

HOUSE BILL 1362

M5, M3, C5

1lr0053

By: **Chair, Economic Matters Committee (By Request – Departmental – Maryland Energy Administration)**

Introduced and read first time: February 25, 2021

Assigned to: Rules and Executive Nominations

A BILL ENTITLED

1 AN ACT concerning

2 **Clean and Renewable Energy Standard (CARES)**

3 FOR the purpose of altering the State's renewable energy portfolio standard to be the clean
4 and renewable energy standard; altering certain legislative findings regarding the
5 standard; requiring certain percentages of certain energy in the State to be derived
6 from certain clean energy resources and certain renewable energy sources in certain
7 years; altering certain required percentages of certain energy to satisfy the standard
8 in certain years; establishing certain qualifications for certain clean energy resources
9 to satisfy certain percentage requirements in the standard in addition to certain
10 renewable energy sources; requiring the Public Service Commission to reduce certain
11 requirements in certain years by a percentage equal to a certain generation output
12 of certain existing nuclear sources; providing for the eligibility of certain clean energy
13 resources for inclusion in meeting the standard after certain dates; altering and
14 removing certain sources that qualify as certain types of Tier 1 renewable sources;
15 repealing certain obsolete references to Tier 2 renewable sources; requiring the
16 Commission to adopt certain regulations governing the application and transfer of
17 certain credits; repealing certain obsolete references to certain sources that
18 incinerated solid waste; requiring certain credits for certain hydroelectric sources to
19 be assigned to the Commission; authorizing the sale of certain credits in a certain
20 manner; requiring the deposit of certain proceeds in the Maryland Hydroelectric
21 Environmental Remediation Fund; requiring the Commission to report on certain
22 matters concerning the standard, renewable energy credits, and clean energy credits;
23 requiring the Commission to include clean energy resource credits in a certain
24 market-based trading system; requiring the Commission to include clean energy
25 resources in a certain annual study; altering the scope and contents of a certain study
26 of the standard by the Power Plant Research Program; requiring the Program to use
27 the findings of the study for certain purposes; providing that certain funds from the
28 Maryland Strategic Energy Investment Fund designated for a certain purpose be
29 reallocated for the recruitment of certain individuals into certain programs;
30 requiring the Department of the Environment to establish a Maryland Hydroelectric

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



Environmental Impact Remediation Program for certain purposes; requiring the Department to use the Program to provide certain measures; requiring the Department to adopt certain regulations for certain purposes; authorizing the Department to develop and implement a certain pilot program; establishing the Maryland Hydroelectric Environmental Impact Remediation Fund; providing that the Maryland Hydroelectric Environmental Impact Remediation Fund is a special, nonlapsing fund; specifying the purpose of the Maryland Hydroelectric Environmental Impact Remediation Fund; requiring the Maryland Energy Administration to administer the Maryland Hydroelectric Environmental Impact Remediation Fund; requiring the State Treasurer to hold the Maryland Hydroelectric Environmental Impact Remediation Fund, and the Comptroller to account for the Maryland Hydroelectric Environmental Impact Remediation Fund; specifying the contents of the Maryland Hydroelectric Environmental Impact Remediation Fund; specifying the purpose for which the Maryland Hydroelectric Environmental Impact Remediation Fund may be used; providing for the investment of money in and expenditures from the Maryland Hydroelectric Environmental Impact Remediation Fund; requiring interest earnings of the Maryland Hydroelectric Environmental Impact Remediation Fund to be credited to the General Fund of the State; requiring the Department to monitor the impact of certain activities of the Program and to take certain measures under certain circumstances; defining certain terms and repealing and altering certain definitions; altering certain reporting requirements; making conforming and stylistic changes; providing for a delayed effective date; providing for the application of this Act; and generally relating to the clean and renewable energy standard.

BY repealing

Article – Public Utilities
Section 7–701(n) and (t)
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)

BY renumbering

Article – Public Utilities
Section 7–701(c) through (m), (o), (p), and (p–1) through (s) and 7–704(g) through (i),
respectively
to be Section 7–701(g) through (w) and 7–704(h) through (j), respectively
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)

BY repealing and reenacting, without amendments,

Article – Public Utilities
Section 7–701(a) and (b)
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)

BY adding to

Article – Public Utilities

Section 7–701(c) through (f) and 7–704(g)
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)

BY repealing and reenacting, with amendments,
Article – Public Utilities
Section 7–701(p), (q), (v), and (w)
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)
(As enacted by Section 2 of this Act)

BY repealing and reenacting, with amendments,
Article – Public Utilities
Section 7–702, 7–703, 7–704(a), (b), (e), and (f), 7–704.1(d)(1)(xiii), 7–704.2(a) and (c),
7–705(a), (b)(2), (c), and (e), 7–706(a) and (b), 7–708, 7–709, 7–710, 7–712, and
7–714
Annotated Code of Maryland
(2020 Replacement Volume and 2020 Supplement)

BY repealing and reenacting, with amendments,
Article – State Government
Section 9–20B–05(f)(10)
Annotated Code of Maryland
(2014 Replacement Volume and 2020 Supplement)

BY adding to
Article – State Government
Section 9–20E–01 through 9–20E–06 to be under the new subtitle “Subtitle 20E.
Maryland Hydroelectric Environmental Impact Remediation Program”
Annotated Code of Maryland
(2014 Replacement Volume and 2020 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
That Section(s) 7–701(n) and (t) of Article – Public Utilities of the Annotated Code of
Maryland be repealed.

SECTION 2. AND BE IT FURTHER ENACTED, That Section(s) 7–701(c) through
(m), (o), (p), and (p–1) through (s) and 7–704(g) through (i), respectively, of Article – Public
Utilities of the Annotated Code of Maryland be renumbered to be Section(s) 7–701(g)
through (w) and 7–704(h) through (j), respectively.

SECTION 3. AND BE IT FURTHER ENACTED, That the Laws of Maryland read
as follows:

Article – Public Utilities

7–701.

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

(b) “Administration” means the Maryland Energy Administration.

(C) “CLEAN AND RENEWABLE ENERGY 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 CLEAN ENERGY RESOURCES IN ACCORDANCE WITH § 7-703(B) OF THIS SUBTITLE.

(D) “CLEAN ENERGY RESOURCE” MEANS AN ASSET CONNECTED WITH THE ELECTRIC DISTRIBUTION GRID SERVING MARYLAND THAT IS:

(1) A COMBINED HEAT AND POWER SYSTEM;

(2) A NATURAL GAS OR QUALIFIED BIOMASS GENERATING STATION WITH A CONCOMITANT CARBON CAPTURE SYSTEM, TO THE EXTENT THE CAPTURED CARBON DIOXIDE OFFSETS THE CARBON OUTPUT OF THE GENERATING STATION AND IS:

(I) PERMANENTLY SEQUESTERED IN GEOLOGICAL RESERVES;

OR

(II) UTILIZED IN A MANNER THAT RESULTS IN INDEFINITE SEQUESTRATION, IN ACCORDANCE WITH REGULATIONS THE COMMISSION ADOPTS;

(3) A NUCLEAR GENERATION ASSET, INCLUDING A SMALL MODULAR REACTOR;

(4) A HYDROELECTRIC GENERATION ASSET WITH A NAMEPLATE CAPACITY OF AT LEAST 30 MEGAWATTS; OR

(5) ANOTHER EMERGING NET-ZERO CARBON TECHNOLOGY, INCLUDING ENERGY STORAGE OR A MICROGRID, IN ACCORDANCE WITH REGULATIONS THE COMMISSION ADOPTS.

