

SENATE BILL 652

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CF 2lr2045

By: **Senators Middleton, Young, Garagiola, Manno, Mathias, and Rosapepe**

Introduced and read first time: February 3, 2012

Assigned to: Finance

A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Renewable Energy**
3 **Credits – Geothermal Heating and Cooling**

4 FOR the purpose of specifying that energy generated from a geothermal heating and
5 cooling system is eligible for inclusion in meeting the renewable energy portfolio
6 standard; entitling a certain person or entity to receive a renewable energy
7 credit under certain circumstances; specifying the method by which energy
8 generation and consumption shall be measured; requiring geothermal heating
9 and cooling system installation to comply with certain standards; defining a
10 certain term; altering the definition of a certain term; and generally relating to
11 geothermal heating and cooling systems.

12 BY repealing and reenacting, without amendments,
13 Article – Public Utilities
14 Section 7–701(a)
15 Annotated Code of Maryland
16 (2010 Replacement Volume and 2011 Supplement)

17 BY adding to
18 Article – Public Utilities
19 Section 7–701(c–1) and 7–704(h)
20 Annotated Code of Maryland
21 (2010 Replacement Volume and 2011 Supplement)

22 BY repealing and reenacting, with amendments,
23 Article – Public Utilities
24 Section 7–701 (l)
25 Annotated Code of Maryland
26 (2010 Replacement Volume and 2011 Supplement)

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



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

Article – Public Utilities

7–701.

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

**(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.

**(I) “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; and

(11) refuse-derived fuel.

7-704.

(H) (1) ENERGY FROM A GEOTHERMAL HEATING AND COOLING SYSTEM IS ELIGIBLE FOR INCLUSION IN MEETING THE RENEWABLE ENERGY PORTFOLIO STANDARD.

(2) A PERSON SHALL RECEIVE A RENEWABLE ENERGY CREDIT EQUAL TO THE AMOUNT OF ENERGY, CONVERTED FROM BTUS TO KILOWATT-HOURS, THAT IS GENERATED BY A GEOTHERMAL HEATING AND COOLING SYSTEM FOR SPACE HEATING AND COOLING OR WATER HEATING IF THE PERSON:

(I) OWNS AND OPERATES THE SYSTEM;

1 **(II) LEASES AND OPERATES THE SYSTEM; OR**

2 **(III) CONTRACTS WITH A THIRD PARTY WHO OWNS AND**
3 **OPERATES THE SYSTEM.**

4 **(3) THE TOTAL AMOUNT OF ENERGY GENERATED AND CONSUMED**
5 **FOR A GEOTHERMAL HEATING AND COOLING SYSTEM SHALL BE MEASURED BY**
6 **AN ONSITE METER FOR THE SYSTEM'S COEFFICIENT OF PERFORMANCE.**

7 **(4) A GEOTHERMAL HEATING AND COOLING SYSTEM SHALL BE**
8 **INSTALLED IN ACCORDANCE WITH APPLICABLE STATE WELL CONSTRUCTION**
9 **AND LOCAL BUILDING CODE STANDARDS.**

10 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall apply only
11 to geothermal heating and cooling systems that are commissioned on or after July 1,
12 2012.

13 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
14 October 1, 2012.