

HOUSE BILL 363

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CF SB 265

By: **The Speaker (By Request – Administration) and Delegates Anderton, Clark, Howard, Kipke, Malone, McComas, and Metzgar**

Introduced and read first time: January 20, 2020

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

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

4 FOR the purpose of altering the “renewable energy portfolio standard” to be the “clean and
5 renewable energy standard”; altering the eligibility of certain sources of energy for
6 the creation of credits under the clean and renewable energy standard; removing
7 certain sources from the definition of a Tier 1 renewable source; altering provisions
8 relating to the intent of the General Assembly; altering and extending the minimum
9 required percentage of energy that must be derived from clean and renewable energy
10 sources in certain years; requiring that a minimum percentage of energy must be
11 derived from clean energy resources; requiring the Public Service Commission to
12 reduce a clean and renewable energy standard for certain nuclear generation sources
13 under certain circumstances; authorizing the Commission to take certain actions
14 under certain circumstances; defining certain terms and altering certain definitions;
15 repealing certain definitions; making conforming changes; providing for a delayed
16 effective date; providing for the application of this Act; and generally relating to the
17 clean and renewable energy standard.

18 BY repealing

19 Article – Public Utilities
20 Section 7–701(o) and (s)
21 Annotated Code of Maryland
22 (2010 Replacement Volume and 2019 Supplement)

23 BY renumbering

24 Article – Public Utilities
25 Section 7–701(c) through (n) and (p) through (r), respectively
26 to be Section 7–701(g) through (w), respectively
27 Annotated Code of Maryland
28 (2010 Replacement Volume and 2019 Supplement)

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 BY repealing and reenacting, without amendments,
2 Article – Public Utilities
3 Section 7–701(a) and (b)
4 Annotated Code of Maryland
5 (2010 Replacement Volume and 2019 Supplement)

6 BY adding to
7 Article – Public Utilities
8 Section 7–701(c) through (f)
9 Annotated Code of Maryland
10 (2010 Replacement Volume and 2019 Supplement)

11 BY repealing and reenacting, with amendments,
12 Article – Public Utilities
13 Section 7–701(p), (r), and (w)
14 Annotated Code of Maryland
15 (2010 Replacement Volume and 2019 Supplement)
16 (As enacted by Section 2 of this Act)

17 BY repealing and reenacting, with amendments,
18 Article – Public Utilities
19 Section 7–702, 7–703(a), (b), (d), and (e), 7–704(a), (b), (e), and (f), 7–704.1(d)(1)(xiii),
20 7–704.2(a) and (c), 7–705(a), (b)(2), (c), and (e), 7–706(a) and (b), 7–708, 7–709,
21 7–710, and 7–712
22 Annotated Code of Maryland
23 (2010 Replacement Volume and 2019 Supplement)

24 BY adding to
25 Article – Public Utilities
26 Section 7–703(f)
27 Annotated Code of Maryland
28 (2010 Replacement Volume and 2019 Supplement)

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

32 SECTION 2. AND BE IT FURTHER ENACTED, That Section(s) 7–701(c) through
33 (n) and (p) through (r), respectively, of Article – Public Utilities of the Annotated Code of
34 Maryland be renumbered to be Section(s) 7–701(g) through (w), respectively.

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

37 **Article – Public Utilities**

1 7-701.

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

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

4 (c) **"CLEAN AND RENEWABLE ENERGY STANDARD" OR "STANDARD" MEANS**
5 **THE PERCENTAGE OF ELECTRICITY SALES AT RETAIL IN THE STATE THAT IS TO BE**
6 **DERIVED FROM TIER 1 RENEWABLE SOURCES AND CLEAN ENERGY RESOURCES IN**
7 **ACCORDANCE WITH § 7-703(B) OF THIS SUBTITLE.**

8 (d) **"CLEAN ENERGY RESOURCE" MEANS THE FOLLOWING ASSETS**
9 **CONNECTED WITH THE ELECTRIC DISTRIBUTION GRID SERVING THE STATE:**

10 (1) **A COMBINED HEAT AND POWER SYSTEM THAT COMMENCES**
11 **OPERATION AFTER DECEMBER 31, 2020;**

12 (2) **A NATURAL GAS OR QUALIFYING BIOMASS GENERATING STATION**
13 **WITH A CONCOMITANT CARBON CAPTURE SYSTEM, TO THE EXTENT THE CAPTURED**
14 **CARBON DIOXIDE OFFSETS THE CARBON OUTPUT OF THE GENERATING STATION**
15 **AND IS:**

