

HOUSE BILL 378

C5
HB 747/14 – ECM

5lr2363

By: **Delegate K. Young**

Introduced and read first time: February 6, 2015

Assigned to: Economic Matters

A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Qualifying Biomass**

3 FOR the purpose of limiting the eligibility of qualifying biomass as a Tier 1 renewable
4 source for the purposes of the renewable energy portfolio standard to qualifying
5 biomass used at a generation unit that started commercial operation on or after a
6 certain date and that achieves a certain total system efficiency; providing that, before
7 a certain date, certain qualifying biomass used at a certain generation unit that
8 started commercial operation on or before a certain date and achieved a certain
9 certification on or before a certain date is eligible as a Tier 1 renewable source;
10 providing that qualifying biomass used at a certain generation unit that started
11 commercial operation on or before a certain date or that achieves not more than a
12 certain percentage of total system efficiency is eligible as a Tier 2 renewable source;
13 providing that, on or after a certain date, certain qualifying biomass used at a certain
14 generation station that started commercial operation on or before a certain date and
15 achieved a certain certification on or before a certain date is eligible as a Tier 2
16 renewable source; requiring the Governor, beginning in a certain fiscal year and each
17 fiscal year thereafter and under certain circumstances, to appropriate funds in the
18 State budget from the Strategic Energy Investment Fund or other funding sources
19 to the Maryland Energy Administration in a certain amount based on a certain
20 calculation; requiring the Administration to issue a certain grant to a certain facility
21 under certain circumstances; providing for the application of this Act; defining
22 certain terms; altering certain terms; making a conforming change; and generally
23 relating to the renewable portfolio standard for qualifying biomass.

24 BY repealing and reenacting, with amendments,
25 Article – Public Utilities
26 Section 7–701 and 7–704(a)
27 Annotated Code of Maryland
28 (2010 Replacement Volume and 2013 Supplement)

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



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

3 **Article – Public Utilities**

4 7–701.

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

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

7 **(B–1) “FUEL INPUT” MEANS THE HIGHER HEATING VALUE OF THE INPUT FUEL**
8 **TYPE, MEASURED IN BTU/LB. BASED ON THE STANDARDIZED HEATING VALUE OF**
9 **THE FUEL TYPE, MULTIPLIED BY THE ANNUAL FUEL USED IN AS–DELIVERED TONS,**
10 **MULTIPLIED BY 2,000.**

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

13 (d) “Geothermal heating and cooling system” means a system that:

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

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

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

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

25 (3) replaces or displaces inefficient space or water heating systems whose
26 primary fuel is electricity or a nonnatural gas fuel source;

27 (4) replaces or displaces inefficient space cooling systems that do not meet
28 federal Energy Star product specification standards;

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

31 (6) does not feed electricity back to the grid.

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

4 (f) “Offshore wind energy” means energy generated by a qualified offshore wind
5 project.

6 (g) “Old growth timber” means timber from a forest:

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

9 (2) that exhibits several of the following characteristics:

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

11 (ii) randomly distributed canopy gaps are present;

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

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

16 (v) pit and mound topography can be observed.

17 (h) “Offshore wind renewable energy credit” or “OREC” means a renewable
18 energy credit equal to the generation attributes of 1 megawatt-hour of electricity that is
19 derived from offshore wind energy.

20 (i) “PJM region” means the control area administered by the PJM
21 Interconnection, as the area may change from time to time.

22 (j) “Poultry litter” means the fecal and urinary excretions of poultry, including
23 wood shavings, sawdust, straw, rice hulls, and other bedding material for the disposition
24 of manure.

25 (k) “Qualified offshore wind project” means a wind turbine electricity generation
26 facility, including the associated transmission-related interconnection facilities and
27 equipment, that:

28 (1) is located on the outer continental shelf of the Atlantic Ocean in an area
29 that:

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

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

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

4 (3) the Commission approves under § 7-704.1 of this subtitle.

5 (l) (1) “Qualifying biomass” means a nonhazardous, organic material that is
6 available on a renewable or recurring basis, and is:

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

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

11 A. mill residue, except sawdust and wood shavings;

12 B. precommercial soft wood thinning;

13 C. slash;

14 D. brush; or

15 E. yard waste;

16 2. a pallet, crate, or dunnage; **OR**

17 3. agricultural and silvicultural sources, including tree
18 crops, vineyard materials, grain, legumes, sugar, and other crop by-products or residues;
19 [or

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

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

24 **(III) GAS PRODUCED FROM THE ANAEROBIC DECOMPOSITION OF**
25 **ANIMAL WASTE, POULTRY WASTE, OR BIOMASS LISTED IN ITEM (I) OR (II) OF THIS**
26 **PARAGRAPH.**

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

1 (3) “Qualifying biomass” does not include:

2 (i) unsegregated solid waste or postconsumer wastepaper; or

3 (ii) an invasive exotic plant species.

