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Comments to Senate Finance Committee

SUPPORT WITH AMENDMENTS

Senate Bill 734
Renewable Energy Portfolio Standard – Qualifying Biomass

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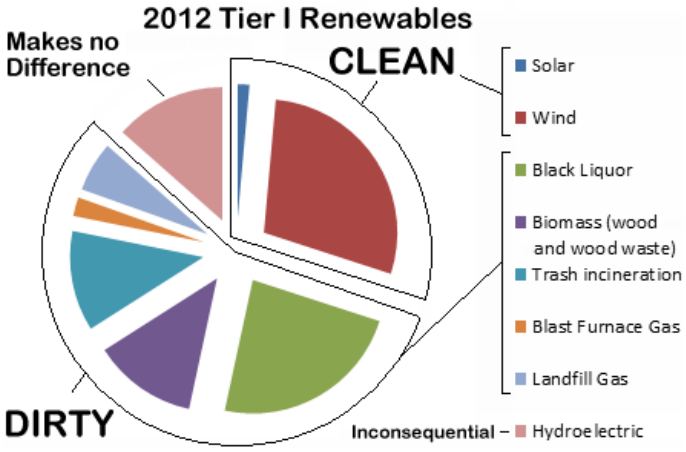
Good afternoon. My name is Mike Ewall, and I'm the founder and director of a national organization called Energy Justice Network. Energy Justice works at the local level with grassroots community groups throughout Maryland and the rest of the country to support efforts to stop polluting and unnecessary energy and waste industry facilities, most notably incinerators of all sorts.

Energy Justice Network supports SB 734, but feels that it ought to be strengthened in four ways that would close loopholes and eliminate even dirtier technologies present in Tier I of the Renewable Portfolio Standard (RPS).

We encourage the following amendments:

1) **Apply the bill's 65% efficiency standard to waste incineration (poultry litter-to-energy, waste-to-energy and refuse-derived fuel).** This will ensure a level playing field, so that these even-dirtier fuels must adhere to the same efficiency standard required for other biomass fuels.
2) **Move trash incineration (waste-to-energy and refuse-derived fuel) back into Tier II.** These are the dirtiest technologies in the RPS by far and should never have been moved to Tier I.
3) **Make the bill's language as explicit in removing black liquor and construction/demolition wood waste as in HB 931 / SB 530, to avoid loopholes.** These related bills specifically name the fuels to be removed, while this "black liquor bill" doesn't do so by name. By not naming construction/demolition wood waste (C&D) as an intended target to be removed by this bill, it leaves the loophole that still allows C&D waste incineration, so long as this toxic wood is burned in a more efficient boiler (which is always less efficient than coal). To protect community health, contaminated wood ought to be excluded explicitly.
4) **Remove co-firing from the RPS.** HB 931 / SB 530, which accomplishes some of the same objectives of this bill, but more carefully, also removes co-firing of biomass and fossil fuels from RPS eligibility. This is wise, as it protects against the use of biomass to keep old coal plants open. It also protects consumers from potential for fraud in accounting of RECs, and protects communities from facilities that profit from mixing eligible fuels with dirtier ones.



Dirty "Renewable Energy" in Maryland

In 2012, the latest data available, 56.5% of the Tier I "renewables" used to meet Maryland's Renewable Energy Portfolio Standard were from smokestack (combustion) technologies. 12% was trash incineration. Only 30% was wind and solar.

13.5% of Tier I (plus most of Tier II) was hydroelectric power, which we don't consider "clean" or meaningful since, unlike wind and solar that are newly developed and make an impact displacing other sources, hydroelectric dams (environmental impacts aside) are old, existing facilities that were paid off many years ago, so diverting ratepayer funds to buy renewable energy credits (RECs) from them makes no difference for the environment. It doesn't help keep them open (they're not as risk of closure), nor does it increase their capacity. It just takes extra ratepayer money that should otherwise go to developing new wind and solar and puts it in the pockets of the utilities that own dams.

Of the combustion technologies, black liquor comprised 23.4% of Tier I in 2012, trash incineration made up 12%, biomass 12.6%, blast furnace gas 2.3% and landfill gas 6.1%. All of these are polluting and dangerous and most are worse than coal for the climate, if not for many other pollutants.

Source: Public Service Commission of Maryland, "Renewable Energy Portfolio Standard Report With Data for Calendar Year 2012," January 2014. Data is from Appendix A: 2012 Retired RECs by Tier and Resource, pp. 17-18. http://webapp.psc.state.md.us/Intranet/Reports/2014%20Renewable%20Energy%20Portfolio%20Report.pdf (older reports available here, under "Renewable Energy Portfolio Standard Reports" http://webapp.psc.state.md.us/Intranet/psc/Reports_new.cfm)

These recommendations are supported by several other environmental groups, including the Assateague Coastal Trust, Clean Water Action, Envision Frederick County, Food & Water Watch, Institute for Local Self-Reliance and Wicomico Environmental Trust.

