

# HOUSE BILL 1016

C5, Q7

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By: **Delegates Hecht, Barkley, Barnes, Bartlett, Beidle, Bobo, Bohanan, Bronrott, Cane, G. Clagett, V. Clagett, Conaway, Conway, Davis, DeBoy, Donoghue, Doory, Elliott, Feldman, Gilchrist, Gutierrez, Guzzone, Harrison, Heller, Hubbard, Hucker, James, Jones, Kaiser, N. King, Kirk, Kramer, Krysiak, Kullen, Lawton, Levy, Love, Malone, Manno, Mathias, McHale, McIntosh, Minnick, Mizeur, Montgomery, Pena-Melnyk, Pendergrass, Rice, Riley, Robinson, Rudolph, Stull, Taylor, F. Turner, Walker, and Weldon**

Introduced and read first time: February 9, 2007

Assigned to: Economic Matters

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## A BILL ENTITLED

1 AN ACT concerning

2 **Renewable Energy Portfolio Standard – Solar Energy**

3 FOR the purpose of altering a certain renewable energy portfolio standard by  
4 requiring that certain portions of electricity in the standard be derived from  
5 solar energy; extending the deadlines within the renewable energy portfolio  
6 standard for certain requirements; repealing a certain provision that provided  
7 for an electricity supplier to receive a double credit toward meeting a certain  
8 renewable energy portfolio standard for energy derived by solar energy sources  
9 under certain circumstances; requiring an electricity supplier to enter into  
10 certain contracts for not less than a certain term of years; altering certain  
11 compliance fees to include fees for a shortfall from the requirement for solar  
12 energy within a certain time frame; authorizing an electricity supplier to  
13 request a delay in implementing certain requirements under certain  
14 circumstances; requiring the Public Service Commission to make certain  
15 considerations when deciding to grant a certain request; altering the use of a  
16 certain fund; requiring the Commission to designate a certain individual to have  
17 certain responsibilities; altering certain amounts of net energy metering  
18 available under certain circumstances; requiring the Commission to begin and  
19 complete a revision of the State's interconnection standards to be consistent

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EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 with certain standards of the Interstate Renewable Energy Council by certain  
 2 dates; altering the time frame within which a certain qualified energy facility  
 3 may place certain energy resources in service for a certain tax credit for  
 4 renewable energy; extending the period over which a certain tax credit may be  
 5 claimed; altering the expiration date of a certain tax credit certificate; providing  
 6 for the application of this Act; and generally relating to the use of renewable  
 7 energy and increasing the use of solar energy in the State.

8 BY repealing and reenacting, with amendments,  
 9 Article – Public Utility Companies  
 10 Section 7–306, 7–703(b), 7–705, 7–707(f), and 7–711  
 11 Annotated Code of Maryland  
 12 (1998 Volume and 2006 Supplement)

13 BY repealing  
 14 Article – Public Utility Companies  
 15 Section 7–704(c)  
 16 Annotated Code of Maryland  
 17 (1998 Volume and 2006 Supplement)

18 BY adding to  
 19 Article – Public Utility Companies  
 20 Section 7–704(c)  
 21 Annotated Code of Maryland  
 22 (1998 Volume and 2006 Supplement)

23 BY repealing and reenacting, with amendments,  
 24 Article – Tax – General  
 25 Section 10–720(a), (b), and (c)  
 26 Annotated Code of Maryland  
 27 (2004 Replacement Volume and 2006 Supplement)

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

30 **Article – Public Utility Companies**

31 7–306.

32 (a) (1) In this section the following words have the meanings indicated.

33 (2) “Biomass” means “qualified biomass” as defined in § 7–701 of this  
 34 title.

1           (3) “Eligible customer-generator” means a customer that owns and  
2 operates or leases and operates a biomass, solar, or wind electric generating facility  
3 that:

4                   (i) is located on the customer’s premises;

5                   (ii) is interconnected and operated in parallel with an electric  
6 company’s transmission and distribution facilities; and

7                   (iii) is intended primarily to offset all or part of the customer’s  
8 own electricity requirements.

