

Department of Legislative Services
Maryland General Assembly
2023 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

House Bill 1214
Economic Matters

(Delegate Stein)

Education, Energy, and the Environment

**Residential Retail Electricity - Green Power - Renewable Energy Credits and
Marketing Claims**

This bill requires an electricity supplier, beginning January 1, 2024, to purchase renewable energy credits (RECs) for each year the electricity supplier offers “green power” for sale to residential customers. The electricity supplier must include a related disclosure about the source of the green power in its marketing materials. An annual reporting requirement for electricity suppliers is updated to include the amount and types of generation associated with RECs purchased in accordance with the bill during the reporting period.

Fiscal Summary

State Effect: The Public Service Commission (PSC) can handle the bill’s requirements with existing budgeted resources through existing reporting processes. The bill does not otherwise materially affect State finances or operations.

Local Effect: None.

Small Business Effect: Meaningful.

Analysis

Bill Summary: “Green power” means energy sources or RECs that are marketed as green, eco-friendly, environmentally friendly or responsible, carbon-free, renewable, 100% renewable, 100% wind, 100% hydro, 100% solar, 100% emission-free, or similar claims.

The required disclosure describes the physical reality of electricity delivery and unbundled RECs as experienced by retail electricity customers in the State’s deregulated electricity market.

Current Law: 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 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. Except for offshore wind, RECs must be created at a facility either in the PJM region or adjacent to the PJM region if the electricity is delivered into the PJM region.

For a general overview of the relevant current law and related background, please see the **Appendix – Renewable Energy Portfolio Standard**.

The Electric Customer Choice and Competition Act of 1999 facilitated the restructuring of the electric utility industry in Maryland. The resulting system of customer choice allows the customer to purchase electricity from a competitive supplier or to continue receiving electricity under standard offer service (SOS). Default SOS is provided by a customer’s electric company (*e.g.*, Baltimore Gas and Electric Company or Pepco). Competitive electric supply is provided by competitive electricity suppliers. In either case, the electric company delivers the electricity and recovers the costs for delivery through distribution rates.

Small Business Effect: Small electricity suppliers must comply with the bill’s REC purchasing, reporting, and disclosure requirements if they offer green power for sale to residential customers. RECs are generally “unbundled,” meaning the energy, capacity, and ancillary services are not included in the price of the REC. In the simplest terms, electricity suppliers generally buy and sell electricity, and then, separately, buy and sell RECs.

Additional Comments: The bill does not specify that an electricity supplier must retire RECs, instead only requiring that RECs be purchased. RECs also do not have to be from any specific geographic region, like they do for compliance with Maryland’s Renewable Energy Portfolio Standard.

Additional Information

Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: None.

Information Source(s): Public Service Commission; Office of People's Counsel; Department of Legislative Services

Fiscal Note History: First Reader - February 21, 2023
rh/lgc Third Reader - March 22, 2023
Revised - Amendment(s) - March 22, 2023
Revised - Clarification - March 22, 2023

Analysis by: Stephen M. Ross

Direct Inquiries to:
(410) 946-5510
(301) 970-5510

Appendix – Renewable Energy Portfolio Standard

General Overview

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, offshore wind, and, beginning in 2023, new geothermal systems. Electric companies (utilities) and other electricity suppliers must submit renewable energy credits (RECs) equal to a percentage of their retail electricity sales specified in statute each year or else pay an alternative compliance payment (ACP) equivalent to their shortfall. Historically, RPS requirements have been met almost entirely through RECs, with negligible reliance on ACPs; however, as discussed further below, that was not the case in 2021. The Maryland Energy Administration must use ACPs for purposes related to renewable energy, as specified.

In 2023, the requirements are 31.9% from Tier 1 sources, including at least 6.0% from solar and 0.05% from post-2022 geothermal systems, plus 2.5% from Tier 2 sources.

