

# SENATE BILL 398

C5

(5lr1088)

## ENROLLED BILL

— Finance/Economic Matters —

Introduced by Senators Pugh, Ramirez and Muse, Muse, Middleton, Benson, Feldman, Hershey, Klausmeier, and Mathias

Read and Examined by Proofreaders:

\_\_\_\_\_  
Proofreader.

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Proofreader.

Sealed with the Great Seal and presented to the Governor, for his approval this \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_ o'clock, \_\_\_\_\_ M.

\_\_\_\_\_  
President.

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

1 AN ACT concerning

2 ~~Public Service Commission – Community Solar Projects or Virtual Net Energy~~  
3 ~~Metering Study~~

4 Electricity – Community Solar Energy Generating System Program

5 FOR the purpose of ~~requiring the Public Service Commission, in consultation with the~~  
6 ~~Maryland Energy Administration, to convene a stakeholder workgroup to study and~~  
7 ~~make recommendations on the establishment of advisability of establishing a~~  
8 ~~program to allow certain customers to participate in certain community solar~~  
9 ~~projects or virtual net energy metering; requiring the workgroup to examine certain~~  
10 ~~matters relating to the establishment of advisability of establishing a certain~~  
11 ~~program; requiring the Commission to report to the General Assembly on or before~~  
12 ~~a certain date; providing for the termination of this Act; and generally relating to a~~  
13 ~~study by the Public Service Commission on the establishment of advisability 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.

*Italics indicate opposite chamber/conference committee amendments.*



~~establishing a program for community solar projects or virtual net energy metering establishing a pilot program on community solar energy generating systems under the authority of the Public Service Commission; providing for the structure and operation of the program, including the generation of electricity and allocation of costs to subscribers to a community solar energy generating system; providing for the beginning and termination of the pilot program; requiring the Commission to adopt certain regulations by a certain date; providing for the continuation of certain contracts under certain circumstances; providing for the inclusion of certain generation in a certain limitation; defining certain terms; stating certain findings of the General Assembly; requiring the Public Service Commission to study certain matters and report its findings to certain committees on or before a certain date; and generally relating to a program for community solar energy generating systems.~~

*BY adding to*

*Article – Public Utilities*

*Section 7-306.1*

*Annotated Code of Maryland*

*(2010 Replacement Volume and 2014 Supplement)*

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

~~That:~~

~~(a) The Public Service Commission, in consultation with the Maryland Energy Administration, shall convene a stakeholder workgroup to study and make recommendations on the establishment of advisability of establishing a program to allow residential customers who are unable to install solar panels on their own property to participate in community solar projects or virtual net energy metering through which a customer may subscribe to the output of the solar installation and obtain the benefits of solar generation.~~

~~(b) In conducting the study, the workgroup shall examine:~~

~~(1) the costs and benefits associated with the transmission and distribution of the energy produced through a community solar project or virtual net energy metering;~~

~~(2) how similar efforts programs in other states have been established and work;~~

~~(3) the allocation of solar renewable energy credits produced by a community solar project or virtual net energy metering;~~

~~(4) possible eligibility requirements for customers to participate in a community solar project or virtual net energy metering; and~~

~~(5) whether and how community solar projects or virtual net energy metering can help reduce the cost of compliance with the State's renewable energy portfolio standard;~~

~~(6) whether and how community solar projects or virtual net energy metering have a substantially different technical impact on the distribution system than traditional solar net energy metering;~~

~~(7) whether and how community solar projects or virtual net energy metering can expand access to ratepayers who want to invest in solar energy, particularly low-income ratepayers; and~~

~~(5) (8) any other matters the workgroup identifies as pertinent to establishment of determining the advisability of establishing the program.~~

~~(e) On or before December 1, 2016, the Public Service Commission shall report its findings and recommendations to the General Assembly, in accordance with § 2-1246 of the State Government Article.~~

~~SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2015. It shall remain effective for a period of 2 years and, at the end of June 30, 2017, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.~~

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

Article – Public Utilities

7-306.1.