9           (4) “Net energy metering” means measurement of the difference  
10 between the electricity that is supplied by an electric company and the electricity that  
11 is generated by an eligible customer-generator and fed back to the electric company  
12 over the eligible customer-generator’s billing period.

13           (b) The General Assembly finds and declares that a program to provide net  
14 energy metering for eligible customer-generators is a means to encourage private  
15 investment in renewable energy resources, stimulate in-State economic growth,  
16 enhance continued diversification of the State’s energy resource mix, and reduce costs  
17 of interconnection and administration.

18           (c) An electric company serving an eligible customer-generator shall ensure  
19 that the meter installed for net energy metering is capable of measuring the flow of  
20 electricity in two directions.

21           (d) The Commission shall require electric utilities to develop a standard  
22 contract or tariff for net energy metering and make it available to eligible  
23 customer-generators on a first-come, first-served basis until the rated generating  
24 capacity owned and operated by eligible customer-generators in the State reaches  
25 [34.722 megawatts, 0.2% of the State’s adjusted peak-load forecast for 1998] **1,500**  
26 **MEGAWATTS.**

27           (e) (1) Except as provided in subsection (g) of this section, a net energy  
28 metering contract or tariff shall be identical, in energy rates, rate structure, and  
29 monthly charges, to the contract or tariff that the customer would be assigned if the  
30 customer were not an eligible customer-generator.

31                   (2) (i) A net energy metering contract or tariff may not include  
32 charges that would raise the eligible customer-generator’s minimum monthly charge

1 above that of customers of the rate class to which the eligible customer-generator  
2 would otherwise be assigned.

3 (ii) Charges prohibited by this paragraph include new or  
4 additional demand charges, standby charges, customer charges, and minimum  
5 monthly charges.

6 (f) (1) The electric company shall calculate net energy metering in  
7 accordance with this subsection.

8 (2) Net energy produced or consumed on a monthly basis shall be  
9 measured in accordance with standard metering practices.

10 (3) If electricity supplied by the grid exceeds electricity generated by  
11 the eligible customer-generator during a month, the eligible customer-generator shall  
12 be billed for the net energy supplied in accordance with subsection (e) of this section.

13 (4) If electricity generated by the eligible customer-generator exceeds  
14 the electricity supplied by the grid, the eligible customer-generator shall be required  
15 to pay only customer charges for that month in accordance with subsection (e) of this  
16 section.

17 (5) (i) An eligible customer-generator under paragraph (4) of this  
18 subsection may accrue generation credit for a period not to exceed 12 months.

19 (ii) The electric company shall carry forward a negative  
20 kilowatt-hour reading until:

21 1. the eligible customer-generator's consumption of  
22 electricity from the grid eliminates the credit; or

23 2. the 12-month accrual period under subparagraph (i)  
24 of this paragraph expires.

25 (g) For an eligible customer-generator whose facility is sized to produce  
26 energy in excess of the eligible customer-generator's annual energy consumption, the  
27 Commission:

28 (1) may require the eligible customer-generator to install a dual meter  
29 that is capable of measuring the flow of electricity in two directions; and

30 (2) shall develop a credit formula that:

1 (i) excludes recovery of transmission and distribution costs; and

2 (ii) provides that the credit may be calculated using a method  
3 other than a kilowatt-hour basis, including a method that allows a dollar for dollar  
4 offset of electricity supplied by the grid compared to electricity generated by the  
5 eligible customer-generator.

6 (h) (1) [(i) Except as provided in subparagraph (ii) of this paragraph,  
7 the] **THE** generating capacity of an electric generating system used by an eligible  
8 customer-generator for net metering may not exceed [200 kilowatts] **2 MEGAWATTS**.

9 [(ii) 1. An eligible customer-generator may petition the  
10 Commission to use an electric generating system with a capacity not exceeding 500  
11 kilowatts.

