

# SENATE BILL 684

C5

3lr2411  
CF HB 1102

---

By: **Senators Garagiola, Ferguson, Klausmeier, Montgomery, Pinsky,  
Ramirez, Raskin, and Young**

Introduced and read first time: February 1, 2013

Assigned to: Finance

---

Committee Report: Favorable with amendments

Senate action: Adopted

Read second time: March 22, 2013

---

## CHAPTER \_\_\_\_\_

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

---

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.

Underlining indicates amendments to bill.

~~Strike out~~ indicates matter stricken from the bill by amendment or deleted from the law by amendment.



1 BY repealing and reenacting, with amendments,  
2 Article – Public Utilities  
3 Section 7–701 and 7–704(a)  
4 Annotated Code of Maryland  
5 (2010 Replacement Volume and 2012 Supplement)

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

8 **Article – Public Utilities**

9 7–701.

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

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

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

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

18 (c–1) “Geothermal heating and cooling system” means a system that:

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

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

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

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

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

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

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

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

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

9 (e) “Old growth timber” means timber from a forest:

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

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

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

16 (ii) randomly distributed canopy gaps are present;

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

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

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

22 (f) “PJM region” means the control area administered by the PJM  
23 Interconnection, Inc., as the area may change from time to time.

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

27 (h) (1) “Qualifying biomass” means a nonhazardous, organic material that  
28 is available on a renewable or recurring basis, and is:

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

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

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

4                                    B.    precommercial soft wood thinning;

5                                    C.    slash;

6                                    D.    brush; or

7                                    E.    yard waste;

8                                    2.    a pallet, crate, or dunnage;

9                                    3.    agricultural and silvicultural sources, including tree  
10 crops, vineyard materials, grain, legumes, sugar, and other crop by-products or  
11 residues; ~~or~~

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

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

16 **OR**

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

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

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

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

24                                    (ii)   an invasive exotic plant species.

25                                    (h-1) “Thermal biomass system” means a system that:

26                                    (1)   uses:

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

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

3 (2) is used in the State; and

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

6 (i) “Renewable energy credit” or “credit” means a credit equal to the  
7 generation attributes of 1 megawatt-hour of electricity that is derived from a Tier 1  
8 renewable source or a Tier 2 renewable source that is located:

9 (1) in the PJM region; or

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

13 (j) “Renewable energy portfolio standard” or “standard” means the  
14 percentage of electricity sales at retail in the State that is to be derived from Tier 1  
15 renewable sources and Tier 2 renewable sources in accordance with § 7-703(b) of this  
16 subtitle.

17 (k) “Renewable on-site generator” means a person who generates electricity  
18 on site from a Tier 1 renewable source or a Tier 2 renewable source for the person’s  
19 own use.

20 (k-1) (1) “Solar water heating system” means a system that:

21 (i) is comprised of glazed liquid-type flat-plate or tubular solar  
22 collectors as defined and certified to the OG-100 standard of the Solar Ratings and  
23 Certification Corporation;

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

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

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

30 (l) “Tier 1 renewable source” means one or more of the following types of  
31 energy sources:

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

1 (2) wind;

2 (3) qualifying biomass LISTED IN SUBSECTION (H)(1)(I) AND (II) OF  
3 THIS SECTION USED AT A GENERATION UNIT THAT:

4 (I) STARTED COMMERCIAL OPERATION ON OR AFTER  
5 JANUARY 1, 2005; AND

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

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

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

12 (6) ocean, including energy from waves, tides, currents, and thermal  
13 differences;

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

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

19 (9) poultry litter-to-energy;

20 (10) waste-to-energy;

21 (11) refuse-derived fuel; ~~and~~

22 (12) thermal energy from a thermal biomass system;

23 (13) QUALIFYING BIOMASS LISTED IN SUBSECTION (H)(1)(III) OF  
24 THIS SECTION; AND

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

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

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

3           (m) “Tier 2 renewable source” means ONE OR MORE OF THE FOLLOWING  
4 TYPES OF ENERGY SOURCES:

5                   **(1) hydroelectric power other than pump storage generation; ~~AND~~**

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

8                   **(I) STARTED COMMERCIAL OPERATION ON OR BEFORE**  
9 **DECEMBER 31, 2004; OR**

10                   **(II) ACHIEVES A TOTAL SYSTEM EFFICIENCY OF NOT MORE**  
11 **THAN 65%; AND**

12                   **(3) ON OR AFTER JANUARY 1, 2018, QUALIFYING BIOMASS LISTED**  
13 **IN SUBSECTION (H)(1)(I) AND (II) OF THIS SECTION USED AT A GENERATION**  
14 **UNIT THAT:**

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

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

19           (N) “TOTAL SYSTEM EFFICIENCY” MEANS THE SUM OF THE NET USEFUL  
20 ~~POWER~~ **ELECTRIC ENERGY OUTPUT MEASURED IN BTUS** AND THE NET USEFUL  
21 **THERMAL ENERGY OUTPUT MEASURED IN BTUS** DIVIDED BY THE TOTAL FUEL  
22 INPUT.

