HB 332

Department of Legislative Services

Maryland General Assembly
2021 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 332 (Delegate Ivey)
Economic Matters

Renewable Energy Portfolio Standard - Eligible Sources

This bill removes waste-to-energy and refuse-derived fuel from eligibility for inclusion in the State's Renewable Energy Portfolio Standard (RPS) as a Tier 1 resource, effective October 1, 2021. A presently existing obligation or contract right may not be impaired in any way by the bill, which applies to all RPS compliance years beginning after December 31, 2021.

Fiscal Summary

State Effect: The Public Service Commission can implement the bill with existing budgeted resources. As discussed below, renewable energy credit (REC) prices are not anticipated to be materially affected and, therefore, neither are State expenditures on electricity. The bill is not anticipated to materially affect special fund revenue from Alternative Compliance Payments.

Local Effect: Beginning in FY 2022, revenues potentially decrease for local governments that own and operate facilities (or that will own/operate in the future) that use the energy sources removed from RPS, as discussed below. Expenditures are not materially affected.

Small Business Effect: Minimal.

Analysis

Current Law: Waste-to-energy and refuse-derived fuel are eligible Tier 1 resources under the State RPS; eligible facilities must be connected to the electric distribution grid serving Maryland. For additional information on Maryland's RPS, see the **Appendix – Renewable Energy Portfolio Standard**.

Local Fiscal Effect: Beginning in fiscal 2022, local governments that own and operate the affected facilities (or that will own/operate such facilities in the future) must sell the associated RECs to other states for compliance in those states, rather than Maryland, if they wish to continue receiving revenue. To the extent there are no other buyers for these RECs, or other state REC prices are lower than Maryland's, local government revenues decrease. However, the net effect on a particular local government cannot be reliably estimated at this time. For context, Montgomery County, the only current local government owner of a municipal solid waste system, advises that its REC revenues have averaged $2.7 million annually in recent years.

This analysis does not include any effects associated with private waste-to-energy companies, such as the Wheelabrator facility in Baltimore City. While not a direct effect of the bill, if that facility were to close, Baltimore City finances and operations as they relate to waste management would be significantly affected.

Additional Comments (Electricity Prices): Much of Maryland's Tier 1 RPS obligation has historically been met with municipal solid waste ("waste-to-energy" in statute). However, the proportion has decreased over time, from 32% in 2012 down to 11% in 2019. There are no "refuse-derived fuel" facilities. Therefore, expenditures on electricity for State and local governments, as electricity customers, and small businesses, are not anticipated to be materially affected; electricity suppliers will purchase other available Tier 1 RECs.

Additional Information

Prior Introductions: SB 560 of 2020 received a hearing from the Senate Finance Committee, but no further action was taken. Its cross file, HB 438, received a hearing from the House Economic Matters Committee, but no further action was taken. SB 548 of 2019 received a hearing from the Senate Finance Committee, but no further action was taken. Its cross file, HB 961, received a hearing from the House Economic Matters Committee, but no further action was taken.

Designated Cross File: None.

Information Source(s): Public Service Commission; Office of People's Counsel; Harford and Montgomery counties; Northeast Maryland Waste Disposal Authority; Department of Legislative Services

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rh/lgc

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Appendix – Renewable Energy Portfolio Standard

Maryland's Renewable Energy Portfolio Standard (RPS) was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. There are specified eligible ("Tier 1" or "Tier 2") sources as well as carve-outs for solar and offshore wind. Electric companies (utilities) and other electricity suppliers must submit renewable energy credits (RECs) equal to a percentage specified in statute each year or else pay an alternative compliance payment (ACP) equivalent to their shortfall. Historically, the requirements have been met almost entirely through RECs, with negligible reliance on ACPs. The Maryland Energy Administration must use ACPs to support new renewable energy sources.

Chapter 757 of 2019 significantly increased the percentage requirements, which now escalate over time to a minimum of 50% from Tier 1 sources, including 14.5% from solar, by 2030. In 2021, the requirements are 30.8% for Tier 1 sources, including at least 7.5% from solar. Tier 2, which has been extended several times, terminated after 2020.

Generally, a REC is a tradable commodity equal to one megawatt-hour of electricity generated or obtained from a renewable energy generation resource. In other words, a REC represents the "generation attributes" of renewable energy – the lack of carbon emissions, its renewable nature, *etc*. A REC has a three-year life during which it may be transferred, sold, or redeemed. REC generators and electricity suppliers are allowed to trade RECs using a Public Service Commission (PSC) approved system known as the Generation Attributes Tracking System, a trading platform designed and operated by PJM Environmental Information Services, Inc. that tracks the ownership and trading of RECs.

Tier 1 sources include wind (onshore and offshore); qualifying biomass; methane from anaerobic decomposition of organic materials in a landfill or wastewater treatment plant; geothermal; ocean, including energy from waves, tides, currents, and thermal differences; a fuel cell that produces electricity from specified sources; a small hydroelectric plant of less than 30 megawatts; poultry litter-to-energy; waste-to-energy; refuse-derived fuel; and thermal energy from a thermal biomass system. Eligible solar sources include photovoltaic cells and residential solar water-heating systems commissioned in fiscal 2012 or later. Tier 2, when it was in effect, eventually included only large hydroelectric power plants.

RPS Compliance

According to the most recent RPS compliance report on PSC's website, electricity suppliers retired 11.4 million RECs at a cost of $134.5 million in 2019, as average REC prices rose from their 2018 levels, as shown in **Exhibit 1**.

Exhibit 1
RPS Compliance Costs and REC Prices
2015-2019

	2015	2016	2017	2018	2019
Compliance Costs ($ Millions)					
Tier 1 Nonsolar	$85.1	$88.2	$50.0	$56.4	$79.3
Tier 1 Solar	39.1	45.6	21.3	27.4	55.2
Tier 2	2.6	1.4	0.7	1.0	.06
Total	**$126.7**	**$135.2**	**$72.0**	**$84.8**	**$134.5**
Average REC Price ($)					
Tier 1 Nonsolar	$13.87	$12.22	$7.14	$6.54	$7.77
Tier 1 Solar	$130.39	$110.63	$38.18	$31.91	$47.26
Tier 2	$1.71	$0.96	$0.47	$0.66	$1.05

REC: renewable energy credit
RPS: Renewable Energy Portfolio Standard

Note: Numbers may not sum to total due to rounding.

Source: Public Service Commission

In 2019, wind (43%), black liquor (23%), small hydroelectric (11%), municipal solid waste (11%), and wood and waste solids (7%) were the primary energy sources used for Tier 1 RPS compliance. Maryland facilities generated 4.7 million RECs in 2019: approximately 2.5 million Tier 1 RECs and 2.2 million Tier 2 RECs. Many RECs can be used for compliance in both Maryland and other surrounding states, although there are geographic and energy source restrictions.

Pursuant to Chapter 393 of 2017, the Power Plant Research Program in the Department of Natural Resources has released its final report on a comprehensive study of the RPS. The report contains historical data but also looks at future scenarios. The report can be found here or on the department's website.