

116TH CONGRESS
2D SESSION

S. 4584

To amend the Energy Policy and Conservation Act to modify the definition of water heater under energy conservation standards, and for other purposes.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 16, 2020

Ms. STABENOW (for herself and Mrs. BLACKBURN) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To amend the Energy Policy and Conservation Act to modify the definition of water heater under energy conservation standards, and for other purposes.

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. WATER HEATERS.**

4 (a) DEFINITION OF WATER HEATER.—Section 321
5 of the Energy Policy and Conservation Act (42 U.S.C.
6 6291) is amended by striking paragraph (27) and insert-
7 ing the following:

8 “(27) WATER HEATER.—

“(A) IN GENERAL.—The term ‘water heater’ means a product that utilizes oil, gas, or electricity to heat potable water for use outside the heater on demand, including—

“(i) storage type units that heat and store water at a thermostatically controlled temperature, including—

“(I) gas storage water heaters with an input of 75,000 Btu per hour or less, including heat pump type units that meet the current and voltage limits under clause (iii);

“(II) oil storage water heaters with an input of 105,000 Btu per hour or less; and

“(III) electric storage water heaters with an input of 12 kilowatts or less, including heat pump type units that meet the current and voltage limits under clause (iii);

“(ii)(I) instantaneous type units that heat water but contain not more than 1 gallon of water per 4,000 Btu per hour of input; and

“(II) in the case of—

1 “(aa) gas instantaneous water
2 heaters, have an input of 200,000 Btu
3 per hour or less and are designed and
4 marketed to provide outlet hot water
5 at a thermostatically controlled tem-
6 perature of less than 180 degrees
7 Fahrenheit;

8 “(bb) oil instantaneous water
9 heaters, have an input of 210,000 Btu
10 per hour or less; and

11 “(cc) electric instantaneous water
12 heaters, have an input of 12 kilowatts
13 or less;

14 “(iii) heat pump type units (including
15 add-on heat pumps, integrated heat pumps
16 with storage, split-system heat pumps that
17 consist of a separate heat pump and stor-
18 age tank that are designed and marketed
19 to operate together, and all ancillary equip-
20 ment, such as fans, storage tanks, pumps,
21 electric resistance heating elements, or
22 controls necessary for the device to per-
23 form its function) that—

1 “(I) have a maximum current
2 rating of 24 amperes at a voltage not
3 greater than 250 volts; and

4 “(II) are designed to transfer
5 thermal energy from 1 temperature
6 level to a different temperature level
7 for the purpose of heating water;

8 “(iv) solar thermal-assisted electric
9 storage units; and

10 “(v) solar thermal-assisted fossil fuel
11 storage units.

12 “(B) EXCLUSIONS.—Unless otherwise de-
13 termined by the Secretary under section
14 325(e)(7)(B), the term ‘water heater’ does not
15 include—

16 “(i) electric storage type units de-
17 scribed in subparagraph (A)(i)(III) that—

18 “(I) are designed and marketed
19 exclusively for commercial building
20 applications; and

21 “(II)(aa) are designed, con-
22 structed, inspected, tested, and
23 stamped in accordance with Section
24 IV, Part HLW, or Section X of the
25 Boiler and Pressure Vessel Code pro-

mulgated by the American Society of
Mechanical Engineers;

“(bb) exclusively use 3-phase
electricity, are designed and marketed
to provide outlet hot water at a
thermostatically controlled tempera-
ture of 180 degrees Fahrenheit or
greater, and operate only at rated
voltages of not less than 208 volts; or

“(cc) exclusively use single-phase
electricity, are designed and marketed
to provide outlet hot water at a
thermostatically controlled tempera-
ture of 180 degrees Fahrenheit or
greater, and operate only at a rated
voltage of 277 volts; or

“(ii) gas storage type units described
in subparagraph (A)(i)(I) that—

“(I) are designed and marketed
exclusively for commercial building
applications; and

“(II) are designed, constructed,
inspected, tested, and stamped in ac-
cordance with Section IV, Part HLW,
of the Boiler and Pressure Vessel

1 Code promulgated by the American
2 Society of Mechanical Engineers.

3 “(C) MULTI-INPUT ELECTRIC STORAGE
4 WATER HEATER.—The term ‘multi-input elec-
5 tric storage water heater’ means a product
6 that—

7 “(i) is not a heat pump type unit de-
8 scribed in subparagraph (A)(iii); and

9 “(ii) is designed, marketed, or shipped
10 from the manufacturer with a capability of
11 operating or being configured to operate at
12 inputs greater than, equal to, or below 12
13 kilowatts.

14 “(D) SOLAR THERMAL-ASSISTED ELECTRIC
15 STORAGE UNIT.—The term ‘solar thermal-as-
16 sisted electric storage unit’ means a unit that—

17 “(i) has an input of 12 kilowatts or
18 less;

19 “(ii) has at least 2 dedicated ports in
20 addition to the ports used for introduction
21 and delivery of potable water for the sup-
22 ply and return of water or a heat transfer
23 fluid heated externally by solar panels;

1 “(iii) does not have electric resistance
 2 heating elements located in the lower half
 3 of the storage tank;

4 “(iv) has the temperature sensing de-
 5 vice that controls the auxiliary electric heat
 6 source located in the upper half of the
 7 storage tank; and

8 “(v) has a ratio of less than 0.70 for
 9 the proportion that the certified first hour
 10 rating bears to the nominal volume of the
 11 storage tank.”.