(A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(2) “BASELINE ANNUAL USAGE” MEANS:

(I) A SUBSCRIBER’S ACCUMULATED ELECTRICITY USE IN KILOWATT-HOURS FOR THE 12 MONTHS BEFORE THE SUBSCRIBER’S MOST RECENT SUBSCRIPTION; OR

(II) FOR A SUBSCRIBER THAT DOES NOT HAVE A RECORD OF 12 MONTHS OF ELECTRICITY USE AT THE TIME OF THE SUBSCRIBER’S MOST RECENT SUBSCRIPTION, AN ESTIMATE OF THE SUBSCRIBER’S ACCUMULATED 12 MONTHS OF ELECTRICITY USE IN KILOWATT-HOURS, DETERMINED IN A MANNER THE COMMISSION APPROVES.

(3) “COMMUNITY SOLAR ENERGY GENERATING SYSTEM” MEANS A SOLAR ENERGY SYSTEM THAT:

1                    (I) IS CONNECTED TO THE ELECTRIC DISTRIBUTION GRID  
2 SERVING THE STATE;

3                    (II) IS LOCATED IN THE SAME ELECTRIC SERVICE TERRITORY AS  
4 ITS SUBSCRIBERS;

5                    (III) IS ATTACHED TO THE ELECTRIC METER OF A SUBSCRIBER OR  
6 IS A SEPARATE FACILITY WITH ITS OWN ELECTRIC METER;

7                    (IV) CREDITS ITS GENERATED ELECTRICITY, OR THE VALUE OF  
8 ITS GENERATED ELECTRICITY, TO THE BILLS OF THE SUBSCRIBERS TO THAT SYSTEM  
9 THROUGH VIRTUAL NET ENERGY METERING;

10                   (V) HAS AT LEAST TWO SUBSCRIBERS;

11                   (VI) DOES NOT HAVE SUBSCRIPTIONS LARGER THAN 200  
12 KILOWATTS CONSTITUTING MORE THAN 60% OF ITS SUBSCRIPTIONS;

13                   (VII) HAS A GENERATING CAPACITY THAT DOES NOT EXCEED 2  
14 MEGAWATTS AS MEASURED BY THE ALTERNATING CURRENT RATING OF THE  
15 SYSTEM'S INVERTER; AND

16                   (VIII) MAY BE OWNED BY ANY PERSON.

17                   (4) "PROGRAM" MEANS THE COMMUNITY SOLAR ENERGY  
18 GENERATING SYSTEMS PILOT PROGRAM.

19                   (5) "SUBSCRIBER" MEANS A RETAIL CUSTOMER OF AN ELECTRIC  
20 COMPANY THAT:

21                    (I) HOLDS A SUBSCRIPTION TO A COMMUNITY SOLAR ENERGY  
22 GENERATING SYSTEM; AND

23                    (II) HAS IDENTIFIED ONE OR MORE INDIVIDUAL METERS OR  
24 ACCOUNTS TO WHICH THE SUBSCRIPTION SHALL BE ATTRIBUTED.

25                   (6) "SUBSCRIBER ORGANIZATION" MEANS:

26                    (I) A PERSON THAT OWNS OR OPERATES A COMMUNITY SOLAR  
27 ENERGY GENERATING SYSTEM; OR

28                    (II) THE COLLECTIVE GROUP OF SUBSCRIBERS OF A COMMUNITY  
29 SOLAR ENERGY GENERATING SYSTEM.

1           (7) “SUBSCRIPTION” MEANS THE PORTION OF THE ELECTRICITY  
2 GENERATED BY A COMMUNITY SOLAR ENERGY GENERATING SYSTEM THAT IS  
3 CREDITED TO A SUBSCRIBER.

4           (8) “UNSUBSCRIBED ENERGY” MEANS ANY COMMUNITY SOLAR  
5 ENERGY GENERATING SYSTEM OUTPUT IN KILOWATT-HOURS THAT IS NOT  
6 ALLOCATED TO ANY SUBSCRIBER.