16 (i) **PERMANENTLY SEQUESTERED IN GEOLOGICAL RESERVES;**
17 **OR**

18 (ii) **UTILIZED IN A MANNER THAT RESULTS IN INDEFINITE**
19 **SEQUESTRATION, AS ESTABLISHED BY REGULATIONS ADOPTED BY THE**
20 **COMMISSION;**

21 (3) **A NUCLEAR GENERATION ASSET, INCLUDING A SMALL MODULAR**
22 **REACTOR, THAT COMMENCES OPERATION AFTER DECEMBER 31, 2020; OR**

23 (4) **OTHER EMERGING NET-ZERO CARBON TECHNOLOGIES, AS**
24 **ESTABLISHED BY REGULATIONS ADOPTED BY THE COMMISSION.**

25 (e) **"CLEAN ENERGY RESOURCE CREDIT" MEANS:**

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

29 (2) **FOR A COMBINED HEAT AND POWER SYSTEM THAT COMMENCES**
30 **OPERATION AFTER DECEMBER 31, 2020, A CREDIT EQUAL TO THE FOLLOWING IF**
31 **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.

(r) “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.

(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

1 differences;

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

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

7 (9) poultry litter-to-energy; AND

8 (10) [waste-to-energy;

9 (11) refuse-derived fuel; and

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

11 7-702.

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

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

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

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

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

21 (b) The General Assembly finds that:

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

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

30 (3) the State needs to increase its reliance on **CLEAN**, renewable, AND

1 **EMERGING** energy in order to:

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

5 (ii) **PROVIDE THE GREATEST VALUE POSSIBLE TO STATE**
6 **RESIDENTS AT THE LOWEST POSSIBLE COST;**

7 (iii) **PROMOTE PRIVATE INVESTMENT WITHIN THE STATE,**
8 **INCREASE COMPETITION, AND MINIMIZE NEGATIVE ECONOMIC IMPACTS; AND**

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

12 7-703.

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

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

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

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

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

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

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

33 (i) 75,000,000 kilowatt-hours of industrial process load to a single

customer in a year; and

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

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

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

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

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

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

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

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

(7) in 2012, 6.5% from Tier 1 renewable sources, including at least 0.1% 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

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

3 (ii) 2.5% from Tier 2 renewable sources;

4 (13) in 2018:

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

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

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

9 (ii) 2.5% from Tier 2 renewable sources;

10 (14) in 2019:

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

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

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

15 (ii) 2.5% from Tier 2 renewable sources;

16 (15) in 2020:

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

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

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

21 (ii) 2.5% from Tier 2 renewable sources;

22 (16) in 2021, [30.8%] **55.8%** from [Tier 1 renewable sources] **CLEAN**
23 **ENERGY RESOURCES AND RENEWABLE ENERGY SOURCES**, including:

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

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

(III) AT LEAST 2.5% DERIVED FROM CLEAN ENERGY RESOURCES;

(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:

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

2 (II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A)
3 OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST
4 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

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

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

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

9 (II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A)
10 OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST
11 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

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

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

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

16 (II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A)
17 OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST
18 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

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

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

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

23 (II) AN AMOUNT SET BY THE COMMISSION UNDER § 7-704.2(A)
24 OF THIS SUBTITLE DERIVED FROM OFFSHORE WIND ENERGY, INCLUDING AT LEAST
25 1,200 MEGAWATTS OF ROUND 2 OFFSHORE WIND PROJECTS; AND

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

27 (33) IN 2038, 95% FROM CLEAN ENERGY RESOURCES AND RENEWABLE
28 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.

(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 CONNECTED TO THE DISTRIBUTION SYSTEM IN THE STATE THAT COMMENCED OPERATION BEFORE JANUARY 1, 2021, THE COMMISSION SHALL

1 **REDUCE THE REQUIREMENTS OF SUBSECTION (B) OF THIS SECTION EACH YEAR BY**
2 **A PERCENTAGE EQUAL TO THE AVERAGE GENERATION OUTPUT OF THOSE**
3 **GENERATION ASSETS IN THE PREVIOUS 3 CALENDAR YEARS DIVIDED BY THE**
4 **AVERAGE ELECTRICITY RETAIL SALES IN THOSE SAME CALENDAR YEARS.**

5 7–704.