(E) “CLEAN ENERGY RESOURCE CREDIT” MEANS:

(1) EXCEPT FOR A COMBINED HEAT AND POWER SYSTEM, A CREDIT EQUAL TO THE GENERATION ATTRIBUTES OF 1 MEGAWATT-HOUR OF ELECTRICITY THAT IS DERIVED FROM A CLEAN ENERGY RESOURCE; OR

(2) FOR A COMBINED HEAT AND POWER SYSTEM, A CREDIT EQUAL TO THE FOLLOWING IF THE SYSTEM OPERATES AT AN EFFICIENCY LEVEL OF:

(I) AT LEAST 90%, ONE CREDIT PER MEGAWATT-HOUR OF ELECTRICITY GENERATION;

(II) AT LEAST 75% BUT LESS THAN 90%, THREE-FOURTHS OF ONE CREDIT PER MEGAWATT-HOUR OF ELECTRICITY GENERATION;

(III) AT LEAST 60% BUT LESS THAN 75%, ONE-HALF CREDIT PER MEGAWATT-HOUR OF ELECTRICITY GENERATION; AND

(IV) LESS THAN 60%, NOTHING.

(F) "CREDIT" MEANS A CLEAN ENERGY RESOURCE CREDIT OR A RENEWABLE ENERGY CREDIT UNDER THIS SUBTITLE.

(p) (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] CLEAN ENERGY RESOURCE 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; [or]

(ii) **BLACK LIQUOR; OR**

(III) an invasive exotic plant species.

(q) “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.

(v) “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;] **ANIMAL MANURE, INCLUDING POULTRY LITTER, AND ASSOCIATED BEDDING, FOOD WASTE, ORGANIC MATERIALS IN A WASTEWATER TREATMENT PLANT, OR QUALIFYING BIOMASS AS FEEDSTOCK TO GENERATE THERMAL ENERGY;**

(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.

(w) “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) 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) 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; AND

(10) [waste-to-energy;

(11) refuse-derived fuel; and

(12)] thermal energy from a thermal biomass system.

7-702.

(a) It is the intent of the General Assembly to:

(1) recognize the economic, environmental, fuel diversity, and security benefits of **CLEAN ENERGY RESOURCES AND** renewable energy resources;

(2) reduce greenhouse gas emissions and [eliminate carbon-fueled generation from the State’s] **ACHIEVE A NET-ZERO CARBON** electric grid by using these resources;

(3) establish a market for electricity from these resources in Maryland; and

(4) lower the cost to consumers of electricity [produced from these resources].

(b) The General Assembly finds that:

(1) the benefits of electricity from **CLEAN ENERGY RESOURCES AND** renewable energy resources, including long-term decreased emissions, a healthier environment, increased energy security, and decreased reliance on and vulnerability from imported energy sources, accrue to the public at large;

(2) electricity suppliers and consumers share an obligation to develop [a minimum level of these] **TO THE FULLEST EXTENT POSSIBLE CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY** resources in the electricity supply portfolio of the State; and

(3) the State needs to increase its reliance on **CLEAN, renewable, AND EMERGING** energy **TECHNOLOGIES** in order to:

(i) **MORE QUICKLY AND EFFECTIVELY** reduce greenhouse gas emissions and meet the State's greenhouse gas emissions reduction goals under § 2-1205 of the Environment Article; [and]

(II) PROVIDE THE GREATEST VALUE POSSIBLE TO STATE RESIDENTS AT THE LOWEST POSSIBLE COST;

(III) PROMOTE PRIVATE INVESTMENT WITHIN THE STATE, INCREASE COMPETITION, AND MINIMIZE NEGATIVE ECONOMIC IMPACTS; AND

~~[(ii)]~~ **(IV)** provide opportunities for small, minority, women-owned, and veteran-owned businesses to participate in and develop a highly skilled workforce for clean energy industries in the State.

7-703.

(a) (1) (i) The Commission shall implement a **CLEAN AND** renewable energy [portfolio] standard that, except as provided under paragraphs (2) and (3) of this subsection, applies to all retail electricity sales in the State by electricity suppliers.

(ii) If the standard becomes applicable to electricity sold to a customer after the start of a calendar year, the standard does not apply to electricity sold to the customer during that portion of the year before the standard became applicable.

(2) A **CLEAN AND** renewable energy [portfolio] standard may not apply to electricity sales at retail by any electricity supplier:

1 (i) in excess of 300,000,000 kilowatt-hours of industrial process load
2 to a single customer in a year;

3 (ii) to residential customers in a region of the State in which
4 electricity prices for residential customers are subject to a freeze or cap contained in a
5 settlement agreement entered into under § 7-505 of this title until the freeze or cap has
6 expired; or

7 (iii) to a customer served by an electric cooperative under an
8 electricity supplier purchase agreement that existed on October 1, 2004, until the
9 expiration of the agreement, as the agreement may be renewed or amended.

10 (3) The portion of a **CLEAN AND** renewable energy [portfolio] standard
11 that represents offshore wind energy may not apply to electricity sales at retail by any
12 electricity supplier in excess of:

13 (i) 75,000,000 kilowatt-hours of industrial process load to a single
14 customer in a year; and

15 (ii) 3,000 kilowatt-hours of electricity in a month to a customer who
16 is an owner of agricultural land and files an Internal Revenue Service form 1040, schedule
17 F.

18 (b) Except as provided in [subsection (e)] **SUBSECTIONS (E) AND (F)** of this
19 section, the **CLEAN AND** renewable energy [portfolio] standard shall be as follows:

20 (1) in 2006, 1% from Tier 1 renewable sources and 2.5% from Tier 2
21 renewable sources;

22 (2) in 2007, 1% from Tier 1 renewable sources and 2.5% from Tier 2
23 renewable sources;

24 (3) in 2008, 2.005% from Tier 1 renewable sources, including at least
25 0.005% derived from solar energy, and 2.5% from Tier 2 renewable sources;

26 (4) in 2009, 2.01% from Tier 1 renewable sources, including at least 0.01%
27 derived from solar energy, and 2.5% from Tier 2 renewable sources;

28 (5) in 2010, 3.025% from Tier 1 renewable sources, including at least
29 0.025% derived from solar energy, and 2.5% from Tier 2 renewable sources;

30 (6) in 2011, 5.0% from Tier 1 renewable sources, including at least 0.05%
31 derived from solar energy, and 2.5% from Tier 2 renewable sources;

32 (7) in 2012, 6.5% from Tier 1 renewable sources, including at least 0.1%
33 derived from solar energy, and 2.5% from Tier 2 renewable sources;

(8) in 2013, 8.2% from Tier 1 renewable sources, including at least 0.25% derived from solar energy, and 2.5% from Tier 2 renewable sources;