7           (9) “VIRTUAL NET ENERGY METERING” MEANS MEASUREMENT OF  
8 THE DIFFERENCE BETWEEN THE KILOWATT-HOURS OR VALUE OF ELECTRICITY THAT  
9 IS SUPPLIED BY AN ELECTRIC COMPANY AND THE KILOWATT-HOURS OR VALUE OF  
10 ELECTRICITY ATTRIBUTABLE TO A SUBSCRIPTION TO A COMMUNITY SOLAR ENERGY  
11 GENERATING SYSTEM AND FED BACK TO THE ELECTRIC GRID OVER THE  
12 SUBSCRIBER’S BILLING PERIOD, AS CALCULATED UNDER THE TARIFFS ESTABLISHED  
13 UNDER SUBSECTION (E)(2) OF THIS SECTION.

14           (B) THE GENERAL ASSEMBLY FINDS THAT:

15           (1) COMMUNITY SOLAR ENERGY GENERATING SYSTEMS:

16           (I) PROVIDE RESIDENTS AND BUSINESSES, INCLUDING THOSE  
17 THAT LEASE PROPERTY, INCREASED ACCESS TO LOCAL SOLAR ELECTRICITY WHILE  
18 ENCOURAGING PRIVATE INVESTMENT IN SOLAR RESOURCES;

19           (II) ENHANCE CONTINUED DIVERSIFICATION OF THE STATE’S  
20 ENERGY RESOURCE MIX TO ACHIEVE THE STATE’S RENEWABLE ENERGY PORTFOLIO  
21 STANDARD AND GREENHOUSE GAS EMISSIONS REDUCTION ACT GOALS; AND

22           (III) PROVIDE ELECTRIC COMPANIES AND RATEPAYERS THE  
23 OPPORTUNITY TO REALIZE THE MANY BENEFITS ASSOCIATED WITH DISTRIBUTED  
24 ENERGY; AND

25           (2) IT IS IN THE PUBLIC INTEREST THAT THE STATE ENABLE THE  
26 DEVELOPMENT AND DEPLOYMENT OF ENERGY GENERATION FROM COMMUNITY  
27 SOLAR ENERGY GENERATING SYSTEMS IN ORDER TO:

28           (I) ALLOW RENTERS AND LOW-INCOME AND  
29 MODERATE-INCOME RETAIL ELECTRIC CUSTOMERS TO OWN AN INTEREST IN A  
30 COMMUNITY SOLAR ENERGY GENERATING SYSTEM;

31           (II) FACILITATE MARKET ENTRY FOR ALL POTENTIAL  
32 SUBSCRIBERS WHILE GIVING PRIORITY TO SUBSCRIBERS WHO ARE THE MOST  
33 SENSITIVE TO MARKET BARRIERS; AND

1 (III) ENCOURAGE DEVELOPERS TO PROMOTE PARTICIPATION BY  
2 RENTERS AND LOW-INCOME AND MODERATE-INCOME RETAIL ELECTRIC  
3 CUSTOMERS.

4 (C) A COMMUNITY SOLAR ENERGY GENERATING SYSTEM, INCLUDING A  
5 SUBSCRIBER OR SUBSCRIBER ORGANIZATION ASSOCIATED WITH THE COMMUNITY  
6 SOLAR ENERGY GENERATING SYSTEM, IS NOT:

7 (1) AN ELECTRIC COMPANY;

8 (2) AN ELECTRICITY SUPPLIER; OR

9 (3) A GENERATING STATION.

10 (D) (1) (I) THE COMMISSION SHALL ESTABLISH A PILOT PROGRAM FOR  
11 A COMMUNITY SOLAR ENERGY GENERATING SYSTEM PROGRAM.

12 (II) THE STRUCTURE OF THE PILOT PROGRAM IS AS PROVIDED  
13 IN THIS SUBSECTION.

14 (2) ALL RATE CLASSES MAY PARTICIPATE IN THE PILOT PROGRAM.

