

116TH CONGRESS
1ST SESSION

H. R. 5375

To amend the Internal Revenue Code of 1986 to allow the energy credit
for certain ocean thermal energy equipment.

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 10, 2019

Ms. GABBARD (for herself and Mr. CASE) introduced the following bill; which
was referred to the Committee on Ways and Means

A BILL

To amend the Internal Revenue Code of 1986 to allow the
energy credit for certain ocean thermal energy equipment.

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

3 **SECTION 1. SHORT TITLE; FINDINGS.**

4 (a) SHORT TITLE.—This Act may be cited as the “E.
5 Cooper Brown Ocean Clean Energy Act of 2019”.

6 (b) FINDINGS RELATED TO OCEAN THERMAL EN-
7 ERGY CONVERSION.—Congress finds the following with re-
8 spect to ocean thermal energy conversion (OTEC):

1 (1) OTEC is a clean energy technology that
2 produces energy by using temperature differentials
3 between cooler deep and warm surface seawaters.

4 (2) OTEC technology has the potential to
5 produce massive levels of clean energy to generate
6 electricity.

7 (3) Deployment of OTEC technology will reduce
8 greenhouse gases and reliance on fossil fuels.

9 (4) In tropical and subtropical remote locations,
10 electricity is expensive to generate. Power generated
11 from OTEC technology will be inexpensive when
12 compared to the unit cost of power from a tradi-
13 tional oil based electrical generation system.

14 (5) OTEC generated energy would reduce oper-
15 ational costs for remote military bases such as Kwaj-
16 alein and Diego Garcia;.

17 (6) The United States became involved in
18 OTEC research in 1974 with the establishment of
19 the Natural Energy Laboratory of Hawaii Authority.
20 The laboratory is one of the world's leading test fa-
21 cilities for OTEC technology. The United States
22 Navy supported the development of a 105 kW dem-
23 onstration OTEC plant at the laboratory site. This
24 facility became operational in 2015 and supplies
25 electricity to the local electricity grid.

1 (7) In certain regions, onshore OTEC plants
2 are also feasible and they can be configured to sup-
3 port seawater or lake water air conditioning (SWAC/
4 LWAC) systems for refrigeration and cooling, agri-
5 culture, and desalination systems for water purifi-
6 cation.

7 (8) Economic benefits of OTEC include reduced
8 fuel imports, stable utilities pricing, reduced capital
9 expense to power companies and governments, and
10 significant energy costs savings.

11 (9) Social benefits of OTEC include and an
12 ability to produce freshwater and promotion of aqua-
13 culture.

14 (c) FINDINGS RELATED TO SEAWATER AIR CONDI-
15 TIONING.—Congress finds the following with respect to
16 seawater air conditioning (SWAC):

17 (1) SWAC is an alternate-energy system that
18 uses the cold water from the deep ocean (and in
19 some cases a deep lake) to cool buildings.

20 (2) SWAC was developed as a secondary benefit
21 in the development of ocean thermal energy conver-
22 sion (OTEC) and can be used in conjunction with an
23 OTEC system or as a standalone alternate energy
24 system.

1 (3) The basic process involves water that is
2 pumped from a deep cold-water source (ocean or
3 lake) and then passed through a heat exchanger. A
4 closed-loop freshwater water distribution system is
5 pumped through a heat exchanger cooling the water
6 and the cooled water is distributed throughout a
7 building or group of buildings (i.e., a district cooling
8 system).

9 (4) The SWAC technology has been proven suc-
10 cessful with large systems at Cornell University, To-
11 ronto, Canada, and the Natural Energy Authority of
12 Hawaii (NELHA).

13 (5) Environmental benefits of SWAC include
14 being a clean, renewable source of energy, decreased
15 reliance on fossil fuels for cooling, and reduction in
16 greenhouse gas emissions.

17 (6) Economic benefits of SWAC include stable
18 long-term energy costs and independence from mar-
19 ket trends, reduced operating costs (including lower
20 costs in fuel, freshwater, equipment, and equipment
21 maintenance), and being a cost-effective and attrac-
22 tive energy technology investment.

1 **SEC. 2. ENERGY CREDIT FOR CERTAIN OCEAN THERMAL**
2 **ENERGY PROPERTY.**

3 (a) IN GENERAL.—Section 48(a)(3)(A) of the Inter-
4 nal Revenue Code of 1986 is amended by striking “or”
5 at the end of clause (vi), by adding “or” at the end of
6 clause (vii), and by adding at the end the following new
7 clause:

8 “(viii) equipment which converts
9 ocean thermal energy to usable energy or
10 which uses ocean water as a thermal en-
11 ergy sink to cool a structure,”.

12 (b) 15-PERCENT CREDIT.—Section 48(a)(2)(A) of
13 such Code is amended—

14 (1) by striking “and” at the end of clause
15 (i)(IV);

16 (2) by redesignating clause (ii) as clause (iii);

17 (3) by striking “any energy property to which
18 clause (i) does not apply” in clause (iii) (as so reded-
19 igned) and inserting “any other energy property”;
20 and

21 (4) by inserting after clause (i) the following
22 new clause:

23 “(ii) 15 percent in the case of any en-
24 ergy property described in paragraph
25 (3)(A)(viii), and”.

1 (c) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to periods after December 31,
3 2019, under rules similar to the rules of section 48(m)
4 of the Internal Revenue Code of 1986 (as in effect on the
5 day before the date of the enactment of the Revenue Rec-
6 onciliation Act of 1990).

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