

Department of Legislative Services
Maryland General Assembly
2025 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

House Bill 505

(The Speaker, *et al.*) (By Request - Administration)

Economic Matters

Rules

Renewable Energy Portfolio Standard - Renaming and Alterations

This Administration bill incorporates nuclear energy into the State Renewable Energy Portfolio Standard (RPS), renames it as the Clean Energy Portfolio Standard (CEPS), and makes various conforming changes to affected statutes to incorporate “clean” as opposed to “renewable” energy. Overall CEPS requirements are increased by 22.5 percentage points each year beginning in 2025. Existing Tier 1 and Tier 2 percentage requirements are converted into minimums instead of their fixed amounts. Each year, the Public Service Commission (PSC) must reduce the overall CEPS requirement by the proportional output of nuclear facilities connected to the electric distribution system in the State, as specified. The overall reduction may not reduce Tier 1 or Tier 2 percentage requirements. The bill must be construed to apply retroactively and must be applied to and interpreted to affect all CEPS compliance years that begin on or after January 1, 2025. A presently existing obligation or contract right may not be impaired in any way by the bill. **The bill takes effect July 1, 2025.**

Fiscal Summary

State Effect: PSC can handle the bill’s requirements with existing budgeted resources. Special fund revenues for the Strategic Energy Investment Fund (SEIF) from alternative compliance payments (ACPs) are not anticipated to be materially affected through FY 2030, as discussed in the Additional Comments section below.

Local Effect: The bill does not materially affect local government finances or operations.

Small Business Effect: The Administration has determined that this bill has minimal or no impact on small business (attached). The Department of Legislative Services concurs with this assessment. (The attached assessment does not reflect amendments to the bill.)

Analysis

Bill Summary: “Clean energy source” means a Tier 1 renewable source or Tier 2 renewable source, as those terms are currently defined, or a nuclear energy generating station, including a small modular reactor, connected with the electric distribution grid serving the State. The bill does not otherwise alter eligible energy sources or the applicability of the standard.

Annual percentage requirements under CEPS and the existing RPS are shown in **Exhibit 1**.

Exhibit 1 Annual Clean Energy Requirements Current Law vs. The Bill

<u>Year</u>	<u>Overall Total Current Law</u>	<u>Overall Total The Bill*</u>	<u>Difference</u>
2025	38.00%	60.5%	22.50%
2026	40.50%	63.0%	22.50%
2027	44.00%	66.5%	22.50%
2028	45.50%	68.0%	22.50%
2029	52.00%	74.5%	22.50%
2030+	52.50%	75.0%	22.50%

* Under the bill, the Public Service Commission must reduce the overall total each year by the proportional output of nuclear facilities connected to the electric distribution system in the State, as specified. In-state nuclear generation accounted for approximately 23% of electricity used in the State in 2022. Existing Tier 1 and Tier 2 percentage requirements are converted into minimums instead of their fixed amounts.

Source: U.S. Energy Information Administration; Department of Legislative Services

Current Law/Background:

Renewable Energy Portfolio Standard

PSC administers the State RPS, which requires that renewable sources generate specified percentages of Maryland’s electricity supply each year. For general information, including a list of eligible Tier 1 sources and trends in renewable energy credit (REC) prices and ACP revenues, see the **Appendix – Renewable Energy Portfolio Standard**.

Other Related Climate and Renewable Energy Initiatives

The Maryland Department of the Environment's (MDE) Climate Change Program leads the State's efforts to reduce greenhouse gas (GHG) emissions and participation and oversight in other initiatives, including the Regional Greenhouse Gas Initiative (RGGI) and the U.S. Climate Alliance. The program also ensures State compliance with climate-related State and federal laws, such as the Climate Solutions Now Act (CSNA) of 2022.

