

# SENATE BILL 797

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CF HB 1084

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By: **Senator Middleton**

Introduced and read first time: February 1, 2013

Assigned to: Finance

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Committee Report: Favorable with amendments

Senate action: Adopted

Read second time: March 15, 2013

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

1 AN ACT concerning

2 ~~Renewable Energy Portfolio Standard – Wood and Plant Derived Biomass~~  
3 ~~Systems~~  
4 Thermal Energy – Task Force and Regulations

5 FOR the purpose of ~~providing that energy from a certain wood and plant derived~~  
6 ~~biomass system is eligible for inclusion in meeting the renewable energy~~  
7 ~~portfolio standard; providing that a person that owns a wood and~~  
8 ~~plant derived biomass system shall receive a certain renewable energy credit~~  
9 ~~calculated in a certain manner; requiring the Public Service Commission to~~  
10 ~~adopt certain regulations for the metering, verification, and reporting of energy~~  
11 ~~output from wood and plant derived biomass systems; providing that energy~~  
12 ~~produced by a wood and plant derived biomass system shall be eligible for~~  
13 ~~inclusion in meeting the renewable energy portfolio standard for certain~~  
14 ~~compliance years; defining certain terms; altering certain definitions; providing~~  
15 ~~for the effective date of this Act; and generally relating to the renewable energy~~  
16 ~~portfolio standard and wood and plant derived biomass systems~~ establishing  
17 the Maryland Thermal Renewable Energy Credit Task Force; providing for the  
18 composition, chair, and staffing of the Task Force; prohibiting a member of the  
19 Task Force from receiving certain compensation, but authorizing the  
20 reimbursement of certain expenses; requiring the Task Force to analyze how to  
21 restructure the renewable energy portfolio standard to incorporate certain  
22 thermal energy sources; requiring the Task Force to make certain  
23 determinations and consider the impact of certain changes; requiring the Task  
24 Force to report its findings and recommendations to the Governor and the  
25 General Assembly on or before a certain date; providing for the termination of

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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.



the Task Force; requiring the Department of the Environment to publish certain regulations to facilitate the commissioning of certain solid fuel boilers in the State under certain circumstances; and generally relating to the establishment of the Maryland Thermal Renewable Energy Credit Task Force and the regulation of thermal energy.

~~BY repealing and reenacting, with amendments,  
Article — Public Utilities  
Section 7-701  
Annotated Code of Maryland  
(2010 Replacement Volume and 2012 Supplement)~~

~~BY adding to  
Article — Public Utilities  
Section 7-704(j)  
Annotated Code of Maryland  
(2010 Replacement Volume and 2012 Supplement)~~

#### Preamble

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

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

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

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That:

(a) There is a Maryland Thermal Renewable Energy Credit Task Force.

(b) The Task Force consists of the following 14 members:

(1) one member of the Senate of Maryland, appointed by the President of the Senate;

(2) one member of the House of Delegates, appointed by the Speaker of the House;

(3) the Director of the Maryland Energy Administration;

- 1           (4)   the Secretary of Natural Resources, or the Secretary's designee;
- 2           (5)   the Secretary of the Environment, or the Secretary's designee;
- 3           (6)   the Secretary of Agriculture, or the Secretary's designee;
- 4           (7)   the Executive Director of the Technical Staff of the Maryland  
5 Public Service Commission, or the Executive Director's designee; and
- 6           (8)   the following seven members, appointed by the Governor:
- 7               (i)   one representative of the solar industry;
- 8               (ii)   one representative of the animal-waste bioenergy industry;
- 9               (iii)   one representative of the geothermal industry;
- 10              (iv)   one representative of the forest products industry;
- 11              (v)   one representative from the Sustainable Forestry Council;
- 12              (vi)   one representative of the biomass thermal energy industry;
- 13 and
- 14              (vii)   one representative of the environmental community.
- 15           (c)   The Director of the Maryland Energy Administration shall be the chair of  
16 the Task Force.
- 17           (d)   The Maryland Energy Administration shall provide staff for the Task  
18 Force.
- 19           (e)   A member of the Task Force:
- 20               (1)   may not receive compensation as a member of the Task Force; but
- 21               (2)   is entitled to reimbursement for expenses under the Standard  
22 State Travel Regulations, as provided in the State budget.
- 23           (f)   In accordance with subsection (g) of this section, the Task Force shall:
- 24               (1)   analyze how to restructure the renewable energy portfolio  
25 standard under Title 7, Subtitle 7 of the Public Utilities Article to incorporate thermal  
26 energy sources, including energy derived from wood-derived biomass;
- 27               (2)   determine whether it is appropriate to create a separate  
28 compliance tier for thermal energy sources;