When people think of renewable energy, they think of wind and solar. **Maryland has one of the dirtier renewable energy mandates in the nation, with 56.5% of Tier I requirements coming from smokestack technologies, and only 30% from wind and solar.** Maryland is the only state to put trash incineration – which is far dirtier than coal by every measure – on par with wind power (in Tier I).

Public opinion strongly supports wind and solar power, but is strongly against biomass and waste incineration. A 2012 survey of over 1,000 adults found that more than 81% of Americans across the political spectrum believe that biomass energy should be used only after less polluting and water-intensive options are explored."[1] Trash incineration is even less popular, with communities throughout Maryland and the world working hard to stop incinerators of all sorts.

It's important to remove all, not just some, of the dirty energy technologies from the RPS. Black liquor and wood waste incineration are filthy fuels and we support the bill's efforts to exclude them, regardless of their efficiency. Trash incineration is far dirtier than these so-called "biomass" fuels, and ought to be excluded as well. On global warming grounds, landfill gas burning for energy is even worse than all of these, due to high rates of methane leakage, and also ought to be excluded. There is no point in nixing a technology from the RPS because it's filthy while leaving in far dirtier technologies like trash incineration.

Even "efficient" biomass is less efficient and worse for the climate than coal. No matter the efficiency of the boiler, biomass (burning of wood, wood waste, animal waste, etc.) is less efficient of a fuel than coal. It thus takes about twice as much fuel to make the same amount of energy, and CO_2 pollution associated with this fuel will necessarily remain about 50% higher than coal. Other pollutants, including particulate matter, dioxins and nitrogen oxides will also remain comparable to, or higher than, coal per unit of energy produced. No fuels that are comparable to coal should be promoted as renewable, especially when the goal of the RPS, in part, is to reduce global warming… and where biomass is unavoidably worse for global warming than coal. There are real communities in and around Maryland threatened by this so-called "efficient" biomass.

The whole point of a Renewable Portfolio Standard is to promote CLEAN energy in order to protect public health, conserve resources and combat climate change. Sadly, the resources taking up the majority of Tier I do the opposite. They pollute the air and water, harm public health, destroy resources, and harm the climate. The burning of trash, biomass and landfill gas is all worse for global warming than coal, with higher CO2 emissions per MWh, according to EPA data. Trash incineration (so called "waste-to-energy") is dirtier than coal on all measures. Biomass and landfill gas are comparable to coal for certain other pollutants.

Trash incineration is the most expensive and polluting way to manage waste or to produce energy. It is more expensive to build or operate than any other form of energy, according to the Energy Information Administration.[2] EPA and Maryland-specific data show that incinerators are more polluting per unit of energy than coal power plants on every pollutant for which there is national data available. They emit 28 times as much dioxin, about 6 times as much mercury and lead, 2.5 times as much carbon dioxide (CO_2), 3.2 times as much nitrogen oxides (NOx), twice as much carbon monoxide, and 20% more sulfur dioxides.[3,4]

Further information on incineration, and more documentation on the statements above are available upon request. Most can be found in the factsheet, powerpoint and other resources available at the following webpages:

Trash incineration:	www.energyjustice.net/incineration
Landfill gas:	www.energyjustice.net/lfg/
Poultry waste incineration:	www.energyjustice.net/fibrowatch/
Biomass incineration:	www.energyjustice.net/biomass/ & www.energyjustice.net/files/biomass/woodybiomass.pdf

[1] "Americans and Energy Policy: The Myth of the Partisan Divide," Civil Society Institute, April 25, 2012, p.24. www.civilsocietyinstitute.org/media/pdfs/042512%20CSI%20clean%20energy%20politics%20survey%20report%20FINAL2.pdf

[2] "Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants," U.S. Energy Information Administration, April 2013. See Table 1, p.6 in www.eia.gov/forecasts/capitalcost/pdf/updated_capcost.pdf

[3] For CO_2, SOx and NOx data, see U.S. EPA, eGRID 2012 data, www.epa.gov/egrid/. Other data calculated from EPA reports on dioxin and mercury emissions.

[4] "Waste-To-Energy: Dirtying Maryland's Air by Seeking a Quick Fix on Renewable Energy?" Environmental Integrity Project, Oct. 2011, Chart 2, p.5 and Chart 4, p.7. www.environmentalintegrity.org/documents/FINALWTEINCINERATORREPORT-101111.pdf