12 2. The Commission may approve a petition for use of an  
13 electric generating system with a capacity not exceeding 500 kilowatts for net  
14 metering if the Commission finds that the project meets public safety and reliability  
15 requirements and is in the public interest.]

16 (2) An electric generating system used by an eligible  
17 customer-generator for net metering shall meet all applicable safety and performance  
18 standards established by the National Electrical Code, the Institute of Electrical and  
19 Electronics Engineers, and Underwriters Laboratories.

20 (3) The Commission may adopt by regulation additional control and  
21 testing requirements for eligible customer-generators that the Commission  
22 determines are necessary to protect public safety and system reliability.

23 (4) An electric company may not require an eligible  
24 customer-generator whose electric generating system meets the standards of  
25 paragraphs (2) and (3) of this subsection to:

26 (i) install additional controls;

27 (ii) perform or pay for additional tests; or

28 (iii) purchase additional liability insurance.

29 **(5) (I) ON OR BEFORE NOVEMBER 1, 2007, THE COMMISSION**  
30 **SHALL BEGIN A REVISION OF THE STATE'S INTERCONNECTION STANDARDS AND**  
31 **PROCEDURES TO BE CONSISTENT WITH THE MR-I2005 MODEL**

1 INTERCONNECTION STANDARDS OF THE INTERSTATE RENEWABLE ENERGY  
2 COUNCIL.

3 (II) THE COMMISSION SHALL COMPLETE THE REVISION OF  
4 THE STATE'S INTERCONNECTION STANDARDS ON OR BEFORE MAY 1, 2008.

5 7-703.

6 (b) The renewable energy portfolio standard shall be as follows:

7 (1) in 2006, 1% from Tier 1 renewable sources and 2.5% from Tier 2  
8 renewable sources;

9 (2) in 2007, 1% from Tier 1 renewable sources and 2.5% from Tier 2  
10 renewable sources;

11 (3) in 2008, [2%] **3%** from Tier 1 renewable sources, **INCLUDING AT**  
12 **LEAST 0.005% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
13 sources;

14 (4) in 2009, [2%] **3%** from Tier 1 renewable sources, **INCLUDING AT**  
15 **LEAST 0.01% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
16 sources;

17 (5) in 2010, [3%] **4%** from Tier 1 renewable sources, **INCLUDING AT**  
18 **LEAST 0.025% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
19 sources;

20 (6) in 2011, [3%] **4%** from Tier 1 renewable sources, **INCLUDING AT**  
21 **LEAST 0.04% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
22 sources;

23 (7) in 2012, [4%] **5%** from Tier 1 renewable sources, **INCLUDING AT**  
24 **LEAST 0.06% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
25 sources;

26 (8) in 2013, [4%] **5%** from Tier 1 renewable sources, **INCLUDING AT**  
27 **LEAST 0.1% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
28 sources;

1           (9) in 2014, [5%] **6%** from Tier 1 renewable sources, **INCLUDING AT**  
2 **LEAST 0.15% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
3 sources;

4           (10) in 2015, [5%] **6%** from Tier 1 renewable sources, **INCLUDING AT**  
5 **LEAST 0.25% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
6 sources;

7           (11) in 2016, [6%] **7%** from Tier 1 renewable sources, **INCLUDING AT**  
8 **LEAST 0.35% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
9 sources;

10           (12) in 2017, [6%] **7%** from Tier 1 renewable sources, **INCLUDING AT**  
11 **LEAST 0.55% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
12 sources;

13           (13) in 2018, [7%] **8%** from Tier 1 renewable sources, **INCLUDING AT**  
14 **LEAST 0.9% DERIVED FROM SOLAR ENERGY**, and 2.5% from Tier 2 renewable  
15 sources; [and]

16           (14) in 2019 [and later, 7.5%], **8%** from Tier 1 renewable sources,  
17 **INCLUDING AT LEAST 1.2% DERIVED FROM SOLAR ENERGY**, and 0% from Tier 2  
18 renewable sources;

