HOUSE BILL 11

C5, M5 2lr1006

(PRE–FILED)

By: **Delegate Stewart**
Requested: October 28, 2021
Introduced and read first time: January 12, 2022
Assigned to: Economic Matters

A BILL ENTITLED

AN ACT concerning

Renewable Energy Portfolio Standard – Tier 1 Renewable Source – Alterations (Reclaim Renewable Energy Act of 2022)

FOR the purpose of altering the definition of "Tier 1 renewable source" for purposes of excluding energy derived from qualifying biomass, methane from the anaerobic decomposition of organic materials, certain fuel cells, poultry litter–to–energy, waste–to–energy, refuse–derived fuel, and thermal energy from a thermal biomass system from being eligible for inclusion in the renewable energy portfolio standard; and generally relating to the renewable energy portfolio standard.

BY repealing and reenacting, without amendments,
Article – Public Utilities
Section 7–306(a)(1)
Annotated Code of Maryland
(2020 Replacement Volume and 2021 Supplement)

BY repealing and reenacting, with amendments,
Article – Public Utilities
Section 7–306(a)(2), 7–701, and 7–704
Annotated Code of Maryland
(2020 Replacement Volume and 2021 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article – Public Utilities

7–306.

(a) (1) In this section the following words have the meanings indicated.

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

(2) **(I)** "Biomass" means **[**"qualified biomass" as defined in § 7–701 of this title**] A NONHAZARDOUS, ORGANIC MATERIAL THAT IS AVAILABLE ON A RENEWABLE OR RECURRING BASIS, AND IS WASTE MATERIAL THAT IS SEGREGATED FROM INORGANIC WASTE MATERIAL AND IS DERIVED FROM SOURCES, INCLUDING:**

1. EXCEPT FOR OLD GROWTH TIMBER, ANY OF THE FOLLOWING FOREST–RELATED RESOURCES:

A. MILL RESIDUE, EXCEPT SAWDUST AND WOOD SHAVINGS;

B. PRECOMMERCIAL SOFT WOOD THINNING;

C. SLASH;

D. BRUSH; OR

E. YARD WASTE;

2. A PALLET, CRATE, OR DUNNAGE;

3. AGRICULTURAL AND SILVICULTURAL SOURCES, INCLUDING TREE CROPS, VINEYARD MATERIALS, GRAIN, LEGUMES, SUGAR, AND OTHER CROP BY–PRODUCTS OR RESIDUES; OR

4. GAS PRODUCED FROM THE ANAEROBIC DECOMPOSITION OF ANIMAL WASTE OR POULTRY WASTE.

(II) "BIOMASS" INCLUDES BIOMASS LISTED IN SUBPARAGRAPH (I) OF THIS PARAGRAPH THAT IS USED FOR CO–FIRING.

(III) "BIOMASS" DOES NOT INCLUDE:

1. UNSEGREGATED SOLID WASTE OR POSTCONSUMER WASTEPAPER;

2. BLACK LIQUOR, OR ANY PRODUCT DERIVED FROM BLACK LIQUOR; OR

3. AN INVASIVE EXOTIC PLANT SPECIES.

7–701.

(a) In this subtitle the following words have the meanings indicated.

(b) "Administration" means the Maryland Energy Administration.

(c) "Fund" means the Maryland Strategic Energy Investment Fund established under § 9–20B–05 of the State Government Article.

(d) "Geothermal heating and cooling system" means a system that:

(1) exchanges thermal energy from groundwater or a shallow ground source to generate thermal energy through a geothermal heat pump or a system of geothermal heat pumps interconnected with any geothermal extraction facility that is:

(i) a closed loop or a series of closed loop systems in which fluid is permanently confined within a pipe or tubing and does not come in contact with the outside environment; or

(ii) an open loop system in which ground or surface water is circulated in an environmentally safe manner directly into the facility and returned to the same aquifer or surface water source;

(2) meets or exceeds the current federal Energy Star product specification standards;

(3) is manufactured, installed, and operated in accordance with applicable government and industry standards; and

(4) does not feed electricity back to the grid.

(e) "Industrial process load" means the consumption of electricity by a manufacturing process at an establishment classified in the manufacturing sector under the North American Industry Classification System, Codes 31 through 33.

[(e–1)**] (F)** "Legacy geothermal system" means a geothermal heating and cooling system that was placed in service on or before December 31, 2022.