CSNA made broad changes to the State's approach to reducing statewide GHG emissions and addressing climate change. Among other things, the Act accelerated previous statewide GHG emissions reductions targets originally established under the Greenhouse Gas Emissions Reduction Act by requiring the State to develop plans, adopt regulations, and implement programs to (1) reduce GHG emissions by 60% from 2006 levels by 2031 and (2) achieve net-zero statewide GHG emissions by 2045. In December 2023, MDE published [Maryland's Climate Pollution Reduction Plan](#), which was developed to implement CSNA.

Maryland participates in the multi-state RGGI in order to reduce carbon dioxide (CO₂) emissions from the power sector. Each participating state limits CO₂ emissions from electric power plants, issues CO₂ allowances, and establishes participation in CO₂ allowance auctions. A single CO₂ allowance represents a limited authorization to emit one ton of CO₂.

Maryland is also part of the U.S. Climate Alliance, which is a group of states committed to reducing GHG emissions consistent with the goals of the Paris Agreement. These goals include reducing collective net GHG emissions by at least 26% to 28% by 2025, by 50% to 52% by 2030, and by 61% to 66% by 2035 (all below 2005 levels) and collectively achieving overall net-zero GHG emissions as soon as practicable, but no later than 2050.

Among other actions, Executive Order 01.01.2024.19 directed the Maryland Energy Administration (MEA) to establish a framework for a clean energy standard to achieve 100% clean electricity in Maryland by 2035 and determine if all or part of the proposed clean energy standard can be implemented through existing authority. MEA published the resulting [report](#) in January 2025.

Strategic Energy Investment Fund

SEIF, which is administered by MEA, is generally funded through the proceeds from the auction of carbon allowances under RGGI; SEIF also receives ACP revenues generated under Maryland's RPS and will receive a portion of corporate income tax revenues from qualified data centers that are operational on or after January 1, 2026.

RGGI proceeds are allocated according to a statutory formula for energy assistance, low-income energy efficiency and conservation programs, renewable and clean energy programs, and administrative expenses. Generally, ACP revenues may be used only to make loans and grants to support the creation of new renewable energy sources in the State that are owned by or directly benefit specified communities, households, or businesses. The loans and grants made from solar and post-2022 geothermal ACP revenues must be for specified purposes related to solar and geothermal energy, including for the Customer-Sited Solar Program from fiscal 2025 through 2027. Additionally, through June 30, 2027, MEA may use 10% of solar ACP revenues for administrative expenses.

Additional Comments: As described above, the bill increases overall annual CEPS percentage requirements (22.5%) by the approximate percentage of retail electricity sales in the State attributable to in-state nuclear generation (23% in 2022). As long as in-state nuclear generation remains at or above 22.5%, there is no change to the effective percentage requirements for Tier 1 or Tier 2 RECs compared to current law, since PSC must reduce overall annual CEPS percentage requirements by the amount of in-state nuclear generation.

However, if in-state nuclear generation decreases below 22.5% in any year, then remaining eligible sources must make up the difference, subject to applicable ACPs, which would increase overall CEPS compliance costs and increase electricity rates. ACP revenues accrue to SEIF and must be used for authorized purposes. Nevertheless, any material effect on State finances or electricity rates is likely beyond the five-year scope of this fiscal and policy note.

Additional Information

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

Designated Cross File: SB 434 (The President, *et al.*) (By Request - Administration) - Education, Energy, and the Environment.

Information Source(s): Public Service Commission; Office of People's Counsel; Maryland Energy Administration; Maryland Department of Transportation; Department of Natural Resources; Maryland Department of the Environment; Maryland Department of Health; Maryland Department of Labor; Department of Commerce; Department of Budget and Management; Board of Public Works; Governor's Office of Small, Minority, and Women Business Affairs; Office of the Attorney General; Comptroller's Office; Maryland State Treasurer's Office; Maryland Environmental Service; Northeast Maryland Waste Disposal Authority; Harford County; Maryland Association of Counties; Maryland

Municipal League; U.S. Energy Information Administration; Department of Legislative Services

Fiscal Note History: First Reader - February 19, 2025
js/mcr Third Reader - April 7, 2025
Revised - Amendment(s) - April 7, 2025
Revised - Clarification - April 7, 2025

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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 geothermal. 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 has not been the case more recently. Generally, the Maryland Energy Administration must use ACPs for purposes related to renewable energy, as specified.

