To increase the quantity of solar photovoltaic electricity by providing rebates for the purchase and installation of an additional 10,000,000 solar roofs and additional solar water heating systems with a cumulative capacity of 10,000,000 gallons by 2019.

IN THE SENATE OF THE UNITED STATES

Mr. Sanders (for himself, Mr. Whitehouse, Mr. Cardin, Mrs. Gillibrand, Mr. Merkley, Mr. Lautenberg, Mr. Leahy, Mrs. Boxer, Mr. Menendez, and Mr. Specter) introduced the following bill; which was read twice and referred to the Committee on ____________________

A BILL

To increase the quantity of solar photovoltaic electricity by providing rebates for the purchase and installation of an additional 10,000,000 solar roofs and additional solar water heating systems with a cumulative capacity of 10,000,000 gallons by 2019.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “10 Million Solar Roofs
and 10 Million Gallons of Solar Water Heating Act of
2010”.
SEC. 2. FINDINGS.

Congress finds that—

(1)(A) there is huge potential for increasing the
quantity of electricity produced in the United States
from distributed solar photovoltaics and solar water
heating systems;

(B) the use of solar photovoltaics on the roofs
of 10 percent of existing buildings could meet 70
percent of peak electric demand;

(C) a key barrier to increased deployment of
solar photovoltaic and hot water heating systems is
the upfront cost of capital, even though over time
the systems are cost-effective;

(2) investment in solar photovoltaics technology
will create economies of scale that will allow the
technology to deliver electricity at prices that are
competitive with electricity from fossil fuels;

(3) electricity produced from distributed solar
photovoltaics helps to reduce greenhouse gas emis-
sions, does not emit harmful air pollutants, such as
mercury, sulfur dioxide, and nitrogen oxides, uses
existing rooftop space, and does not require addi-
tional land for generation, thereby conserving nat-
ural resources and wildlife habitat;

(4) electricity produced from distributed solar
photovoltaics enhances national energy security and
helps to meet peak power demand without requiring
the construction and siting of new transmission in-
frastructure;

(5) investments in renewable energy stimulate
the development of green jobs in the United States
that provide substantial economic benefits;

(6)(A) rebate programs in several States have
been successful in increasing the quantity of solar
energy from distributed solar photovoltaics and solar
water heating systems;

(B) the State of California leads the United
States in installed solar photovoltaic systems and
has used rebate programs to promote the installation
of more than 500 megawatts of grid-connected solar
photovoltaics, with 226 megawatts installed during
the 3-year period ending on the date of enactment
of this Act due to the Solar Initiative of the State;

(C) the State of New Jersey is second in the
United States in installed solar photovoltaic systems
and has used incentive programs to achieve 90
megawatts of installed solar capacity;

(D) the State of Hawaii leads the United States
in solar water heating systems installed, and will re-
quire all new homes to have solar water heating sys-
tems starting in 2010, which is projected to save the
average household $600 annually and reduce the oil
consumption of the State by 30,000 barrels in 2010
alone; and

(E) the State of Florida has used consumer and
business rebate programs for solar photovoltaic and
solar water heating systems and is second in the
United States in installed solar hot water systems;

(7) despite inventing solar technology, the
United States has fallen behind nations with less
solar resources because those nations have set in
place policies to promote solar energy, and the
United States now ranks fourth in installed solar be-

hind Germany, Spain, and Japan;

(8) there are more than 1,500,000 solar water
heating systems in the United States that rely on a
free fuel source, the sun, to provide hot water, and
there is enormous potential for additional solar hot
water systems to displace fossil fuel use in water
heating; and

(9) homes in the United States spend more
than $13,000,000,000 on energy for water heating,
which is equivalent to 11.4 barrels of oil per home
and accounts for approximately 30 percent of the
carbon dioxide emissions of an average home, but
solar water heating systems can reduce the cost of
water heating and reduce residential carbon dioxide emissions.

SEC. 3. REBATES FOR PURCHASE AND INSTALLATION OF PHOTOVOLTAIC SYSTEMS AND SOLAR WATER HEATING SYSTEMS.