4 [(m) “Thermal biomass system” means a system that:

5 (1) uses:

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

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

10 (2) is used in the State; and

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

13 [(n) (M) “Renewable energy credit” or “credit” means a credit equal to the
14 generation attributes of 1 megawatt–hour of electricity that is derived from a Tier 1
15 renewable source or a Tier 2 renewable source that is located:

16 (1) in the PJM region;

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

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

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

24 (ii) is between 10 and 30 miles off the coast of the State.

25 [(o) (N) “Renewable energy portfolio standard” or “standard” means the
26 percentage of electricity sales at retail in the State that is to be derived from Tier 1
27 renewable sources and Tier 2 renewable sources in accordance with § 7–703(b) of this
28 subtitle.

29 [(p) (O) “Renewable on–site generator” means a person who generates
30 electricity on site from a Tier 1 renewable source or a Tier 2 renewable source for the
31 person’s own use.

1 **[(q)] (P)** (1) “Solar water heating system” means a system that:

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

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

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

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

10 **(Q) “THERMAL BIOMASS SYSTEM” MEANS A SYSTEM THAT:**

11 **(1) USES:**

12 **(I) PRIMARYLY ANIMAL MANURE, INCLUDING POULTRY LITTER,**
13 **AND ASSOCIATED BEDDING TO GENERATE THERMAL ENERGY; AND**

14 **(II) FOOD WASTE OR QUALIFYING BIOMASS FOR THE**
15 **REMAINDER OF THE FEEDSTOCK;**

16 **(2) IS USED IN THE STATE; AND**

17 **(3) COMPLIES WITH ALL APPLICABLE STATE AND FEDERAL STATUTES**
18 **AND REGULATIONS, AS DETERMINED BY THE APPROPRIATE REGULATORY**
19 **AUTHORITY.**

20 (r) “Tier 1 renewable source” means one or more of the following types of energy
21 sources:

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

24 (2) wind;

25 (3) qualifying biomass **LISTED IN SUBSECTION (L)(1)(I) AND (II) OF**
26 **THIS SECTION USED AT A GENERATION UNIT THAT:**

27 **(I) STARTED COMMERCIAL OPERATION ON OR AFTER JANUARY**
28 **1, 2005; AND**

(II) ACHIEVES A TOTAL SYSTEM EFFICIENCY OF 65% OR MORE;

(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;

(10) waste-to-energy;

(11) refuse-derived fuel; [and]

(12) thermal energy from a thermal biomass system;

(13) QUALIFYING BIOMASS LISTED IN SUBSECTION (L)(1)(III) OF THIS SECTION; AND

(14) BEFORE JANUARY 1, 2018, QUALIFYING BIOMASS LISTED IN SUBSECTION (L)(1)(I) AND (II) OF THIS SECTION USED AT A GENERATION UNIT THAT:

(I) STARTED COMMERCIAL OPERATION ON OR BEFORE DECEMBER 31, 2004; AND

(II) ACHIEVED CERTIFICATION WITH THE COMMISSION ON OR BEFORE DECEMBER 31, 2005.

(s) "Tier 2 renewable source" means **ONE OR MORE OF THE FOLLOWING TYPES OF ENERGY SOURCES:**

(1) hydroelectric power other than pump storage generation;

(2) QUALIFYING BIOMASS LISTED IN SUBSECTION (L)(1)(I) AND (II) OF THIS SECTION USED AT A GENERATION UNIT THAT:

1 (I) STARTED COMMERCIAL OPERATION ON OR BEFORE
2 DECEMBER 31, 2004; OR

3 (II) ACHIEVES A TOTAL SYSTEM EFFICIENCY OF NOT MORE
4 THAN 65%; AND

5 (3) ON OR AFTER JANUARY 1, 2018, QUALIFYING BIOMASS LISTED IN
6 SUBSECTION (L)(1)(I) AND (II) OF THIS SECTION USED AT A GENERATION UNIT THAT:

7 (I) STARTED COMMERCIAL OPERATION ON OR BEFORE
8 DECEMBER 31, 2004; AND

9 (II) ACHIEVED CERTIFICATION WITH THE COMMISSION ON OR
10 BEFORE DECEMBER 31, 2005.

11 (T) "TOTAL SYSTEM EFFICIENCY" MEANS THE SUM OF THE NET USEFUL
12 ELECTRIC ENERGY OUTPUT MEASURED IN BTUS AND THE NET USEFUL THERMAL
13 ENERGY OUTPUT MEASURED IN BTUS DIVIDED BY THE TOTAL FUEL INPUT.