(9) in 2014, 10.3% from Tier 1 renewable sources, including at least 0.35% derived from solar energy, and 2.5% from Tier 2 renewable sources;

(10) in 2015, 10.5% from Tier 1 renewable sources, including at least 0.5% derived from solar energy, and 2.5% from Tier 2 renewable sources;

(11) in 2016, 12.7% from Tier 1 renewable sources, including at least 0.7% derived from solar energy, and 2.5% from Tier 2 renewable sources;

(12) in 2017:

(i) 13.1% from Tier 1 renewable sources, including:

1. at least 1.15% derived from solar energy; and

2. an amount set by the Commission under § 7–704.2(a) of this subtitle, not to exceed 2.5%, derived from offshore wind energy; and

(ii) 2.5% from Tier 2 renewable sources;

(13) in 2018:

(i) 15.8% from Tier 1 renewable sources, including:

1. at least 1.5% derived from solar energy; and

2. an amount set by the Commission under § 7–704.2(a) of this subtitle, not to exceed 2.5%, derived from offshore wind energy; and

(ii) 2.5% from Tier 2 renewable sources;

(14) in 2019:

(i) 20.7% from Tier 1 renewable sources, including:

1. at least 5.5% derived from solar energy; and

2. an amount set by the Commission under § 7–704.2(a) of this subtitle, not to exceed 2.5%, derived from offshore wind energy;

(ii) 2.5% from Tier 2 renewable sources;

(15) in 2020:

(i) 28% from Tier 1 renewable sources, including:

1. at least 6% derived from solar energy; and

2. an amount set by the Commission under § 7–704.2(a) of this subtitle, not to exceed 2.5%, derived from offshore wind energy; and

(ii) 2.5% from Tier 2 renewable sources;

(16) in 2021, 30.8% from Tier 1 renewable sources, including:

(i) at least 7.5% derived from solar energy; and

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy;

(17) in 2022, [33.1%] **58.1%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 8.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy; **AND**

(III) AT LEAST 3.3% DERIVED FROM CLEAN ENERGY RESOURCES;

(18) in 2023, [35.4%] **60.4%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 9.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy; **AND**

(III) AT LEAST 4.2% DERIVED FROM CLEAN ENERGY RESOURCES;

(19) in 2024, [37.7%] **62.7%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 10.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy; **AND**

(III) AT LEAST 5.0% DERIVED FROM CLEAN ENERGY RESOURCES;

(20) in 2025, [40%] **65%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 11.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle, not to exceed 10% derived from offshore wind energy; **AND**

(III) AT LEAST 5.8% DERIVED FROM CLEAN ENERGY RESOURCES;

(21) in 2026, [42.5%] **67.5%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 12.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy, including at least 400 megawatts of Round 2 offshore wind projects; **AND**

(III) AT LEAST 6.7% DERIVED FROM CLEAN ENERGY RESOURCES;

(22) in 2027, [45.5%] **70.5%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 13.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy, including at least 400 megawatts of Round 2 offshore wind projects; **AND**

(III) AT LEAST 7.5% DERIVED FROM CLEAN ENERGY RESOURCES;

(23) in 2028, [47.5%] **72.5%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 14.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy, including at least 800 megawatts of Round 2 offshore wind projects; **AND**

(III) AT LEAST 8.3% DERIVED FROM CLEAN ENERGY RESOURCES;

(24) in 2029, [49.5%] **74.5%** from [Tier 1 renewable sources] **CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

(i) at least 14.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7–704.2(a) of this subtitle derived from offshore wind energy, including at least 800 megawatts of Round 2 offshore wind projects; and

(III) AT LEAST 9.2% DERIVED FROM CLEAN ENERGY RESOURCES;

(25) IN 2030, 75% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7–704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 10% DERIVED FROM CLEAN ENERGY RESOURCES;

(26) IN 2031, 77.5% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7–704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 12% DERIVED FROM CLEAN ENERGY RESOURCES;

(27) IN 2032, 80% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7–704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 14% DERIVED FROM CLEAN ENERGY RESOURCES;

(28) IN 2033, 82.5% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 16% DERIVED FROM CLEAN ENERGY RESOURCES;

(29) IN 2034, 85% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 18% DERIVED FROM CLEAN ENERGY RESOURCES;

(30) IN 2035, 87.5% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 20% DERIVED FROM CLEAN ENERGY RESOURCES;

(31) IN 2036, 90% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 22% DERIVED FROM CLEAN ENERGY RESOURCES;

(32) IN 2037, 92.5% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 24% DERIVED FROM CLEAN ENERGY RESOURCES;

(33) IN 2038, 95% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 26% DERIVED FROM CLEAN ENERGY RESOURCES;

(34) IN 2039, 97.5% FROM CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, INCLUDING:

(I) AT LEAST 14.5% DERIVED FROM SOLAR ENERGY;

(II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A) OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

(III) AT LEAST 28% DERIVED FROM CLEAN ENERGY RESOURCES;

AND

[(25)] (35) in [2030] 2040 and later, [50%] 100% from [Tier 1 renewable sources] CLEAN ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES, including:

(i) at least 14.5% derived from solar energy; [and]

(ii) an amount set by the Commission under § 7-704.2(a) of this subtitle derived from offshore wind energy, including at least 1,200 megawatts of Round 2 offshore wind projects; AND

(III) AT LEAST 30% DERIVED FROM CLEAN ENERGY RESOURCES.

(c) Before calculating the number of credits required to meet the percentages established under subsection (b) of this section, an electricity supplier shall exclude from its total retail electricity sales all retail electricity sales described in subsection (a)(2) and (3) of this section.

(d) Subject to subsections (a) and (c) of this section and in accordance with § 7-704.2 of this subtitle, an electricity supplier shall meet the **CLEAN AND** renewable energy [portfolio] standard by accumulating the equivalent amount of renewable energy credits that equal the percentages required under this section.

(e) The required percentage of **A MUNICIPAL ELECTRIC COMPANY OR** an electric cooperative's **CLEAN AND** renewable energy [portfolio] standard derived from solar energy shall be 2.5% in 2020 and later.

(F) IN RECOGNITION OF THE BASELOAD, GREENHOUSE GAS-FREE, AND CARBON-FREE PRODUCTION OF ELECTRICITY PROVIDED BY NUCLEAR GENERATION ASSETS IN THE STATE THAT COMMENCED OPERATION BEFORE JANUARY 1, 2022, THE COMMISSION SHALL REDUCE THE REQUIREMENTS OF SUBSECTION (B) OF THIS SECTION EACH YEAR BY A PERCENTAGE EQUAL TO THE AVERAGE GENERATION OUTPUT OF THOSE GENERATION ASSETS IN THE PREVIOUS 3 CALENDAR YEARS DIVIDED BY THE AVERAGE ELECTRICITY RETAIL SALES IN THOSE SAME CALENDAR YEARS.

7-704.