[(f)**] (G)** "Offshore wind energy" means energy generated by a qualified offshore wind project.

[(g)**] (H)** "Offshore wind renewable energy credit" or "OREC" means a renewable energy credit equal to the generation attributes of 1 megawatt–hour of electricity that is derived from offshore wind energy.

[(h)**] (I)** "Old growth timber" means timber from a forest:

(1) at least 5 acres in size with a preponderance of old trees, of which the oldest exceed at least half the projected maximum attainable age for the species; and

(2) that exhibits several of the following characteristics:

(i) shade–tolerant species are present in all age and size classes;

(ii) randomly distributed canopy gaps are present;

(iii) a high degree of structural diversity characterized by multiple growth layers reflecting a broad spectrum of ages is present;

(iv) an accumulation of dead wood of varying sizes and stages of decomposition accompanied by decadence in live dominant trees is present; and

(v) pit and mound topography can be observed.

[(i)**] (J)** "PJM region" means the control area administered by the PJM Interconnection, as the area may change from time to time.

[(i–1)**] (K)** "Post–2022 geothermal system" means a geothermal heating and cooling system that is placed in service on or after January 1, 2023.

[(j) "Poultry litter" means the fecal and urinary excretions of poultry, including wood shavings, sawdust, straw, rice hulls, and other bedding material for the disposition of manure.**]**

[(k)**] (L)** "Qualified offshore wind project" means a wind turbine electricity generation facility, including the associated transmission–related interconnection facilities and equipment, that:

(1) is located on the outer continental shelf of the Atlantic Ocean in an area that the United States Department of the Interior designates for leasing after coordination and consultation with the State in accordance with § 388(a) of the Energy Policy Act of 2005; and

(2) interconnects to the PJM Interconnection grid at a point located on the Delmarva Peninsula.

[(l) (1) "Qualifying biomass" means a nonhazardous, organic material that is available on a renewable or recurring basis, and is:

(i) waste material that is segregated from inorganic waste material and is derived from sources including:

1. except for old growth timber, any of the following forest–related resources:

A. mill residue, except sawdust and wood shavings;

B. precommercial soft wood thinning;

C. slash;

D. brush; or

E. yard waste;

2. a pallet, crate, or dunnage;

3. agricultural and silvicultural sources, including tree crops, vineyard materials, grain, legumes, sugar, and other crop by–products or residues; or

4. gas produced from the anaerobic decomposition of animal waste or poultry waste; or

(ii) a plant that is cultivated exclusively for purposes of being used at a Tier 1 renewable source or a Tier 2 renewable source to produce electricity.

(2) "Qualifying biomass" includes biomass listed in paragraph (1) of this subsection that is used for co–firing, subject to § 7–704(d) of this subtitle.

(3) "Qualifying biomass" does not include:

(i) unsegregated solid waste or postconsumer wastepaper;

(ii) black liquor, or any product derived from black liquor; or

(iii) an invasive exotic plant species.**]**

(m) "Renewable energy credit" or "credit" means a credit equal to the generation attributes of 1 megawatt–hour of electricity that is derived from a Tier 1 renewable source or a Tier 2 renewable source that is located:

(1) in the PJM region;

(2) outside the area described in item (1) of this subsection but in a control area that is adjacent to the PJM region, if the electricity is delivered into the PJM region; or

(3) on the outer continental shelf of the Atlantic Ocean in an area that:

(i) the United States Department of the Interior designates for leasing after coordination and consultation with the State in accordance with § 388(a) of the Energy Policy Act of 2005; and

(ii) is between 10 and 80 miles off the coast of the State.

(n) "Renewable energy portfolio standard" or "standard" means the percentage of electricity sales at retail in the State that is to be derived from Tier 1 renewable sources and Tier 2 renewable sources in accordance with § 7–703(b) of this subtitle.

(o) "Renewable on–site generator" means a person who generates electricity on site from a Tier 1 renewable source or a Tier 2 renewable source for the person's own use.

(p) "Round 1 offshore wind project" means a qualified offshore wind project that:

(1) is between 10 and 30 miles off the coast of the State; and

(2) the Commission approved under § 7–704.1 of this subtitle before July 1, 2017.

[(p–1)**] (Q)** "Round 2 offshore wind project" means a qualified offshore wind project that:

(1) is not less than 10 miles off the coast of the State; and

(2) the Commission approves under § 7–704.1 of this subtitle on or after July 1, 2017.