In 2025, the requirements are 35.5% from Tier 1 sources, including at least 7.0% from solar and 0.25% 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 five-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 excluded black liquor, or any product derived from black liquor, from Tier 1 beginning in 2022, although some black liquor RECs remain eligible through the duration of certain contracts.

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

Compliance costs for electricity suppliers totaled \$564.2 million in 2023: \$243.8 million for 7.9 million RECs and \$320.4 million in ACPs. This continues a multi-year trend of increasing overall compliance costs, reliance on ACPs, and REC prices. Of note, 2023 was the first time that ACPs have been used in a significant way for general Tier 1 compliance. In fact, electricity suppliers retired the lowest number of general Tier 1 RECs since 2013 – and made \$262.4 million in ACPs for the remaining obligation. Compliance costs and REC prices for the most recent five-year period are shown in **Exhibit 1**.

In 2023, solar (27.5%), wind (19.9%), black liquor (16.1%), municipal solid waste (14.2%), and small hydroelectric (7.5%) were the primary energy sources used for Tier 1 RPS compliance. Maryland facilities generated 5.2 million RECs in 2023: 1.3 million Tier 1 RECs, 2.1 million Tier 1 RECs, and 1.8 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
2019-2023

Compliance Costs (\$ Millions)	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
RECs					
Tier 1	\$79.3	\$99.8	\$187.3	\$246.5	\$124.9
Tier 1 Solar	55.2	122.9	144.4	101.4	109.6
Tier 1 Geothermal	n/a	n/a	n/a	n/a	0.1
Tier 2	<u>0.1</u>	<u>0.4</u>	<u>1.0</u>	<u>4.4</u>	<u>9.3</u>
<i>RECs Subtotal</i>	<i>\$134.6</i>	<i>\$223.1</i>	<i>\$332.7</i>	<i>\$352.3</i>	<i>\$243.8</i>
ACPs					
Tier 1	\$5.0	\$0.0	\$0.2	\$0.7	\$262.4
Tier 1 Solar	2.7	0.0	76.9	85.9	56.0
Tier 1 Geothermal	n/a	n/a	n/a	n/a	1.6
Tier 2	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.4</u>
<i>ACPs Subtotal</i>	<i>\$7.7</i>	<i>\$0.1</i>	<i>\$77.1</i>	<i>\$86.6</i>	<i>\$320.4</i>
Total	\$142.3	\$223.2	\$409.8	\$438.9	\$564.2
Average REC Price (\$)					
Tier 1	\$7.77	\$8.24	\$14.36	\$17.80	\$24.61
Tier 1 Solar	\$47.26	\$66.10	\$72.59	\$57.80	\$56.67
Tier 1 Geothermal	n/a	n/a	n/a	n/a	\$94.47
Tier 2	\$1.05	\$1.06	\$6.45	\$7.42	\$10.50

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

Note: Numbers may not sum to total due to rounding. The post-2022 geothermal system carve-out became effective in 2023.

Source: Public Service Commission

Related Studies and Reports

PSC must submit an RPS compliance report to the General Assembly each year. The most recent report, which contains historical data through 2023, 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](#). PPRP's supplemental study on the overall costs and benefits of increasing the RPS to a goal of 100% by 2040 was due by January 1, 2024.

The Department of Legislative Services also issued an RPS report in 2024, which can be found [here](#). The report contains additional detail on the program, significant statutory changes, and visualizations of planned and actual RPS percentage requirements over time.

ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Empowering New Energy Resources and Green Initiatives Toward a Zero-Emission (ENERGIZE) Maryland Act

BILL NUMBER: HB 505

PREPARED BY: Saif Ratul

PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

X WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

 WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

PART B. ECONOMIC IMPACT ANALYSIS

This legislation will have little to no impact on small businesses in the near term. Utility rates rise slightly in CY25 and beyond due to the constant price of SRECs and Solar ACP within the RPS for new projects.