15 (3) SUBSCRIBERS SERVED BY ELECTRIC STANDARD OFFER SERVICE  
16 AND ELECTRICITY SUPPLIERS MAY HOLD SUBSCRIPTIONS TO THE SAME COMMUNITY  
17 SOLAR ENERGY GENERATING SYSTEM.

18 (4) A SUBSCRIBER ORGANIZATION SHALL:

19 (I) DETERMINE HOW TO ALLOCATE SUBSCRIPTIONS TO  
20 SUBSCRIBERS; AND

21 (II) NOTIFY AN ELECTRIC COMPANY AND, IF APPLICABLE, A  
22 RELEVANT ELECTRICITY SUPPLIER ABOUT THE REGULATIONS THE COMMISSION  
23 ADOPTS UNDER SUBSECTION (E) OF THIS SECTION.

24 (5) AN ELECTRIC COMPANY SHALL USE THE TARIFF STRUCTURE  
25 UNDER SUBSECTION (E)(2) OF THIS SECTION TO PROVIDE EACH SUBSCRIBER WITH  
26 THE CREDITS.

27 (6) A SUBSCRIBER MAY NOT RECEIVE CREDIT FOR VIRTUAL NET  
28 EXCESS GENERATION THAT EXCEEDS 200% OF THE SUBSCRIBER'S BASELINE  
29 ANNUAL USAGE.

1           (7) ANY UNSUBSCRIBED ENERGY GENERATED BY A COMMUNITY  
2 SOLAR ENERGY GENERATING SYSTEM THAT IS NOT OWNED BY AN ELECTRIC  
3 COMPANY SHALL BE PURCHASED UNDER THE ELECTRIC COMPANY'S PROCESS FOR  
4 PURCHASING THE OUTPUT FROM QUALIFYING FACILITIES AT THE AMOUNT IT WOULD  
5 HAVE COST THE ELECTRIC COMPANY TO PROCURE THE ENERGY.

6           (8) AN ELECTRIC COMPANY SHALL USE ENERGY GENERATED FROM A  
7 COMMUNITY SOLAR ENERGY GENERATING SYSTEM TO OFFSET PURCHASES FROM  
8 WHOLESALE ELECTRICITY SUPPLIERS FOR STANDARD OFFER SERVICE.

9           (9) ALL COSTS ASSOCIATED WITH SMALL GENERATOR  
10 INTERCONNECTION STANDARDS UNDER COMAR 20.50.09 ARE THE  
11 RESPONSIBILITY OF THE SUBSCRIBER ORGANIZATION.

12           (10) A SUBSCRIBER ORGANIZATION MAY PETITION AN ELECTRIC  
13 COMPANY TO COORDINATE THE INTERCONNECTION AND COMMENCEMENT OF  
14 OPERATIONS OF A COMMUNITY SOLAR ENERGY GENERATING SYSTEM AFTER THE  
15 COMMISSION ADOPTS REGULATIONS REQUIRED UNDER SUBSECTION (E) OF THIS  
16 SECTION.

17           (11) A SUBSCRIBER ORGANIZATION MAY CONTRACT WITH A THIRD  
18 PARTY FOR THE THIRD PARTY TO FINANCE, BUILD, OWN, OR OPERATE A COMMUNITY  
19 SOLAR ENERGY GENERATING SYSTEM.

20           (12) A MUNICIPAL UTILITY OR COOPERATIVE UTILITY MAY  
21 PARTICIPATE IN THE PILOT PROGRAM.

22           (13) EQUIPMENT FOR A COMMUNITY SOLAR ENERGY GENERATING  
23 SYSTEM MAY NOT BE BUILT ON CONTIGUOUS PARCELS OF LAND UNLESS THE  
24 EQUIPMENT IS INSTALLED ONLY ON BUILDING ROOFTOPS.

25           (14) THE PILOT PROGRAM SHALL:

26           (I) BEGIN ON THE EARLIER OF:

27                   1. THE DATE OF SUBMISSION OF THE FIRST PETITION OF  
28 A SUBSCRIBER ORGANIZATION UNDER PARAGRAPH (10) OF THIS SUBSECTION AFTER  
29 THE COMMISSION ADOPTS THE REGULATIONS REQUIRED UNDER SUBSECTION (E) OF  
30 THIS SECTION; OR

31                   2. 6 MONTHS AFTER THE COMMISSION ADOPTS THOSE  
32 REGULATIONS; AND

33           (II) END 3 YEARS AFTER THE BEGINNING DATE.