(a) IN GENERAL.—The Secretary of Energy (referred to in this Act as the “Secretary”) shall establish a program under which the Secretary shall provide rebates to eligible individuals or entities for the purchase and installation of solar photovoltaic systems and solar water heating systems for residential and commercial properties in order to install, over the 10-year period beginning on the date of enactment of this Act, at least—

(1) an additional 10,000,000 solar systems in the United States (as compared to the number of solar systems installed in the United States as of the date of enactment of this Act) with a cumulative capacity of at least 30,000 megawatts; and

(2) an additional 200,000 solar water heating systems in the United States (as compared to the number of solar water heating systems installed in the United States as of the date of enactment of this Act) with a cumulative capacity of 10,000,000 gallons.

(b) ELIGIBILITY.—
(1) **IN GENERAL.**—To be eligible for a rebate under this section—

(A) the recipient of the rebate shall be a homeowner, business, nonprofit entity, or State or local government that purchased and installed a solar photovoltaic system or solar water heating system for a property located in the United States; and

(B) the total capacity of the solar photovoltaic system for the property shall not exceed 2 megawatts.

(2) **OTHER INCENTIVES.**—The Secretary shall issue guidance to participating solar installers and contractors to ensure that information is made available to rebate recipients on all available Federal, State, local, and other incentives for energy efficiency improvements that can be made in the buildings on the property at which the solar photovoltaic or hot water heating system is being installed.

(3) **OTHER ENTITIES.**—After public review and comment, the Secretary may identify other individuals or entities located in the United States that qualify for a rebate under this section.

(c) **AMOUNTS.**—

(1) **SOLAR PHOTOVOLTAIC SYSTEMS.**—
(A) IN GENERAL.—Subject to subparagraph (B) and paragraph (3), the amount of a rebate provided to an eligible individual or entity for the purchase and installation of a solar photovoltaic system for a property under this section shall be a rebate per watt of installed capacity not to exceed the following amounts:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Dollar per watt</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1.75</td>
</tr>
<tr>
<td>2011</td>
<td>1.75</td>
</tr>
<tr>
<td>2012</td>
<td>1.5</td>
</tr>
<tr>
<td>2013</td>
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<td>2014</td>
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<td>0.75</td>
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<td>2017</td>
<td>0.75</td>
</tr>
<tr>
<td>2018</td>
<td>0.5</td>
</tr>
<tr>
<td>2019</td>
<td>0.5</td>
</tr>
</tbody>
</table>

(B) ADJUSTMENTS.—The Secretary may adjust the maximum amounts described in subparagraph (A)—

(i) to ensure deployment consistent with the purposes of this Act; and

(ii) to respond to projected and actual market conditions.

(2) SOLAR WATER HEATING SYSTEMS.—

(A) IN GENERAL.—Subject to subparagraph (B) and paragraph (3), the amount of a rebate provided to an eligible individual or entity for the purchase and installation of a solar water heating system under this section shall be
not more than $1 for each watt thermal-equivalent of installed capacity during calendar year 2010.

(B) ADJUSTMENTS.—The Secretary shall ensure that the maximum amount described in subparagraph (A) decreases over time at a rate that is similar to the schedule described in paragraph (1)(A), and consistent with projected and actual market conditions and the purposes of this Act, for each watt thermal-equivalent of installed capacity.

(3) MAXIMUM AMOUNT.—The total amount of a rebate provided to an eligible individual or entity for the purchase and installation of a solar photovoltaic system or solar water heating system for a property under this section shall not exceed 50 percent of the remaining cost to the purchaser for the purchase and installation of the system (after consideration of all applicable Federal, State, and local incentives and tax credits).

(d) RELATIONSHIP TO OTHER LAW.—The authority provided under this section shall be in addition to any other authority under which credits or other types of financial assistance are provided for installation of a solar photovoltaic or solar water heating system for a property.
1 (e) Authorization of Appropriations.—There
2 are authorized to be appropriated such sums as are nec-
3 essary to carry out this section.