19           **(15) IN 2020, 9% FROM TIER 1 RENEWABLE SOURCES, INCLUDING**  
20 **AT LEAST 1.5% DERIVED FROM SOLAR ENERGY, AND 0% FROM TIER 2**  
21 **RENEWABLE SOURCES;**

22           **(16) IN 2021, 9.5% FROM TIER 1 RENEWABLE SOURCES,**  
23 **INCLUDING AT LEAST 1.85% DERIVED FROM SOLAR ENERGY, AND 0% FROM**  
24 **TIER 2 RENEWABLE SOURCES; AND**

25           **(17) IN 2022 AND LATER, 9.5% FROM TIER 1 RENEWABLE**  
26 **SOURCES, INCLUDING AT LEAST 2% DERIVED FROM SOLAR ENERGY, AND 0%**  
27 **FROM TIER 2 RENEWABLE SOURCES.**

28 7-704.

29           [(c) An electricity supplier shall receive double credit toward meeting the  
30 renewable energy portfolio standard for energy derived from solar energy.]





1                                   **5.     IN 2015 AND 2016, 25 CENTS; AND**

2                                   **6.     IN 2017 AND LATER, 20 CENTS; AND**

3                                   [(ii)] **(III)**   1.5 cents for each kilowatt-hour of shortfall from  
4 required Tier 2 renewable sources; or

5                                   (2)   for industrial process load:

6                                   (i)   for each kilowatt-hour of shortfall from required Tier 1  
7 renewable sources, a compliance fee of:

8                                   1.    0.8 cents in 2006, 2007, and 2008;

9                                   2.    0.5 cents in 2009 and 2010;

10                                  3.    0.4 cents in 2011 and 2012;

11                                  4.    0.3 cents in 2013 and 2014;

12                                  5.    0.25 cents in 2015 and 2016; and

13                                  6.    0.2 cents in 2017 and later; and

14                                  (ii)   nothing for any shortfall from required Tier 2 renewable  
15 sources.

16                                  (c)   The Commission may allow an electricity supplier to submit the report  
17 required under § 7-505(b)(4) of this title to demonstrate compliance with the  
18 renewable energy portfolio standard.

19                                  (d)   An aggregator or broker who assists an electricity customer in purchasing  
20 electricity but who does not supply the electricity or take title to or ownership of the  
21 electricity may require the electricity supplier who supplies the electricity to  
22 demonstrate compliance with this subtitle.

23                                  **(E)   (1)   NOTWITHSTANDING THE REQUIREMENTS OF § 7-703(B) OF**  
24 **THIS SUBTITLE, IF THE ACTUAL DOLLAR-FOR-DOLLAR COST INCURRED BY AN**  
25 **ELECTRICITY SUPPLIER SOLELY FOR THE PURCHASE OF TIER 1 RENEWABLE**  
26 **ENERGY CREDITS DERIVED FROM SOLAR ENERGY IN ANY 1 YEAR IS GREATER**  
27 **THAN OR EQUAL TO 1% OF THE ELECTRICITY SUPPLIER'S ANNUAL ELECTRICITY**  
28 **SALES REVENUES, THE ELECTRICITY SUPPLIER MAY REQUEST A DELAY OF 1**

1 **YEAR IN THE SCHEDULED INCREASE OF SOLAR ENERGY REQUIREMENTS THAT**  
2 **APPLY TO THE ELECTRICITY SUPPLIER UNDER § 7-703 OF THIS SUBTITLE.**

3 **(2) WITH RESPECT TO A REQUEST FOR DELAY UNDER**  
4 **PARAGRAPH (1) OF THIS SUBSECTION, THE COMMISSION SHALL CONSIDER AND**  
5 **COMPARE THE DOLLAR-FOR-DOLLAR COMPLIANCE COSTS OF OTHER**  
6 **ELECTRICITY SUPPLIERS IN THE STATE.**

7 7-707.