1 ~~(e) “Fund” means the Maryland Strategic Energy Investment Fund~~  
2 ~~established under § 9-20B-05 of the State Government Article.~~

3 ~~(e-1) “Geothermal heating and cooling system” means a system that:~~

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

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

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

13 ~~(2) meets or exceeds the current federal Energy Star product~~  
14 ~~specification standards;~~

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

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

19 ~~(5) is manufactured, installed, and operated in accordance with~~  
20 ~~applicable government and industry standards; and~~

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

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

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

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

29 ~~(2) that exhibits several of the following characteristics:~~

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

32 ~~(ii) randomly distributed canopy gaps are present;~~

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

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

5                   ~~(v) pit and mound topography can be observed.~~

6           ~~(f) "PJM region" means the control area administered by the PJM~~  
7 ~~Interconnection, Inc., as the area may change from time to time.~~

8           ~~(g) "Poultry litter" means the fecal and urinary excretions of poultry,~~  
9 ~~including wood shavings, sawdust, straw, rice hulls, and other bedding material for~~  
10 ~~the disposition of manure.~~

11           ~~(h) (1) "Qualifying biomass" means a nonhazardous, organic material that~~  
12 ~~is available on a renewable or recurring basis, and is:~~

13                   ~~(i) waste material that is segregated from inorganic waste~~  
14 ~~material and is derived from sources including:~~

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

17                                   ~~A. mill residue, except sawdust and wood shavings;~~

18                                   ~~B. precommercial soft wood thinning;~~

19                                   ~~C. slash;~~

20                                   ~~D. brush; or~~

21                                   ~~E. yard waste;~~

22                                   ~~2. a pallet, crate, or dunnage;~~

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

26                                   ~~4. gas produced from the anaerobic decomposition of~~  
27 ~~animal waste or poultry waste; or~~

28                   ~~(ii) a plant that is cultivated exclusively for purposes of being~~  
29 ~~used at a Tier 1 renewable source or a Tier 2 renewable source to produce electricity.~~

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

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

4                   ~~(i) unsegregated solid waste or postconsumer wastepaper; or~~

5                   ~~(ii) an invasive exotic plant species.~~

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

7                   ~~(1) uses:~~

8                           ~~(i) primarily animal manure, including poultry litter, and~~  
9 ~~associated bedding to generate thermal energy; and~~

10                           ~~(ii) food waste or qualifying biomass for the remainder of the~~  
11 ~~feedstock;~~

12                   ~~(2) is used in the State; and~~

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

15           ~~(i) “Renewable energy credit” or “credit” means a credit equal to the~~  
16 ~~generation attributes of 1 megawatt-hour of electricity OR RENEWABLE THERMAL~~  
17 ~~ENERGY EQUIVALENT that is derived from a Tier 1 renewable source or a Tier 2~~  
18 ~~renewable source that is located:~~

19                   ~~(1) in the PJM region; or~~

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

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

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

30           ~~(k-1) “RENEWABLE THERMAL ENERGY EQUIVALENT” MEANS THE~~  
31 ~~ELECTRICAL EQUIVALENT IN MEGAWATT HOURS OF RENEWABLE THERMAL~~  
32 ~~ENERGY CALCULATED BY DIVIDING THE HEAT CONTENT, MEASURED IN BTUS,~~

~~1 OF THE RENEWABLE THERMAL ENERGY AT THE POINT OF TRANSFER TO A  
2 HEAT DEPENDENT PROCESS BY THE STANDARD CONVERSION FACTOR OF 3.412  
3 MILLION BTUS PER MEGAWATT HOUR.~~

~~4 (K-2) (1) "Solar water heating system" means a system that:~~

~~5 (i) is comprised of glazed liquid type flat plate or tubular solar  
6 collectors as defined and certified to the OG-100 standard of the Solar Ratings and  
7 Certification Corporation;~~

