RPS subsidies for burning woody biomass went to facilities outside of Maryland

Biomass (burning trees for electricity), Biogas (harvesting methane from the mismanaged waste of abused animals), and Municipal Trash Incineration (burning then landfilling compostable biomass, single-use plastic produced from fracked methane, and improperly sorted reusable material) share four common characteristics:

1. They are very expensive, **more expensive by far than non-polluting alternatives**, non-fuel-based true renewable sources like sun, wind, moving water, and geothermal energy
2. They **harm the local communities** where they are harvested, they harm the local communities where they are burned, and they require significantly more transportation infrastructure than non-polluting, non-fuel-based true renewable sources like sun, wind, moving water, and geothermal energy
3. They **generate far more greenhouse gases** than non-fuel-based true renewable sources like sun, wind, moving water, and geothermal energy, and our atmosphere is out of room for more greenhouse gases
4. They are **NOT scalable, viable sources of energy** (we simply can't torture enough animals, the total US potential for cafo methane is <5% of the methane currently used to generate electricity) and clearcut enough trees (biomass accounts for less than 5% of US energy production and biomass to generate electricity is less than 10% of that 5%--and our soils are being depleted of nutrients at a rate that threatens global food production) worth the infrastructure that would be required to increase their production. Sun, wind, moving water, and geothermal energy are massively scalable, with each one separately having the potential to meet all of our energy needs, without pollution.

These three waste management solutions are, according to our best current science, not even recommended alternatives for waste management. To invest in them to manage our waste is proving to be bad government. To continue to subsidize them in any way would be wasteful government. **But to subsidize them using money ratepayers were promised would go toward developing clean, truly renewable energy is, to be honest, corrupt government.**

According to the EPA composting lowers greenhouse gasses by improving carbon sequestration in the soil and by preventing methane emissions through aerobic decomposition, as methane-producing microbes are not active in the presence of oxygen. Fifty percent of the average municipal waste stream can be composted.

This is an almost **one half billion-dollar boondoggle on the ratepayers** underway here. There are simply no science-based, economics-based, or public-health based reasons to continue these subsidies. None. I challenge you to name just one. The industry 'talking points' on this issue are just that—talk devoid of science--talk that misleads, cherry picks, obfuscates, and seeks to divide constituencies by raising false, unfounded economic and public benefit claims.

Please pause to tally the number of Marylanders associated with the organizations excited to support this bill and put our investments to good work, finally. And contrast the diversity of that support with the very few industry representatives hoping to keep receiving undeserved taxpayer handouts. Contrast the science supporting this bill with the fear, uncertainty, distrust, and irresponsible public relations messages from those very, very few benefitting from this misdirected set of subsidies.

We simply cannot afford this malfeasance in terms of time to mitigate the climate emergency, money, or public health costs. I will commit myself to organizing a ratepayer boycott of the dirty RPS portion of their utility bills if you do not end this horrible waste, fraud, and abuse this session.

Again, thank you.

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