8 (f) (1) (I) [The] **SUBJECT TO SUBPARAGRAPH (II) OF THIS**  
9 **PARAGRAPH, THE** Fund may be used only to make loans and grants to support the  
10 creation of new Tier 1 renewable energy sources in the State.

11 **(II) COMPLIANCE FEES PAID UNDER § 7-705(B)(1)(II) OF**  
12 **THIS SUBTITLE SHALL BE ACCOUNTED FOR SEPARATELY WITHIN THE FUND AND**  
13 **MAY BE USED ONLY TO MAKE LOANS AND GRANTS TO SUPPORT THE CREATION**  
14 **OF NEW SOLAR ENERGY SOURCES IN THE STATE.**

15 (2) By regulation the Commission shall adopt eligibility criteria for  
16 projects supported by the Fund.

17 (3) (i) The Administration shall receive and review applications for  
18 loans and grants for eligible projects.

19 (ii) The Administration shall approve or disapprove applications  
20 for loans and grants from the Fund.

21 (4) (i) Subject to subparagraph (ii) of this paragraph, the  
22 Commission may allow the use of money of the Fund for administrative expenses  
23 related to the Fund and project review and oversight.

24 (ii) The Administration and the Commission may not spend  
25 more than 10% of the funds placed in the Fund for administrative expenses.

26 7-711.

27 **(A)** The Commission has the same power and authority with respect to an  
28 electricity supplier under this subtitle that the Commission has with respect to any  
29 public service company under this article for the purposes of investigating and

1 examining the electricity supplier to determine compliance with this subtitle and with  
2 other applicable law.

3 **(B) (1) BEGINNING JANUARY 1, 2008, THE COMMISSION SHALL**  
4 **DESIGNATE AN INDIVIDUAL TO BE RESPONSIBLE FOR THE OVERSIGHT OF**  
5 **COMPLIANCE WITH THE REQUIREMENTS OF TIER 1 RENEWABLE ENERGY**  
6 **SOURCES THAT ARE TO BE DERIVED FROM SOLAR ENERGY.**

7 **(2) THE PERSON DESIGNATED UNDER PARAGRAPH (1) OF THIS**  
8 **SUBSECTION SHALL:**

9 **(I) DEVELOP THE PROGRAM FOR THE REQUIREMENTS FOR**  
10 **TIER 1 RENEWABLE ENERGY SOURCES DERIVED FROM SOLAR ENERGY;**

11 **(II) PROVIDE EDUCATION AND OUTREACH TO PROMOTE THE**  
12 **USE OF SOLAR ENERGY; AND**

13 **(III) MAKE POLICY RECOMMENDATIONS TO THE**  
14 **COMMISSION REGARDING IMPROVING THE STATE'S USE OF SOLAR ENERGY.**

15 **Article - Tax - General**

16 10-720.

17 (a) (1) In this section the following words have the meanings indicated.

18 (2) "Administration" means the Maryland Energy Administration.

19 (3) (i) Except as provided in subparagraphs (ii) and (iii) of this  
20 paragraph, "qualified energy resources" has the meaning stated in § 45(c)(1) of the  
21 Internal Revenue Code.

22 (ii) "Qualified energy resources" includes any solid,  
23 nonhazardous, cellulosic waste material that is segregated from other waste materials  
24 and is derived from:

25 1. any of the following forest-related resources, not  
26 including old-growth timber:

27 A. mill residues, except sawdust and wood shavings;

- 1 B. forest thinnings;
- 2 C. slash; or
- 3 D. brush;
- 4 2. waste pallets, crates, and dunnage and landscape or  
5 right-of-way trimmings; or
- 6 3. agricultural sources, including orchard tree crops,  
7 vineyard, grain, legumes, sugar, and other crop by-products or residues.

8 (iii) "Qualified energy resources" includes methane gas or other  
9 combustible gases resulting from the decomposition of organic materials from an  
10 agricultural operation, or from a landfill or wastewater treatment plant using one or a  
11 combination of the following processes:

- 12 1. anaerobic decomposition; or
- 13 2. thermal decomposition.