1           (15) THE COMMISSION SHALL LIMIT THE PILOT PROGRAM IN SUCH A  
2 WAY THAT THE COMMISSION MAY CONDUCT A MEANINGFUL STUDY OF THE PILOT  
3 PROGRAM AND ITS RESULTS, INCLUDING:

4           (I) THE APPROPRIATE NUMBER OF COMMUNITY SOLAR ENERGY  
5 GENERATING SYSTEMS TO BE INCLUDED IN THE PILOT PROGRAM;

6           (II) THE APPROPRIATE AMOUNT OF GENERATING CAPACITY OF  
7 THE COMMUNITY SOLAR ENERGY GENERATING SYSTEMS TO BE INCLUDED IN THE  
8 PILOT PROGRAM; AND

9           (III) A VARIETY OF APPROPRIATE GEOGRAPHICAL AREAS IN THE  
10 STATE FOR LOCATING COMMUNITY SOLAR ENERGY GENERATING SYSTEMS TO BE  
11 INCLUDED IN THE PILOT PROGRAM.

12           (E) ON OR BEFORE MAY 15, 2016, THE COMMISSION SHALL ADOPT  
13 REGULATIONS TO IMPLEMENT THIS SECTION, INCLUDING REGULATIONS FOR:

14           (1) CONSUMER PROTECTION;

15           (2) A TARIFF STRUCTURE FOR AN ELECTRIC COMPANY TO PROVIDE A  
16 SUBSCRIBER WITH THE KILOWATT-HOURS OR VALUE OF THE SUBSCRIBER'S  
17 SUBSCRIPTION, AS THE COMMISSION DETERMINES;

18           (3) A CALCULATION FOR VIRTUAL NET ENERGY METERING AS THE  
19 COMMISSION DETERMINES;

20           (4) A PROTOCOL FOR ELECTRIC COMPANIES, ELECTRICITY  
21 SUPPLIERS, AND SUBSCRIBER ORGANIZATIONS TO COMMUNICATE THE  
22 INFORMATION NECESSARY TO CALCULATE AND PROVIDE THE MONTHLY ELECTRIC  
23 BILL CREDITS AND YEARLY NET EXCESS GENERATION PAYMENTS REQUIRED BY THIS  
24 SECTION; AND

25           (5) A PROTOCOL FOR A SUBSCRIBER ORGANIZATION TO COORDINATE  
26 WITH AN ELECTRIC COMPANY FOR THE INTERCONNECTION AND COMMENCEMENT OF  
27 OPERATIONS OF A COMMUNITY SOLAR ENERGY GENERATING SYSTEM.

28           (F) (1) SUBJECT TO REGULATIONS OR ORDERS OF THE COMMISSION, A  
29 CONTRACT RELATING TO A COMMUNITY SOLAR ENERGY GENERATING SYSTEM OR  
30 SUBSCRIBER ORGANIZATION THAT IS ENTERED INTO DURING THE PILOT PROGRAM  
31 SHALL REMAIN IN EFFECT ACCORDING TO THE TERMS OF THE CONTRACT,  
32 INCLUDING AFTER THE TERMINATION OF THE PILOT PROGRAM.