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

(i) is eligible for inclusion in meeting the **CLEAN AND** 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]; **AND**

(III) MAY BE APPLIED TO THE PERCENTAGE REQUIREMENTS OF THE STANDARD FOR CLEAN ENERGY RESOURCES IF GENERATED BY AN ASSET CONNECTED WITH THE ELECTRIC DISTRIBUTION GRID SERVING MARYLAND.

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

(ii) 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 **CLEAN AND** renewable energy [portfolio] standard under § 7–703 of this subtitle.

[(3) Energy from a Tier 1 renewable source under § 7–701(r)(8) 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(s) of this subtitle is eligible for inclusion in meeting the renewable energy portfolio standard through 2020 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.]

(3) ENERGY FROM A CLEAN ENERGY RESOURCE THAT IS A COMBINED HEAT AND POWER SYSTEM IS ELIGIBLE FOR INCLUSION IN MEETING THE CLEAN AND RENEWABLE ENERGY STANDARD IF THE SYSTEM COMMENCES OPERATION AFTER DECEMBER 31, 2021.

(4) ENERGY FROM A CLEAN ENERGY RESOURCE THAT IS A NUCLEAR GENERATION ASSET, INCLUDING A SMALL MODULAR REACTOR, IS ELIGIBLE FOR INCLUSION IN MEETING THE CLEAN AND RENEWABLE ENERGY STANDARD IF THE ASSET COMMENCES OPERATION AFTER DECEMBER 31, 2021.

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

(1) receive renewable energy credits **AND CLEAN ENERGY RESOURCE CREDITS**; and

(2) accumulate renewable energy credits **AND CLEAN ENERGY RESOURCE CREDITS** under this subtitle.

(e) (1) In this subsection, “customer” means:

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

(ii) a **CLEAN ENERGY RESOURCE OR** 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

1 **AND CLEAN ENERGY RESOURCE CREDITS** to satisfy the standards applicable to the
2 customer's load, including credits created by a **CLEAN ENERGY RESOURCE OR** renewable
3 on-site generator.

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

7 (4) A **CLEAN ENERGY RESOURCE OR** renewable on-site generator may
8 retain or transfer at its sole option any credits created by the **CLEAN ENERGY RESOURCE**
9 **OR** renewable on-site generator, including credits for the portion of its on-site generation
10 from a Tier 1 renewable source or a [Tier 2 renewable source] **CLEAN ENERGY RESOURCE**
11 that displaces the purchase of electricity by the **CLEAN ENERGY RESOURCE OR** renewable
12 on-site generator from the grid.

13 (5) A customer that satisfies the standard applicable to the customer's load
14 under this subsection may not be required to contribute to a compliance fee recovered under
15 § 7-706 of this subtitle.

16 (6) The Commission shall adopt regulations governing the application and
17 transfer of credits under this subsection **THAT:**

18 (I) **PREVENT ANY SINGLE GENERATION ASSET, EXCEPT A**
19 **QUALIFYING BIOMASS TECHNOLOGY THAT IS PAIRED WITH CARBON CAPTURE AND**
20 **STORAGE SYSTEMS, FROM RECEIVING MULTIPLE CREDITS EVEN THOUGH THE ASSET**
21 **MAY QUALIFY UNDER MORE THAN ONE PROVISION OF THE CLEAN AND RENEWABLE**
22 **ENERGY STANDARD; AND**

23 (II) **ARE** consistent with federal law.

24 (f) [(1)] In order to create a renewable energy credit **OR CLEAN ENERGY**
25 **RESOURCE CREDIT**, a Tier 1 renewable source or [Tier 2 renewable source] **CLEAN**
26 **ENERGY RESOURCE** must substantially comply with all applicable environmental and
27 administrative requirements, including air quality, water quality, solid waste, and
28 right-to-know provisions, permit conditions, and administrative orders.

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

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

33 1. for areas in Maryland, jurisdictions that achieve the
34 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) (1) THE COMMISSION SHALL BE ASSIGNED ALL CLEAN ENERGY RESOURCE CREDITS OF HYDROELECTRIC GENERATION ASSETS WITH A NAMEPLATE CAPACITY OF AT LEAST 30 MEGAWATTS CONNECTED WITH THE ELECTRIC DISTRIBUTION GRID SERVING MARYLAND.

(2) THE GENERATED CREDITS ASSIGNED UNDER PARAGRAPH (1) OF THIS SUBSECTION SHALL BE OFFERED FOR SALE IN THE MANNER THE COMMISSION DETERMINES.

(3) THE PROCEEDS OF THE SALE OF CREDITS UNDER PARAGRAPH (2) OF THIS SUBSECTION SHALL BE DEPOSITED IN THE MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION FUND UNDER § 9-20E-05 OF THE STATE GOVERNMENT ARTICLE.

7-704.1.

(d) (1) The Commission shall use the following criteria to evaluate and compare proposed offshore wind projects submitted during an application period:

(xiii) estimated ability to assist in meeting the **CLEAN AND** renewable energy [portfolio] standard under § 7-703 of this subtitle; and

7-704.2.

(a) (1) The Commission shall determine the offshore wind energy component of the **CLEAN AND** renewable energy [portfolio] standard under § 7-703(b)(12) through [(25)] **(35)** of this subtitle based on the projected annual creation of ORECs by qualified offshore wind projects.

(2) The Commission shall establish the **CLEAN AND** renewable energy [portfolio] standard obligation for ORECs on a forward-looking basis that includes a surplus to accommodate reasonable forecasting error in estimating overall electricity sales in the State.

(3) Any positive adjustment to the **CLEAN AND** renewable energy [portfolio] standard shall be on a forward-looking basis and sufficiently in advance to allow

OREC purchasers to reflect OREC costs in retail prices offered to consumers.

(4) The Commission shall adopt regulations that establish:

(i) the offshore wind purchase obligation sufficiently in advance to allow OREC purchasers to reflect OREC costs in retail prices offered to consumers; and

(ii) a mechanism to adjust the **CLEAN AND** renewable energy [portfolio] standard obligation in a given year to accommodate a shortfall of ORECs in one or more earlier years that is the result of the variation between the quantity of ORECs calculated from the **CLEAN AND** renewable energy [portfolio] standard obligation and the quantity of ORECs approved in the Commission order for the same years.

(c) (1) Each electricity supplier shall purchase from the escrow account established under this section the number of ORECs required to satisfy the offshore wind energy component of the **CLEAN AND** renewable energy [portfolio] standard under § 7-703(b)(12) through [(25)] **(35)** of this subtitle.

(2) (i) Subject to any escrow account reserve requirement the Commission establishes, if there are insufficient ORECs available to satisfy the suppliers' OREC obligation, the overpayment shall be distributed to electric companies to be refunded or credited to each ratepayer based on the ratepayer's consumption of electricity supply that is subject to the **CLEAN AND** renewable energy [portfolio] standard.

(ii) Subject to any escrow account reserve requirement the Commission establishes, the calculation of an electricity supplier's OREC purchase obligation shall be based on final electricity sales data as reported by the PJM Interconnection as measured at the customer meter.

