

SENATE BILL 797

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By: **Senator Middleton**

Introduced and read first time: February 1, 2013

Assigned to: Finance

A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Wood– and Plant–Derived Biomass**
3 **Systems**

4 FOR the purpose of providing that energy from a certain wood– and plant–derived
5 biomass system is eligible for inclusion in meeting the renewable energy
6 portfolio standard; providing that a person that owns a wood– and
7 plant–derived biomass system shall receive a certain renewable energy credit
8 calculated in a certain manner; requiring the Public Service Commission to
9 adopt certain regulations for the metering, verification, and reporting of energy
10 output from wood– and plant–derived biomass systems; providing that energy
11 produced by a wood– and plant–derived biomass system shall be eligible for
12 inclusion in meeting the renewable energy portfolio standard for certain
13 compliance years; defining certain terms; altering certain definitions; providing
14 for the effective date of this Act; and generally relating to the renewable energy
15 portfolio standard and wood– and plant–derived biomass systems.

16 BY repealing and reenacting, with amendments,
17 Article – Public Utilities
18 Section 7–701
19 Annotated Code of Maryland
20 (2010 Replacement Volume and 2012 Supplement)

21 BY adding to
22 Article – Public Utilities
23 Section 7–704(j)
24 Annotated Code of Maryland
25 (2010 Replacement Volume and 2012 Supplement)

26 Preamble

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 WHEREAS, The General Assembly recognizes the importance of supporting
2 Maryland's efforts to produce energy, to the extent practicable, from in-State
3 resources in order to help meet the State's clean, renewable energy goals; and

4 WHEREAS, The General Assembly is committed to the promotion of the
5 creation of green energy jobs in Maryland; and

6 WHEREAS, The General Assembly also encourages the Department of General
7 Services to consider the use of renewable energy, including the use of biomass systems
8 using wood- and plant-derived biomass sources, when developing procurement
9 guidelines; now, therefore,

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

12 **Article – Public Utilities**

13 7-701.

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

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

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

3 (i) “Renewable energy credit” or “credit” means a credit equal to the
4 generation attributes of 1 megawatt–hour of electricity **OR RENEWABLE THERMAL**
5 **ENERGY EQUIVALENT** that is derived from a Tier 1 renewable source or a Tier 2
6 renewable source that is located:

7 (1) in the PJM region; or

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

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

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

18 (k–1) **“RENEWABLE THERMAL ENERGY EQUIVALENT” MEANS THE**
19 **ELECTRICAL EQUIVALENT IN MEGAWATT–HOURS OF RENEWABLE THERMAL**
20 **ENERGY CALCULATED BY DIVIDING THE HEAT CONTENT, MEASURED IN BTUS,**
21 **OF THE RENEWABLE THERMAL ENERGY AT THE POINT OF TRANSFER TO A**
22 **HEAT–DEPENDENT PROCESS BY THE STANDARD CONVERSION FACTOR OF 3.412**
23 **MILLION BTUS PER MEGAWATT–HOUR.**

24 **(K–2)** (1) “Solar water heating system” means a system that:

25 (i) is comprised of glazed liquid–type flat–plate or tubular solar
26 collectors as defined and certified to the OG–100 standard of the Solar Ratings and
27 Certification Corporation;

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

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

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

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

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

5 (2) wind;

6 (3) qualifying biomass;

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

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

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

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

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

18 (9) poultry litter-to-energy;

19 (10) waste-to-energy;

20 (11) refuse-derived fuel; [and]

21 (12) thermal energy from a thermal biomass system; AND

22 **(13) ENERGY FROM A WOOD- AND PLANT-DERIVED BIOMASS**
23 **SYSTEM.**

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

26 **(N) (1) "WOOD- AND PLANT-DERIVED BIOMASS SYSTEM" MEANS A**
27 **SYSTEM THAT:**

28 **(I) EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS**
29 **SUBSECTION, USES QUALIFYING BIOMASS; AND**

- 1 **(II) PROVIDES ENERGY USED FOR:**
- 2 1. **SPACE OR WATER HEATING OR COOLING;**
- 3 2. **COMBINED HEAT AND POWER;**
- 4 3. **HUMIDITY CONTROL; OR**
- 5 4. **THERMAL END USE FOR WHICH FUEL OR**
6 **ELECTRICITY OTHERWISE WOULD BE CONSUMED.**

7 **(2) “WOOD- AND PLANT-DERIVED BIOMASS SYSTEM” DOES NOT**
8 **INCLUDE A SYSTEM THAT USES GAS PRODUCED FROM THE ANAEROBIC**
9 **DECOMPOSITION OF ANIMAL WASTE OR POULTRY WASTE.**

10 7-704.

11 **(J) (1) ENERGY FROM A WOOD- AND PLANT-DERIVED BIOMASS**
12 **SYSTEM COMMISSIONED ON OR AFTER JULY 1, 2013 IS ELIGIBLE FOR**
13 **INCLUSION IN MEETING THE RENEWABLE ENERGY PORTFOLIO STANDARD.**

14 **(2) A PERSON THAT OWNS A WOOD- AND PLANT-DERIVED**
15 **BIOMASS SYSTEM SHALL RECEIVE A RENEWABLE ENERGY CREDIT FOR THE**
16 **RENEWABLE THERMAL ENERGY EQUIVALENT PRODUCED BY THE WOOD- AND**
17 **PLANT-DERIVED BIOMASS SYSTEM.**

18 **(3) THE COMMISSION SHALL ADOPT REGULATIONS FOR THE**
19 **METERING, VERIFICATION, AND REPORTING OF THE ENERGY OUTPUT OF**
20 **WOOD- AND PLANT-DERIVED BIOMASS SYSTEMS.**

21 SECTION 2. AND BE IT FURTHER ENACTED, That energy produced by a
22 wood- and plant-derived biomass system shall be eligible for inclusion in meeting the
23 renewable energy portfolio standard for compliance years starting with 2014.

24 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
25 January 1, 2014.