[(q)**] (R)** (1) "Solar water heating system" means a system that:

(i) consists of glazed liquid–type flat–plate or tubular solar collectors or concentrating solar thermal collectors as defined and certified to the OG–100 standard of the Solar Ratings and Certification Corporation;

(ii) generates energy using solar radiation for the purpose of heating water; and

(iii) does not feed electricity back to the electric grid.

(2) "Solar water heating system" does not include a system that generates energy using solar radiation for the sole purpose of heating a hot tub or swimming pool.

[(r) "Thermal biomass system" means a system that:

(1) uses:

(i) primarily animal manure, including poultry litter, and associated bedding to generate thermal energy; and

(ii) food waste or qualifying biomass for the remainder of the feedstock;

(2) is used in the State; and

(3) complies with all applicable State and federal statutes and regulations, as determined by the appropriate regulatory authority.**]**

(s) "Tier 1 renewable source" means one or more of the following types of energy sources:

(1) solar energy, including energy from photovoltaic technologies and solar water heating systems;

(2) wind;

(3) **[**qualifying biomass;

(4) methane from the anaerobic decomposition of organic materials in a landfill or wastewater treatment plant;

(5)**]** geothermal, including energy generated through geothermal exchange from or thermal energy avoided by, groundwater or a shallow ground source;

[(6)**] (4)** ocean, including energy from waves, tides, currents, and thermal differences;

[(7) a fuel cell that produces electricity from a Tier 1 renewable source under item (3) or (4) of this subsection;

(8)**] (5)** a small hydroelectric power plant of less than 30 megawatts in capacity that is licensed or exempt from licensing by the Federal Energy Regulatory Commission;

[(9) poultry litter–to–energy;

(10) waste–to–energy;

(11) refuse–derived fuel;

(12) thermal energy from a thermal biomass system;**]** and

[(13)**] (6)** raw or treated wastewater used as a heat source or sink for a heating or cooling system.

(t) "Tier 2 renewable source" means hydroelectric power other than pump storage generation.

7–704.

(a) (1) Energy from a Tier 1 renewable source:

(i) is eligible for inclusion in meeting the renewable energy portfolio standard regardless of when the generating system or facility was placed in service; and

(ii) may be applied to the percentage requirements of the standard for either Tier 1 renewable sources or Tier 2 renewable sources.

(2) (i) Energy from a Tier 1 renewable source under **[**§ 7–701(s)(1), (5), (9), (10), or (11)**] § 7–701(S)(1) OR (3)** of this subtitle is eligible for inclusion in meeting the renewable energy portfolio standard only if the source is connected with the electric distribution grid serving Maryland.

(ii) Energy from a Tier 1 renewable source under **[**§ 7–701(s)(13)**] § 7–701(S)(6)** of this subtitle is eligible for inclusion in meeting the renewable energy portfolio standard only if the source:

1. is connected with the electric distribution grid serving Maryland; or

2. processes wastewater from Maryland residents.

(iii) If the owner of a solar generating system in this State chooses to sell solar renewable energy credits from that system, the owner must first offer the credits for sale to an electricity supplier or electric company that shall apply them toward compliance with the renewable energy portfolio standard under § 7–703 of this subtitle.

(3) Energy from a Tier 1 renewable source under **[**§ 7–701(s)(8)**] § 7–701(S)(5)** of this subtitle is eligible for inclusion in meeting the renewable energy portfolio standard if it is generated at a dam that existed as of January 1, 2004, even if a system or facility that is capable of generating electricity did not exist on that date.

(4) Energy from a Tier 2 renewable source under § 7–701(t) of this subtitle is eligible for inclusion in meeting the renewable energy portfolio standard if it is generated at a system or facility that existed and was operational as of January 1, 2004, even if the facility or system was not capable of generating electricity on that date.

(b) On or after January 1, 2004, an electricity supplier may:

(1) receive renewable energy credits; and

(2) accumulate renewable energy credits under this subtitle.

(c) (1) This subsection applies only to a generating facility that is placed in service on or after January 1, 2004.

(2) (i) On or before December 31, 2005, an electricity supplier shall receive 120% credit toward meeting the renewable energy portfolio standard for energy derived from wind.