(3) For each OREC for which a qualified offshore wind project receives payment, a qualified offshore wind project shall:

(i) [sell] **OFFER FOR SALE** all energy, capacity, and ancillary services associated with the creation of ORECs into the markets operated by PJM Interconnection; and

(ii) distribute the proceeds received from the sales to PJM Interconnection markets, under item (i) of this paragraph to electric companies to be refunded or credited to each ratepayer based on the ratepayer's consumption of electricity supply that is subject to the **CLEAN AND** renewable energy [portfolio] standard.

(4) Notwithstanding § 7-709 of this subtitle, the Commission shall adopt regulations regarding the transfer and expiration of ORECs created by a qualified offshore wind project in excess of the OREC pricing schedule.

7-705.

(a) Each electricity supplier shall submit a report to the Commission each year in a form and by a date specified by the Commission that:

(1) (i) demonstrates that the electricity supplier has complied with the applicable **CLEAN AND** renewable energy [portfolio] standard under § 7–703 of this subtitle and includes the submission of the required amount of renewable energy credits **AND CLEAN ENERGY RESOURCE CREDITS**; or

(ii) demonstrates the amount of electricity sales by which the electricity supplier failed to meet the applicable **CLEAN AND** renewable energy [portfolio] standard; and

(2) documents the level of participation of minority business enterprises and minorities in the activities that support the creation of renewable energy credits **AND CLEAN ENERGY RESOURCE CREDITS** used to satisfy the standard under § 7–703 of this subtitle, including development, installation, and operation of generating facilities that create credits.

(b) (2) If an electricity supplier fails to comply with the **CLEAN AND** renewable energy [portfolio] standard for the applicable year, the electricity supplier shall pay into the Maryland Strategic Energy Investment Fund established under § 9–20B–05 of the State Government Article:

(i) except as provided in item (ii) of this paragraph, a compliance fee of:

1. the following amounts for each kilowatt–hour of shortfall from required Tier 1 renewable sources **AND CLEAN ENERGY RESOURCES** other than the shortfall from the required Tier 1 renewable sources that is to be derived from solar energy:

- A. 4 cents through 2016;
- B. 3.75 cents in 2017 and 2018;
- C. 3 cents in 2019 through 2023;
- D. 2.75 cents in 2024;
- E. 2.5 cents in 2025;
- F. 2.475 cents in 2026;
- G. 2.45 cents in 2027;
- H. 2.25 cents in 2028 and 2029; and

I. 2.235 cents in 2030 and later;

2. the following amounts for each kilowatt–hour of shortfall from required Tier 1 renewable sources that is to be derived from solar energy:

A. 45 cents in 2008;

B. 40 cents in 2009 through 2014;

C. 35 cents in 2015 and 2016;

D. 19.5 cents in 2017;

E. 17.5 cents in 2018;

F. 10 cents in 2019;

G. 10 cents in 2020;

H. 8 cents in 2021;

I. 6 cents in 2022;

J. 4.5 cents in 2023;

K. 4 cents in 2024;

L. 3.5 cents in 2025;

M. 3 cents in 2026;

N. 2.5 cents in 2027 and 2028;

O. 2.25 cents in 2029; and

P. 2.235 cents in 2030 and later; and

3. 1.5 cents for each kilowatt–hour of shortfall from required Tier 2 renewable sources; or

(ii) for industrial process load:

1. for each kilowatt–hour of shortfall from required Tier 1 renewable sources, a compliance fee of:

A. 0.8 cents in 2006, 2007, and 2008;

B. 0.5 cents in 2009 and 2010;

C. 0.4 cents in 2011 and 2012;

D. 0.3 cents in 2013 and 2014;

E. 0.25 cents in 2015 and 2016; and

F. except as provided in paragraph (3) of this subsection, 0.2 cents in 2017 and later; and

2. nothing for any shortfall from required Tier 2 renewable sources.

(c) The Commission may allow an electricity supplier to submit the report required under § 7–505(b)(4) of this title to demonstrate compliance with the **CLEAN AND** renewable energy [portfolio] standard.

(e) (1) Notwithstanding the requirements of § 7–703(b) of this subtitle, if the actual or projected dollar-for-dollar cost incurred or to be incurred by an electricity supplier solely for the purchase of Tier 1 renewable energy credits derived from solar energy in any 1 year is greater than or equal to, or is anticipated to be greater than or equal to, 6.0% of the electricity supplier's total annual electricity sales revenues in Maryland, the electricity supplier may request that the Commission:

(i) delay by 1 year each of the scheduled percentages for solar energy under § 7–703(b) of this subtitle that would apply to the electricity supplier; and

(ii) allow the **CLEAN AND** renewable energy [portfolio] standard for solar energy for that year to continue to apply to the electricity supplier for the following year.

(2) In making its determination under paragraph (1) of this subsection, the Commission shall consider the actual or projected dollar-for-dollar compliance costs of other electricity suppliers.

(3) If an electricity supplier makes a request under paragraph (1) of this subsection based on projected costs, the electricity supplier shall provide verifiable evidence of the projections to the Commission at the time of the request.

(4) If the Commission allows a delay under paragraph (1) of this subsection:

(i) the **CLEAN AND** renewable energy [portfolio] standard for solar energy applicable to the electricity supplier under the delay continues for each subsequent consecutive year that the actual or projected dollar-for-dollar costs incurred, or to be

incurred, by the electricity supplier solely for the purchase of solar renewable energy credits is greater than or equal to, or is anticipated to be greater than or equal to, 6.0% of the electricity supplier's total annual retail electricity sales revenues in Maryland; and

(ii) the **CLEAN AND** renewable energy [portfolio] standard for solar energy applicable to the electricity supplier under the delay is increased to the next scheduled percentage increase under § 7-703(b) of this subtitle for each year in which the actual or projected dollar-for-dollar costs incurred, or to be incurred, by the electricity supplier solely for the purchase of solar renewable energy credits is less than, or is anticipated to be less than, 6.0% of the electricity supplier's total annual retail electricity sales revenues in Maryland.

7-706.

(a) (1) Except as provided in paragraph (2) of this subsection, in accordance with the obligation to provide standard offer service through the bid process created under § 7-510 of this title, the Commission shall allow an electricity supplier to recover actual dollar-for-dollar costs incurred, including a compliance fee under § 7-705 of this subtitle, in complying with a State-mandated **CLEAN AND** renewable energy [portfolio] standard.

(2) In accordance with the Phase II settlement agreement approved by the Commission in Order No. 78710 in Case No. 8908 on September 30, 2003, for any full-service agreement executed before the **CLEAN AND** renewable energy standard under this subtitle applies to an electric company, the electric company and its wholesale electricity suppliers may pass through their commercially reasonable additional costs, if any, associated with complying with the standard, through the end of the year of standard offer service in which the requirement took effect.

(b) An electricity supplier may recover a compliance fee if:

(1) the payment of a compliance fee is the least-cost measure to customers as compared to the purchase of Tier 1 renewable sources **OR CLEAN ENERGY RESOURCES** to comply with a **CLEAN AND** renewable energy [portfolio] standard;

(2) there are insufficient Tier 1 renewable sources **OR CLEAN ENERGY RESOURCES** available for the electricity supplier to comply with a **CLEAN AND** renewable energy [portfolio] standard; or

(3) a wholesale electricity supplier defaults or otherwise fails to deliver renewable energy credits **OR CLEAN ENERGY RESOURCE CREDITS** under a supply contract approved by the Commission.