14 (U) (1) "USEFUL THERMAL ENERGY OUTPUT" MEANS ENERGY:

15 (I) IN THE FORM OF DIRECT HEAT, STEAM, HOT WATER, OR
16 OTHER THERMAL FORM THAT IS USED IN PRODUCTION AND BENEFICIAL MEASURES
17 FOR HEATING, COOLING, HUMIDITY CONTROL, PROCESS USE, OR OTHER VALID
18 THERMAL END USE ENERGY REQUIREMENTS; AND

19 (II) FOR WHICH FUEL OR ELECTRICITY WOULD OTHERWISE BE
20 CONSUMED.

21 (2) "USEFUL THERMAL ENERGY OUTPUT" DOES NOT INCLUDE
22 THERMAL ENERGY USED FOR THE PURPOSE OF DRYING OR REFINING BIOMASS
23 FUEL.

24 7-704.

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

26 (i) EXCEPT FOR QUALIFYING BIOMASS, is eligible for inclusion in
27 meeting the renewable energy portfolio standard regardless of when the generating system
28 or facility was placed in service; and

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

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

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

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

13 (4) Energy from a Tier 2 renewable source under § ~~7-701(s)~~
14 **7-701(S)(1)** of this subtitle is eligible for inclusion in meeting the renewable energy
15 portfolio standard through 2018 if it is generated at a system or facility that existed and
16 was operational as of January 1, 2004, even if the facility or system was not capable of
17 generating electricity on that date.

18 SECTION 2. AND BE IT FURTHER ENACTED, That:

19 (a) This Act shall be construed to apply only prospectively and may not be applied
20 or interpreted to have any effect on or application to the following:

21 (1) contracts entered into for the purchase of renewable energy credits
22 before January 1, 2015;

23 (2) renewable energy credits included in PJM's Generator Attributes
24 Tracking system that:

25 (i) were generated before the effective date of this Act by a facility
26 that qualified as a Tier 1 energy source before the effective date of this Act; or

27 (ii) are generated by a facility that qualified as a Tier 1 energy source
28 before the effective date of this Act, but were purchased by an electricity supplier before
29 the effective date of this Act; and

30 (3) renewable energy credits purchased before March 1, 2015, as part of a
31 Request for Proposals notice issued before the effective date of this Act.

32 (b) This Act shall apply to all contracts entered into, renewed, extended, or
33 substantially amended for the purchase of renewable energy credits after the effective date
34 of this Act.

35 SECTION 3. AND BE IT FURTHER ENACTED, That:

1 (a) Beginning in the first fiscal year in which final data is available for calendar
2 year 2018 renewable energy portfolio standard compliance and each fiscal year thereafter,
3 the Governor shall appropriate funds in the State budget from the Strategic Energy
4 Investment Fund or other funding sources, as determined by the Governor, to the Maryland
5 Energy Administration in an amount calculated by:

6 (1) multiplying:

7 (i) the average annual quantity of the sum of Tier 1 and Tier 2
8 renewable energy credits produced from January 1, 2013, to December 31, 2018, by a
9 facility located in Western Maryland that began commercial operation on or before
10 December 31, 2004, and achieved certification with the Public Service Commission on or
11 before December 31, 2005; by

12 (ii) the average selling price of nonsolar Tier 1 renewable energy
13 credits retired for Maryland renewable energy portfolio compliance in the most recent
14 calendar year in which final data is available; and

15 (2) subtracting any revenues received in that same calendar year from the
16 sale of Tier 1 or Tier 2 renewable energy credits produced by a facility referenced under
17 item (1)(i) of this subsection, as verified by the Public Service Commission.

18 (b) An owner of a facility referenced under subsection (a)(1)(i) of this section shall
19 make all reasonable efforts to maximize the revenue received for the sale of Tier 1 and Tier
20 2 renewable energy credits produced by the facility in any markets in which the renewable
21 energy credits are eligible for sale.

22 (c) The appropriation under this section shall be made only in a fiscal year in
23 which a facility referenced under subsection (a)(1)(i) of this section, the manufacture of final
24 paper products by a facility referenced under the most recent calendar year in which final
25 data for Maryland renewable energy portfolio standard compliance is available, is at least
26 25% of the tonnage produced in calendar year 2012.

27 (d) The Administration shall issue a grant to an owner of a facility referenced
28 under subsection (a)(1)(i) of this section for the amount of any appropriation made under
29 subsection (a) of this section.

30 SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect
31 October 1, 2015.