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

7 (i) is eligible for inclusion in meeting the **CLEAN AND** renewable
8 energy [portfolio] standard regardless of when the generating system or facility was placed
9 in service; [and]

10 (ii) may be applied to the percentage requirements of the standard
11 for [either] Tier 1 renewable sources [or Tier 2 renewable sources]; **AND**

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

15 (2) (i) Energy from a Tier 1 renewable source under [§ 7–701(r)(1), (5),
16 (9), (10), or (11)] **§ 7–701(w)(1), (5), OR (9)** of this subtitle is eligible for inclusion in
17 meeting the **CLEAN AND** renewable energy [portfolio] standard only if the source is
18 connected with the electric distribution grid serving Maryland.

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

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

28 (4) Energy from a Tier 2 renewable source under § 7–701(s) of this subtitle
29 is eligible for inclusion in meeting the renewable energy portfolio standard through 2020 if
30 it is generated at a system or facility that existed and was operational as of January 1,
31 2004, even if the facility or system was not capable of generating electricity on that date.]

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

33 (1) receive renewable energy credits **AND CLEAN ENERGY RESOURCE**
34 **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 **AND CLEAN ENERGY RESOURCE CREDITS** to satisfy the standards applicable to the customer’s load, including credits created by a **CLEAN ENERGY RESOURCE OR** 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 **CLEAN ENERGY RESOURCE OR** renewable on-site generator may retain or transfer at its sole option any credits created by the **CLEAN ENERGY RESOURCE OR** 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] **CLEAN ENERGY RESOURCE** that displaces the purchase of electricity by the **CLEAN ENERGY RESOURCE OR** 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)] In order to create a renewable energy credit **OR CLEAN ENERGY RESOURCE CREDIT**, a Tier 1 renewable source or [Tier 2 renewable source] **CLEAN ENERGY RESOURCE** 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.】

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

1 or more earlier years that is the result of the variation between the quantity of ORECs
2 calculated from the **CLEAN AND** renewable energy [portfolio] standard obligation and the
3 quantity of ORECs approved in the Commission order for the same years.

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

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

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

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

19 (i) sell all energy, capacity, and ancillary services associated with
20 the creation of ORECs into the markets operated by PJM Interconnection; and

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

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

28 7–705.

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

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

35 (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

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

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

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

8 (e) (1) Notwithstanding the requirements of § 7-703(b) of this subtitle, if the
9 actual or projected dollar-for-dollar cost incurred or to be incurred by an electricity
10 supplier solely for the purchase of Tier 1 renewable energy credits derived from solar energy
11 in any 1 year is greater than or equal to, or is anticipated to be greater than or equal to,
12 6.0% of the electricity supplier's total annual electricity sales revenues in Maryland, the
13 electricity supplier may request that the Commission:

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

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

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

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

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

27 (i) the **CLEAN AND** renewable energy [portfolio] standard for solar
28 energy applicable to the electricity supplier under the delay continues for each subsequent
29 consecutive year that the actual or projected dollar-for-dollar costs incurred, or to be
30 incurred, by the electricity supplier solely for the purchase of solar renewable energy credits
31 is greater than or equal to, or is anticipated to be greater than or equal to, 6.0% of the
32 electricity supplier's total annual retail electricity sales revenues in Maryland; and

33 (ii) the **CLEAN AND** renewable energy [portfolio] standard for solar
34 energy applicable to the electricity supplier under the delay is increased to the next
35 scheduled percentage increase under § 7-703(b) of this subtitle for each year in which the
36 actual or projected dollar-for-dollar costs incurred, or to be incurred, by the electricity
37 supplier solely for the purchase of solar renewable energy credits is less than, or is

1 anticipated to be less than, 6.0% of the electricity supplier's total annual retail electricity
2 sales revenues in Maryland.

3 7-706.

4 (a) (1) Except as provided in paragraph (2) of this subsection, in accordance
5 with the obligation to provide standard offer service through the bid process created under
6 § 7-510 of this title, the Commission shall allow an electricity supplier to recover actual
7 dollar-for-dollar costs incurred, including a compliance fee under § 7-705 of this subtitle,
8 in complying with a State-mandated **CLEAN AND** renewable energy [portfolio] standard.

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

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

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

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

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

26 7-708.

27 (a) (1) The Commission shall establish and maintain a market-based
28 renewable electricity trading system to facilitate the creation and transfer of renewable
29 energy credits **AND CLEAN ENERGY RESOURCE CREDITS**.

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

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

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

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

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

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

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

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

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

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

7-709.

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

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

(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 FOR** 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) 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

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

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

7 7-710.

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

11 7-712.

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

16 **SECTION 4. AND BE IT FURTHER ENACTED**, That this Act shall take effect
17 January 1, 2021, and shall apply to all clean and renewable energy standard compliance
18 years beginning with the 2021 compliance year.