23           (O) (1) “USEFUL THERMAL ENERGY OUTPUT” MEANS ENERGY:

24                   **(I) IN THE FORM OF DIRECT HEAT, STEAM, HOT WATER, OR**  
25 **OTHER THERMAL FORM THAT IS USED IN PRODUCTION AND BENEFICIAL**  
26 **MEASURES FOR HEATING, COOLING, HUMIDITY CONTROL, PROCESS USE, OR**  
27 **OTHER VALID THERMAL END USE ENERGY REQUIREMENTS; AND**

28                   **(II) FOR WHICH FUEL OR ELECTRICITY WOULD OTHERWISE**  
29 **BE CONSUMED.**

1           **(2) “USEFUL THERMAL ENERGY OUTPUT” DOES NOT INCLUDE**  
2 **THERMAL ENERGY USED FOR THE PURPOSE OF DRYING OR REFINING BIOMASS**  
3 **FUEL.**

4 7–704.

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

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

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

11           (2)    (i)    1.    Except as provided in subparagraph 2 of this  
12 subparagraph, energy from a Tier 1 renewable source under § 7–701(l)(1), (5), (9), (10),  
13 or (11) of this subtitle is eligible for inclusion in meeting the renewable energy  
14 portfolio standard only if the source is connected with the electric distribution grid  
15 serving Maryland.

16                               2.    On or before December 31, 2011, energy from a Tier 1  
17 renewable source under § 7–701(l)(1) of this subtitle that is not connected with the  
18 electric distribution grid serving Maryland is eligible for inclusion in meeting the  
19 renewable energy portfolio standard only if offers for solar credits from Maryland grid  
20 sources are not made to the electricity supplier that would satisfy requirements under  
21 the standard and only to the extent that such offers are not made.

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

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

31           (4)    Energy from a Tier 2 renewable source under **[§ 7–701(m)] §**  
32 **7–701(M)(1)** of this subtitle is eligible for inclusion in meeting the renewable energy  
33 portfolio standard through 2018 if it is generated at a system or facility that existed  
34 and was operational as of January 1, 2004, even if the facility or system was not  
35 capable of generating electricity on that date.



1 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall be  
2 construed to apply only prospectively and may not be applied or interpreted to have  
3 any effect on or application to the following:

4 (1) contracts entered into for the purchase of renewable energy credits  
5 before ~~the effective date of this Act~~ January 1, 2013;

6 (2) facilities that:

7 (i) start commercial operation on or after January 1, 2014; and

8 (ii) enter into contracts of at least 10 years in duration before  
9 the effective date of this Act for the purchase of at least 50% of the anticipated  
10 renewable energy credits that will be generated by the facility; and

11 ~~(2)~~ (3) renewable energy credits included in PJM's Generator Attributes  
12 Tracking system that were generated by a facility that qualified as a Tier 1 energy  
13 source before the effective date of this Act.

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

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

20 (1) multiplying:

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

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

29 (2) subtracting any revenues received in that same calendar year from  
30 the sale of Tier 1 or Tier 2 renewable energy credits produced by a facility referenced  
31 under subsection (a)(1)(i) of this section, as verified by the Public Service Commission;

32 (b) an owner of a facility referenced under subsection (a)(1)(i) of this section  
33 shall make all reasonable efforts to maximize the revenue received for the sale of Tier  
34 1 and Tier 2 renewable energy credits produced by the facility in any markets in which  
35 the renewable energy credits are eligible for sale;

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

6           (d)     the Administration shall issue a grant to an owner of a facility referenced  
7 under subsection (a)(1)(i) of this section for the amount of any appropriation made  
8 under subsection (a) of this section.

9           SECTION ~~3~~ 4. AND BE IT FURTHER ENACTED, That this Act shall take  
10 effect October 1, 2013.

Approved:

---

Governor.

---

President of the Senate.

---

Speaker of the House of Delegates.