(ii) After December 31, 2005, and on or before December 31, 2008, an electricity supplier shall receive 110% credit toward meeting the renewable energy portfolio standard for energy derived from wind.

[(3) On or before December 31, 2008, an electricity supplier shall receive 110% credit toward meeting the renewable energy portfolio standard for energy derived from methane under § 7–701(r)(4) of this subtitle.**]**

[(d) An electricity supplier shall receive credit toward meeting the renewable energy portfolio standard for electricity derived from the biomass fraction of biomass co–fired with other fuels.**]**

[(e)**] (D)** (1) In this subsection, "customer" means:

(i) an industrial electric customer that is not on standard offer service; or

(ii) a renewable on–site generator.

(2) This subsection does not apply to offshore wind renewable energy credits.

(3) (i) A customer may independently acquire renewable energy credits to satisfy the standards applicable to the customer's load, including credits created by a renewable on–site generator.

(ii) Credits that a customer transfers to its electricity supplier to meet the standard and that the electricity supplier relies on in submitting its compliance report may not be resold or retransferred by the customer or by the electricity supplier.

(4) A renewable on–site generator may retain or transfer at its sole option any credits created by the renewable on–site generator, including credits for the portion of its on–site generation from a Tier 1 renewable source or a Tier 2 renewable source that displaces the purchase of electricity by the renewable on–site generator from the grid.

(5) A customer that satisfies the standard applicable to the customer's load under this subsection may not be required to contribute to a compliance fee recovered under § 7–706 of this subtitle.

(6) The Commission shall adopt regulations governing the application and transfer of credits under this subsection consistent with federal law.

[(f) (1)**] (E)** In order to create a renewable energy credit, a Tier 1 renewable source or Tier 2 renewable source must substantially comply with all applicable environmental and administrative requirements, including air quality, water quality, solid waste, and right–to–know provisions, permit conditions, and administrative orders.

[(2) (i) This paragraph applies to Tier 1 renewable sources that incinerate solid waste.

(ii) At least 80% of the solid waste incinerated at a Tier 1 renewable source facility shall be collected from:

1. for areas in Maryland, jurisdictions that achieve the recycling rates required under § 9–505 of the Environment Article; and

2. for other states, jurisdictions for which the electricity supplier demonstrates recycling substantially comparable to that required under § 9–505 of the Environment Article, in accordance with regulations of the Commission.

(iii) An electricity supplier may report credits received under this paragraph based on compliance by the facility with the percentage requirement of subparagraph (ii) of this paragraph during the year immediately preceding the year in which the electricity supplier receives the credit to apply to the standard.**]**

[(g)**] (F)** (1) Energy from a solar water heating system is eligible for inclusion in meeting the renewable energy portfolio standard.

(2) A person that owns and operates a solar water heating system shall receive a renewable energy credit equal to the amount of energy, converted from BTUs to kilowatt–hours, that is generated by the system that is used by the person for water heating.

(3) The total amount of energy generated and consumed for a nonresidential or commercial solar water heating system shall be measured by an on–site meter that meets the required performance standards of the International Organization of Legal Metrology.

(4) The total amount of energy generated and consumed by a residential solar water heating system shall be:

(i) measured by a meter that meets the required standards of the International Organization of Legal Metrology; or

(ii) 1. Measured by the Solar Ratings and Certification Corporation's OG–300 thermal performance rating for the system or an equivalent certification that the Commission approves in consultation with the Administration; and

2. certified to the OG–300 standard of the Solar Ratings and Certification Corporation or an equivalent certification body that the Commission approves in consultation with the Administration.

(5) A residential solar water heating system shall be installed in accordance with applicable State and local plumbing codes.

(6) A residential solar water heating system may not produce more than five solar renewable energy credits in any 1 year.

[(h)**] (G)** (1) Except as provided in paragraph (6) of this subsection, energy from a geothermal heating and cooling system including energy from a legacy geothermal system and energy from a post–2022 geothermal system, is eligible for inclusion in meeting the renewable energy portfolio standard.

(2) A person shall receive a renewable energy credit equal to the amount of energy, converted from BTUs to kilowatt–hours, that is generated by a geothermal heating and cooling system for space heating and cooling or water heating if the person:

(i) owns and operates the system;

(ii) leases and operates the system; or

(iii) contracts with a third party who owns and operates the portion of the system that consists of:

1. a closed loop or a series of closed loop systems in which fluid is permanently confined within a pipe or tubing and does not come in contact with the outside environment; or

2. an open loop system in which ground or surface water is circulated in an environmentally safe manner directly into the facility and returned to the same aquifer or surface water source.

