# Chapter 323

# (House Bill 1084)

### AN ACT concerning

# Renewable Energy Portfolio Standard – Wood– and Plant–Derived Biomass Systems

#### <u>Thermal Energy – Task Force and Regulations</u>

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

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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,

<u>SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF</u> <u>MARYLAND, That:</u>

- (a) <u>There is a Maryland Thermal Renewable Energy Credit Task Force.</u>
- (b) The Task Force consists of the following 14 members:

(1) <u>one member of the Senate of Maryland, appointed by the President</u> of the Senate;

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

<u>the House;</u>

- (3) the Director of the Maryland Energy Administration;
- (4) the Secretary of Natural Resources, or the Secretary's designee;
- (5) the Secretary of the Environment, or the Secretary's designee;
- (6) the Secretary of Agriculture, or the Secretary's designee;

(7) the Executive Director of the Technical Staff of the Maryland Public Service Commission, or the Executive Director's designee; and

- (8) the following seven members, appointed by the Governor:
  - (i) <u>one representative of the solar industry;</u>

- (ii) <u>one representative of the animal-waste bioenergy industry;</u>
- (iii) <u>one representative of the geothermal industry;</u>
- (iv) one representative of the forest products industry;
- (v) <u>one representative from the Sustainable Forestry Council;</u>
- (vi) <u>one representative of the biomass thermal energy industry;</u>

<u>and</u>

(vii) <u>one representative of the environmental community.</u>

(c) <u>The Director of the Maryland Energy Administration shall be the chair of the Task Force.</u>

(d) <u>The Maryland Energy Administration shall provide staff for the Task</u> <u>Force.</u>

- (e) <u>A member of the Task Force:</u>
  - (1) may not receive compensation as a member of the Task Force; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(f) In accordance with subsection (g) of this section, the Task Force shall:

(1) analyze how to restructure the renewable energy portfolio standard under Title 7, Subtitle 7 of the Public Utilities Article to incorporate thermal energy sources, including energy derived from wood-derived biomass;

(2) <u>determine whether it is appropriate to create a separate</u> <u>compliance tier for thermal energy sources;</u>

(3) determine an appropriate method of awarding renewable energy credits for thermal energy sources, including energy derived from wood-derived biomass; and

(4) <u>determine any other changes to State law that the Task Force</u> <u>deems appropriate to incorporate thermal energy sources in the renewable energy</u> <u>portfolio standard.</u>

(g) In conducting the analysis and determinations required under subsection (f) of this section, the Task Force shall consider the impact of any proposed changes on: Ch. 323

(1) the State's ability to:

(i) <u>meet the greenhouse gas reduction goal under § 2–1204 of</u> the Environment Article;

(ii) achieve the goals set forth in the State's renewable energy portfolio standards under § 7–703 of the Public Utilities Article; and

(iii) utilize wood-derived biomass to help meet the State's renewable energy goals, consistent with § 5–102 of the Natural Resources Article; and

(2) any other factor the Task Force deems appropriate.

(h) On or before December 31, 2013, the Task Force shall report its findings and recommendations to the Governor and, in accordance with § 2–1246 of the State Government Article, the General Assembly.

SECTION 2. AND BE IT FURTHER ENACTED, That the Department of the Environment shall publish by October 1, 2013, a proposed regulation revising COMAR 26.11.09.04 to facilitate the commissioning of small- to medium-scale solid fuel boilers in the State that meet environmental standards that the Department of the Environment deems appropriate.

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

# Article – Public Utilities

<del>7**-**701.</del>

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

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

(c) <u>"Fund" means the Maryland Strategic Energy Investment Fund</u> established under § 9–20B–05 of the State Government Article.

(c-1) "Geothermal heating and cooling system" means a system that:

(1) exchanges thermal energy from groundwater or a shallow ground source to generate thermal energy through a geothermal heat pump or a system of geothermal heat pumps interconnected with any geothermal extraction facility that is: (i) a closed loop or a series of closed loop systems in which fluid is permanently confined within a pipe or tubing and does not come in contact with the outside environment; or

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

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

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

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

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

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

(d) <u>"Industrial process load" means the consumption of electricity by a</u> manufacturing process at an establishment classified in the manufacturing sector under the North American Industry Classification System, Codes 31 through 33.

(e) <u>"Old growth timber" means timber from a forest:</u>

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

(2) that exhibits several of the following characteristics:

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

<del>classes;</del>

(ii) randomly distributed canopy gaps are present;

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

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

(v) pit and mound topography can be observed.

(f) <u>"PJM region" means the control area administered by the PJM</u> Interconnection, Inc., as the area may change from time to time.

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

(h) (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;
- <del>C.</del> <del>slash;</del>
- <del>D.</del> <del>brush; or</del>
- <del>E.</del> <del>yard waste;</del>
- 2. a pallet, crate, or dunnage;

<del>3.</del> agricultural and silvicultural sources, including tree erops, 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 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

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#### (ii) an invasive exotic plant species.

(h-1) "Thermal biomass system" means a system that:

(1) uses:

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

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

(2) is used in the State; and

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

(i) <u>"Renewable energy credit" or "credit" means a credit equal to the</u> generation attributes of 1 megawatt-hour of electricity OR RENEWABLE THERMAL ENERGY EQUIVALENT that is derived from a Tier 1 renewable source or a Tier 2 renewable source that is located:

(1) in the PJM region; or

(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.

(j) <u>"Renewable energy portfolio standard" or "standard" means the</u> percentage of electricity sales at retail in the State that is to be derived from Tier 1 renewable sources and Tier 2 renewable sources in accordance with § 7–703(b) of this subtitle.

(k) "Renewable on-site generator" means a person who generates electricity on site from a Tier 1 renewable source or a Tier 2 renewable source for the person's own use.

(k-1) "RENEWABLE THERMAL ENERGY EQUIVALENT" MEANS THE ELECTRICAL EQUIVALENT IN MEGAWATT-HOURS OF RENEWABLE THERMAL ENERGY CALCULATED BY DIVIDING THE HEAT CONTENT, MEASURED IN BTUS, OF THE RENEWABLE THERMAL ENERGY AT THE POINT OF TRANSFER TO A HEAT-DEPENDENT PROCESS BY THE STANDARD CONVERSION FACTOR OF 3.412 MILLION BTUS PER MEGAWATT-HOUR.

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

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

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

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

(2) <u>"Solar water heating system" does not include a system that</u> generates energy using solar radiation for the sole purpose of heating a hot tub or swimming pool.

(1) "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 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; AND

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

(m) <u>"Tier 2 renewable source" means hydroelectric power other than pump</u> storage generation.

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

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

- (II) PROVIDES ENERGY USED FOR:
  - **1. SPACE OR WATER HEATING OR COOLING;**
  - 2. COMBINED HEAT AND POWER;
  - 3. HUMIDITY CONTROL; OR

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

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

7-704.

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

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

(3) THE COMMISSION SHALL ADOPT REGULATIONS FOR THE METERING, VERIFICATION, AND REPORTING OF THE ENERGY OUTPUT OF WOOD-AND PLANT-DERIVED BIOMASS SYSTEMS. Ch. 323

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

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

Approved by the Governor, May 2, 2013.