14 (4) "Qualified Maryland facility" means a facility located in the State  
15 that:

16 (i) primarily uses qualified energy resources to produce  
17 electricity and is originally placed in service on or after January 1, 2006, but before  
18 [January 1, 2011] **JANUARY 2, 2016**; or

19 (ii) produces electricity from a qualified energy resource that is  
20 co-fired with coal and initially begins co-firing a qualified energy resource on or after  
21 January 1, 2006, but before January 1, 2011, regardless of when the original facility  
22 was placed in service.

23 (b) (1) Except as provided in paragraphs (2) and (3) of this subsection, an  
24 individual or corporation that receives an initial credit certificate from the  
25 Administration may claim a credit against the State income tax for a taxable year in  
26 an amount equal to [0.85] **1.7** cents for each kilowatt hour of electricity:

27 (i) produced by the individual or corporation from qualified  
28 energy resources at a qualified Maryland facility during the [5-year] **10-YEAR** period  
29 specified in the initial credit certificate; and

1 (ii) sold by the individual or corporation to a person other than a  
2 related person, within the meaning of § 45 of the Internal Revenue Code, during the  
3 taxable year.

4 (2) If the electricity is produced from a qualified energy resource that  
5 is co-fired at a facility that produces electricity from coal, the credit is 0.5 cents for  
6 each kilowatt hour of electricity produced from the qualified energy resource instead of  
7 [0.85] **1.7** cents.

8 (3) The annual tax credit under this subsection may not exceed  
9 one-fifth of the maximum amount of credit stated in the initial credit certificate.

10 (c) (1) Subject to the provisions of this subsection, on application by a  
11 taxpayer, the Administration shall issue an initial credit certificate if the taxpayer has  
12 demonstrated that the taxpayer will within the next 12 months produce electricity  
13 from qualified energy resources at a qualified Maryland facility.

14 (2) The initial credit certificate issued under this subsection shall:

15 (i) state the maximum amount of credit that may be claimed by  
16 the taxpayer over a [5-year] **10-YEAR** period;

17 (ii) state the earliest tax year for which the credit may be  
18 claimed; and

19 (iii) expire after the [5th] **10TH** consecutive tax year beginning  
20 with the earliest tax year for which the credit may be claimed.

21 (3) The maximum amount of credit stated in the initial credit  
22 certificate shall:

23 (i) for an energy producer, be in an amount equal to the lesser  
24 of:

25 1. the product of multiplying 5 times the taxpayer's  
26 estimated annual tax credit, based on estimated annual energy production, as certified  
27 by the Administration; or

28 2. \$2,500,000.

29 (4) The Administration may not issue initial credit certificates for  
30 maximum credit amounts in the aggregate totaling more than \$25,000,000.

1           (5) The Administration shall approve all applications that qualify for  
2 an initial credit certificate under this subsection on a first-come, first-served basis.

3           (6) If a taxpayer over a 3-year period does not claim on average at  
4 least 10% of the maximum credit amount stated in the initial credit certificate, the  
5 Administration at its discretion may cancel an amount of the taxpayer's initial credit  
6 certificate equal to the product of multiplying:

7                   (i) the amount of the credit on average that was not claimed  
8 over the 3-year period; and

9                   (ii) the remaining number of tax years that the taxpayer is  
10 eligible to take the credit.

11           (7) An applicant for an initial credit certificate or a taxpayer whose  
12 credits have been canceled under paragraph (6) of this subsection, may appeal a  
13 decision by the Administration to the Office of Administrative Hearings in accordance  
14 with Title 10, Subtitle 2 of the State Government Article.

15           (8) The Administration may not issue an initial credit certificate after  
16 December 31, 2010.

17           SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect  
18 October 1, 2007, and shall be applicable to all taxable years beginning after December  
19 31, 2007.