7-708.

(a) (1) The Commission shall establish and maintain a market-based renewable electricity trading system to facilitate the creation and transfer of renewable

1 energy credits **AND CLEAN ENERGY RESOURCE CREDITS**.

2 (2) To the extent practicable, the trading system shall be consistent with
3 and operate in conjunction with the trading system developed by PJM Interconnection, Inc.,
4 if available.

5 (3) The Commission may contract with a for-profit or a nonprofit entity to
6 assist in the administration of the electricity trading system required under paragraph (1)
7 of this subsection.

8 (b) (1) The system shall include a registry of pertinent information regarding
9 all:

10 (i) available renewable energy credits **AND CLEAN ENERGY**
11 **RESOURCE CREDITS**; and

12 (ii) renewable energy credit **AND CLEAN ENERGY RESOURCE**
13 **CREDIT** transactions among electricity suppliers in the State, including:

14 1. the creation and application of renewable energy credits
15 **AND CLEAN ENERGY RESOURCE CREDITS**;

16 2. the number of renewable energy credits **AND CLEAN**
17 **ENERGY RESOURCE CREDITS** sold or transferred; and

18 3. the price paid for the sale or transfer of renewable energy
19 credits **AND CLEAN ENERGY RESOURCE CREDITS**.

20 (2) (i) The registry shall provide current information to electricity
21 suppliers and the public on the status of renewable energy credits **AND CLEAN ENERGY**
22 **RESOURCE CREDITS** created, sold, or transferred in the State.

23 (ii) Registry information shall be available by computer network
24 access through the Internet.

25 7-709.

26 (a) An electricity supplier may use accumulated renewable energy credits **OR**
27 **CLEAN ENERGY RESOURCE CREDITS** to meet the **CLEAN AND** renewable energy
28 [portfolio] standard, including credits created by a **CLEAN ENERGY RESOURCE OR**
29 renewable on-site generator.

30 (b) A renewable energy **OR CLEAN ENERGY RESOURCE** credit may be sold or
31 otherwise transferred.

32 (c) (1) (i) If an electricity supplier purchases solar renewable energy

credits directly from a renewable on-site generator with a capacity that exceeds 10 kilowatts to meet the solar component of the **STANDARD** Tier 1 renewable [energy portfolio standard] **SOURCES**, the duration of the contract term for the solar renewable energy credits may not be less than 15 years.

(ii) The minimum required term under subparagraph (i) of this paragraph does not affect the ability of the parties to negotiate a price for a solar renewable energy credit that varies over time in any manner.

(2) (i) An electricity supplier that purchases solar renewable energy credits from a renewable on-site generator with a capacity not exceeding 10 kilowatts shall purchase the credits with a single initial payment representing the full estimated production of the system for the life of the contract.

(ii) The Commission shall:

1. develop a method for estimating annual production from the type of system described in subparagraph (i) of this paragraph and allocating the credits to the electricity supplier in a manner that is consistent with the duration of the contract; and

2. determine the rate for a payment made to a renewable on-site generator under subparagraph (i) of this paragraph.

(d) (1) Except as authorized under paragraph (2) of this subsection, a renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT** shall exist for 3 years from the date created.

(2) A renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT** may be diminished or extinguished before the expiration of 3 years by:

(i) the electricity supplier that received the credit;

(ii) a nonaffiliated entity of the electricity supplier:

1. that purchased the credit from the electricity supplier receiving the credit; or

2. to whom the electricity supplier otherwise transferred the credit; or

(iii) demonstrated noncompliance by the generating facility with the requirements of § 7-704(f) of this subtitle.

(e) Notwithstanding subsection (d)(2)(iii) of this section, and only if the demonstrated noncompliance does not result in environmental degradation, an electricity supplier that reasonably includes in its annual report under § 7-705 of this subtitle a

renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT** that is extinguished for noncompliance with [§ 7–704(f)(1) or (2)] **§ 7–704(F)** of this subtitle:

(1) may continue to rely on that credit for that year; but

(2) for later years must:

(i) demonstrate a return to compliance of the generating facility under § 7–704(f) of this subtitle; or

(ii) replace the credit with a renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT** from another source.

(f) The Commission by regulation shall establish requirements for documentation and verification of renewable energy credits by licensed electricity suppliers and other generators that create and receive credits for compliance with the standards for Tier 1 renewable sources and [Tier 2 renewable sources] **CLEAN ENERGY RESOURCES**.

7–710.

The Commission may impose an administrative fee on a renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT** transaction, but the amount of the fee may not exceed the Commission’s actual direct cost of processing the transaction.

7–712.

Subject to § 2–1257 of the State Government Article, on or before December 1 of each year the Commission shall report to the General Assembly on the status of implementation of this subtitle, including the availability of Tier 1 renewable sources **AND CLEAN ENERGY RESOURCES**, projects supported by the Fund, and other pertinent information.

7–714.

(a) The Power Plant Research Program shall conduct a study of the **CLEAN AND** renewable energy [portfolio] standard and related matters in accordance with this section.

(b) The study shall be a comprehensive review of the history, implementation, overall costs and benefits, and effectiveness of the **CLEAN AND** renewable energy [portfolio] standard in relation to the energy policies of the State, including:

(1) the availability of all clean energy [sources] **RESOURCES** at reasonable and affordable rates, including in–State and out–of–state renewable energy options;

(2) the economic and environmental impacts of the deployment of **CLEAN ENERGY RESOURCES AND** renewable energy sources in the State and in surrounding areas of the PJM region;

(3) the effectiveness of the standard in encouraging development and deployment of **CLEAN ENERGY RESOURCES AND** renewable energy sources;

(4) the impact of alterations that have been made in the components of each tier of the standard, the implementation of different specific goals for particular sources, and the effect of different percentages and alternative compliance payment scales for energy [in the tiers] **WITHIN THE STANDARD**;

(5) an assessment of alternative models of regulation and market-based tools that may be available or advisable to promote the goals of the standard and the energy policies of the State; and

(6) the potential to alter or otherwise evolve the standard in order to increase and maintain its effectiveness in promoting the State's energy policies.