1           **(2) AFTER TERMINATION OF THE PILOT PROGRAM, IN ACCORDANCE**  
2 **WITH THE OPERATIONAL AND BILLING REQUIREMENTS IN SUBSECTION (D) OF THIS**  
3 **SECTION:**

4           **(I) A SUBSCRIBER ORGANIZATION MAY CONTINUE THE**  
5 **OPERATION OF A COMMUNITY SOLAR ENERGY GENERATING SYSTEM THAT BEGAN**  
6 **OPERATION DURING THE PILOT PROGRAM, INCLUDING THE CREATION AND TRADING**  
7 **OF SUBSCRIPTIONS; AND**

8           **(II) IN ACCORDANCE WITH THE TARIFFS ESTABLISHED UNDER**  
9 **SUBSECTION (E)(2) OF THIS SECTION, AN ELECTRIC COMPANY SHALL CONTINUE TO**  
10 **FACILITATE THE OPERATION OF A COMMUNITY SOLAR ENERGY GENERATING SYSTEM**  
11 **THAT BEGAN OPERATION DURING THE PILOT PROGRAM.**

12           **(G) THE CUMULATIVE INSTALLED NAMEPLATE CAPACITY UNDER THE PILOT**  
13 **PROGRAM SHALL COUNT TOWARD THE OVERALL LIMITATION OF 1,500 MEGAWATTS**  
14 **FOR ALL NET METERING PROJECTS IN § 7-306(D) OF THIS SUBTITLE.**

15           **SECTION 2. AND BE IT FURTHER ENACTED, That:**

16           **(a) The Public Service Commission, in consultation with the Maryland Energy**  
17 **Administration, shall convene a stakeholder workgroup to study the value and costs of the**  
18 **pilot program established under § 7-306.1 of the Public Utilities Article, as enacted by**  
19 **Section 1 of this Act and make recommendations to the Commission on the advisability of**  
20 **establishing a permanent program.**

21           **(b) In conducting the study, the workgroup shall identify and examine:**

22           **(1) a framework for valuation of the costs and benefits related to community**  
23 **solar and virtual net energy metering;**

24           **(2) the costs and benefits of community solar energy generating systems to**  
25 **participating subscribers and to nonsubscriber ratepayers;**

26           **(3) an appropriate credit mechanism and operational structure that allows**  
27 **a community renewable solar energy generating system to minimize administrative costs to**  
28 **an electric company, electric supplier, or subscriber organization;**

29           **(4) the benefits to and the technical and cost impacts of community solar**  
30 **programs and virtual net energy metering on an electric company's distribution grid;**

31           **(5) issues, benefits, and concerns related to the participation of electric**  
32 **companies, including investor-owned utilities, in community solar programs and projects,**  
33 **including owners and operators of the projects;**

1 (6) whether and how community solar projects or virtual net energy  
2 metering have a substantially different technical impact on the distribution system than  
3 traditional net energy metering;

4 (7) identification of any impacts on the standard offer service procurement  
5 process;

6 (8) a review of community solar programs and cost-benefit studies in other  
7 states;

8 (9) whether and how community solar programs can help reduce the cost of  
9 compliance with the renewable energy portfolio standard;

10 (10) how community solar energy generating systems can impact locational  
11 marginal prices in Maryland;

12 (11) the impacts of the pilot program on energy costs, reliability, and  
13 equitable cost allocation for ratepayers;

14 (12) how community solar project developers can increase participation by  
15 low- and moderate-income retail electric customers in community solar projects;

16 (13) the progress of the community solar energy generating pilot program  
17 under § 7-306.1 of the Public Utilities Article, as enacted by Section 1 of this Act, in  
18 attracting low- and moderate-income retail electric customers;

19 (14) whether community solar energy generating systems are an overall net  
20 benefit in helping Maryland achieve its distributed generation and renewable goals;

21 (15) any other matters the workgroup considers relevant; and

22 (16) any additional factors the Public Service Commission considers  
23 appropriate.

24 (c) On or before July 1, 2019, the Public Service Commission shall report its  
25 findings and recommendations, based on the study conducted under this section, to the  
26 Senate Finance Committee and the House Economic Matters Committee in accordance with  
27 § 2-1246 of the State Government Article.

28 SECTION 3. AND BE IT FURTHER ENACTED, That the Public Service  
29 Commission shall notify the General Assembly and Department of Legislative Services when  
30 the pilot program begins in accordance with § 7-306.1(d)(14) of the Public Utilities Article,  
31 as enacted by this Act.

32 SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect July  
33 1, 2015.