(3) To determine the energy savings of a geothermal heating and cooling system for a residence, the Commission shall:

(i) identify available energy consumption calculators developed by the geothermal heating and cooling industry;

(ii) collect the following data provided in the renewable energy credit application that:

1. describes the name of the applicant and the address at which the geothermal heating and cooling system is installed; and

2. provides the annual BTU energy savings attributable to home heating, cooling, and water heating; and

(iii) in determining the annual amount of renewable energy credits awarded for the geothermal heating and cooling system, convert the annual BTUs into annual megawatt–hours.

(4) To determine the energy savings of a nonresidential geothermal heating and cooling system, the Commission shall:

(i) use the geothermal heating and cooling engineering technical system designs provided with the renewable energy credit application; and

(ii) in determining the annual amount of renewable energy credits awarded for the geothermal heating and cooling system, convert the annual BTUs into annual megawatt–hours.

(5) A geothermal heating and cooling system shall be installed in accordance with applicable State well construction and local building code standards.

(6) (i) A post–2022 geothermal system with a 360,000 BTU capacity is eligible for inclusion in meeting the renewable energy portfolio standard only if the company installing the system provides for its employees:

1. family–sustaining wages;

2. employer–provided health care with affordable deductibles and co–pays;

3. career advancement training, as provided in subparagraph (ii) of this paragraph;

4. fair scheduling;

5. employer–paid workers' compensation and unemployment insurance;

6. a retirement plan;

7. paid time off; and

8. the right to bargain collectively for wages and benefits.

(ii) As part of the career advancement training the installation company provides, the company shall ensure that a minimum of 10% of the employees working on the installation are enrolled in an apprenticeship program approved by and registered with the State or the federal government.

(iii) Compliance with this paragraph shall be regulated and enforced by the Maryland Department of Labor.

[(i) (1) Energy from a thermal biomass system is eligible for inclusion in meeting the renewable energy portfolio standard.

(2) (i) A person that owns and operates a thermal biomass system that uses anaerobic digestion is eligible to receive a renewable energy credit.

(ii) A person that owns and operates a thermal biomass system that uses a thermochemical process is eligible to receive a renewable energy credit if the person demonstrates to the Maryland Department of the Environment that the operation of the thermal biomass system:

1. is not significantly contributing to local or regional air quality impairments; and

2. will substantially decrease emissions of oxides of nitrogen beyond that achieved by a direct burn combustion unit through the use of precombustion techniques, combustion techniques, or postcombustion techniques.

(3) A person that is eligible to receive a renewable energy credit under paragraph (2) of this subsection shall receive a renewable energy credit equal to the amount of energy, converted from BTUs to kilowatt–hours, that is generated by the thermal biomass system and used on site.

(4) The total amount of energy generated and consumed for a residential, nonresidential, or commercial thermal biomass system shall be measured by an on–site meter that meets the required performance standards established by the Commission.

(5) The Commission shall adopt regulations for the metering, verification, and reporting of the output of thermal biomass systems.

(j)**] (H)** (1) Energy from a wastewater heating or cooling system is eligible for inclusion in meeting the renewable energy portfolio standard.

(2) A person shall receive a renewable energy credit equal to the amount of energy, converted from BTUs to kilowatt–hours, that is generated by a wastewater heating or cooling system for space heating or cooling, industrial heating or cooling, or another useful thermal purpose, if the person:

(i) owns and operates the system;

(ii) leases and operates the system; or

(iii) contracts with a third party who owns and operates the system.

(3) To determine the energy savings of a wastewater heating or cooling system, the Commission shall:

(i) use the wastewater heating or cooling engineering technical system designs provided with the renewable energy credit application; and

(ii) in determining the annual amount of renewable energy credits awarded for the wastewater heating or cooling system, convert the annual BTUs into annual megawatt–hours.

(4) The Commission shall adopt regulations for the metering, verification, and reporting of the output of wastewater heating or cooling systems.

SECTION 2. AND BE IT FURTHER ENACTED, That a presently existing obligation or contract right may not be impaired in any way by this Act.

SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall apply to all renewable energy portfolio standard compliance years starting on or after January 1, 2022.

SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2022.