(c) Particular subjects to be addressed in the study include:

(1) the role and effectiveness that the standard may have in reducing the carbon content of imported electricity and whether existing or new additional complementary policies or programs could help address the carbon emissions associated with electricity imported into the State;

(2) the net environmental and fiscal impacts that may be associated with long-term contracts tied to clean energy projects, including:

(i) ratepayer impacts that resulted in other states from the use of long-term contracts for the procurement of renewable energy for the other states' standard offer service and whether the use of long-term contracts incentivized new renewable energy generation development; and

(ii) ratepayer impacts that may result in the State from the use of long-term contracts for each energy source in the State's Tier 1 and whether, for each of the sources, the use of long-term contracts would incentivize new renewable energy generation development in that source;

(3) whether the standard is able to meet current and potential future targets without the inclusion of certain technologies;

(4) what industries are projected to grow, and to what extent, as a result of incentives associated with the standard;

(5) whether the public health and environmental benefits of the growing clean energy industries supported by the standard are being equitably distributed across overburdened and underserved environmental justice communities;

(6) whether the State is likely to meet its existing goals under the standard

1 and, if the State were to increase those goals, whether electricity suppliers should expect
2 to find an adequate supply to meet the additional demand for credits;

3 (7) additional opportunities that may be available to promote local job
4 creation within the industries that are projected to grow as a result of the standard;

5 (8) system flexibility that the State would need under future goals under
6 the standard, including the quantities of system peaking and ramping that may be
7 required;

8 (9) how energy storage technology and other flexibility resources should
9 continue to be addressed in support of renewable energy and State energy policy, including:

10 (i) whether the resources should be encouraged through a
11 procurement, a production, or an installation incentive;

12 (ii) the advisability of providing incentives for energy storage devices
13 to increase hosting capacity of increased renewable on-site generation on the distribution
14 system; and

15 (iii) discussion of the costs and benefits of energy storage deployment
16 in the State under future goals scenarios for renewable generation;

17 (10) (i) the role of in-State clean energy in achieving greenhouse gas
18 emission reductions and promoting local jobs and economic activity in the State;

19 (ii) the impact of item (i) of this item on ratepayers with respect to
20 the requirement of in-State clean energy generation as an increasing percentage of the
21 standard; and

22 (iii) the impact of all energy sources that qualify under the standard
23 with respect to the requirement of in-State clean energy generation as an increasing
24 percentage of the standard;

25 (11) an assessment of any change in solar renewable energy credit prices
26 over the immediate 24 months preceding the submission of the interim report required
27 under subsection (e) of this section;

28 (12) an assessment of the costs, benefits, and any legal or other implications
29 of allowing the location anywhere in or off the coast of the contiguous United States of Tier
30 1 renewable sources **OR CLEAN ENERGY RESOURCES** that are currently required to be
31 located in the PJM region or in a control area that is adjacent to the PJM region, if the
32 electricity is delivered into the PJM region; and

33 (13) any other matters the Program considers relevant to the analysis of the
34 issues outlined in this section.

(d) (1) The Commission, the Administration, the Department of the Environment, the Department of Natural Resources, and other State and local units shall cooperate with the Program in the conduct of the study under this section, including sharing of information, data, and resources, subject to appropriate legal protection of commercially sensitive and other information.

(2) The Program shall consult with representatives of various segments of the clean energy industry and other stakeholders.

(e) [(1) (i) On or before December 1, 2018, the Program shall submit an interim report on any preliminary findings of the study under this section, including any observations and requests for alteration or clarification of the scope, subjects, procedures, and intergovernmental cooperation that may be required to complete the study and submit a final report under this subsection.

(ii) If the Program determines that any preliminary findings under subparagraph (i) of this paragraph warrant reporting earlier than December 1, 2018, the Program may submit a preliminary interim report on those preliminary findings.

(2) On or before December 1, 2019, the Program shall submit a final report on the findings of the study, including proposals for any alteration of the renewable portfolio standard, alternative mechanisms for furthering the State's energy policies, and related matters, and any proposed legislative or regulatory changes recommended to implement the findings of the study.

(3) The interim, any preliminary interim, and final reports shall be submitted to the Governor and, subject to § 2-1257 of the State Government Article, the Senate Finance Committee and the House Economic Matters Committee.

(f) (1) The Program shall conduct a [supplemental] study to assess the overall costs and benefits of [increasing] the [renewable energy portfolio] **CLEAN AND RENEWABLE ENERGY** standard [to a] goal of 100% [renewable energy] **CLEAN ELECTRICITY** by 2040.

(2) Particular subjects to be addressed in the supplemental study shall include:

(i) all relevant subjects listed in subsections (b) and (c) of this section;

(ii) an assessment of whether any in-State industries could be displaced or negatively economically impacted by a 100% **CLEAN AND** renewable energy [portfolio] standard, and recommendations on how to provide and fund a comparable transition for workers, including wage and benefit packages, and communities that rely on those industries that could face displacement or be negatively economically impacted; and

(iii) the findings and recommendations of the study of nuclear energy and its role as a renewable or clean energy resource conducted by the Program under Chapter 757, § 2 of the Acts of the General Assembly of 2019.

(3) [On completion of the supplemental study, the Program shall use the findings of the study to publish recommendations regarding the feasibility of implementing a renewable energy portfolio standard of 100% by 2040.

(4) On or before January 1, 2024, the Program shall submit the [supplemental] study to the Governor and, in accordance with § 2–1257 of the State Government Article, the General Assembly.

(4) (I) ON COMPLETION OF THE STUDY, THE PROGRAM SHALL USE THE FINDINGS OF THE STUDY, IN COOPERATION WITH THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE ADMINISTRATION, TO PUBLISH RECOMMENDATIONS TO ALTER AND IMPROVE THE CLEAN AND RENEWABLE ENERGY STANDARD.

(II) ON REVIEW OF THE STUDY AND RECOMMENDATIONS REQUIRED BY THIS SUBSECTION, THE GENERAL ASSEMBLY MAY ACT TO MAINTAIN, REVISE, OR ELIMINATE THE PROVISIONS OF THE STANDARD.

Article – State Government

9–20B–05.

(f) The Administration shall use the Fund:

(10) subject to subsections (f–2) and (f–3) of this section, to invest in pre–apprenticeship, youth apprenticeship, and registered apprenticeship programs to establish career paths in the clean energy industry under § 11–708.1 of the Labor and Employment Article, as follows:

(i) \$1,250,000 for grants to pre–apprenticeship jobs training programs under § 11–708.1(c)(3) of the Labor and Employment Article starting in fiscal year 2021 until all amounts are spent;

(ii) **[\$6,000,000] \$5,850,000** for grants to youth apprenticeship jobs training programs and registered apprenticeship jobs training programs under § 11–708.1(c)(5) of the Labor and Employment Article starting in fiscal year 2021 until all amounts are spent; [and]

(iii) \$750,000 for the recruitment of individuals, including veterans and formerly incarcerated individuals, to the pre–apprenticeship jobs training programs and the registered apprenticeship jobs training programs under § 11–708.1 of the Labor and Employment Article starting in fiscal year 2021 until all amounts are spent; and

(IV) \$150,000 FOR THE RECRUITMENT OF INDIVIDUALS TRANSITIONING FROM EMPLOYMENT IN THE FOSSIL FUEL INDUSTRY TO THE PRE-APPRENTICESHIP JOBS TRAINING PROGRAMS, THE REGISTERED APPRENTICESHIP JOBS TRAINING PROGRAMS UNDER § 11-708.1 OF THE LABOR AND EMPLOYMENT ARTICLE, AND ANY OTHER RELEVANT JOB TRAINING AND PLACEMENT PROGRAMS IN THE MARYLAND DEPARTMENT OF LABOR STARTING IN FISCAL YEAR 2022 UNTIL ALL AMOUNTS ARE SPENT; AND

**SUBTITLE 20E. MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT
REMEDATION PROGRAM.**

9-20E-01.

(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(B) “ADMINISTRATION” MEANS THE MARYLAND ENERGY ADMINISTRATION.