~~8 (ii) generates energy using solar radiation for the purpose of  
9 heating water; and~~

~~10 (iii) does not feed electricity back to the electric grid.~~

~~11 (2) "Solar water heating system" does not include a system that  
12 generates energy using solar radiation for the sole purpose of heating a hot tub or  
13 swimming pool.~~

~~14 (1) "Tier 1 renewable source" means one or more of the following types of  
15 energy sources:~~

~~16 (1) solar energy, including energy from photovoltaic technologies and  
17 solar water heating systems;~~

~~18 (2) wind;~~

~~19 (3) qualifying biomass;~~

~~20 (4) methane from the anaerobic decomposition of organic materials in  
21 a landfill or wastewater treatment plant;~~

~~22 (5) geothermal, including energy generated through geothermal  
23 exchange from or thermal energy avoided by, groundwater or a shallow ground source;~~

~~24 (6) ocean, including energy from waves, tides, currents, and thermal  
25 differences;~~

~~26 (7) a fuel cell that produces electricity from a Tier 1 renewable source  
27 under item (3) or (4) of this subsection;~~

~~28 (8) a small hydroelectric power plant of less than 30 megawatts in  
29 capacity that is licensed or exempt from licensing by the Federal Energy Regulatory  
30 Commission;~~

~~31 (9) poultry litter to energy;~~



1           ~~(10) waste to energy;~~

2           ~~(11) refuse derived fuel; [and]~~

3           ~~(12) thermal energy from a thermal biomass system; AND~~

4           ~~(13) ENERGY FROM A WOOD AND PLANT DERIVED BIOMASS~~  
5 ~~SYSTEM.~~

6           ~~(m) "Tier 2 renewable source" means hydroelectric power other than pump~~  
7 ~~storage generation.~~

8           ~~(N) (1) "WOOD AND PLANT DERIVED BIOMASS SYSTEM" MEANS A~~  
9 ~~SYSTEM THAT:~~

10                     ~~(I) EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS~~  
11 ~~SUBSECTION, USES QUALIFYING BIOMASS; AND~~

12                     ~~(II) PROVIDES ENERGY USED FOR:~~

13                             ~~1. SPACE OR WATER HEATING OR COOLING;~~

14                             ~~2. COMBINED HEAT AND POWER;~~

15                             ~~3. HUMIDITY CONTROL; OR~~

16                             ~~4. THERMAL END USE FOR WHICH FUEL OR~~  
17 ~~ELECTRICITY OTHERWISE WOULD BE CONSUMED.~~

18                     ~~(2) "WOOD AND PLANT DERIVED BIOMASS SYSTEM" DOES NOT~~  
19 ~~INCLUDE A SYSTEM THAT USES GAS PRODUCED FROM THE ANAEROBIC~~  
20 ~~DECOMPOSITION OF ANIMAL WASTE OR POULTRY WASTE.~~

21 ~~7-704.~~

22           ~~(J) (1) ENERGY FROM A WOOD AND PLANT DERIVED BIOMASS~~  
23 ~~SYSTEM COMMISSIONED ON OR AFTER JULY 1, 2013 IS ELIGIBLE FOR~~  
24 ~~INCLUSION IN MEETING THE RENEWABLE ENERGY PORTFOLIO STANDARD.~~

25           ~~(2) A PERSON THAT OWNS A WOOD AND PLANT DERIVED~~  
26 ~~BIOMASS SYSTEM SHALL RECEIVE A RENEWABLE ENERGY CREDIT FOR THE~~  
27 ~~RENEWABLE THERMAL ENERGY EQUIVALENT PRODUCED BY THE WOOD AND~~  
28 ~~PLANT DERIVED BIOMASS SYSTEM.~~

1                    ~~(3) THE COMMISSION SHALL ADOPT REGULATIONS FOR THE~~  
 2 ~~METERING, VERIFICATION, AND REPORTING OF THE ENERGY OUTPUT OF~~  
 3 ~~WOOD AND PLANT DERIVED BIOMASS SYSTEMS.~~

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

7                    SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect  
 8 ~~January 1, 2014~~ June 1, 2013.

Approved:

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Governor.

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President of the Senate.

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Speaker of the House of Delegates.