Recent Significant Changes to Overall Percentage Requirements

- 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.
- Chapter 673 of 2021 reduced the amount of solar energy required under the RPS each year from 2022 through 2029, while leaving the nonsolar requirement generally unchanged, before realigning with the previous requirements beginning in 2030. The Act also extended Tier 2 in perpetuity at 2.5%.
- Chapter 164 of 2021 created a carve-out for post-2022 geothermal systems in Tier 1 beginning in 2023.

Limited Applicability to Municipal Electric Utilities and Electric Cooperatives

As RPS percentage requirements have grown over time, legislation has been enacted to limit the effect on municipal electric utilities and electric cooperatives. Tier 1 percentage requirements for municipal electric utilities are limited to 20.4% in total beginning in 2021, including at least 1.95% from solar energy and up to 2.5% from offshore wind. Municipal electric utilities are also exempt from Tier 2 after 2021. Electric cooperatives are exempt

from future increases to the solar carve-out beyond 2.5%, and the RPS does not apply to Choptank Electric Cooperative.

Renewable Energy Credits

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.

Eligible Sources

Tier 1 sources include wind (onshore and offshore); solar (photovoltaic and certain water-heating systems); 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; thermal energy from a thermal biomass system; and raw or treated wastewater used as a heat source or sink for heating or cooling. Tier 2 includes only large hydroelectric power plants.

Chapter 673 of 2021 excluded black liquor, or any product derived from black liquor, from Tier 1 beginning in 2022.

Trends in Compliance Costs, Renewable Energy Credit Prices, and Resources Used

Compliance costs for electricity suppliers totaled \$409.8 million in 2021: \$332.7 million for 15.2 million RECs; and \$77.1 million in ACPs. Costs and RECs are shown in **Exhibit 1**. This continues a multi-year trend of increasing compliance costs and, generally, average REC prices.

In 2021, wind (50.8%), solar (13.2%), black liquor (12.5%), small hydroelectric (8.0%), and municipal solid waste (6.4%) were the primary energy sources used for Tier 1 RPS compliance. This continues a multi-year trend of increasing reliance on wind and solar energy. Maryland facilities generated 5.0 million RECs in 2021: approximately 2.9 million Tier 1 RECs; and 2.1 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.

Exhibit 1
RPS Compliance Costs and REC Prices
2017-2021

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Compliance Costs (\$ Millions)					
Tier 1 Nonsolar RECs	\$50.0	\$56.4	\$79.3	\$99.8	187.3
Tier 1 Solar RECs	21.3	27.4	55.2	122.9	144.4
Tier 2 RECs	0.7	1.0	0.06	0.4	1.0
ACPs	<u>\$0.1</u>	<u>\$0.1</u>	<u>\$7.7</u>	<u>\$0.1</u>	<u>\$77.1</u>
Total	\$72.1	\$84.9	\$142.3	\$223.2	409.8
 Average REC Price (\$)					
Tier 1 Nonsolar	\$7.14	\$6.54	\$7.77	\$8.24	\$14.36
Tier 1 Solar	38.18	31.91	47.26	66.10	72.59
Tier 2	0.48	0.66	1.05	1.06	6.45

ACP: alternative compliance payment
 REC: renewable energy credit
 RPS: Renewable Energy Portfolio Standard

Note: Numbers may not sum to total due to rounding. The vast majority of ACPs in 2021 (\$76.9 million out of \$77.1 million in total) were due to a shortfall of solar RECs.

Source: Public Service Commission

Related Studies Reports

PSC must submit an RPS compliance report to the General Assembly each year. The most recent report, which contains historical data through 2021, can be found [here](#).

The Power Plant Research Program (PPRP) in the Department of Natural Resources has frequently been required to conduct RPS studies. PPRP submitted a final report on a comprehensive RPS study in December 2019, which can be found [here](#). PPRP also submitted a related required study on nuclear energy at that time, which can be found [here](#). A supplemental study on the overall costs and benefits of increasing the RPS to a goal of 100% by 2040 is due by January 1, 2024.