(C) “DEPARTMENT” MEANS THE DEPARTMENT OF THE ENVIRONMENT.

(D) “FUND” MEANS THE MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION FUND.

(E) “PROGRAM” MEANS THE MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION PROGRAM.

(F) “REMEDIATION MEASURE” MEANS AN ACTION THAT, WHEN COMPLETED, RESULTS IN A REDUCTION IN SEDIMENT OR NUTRIENT POLLUTION OF THE CHESAPEAKE BAY OR ITS TRIBUTARIES.

9-20E-02.

THERE IS A MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION PROGRAM IN THE DEPARTMENT.

9-20E-03.

(A) THE PURPOSES OF THE PROGRAM ARE TO:

(1) REMEDIATE THE ENVIRONMENTAL IMPACTS OF HYDROELECTRIC POWER PLANTS LOCATED IN THE STATE WITH A NAMEPLATE CAPACITY GREATER THAN 10 MEGAWATTS; AND

1 **(2) PROMOTE THE HEALTH OF THE CHESAPEAKE BAY.**

2 **(B) THE DEPARTMENT SHALL USE THE PROGRAM TO PROVIDE**
3 **ENVIRONMENTAL REMEDIATION AND ASSOCIATED MEASURES IN ACCORDANCE**
4 **WITH THIS SUBTITLE.**

5 **(C) THE DEPARTMENT SHALL MANAGE, SUPERVISE, AND ADMINISTER THE**
6 **PROGRAM UNDER THIS SUBTITLE.**

7 **(D) (1) THE DEPARTMENT SHALL ADOPT REGULATIONS TO:**

8 **(I) ENSURE THAT FINANCING IS PROVIDED ONLY TO A PROJECT**
9 **THAT CARRIES OUT THE PURPOSES OF THE PROGRAM;**

10 **(II) ESTABLISH ELIGIBILITY CRITERIA FOR GRANTEEES OR**
11 **BORROWERS UNDER THE PROGRAM; AND**

12 **(III) ESTABLISH MECHANISMS FOR INDEPENDENT QUALITY**
13 **CONTROL AND QUALITY ASSURANCE.**

14 **(2) THE DEPARTMENT MAY ADOPT OTHER REASONABLE**
15 **REGULATIONS TO SERVE THE PURPOSE OF THE PROGRAM.**

16 **(E) THE DEPARTMENT MAY DEVELOP AND IMPLEMENT A TEST OR PILOT**
17 **PROGRAM UNDER THE PROGRAM.**

18 **9-20E-04.**

19 **THE DEPARTMENT SHALL:**

20 **(1) MANAGE, SUPERVISE, AND ADMINISTER THE PROGRAM;**

21 **(2) ADOPT REGULATIONS TO IMPLEMENT THE PROGRAM AND TO**
22 **ENSURE THAT FUND RESOURCES ARE UTILIZED ONLY TO CARRY OUT THE PURPOSES**
23 **OF THE PROGRAM;**

24 **(3) ATTACH SPECIFIC TERMS AND CONDITIONS TO ANY GRANT, LOAN,**
25 **OR OTHER FORM OF ASSISTANCE THAT THE ADMINISTRATION DETERMINES ARE**
26 **NECESSARY TO ENSURE THAT THE PURPOSES OF THE PROGRAM ARE FULFILLED;**
27 **AND**

28 **(4) DEVELOP PROCEDURES FOR MONITORING PROGRAMS,**
29 **PROJECTS, ACTIVITIES, AND INVESTMENTS TO VERIFY THAT FUND RESOURCES ARE**

1 BEING USED TO MEET THE PURPOSES OF THE PROGRAM.

2 **9-20E-05.**

3 (A) THERE IS A MARYLAND HYDROELECTRIC ENVIRONMENTAL IMPACT
4 REMEDIATION FUND IN THE STRATEGIC ENERGY INVESTMENT FUND.

5 (B) THE PURPOSE OF THE FUND IS TO IMPLEMENT THE MARYLAND
6 HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION PROGRAM.

7 (C) THE ADMINISTRATION SHALL ADMINISTER THE FUND.

8 (D) (1) THE FUND IS A SPECIAL, NONLAPSING FUND THAT IS NOT
9 SUBJECT TO:

10 (I) § 7-302 OF THE STATE FINANCE AND PROCUREMENT
11 ARTICLE; OR

12 (II) § 9-20B-05 OF THIS TITLE.

13 (2) THE STATE TREASURER SHALL HOLD THE FUND SEPARATELY,
14 AND THE COMPTROLLER SHALL ACCOUNT FOR THE FUND.

15 (E) THE FUND CONSISTS OF:

16 (1) PROCEEDS FROM THE SALE OF CLEAN AND RENEWABLE ENERGY
17 CREDITS UNDER § 7-704(G) OF THE PUBLIC UTILITIES ARTICLE;

18 (2) MONEY APPROPRIATED IN THE STATE BUDGET TO THE PROGRAM;
19 AND

20 (3) REPAYMENTS AND PREPAYMENTS OF PRINCIPAL AND INTEREST
21 ON LOANS MADE FROM THE FUND.

22 (F) THE ADMINISTRATION SHALL USE THE FUND TO FUND THE MARYLAND
23 HYDROELECTRIC ENVIRONMENTAL IMPACT REMEDIATION PROGRAM WITHIN THE
24 DEPARTMENT.

25 (G) (1) THE STATE TREASURER SHALL INVEST THE MONEY OF THE FUND
26 IN THE SAME MANNER AS OTHER STATE MONEY MAY BE INVESTED.

27 (2) ANY INTEREST EARNINGS OF THE FUND SHALL BE CREDITED TO
28 THE GENERAL FUND OF THE STATE.

1 **(H) EXPENDITURES FROM THE FUND MAY BE MADE ONLY IN ACCORDANCE**
2 **WITH THE STATE BUDGET.**

3 **9-20E-06.**

4 **(A) THE DEPARTMENT SHALL MONITOR AND ANALYZE THE IMPACT OF**
5 **EACH PROGRAM, PROJECT, ACTIVITY, AND INVESTMENT TO ENSURE THAT THE**
6 **OUTCOME OF EACH PROGRAM, PROJECT, ACTIVITY, OR INVESTMENT ACHIEVES THE**
7 **PURPOSES OF THE PROGRAM.**

8 **(B) IN MONITORING AND ANALYZING THE IMPACT OF A PROGRAM, A**
9 **PROJECT, AN ACTIVITY, OR AN INVESTMENT UNDER SUBSECTION (A) OF THIS**
10 **SECTION, IF THE DEPARTMENT FINDS THAT THE OUTCOME OF THE PROGRAM,**
11 **PROJECT, ACTIVITY, OR INVESTMENT IS NOT ACHIEVING THE PURPOSES OF THE**
12 **PROGRAM, THE DEPARTMENT SHALL TAKE SPECIFIC MEASURES TO ADDRESS THE**
13 **FINDINGS.**

14 SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect
15 January 1, 2022, and shall apply to all clean and renewable energy standard compliance
16 years beginning with the 2022 compliance year.