12 (b) STANDARDS FOR WATER HEATERS.—Section
 13 325(e) of the Energy Policy and Conservation Act (42
 14 U.S.C. 6295(e)) is amended by adding at the end the fol-
 15 lowing:

16 “(7) EXEMPTED WATER HEATERS.—

17 “(A) DEFINITION OF EXEMPTED WATER
 18 HEATER.—In this paragraph, the term ‘exempt-
 19 ed water heater’ means a water heater de-
 20 scribed in section 321(27)(B).

21 “(B) MONITORING OF SHIPMENTS.—

22 “(i) SUBMISSION OF DATA.—Not later
 23 than 90 days after the date of enactment
 24 of this paragraph, and not later than May
 25 1 of each year thereafter, the Secretary

1 shall require each manufacturer of water
2 heaters to report to the Secretary the
3 quantity of exempted water heaters, in
4 each category of exempted water heaters,
5 that the manufacturer shipped in the pre-
6 ceding calendar year.

7 “(ii) CONFIDENTIALITY REQUIRE-
8 MENTS.—The Secretary shall treat ship-
9 ment data reported by manufacturers
10 under clause (i) as confidential business in-
11 formation subject to appropriate confiden-
12 tial data safeguards.

13 “(iii) PUBLICATION.—

14 “(I) BASELINE SHIPMENT
15 DATA.—Not later than 120 days after
16 the date of enactment of this para-
17 graph, the Secretary shall publish an
18 analysis of the data collected under
19 clause (i) for public comment, subject
20 to applicable confidentiality safe-
21 guards, which shall serve as the base-
22 line data for the analysis described in
23 subclause (II)(bb).

24 “(II) PERCENTAGE GROWTH
25 FROM BASELINE.—Not later than

1 June 1 of each year after the year in
2 which the Secretary publishes data
3 under subclause (I), the Secretary
4 shall publish—

5 “(aa) an analysis of the data
6 collected under clause (i) for pub-
7 lic comment, subject to applicable
8 confidentiality safeguards;

9 “(bb) the percentage growth
10 in the number of shipments with-
11 in each category of exempted
12 water heater relative to the base-
13 line data described in subclause
14 (I); and

15 “(cc) the determination of
16 the Secretary as to whether the
17 number of shipments for any cat-
18 egory of exempted water heater
19 have increased by more than 25
20 percent compared to the baseline
21 data for that category.

22 “(C) INCLUSION OF EXEMPTED WATER
23 HEATERS.—

24 “(i) IN GENERAL.—The Secretary
25 shall, by regulation, revise the definition of

1 water heater under section 321(27) to in-
2 clude an exempted water heater under sub-
3 paragraph (A) of that section if the Sec-
4 retary makes an affirmative determination
5 under subparagraph (B)(iii)(II)(cc) for
6 that category of exempted water heater.

7 “(ii) ENERGY CONSERVATION STAND-
8 ARDS.—Any category of exempted water
9 heater included in the definition of water
10 heater under clause (i) shall be required to
11 meet the energy conservation standards
12 applicable to an electric or gas storage type
13 water heater under this part.

14 “(iii) EFFECTIVE DATE.—For any
15 category of exempted water heater, the
16 Secretary shall carry out clause (i), and re-
17 quire compliance under clause (ii), not
18 later than 1 year after the date on which
19 the Secretary makes the affirmative deter-
20 mination described in clause (i) for that
21 category.

22 “(8) STANDARDS FOR MULTI-INPUT ELECTRIC
23 STORAGE WATER HEATERS.—A multi-input electric
24 storage water heater shall be subject to the test pro-

1 cedures, energy conservation standards, labeling (if
2 applicable), and certification requirements—

3 “(A) for electric storage water heaters
4 under this part; and

5 “(B) for storage water heaters under part
6 C.

7 “(9) TECHNOLOGY-NEUTRAL ELECTRIC STOR-
8 AGE WATER HEATER STANDARDS.—Notwithstanding
9 any other provision of this Act, the Secretary may
10 not create separate product classes for heat pump
11 water heaters and other electric storage water heat-
12 ers.”.

13 (c) DEFINITION OF COMMERCIAL WATER HEATER.—
14 Section 340 of the Energy Policy and Conservation Act
15 (42 U.S.C. 6311) is amended by striking paragraph (12)
16 and inserting the following:

17 “(12)(A) STORAGE WATER HEATER.—

18 “(i) IN GENERAL.—The term ‘storage
19 water heater’ means a water heater that—

20 “(I) heats and stores water within an
21 appliance at a thermostatically controlled
22 temperature for delivery on demand; and

23 “(II) is not a water heater described
24 in section 321(27)(A).

1 “(ii) EXCLUSION.—The term ‘storage
2 water heater’ does not include a unit with an
3 input rating of 4,000 Btu per hour or more per
4 gallon of stored water.

5 “(B) INSTANTANEOUS WATER HEATER.—The
6 term ‘instantaneous water heater’ means a water
7 heater that—

8 “(i) has an input rating of at least 4,000
9 Btu per hour per gallon of stored water; and

10 “(ii) is not a water heater described in sec-
11 tion 321(27)(A).

12 “(C) UNFIRED HOT WATER STORAGE TANK.—
13 The term ‘unfired hot water storage tank’ means a
14 tank used to store water that is heated externally.”.

15 (d) LABELING REQUIREMENTS.—Section 344 of the
16 Energy Policy and Conservation Act (42 U.S.C. 6315) is
17 amended by adding at the end the following:

18 “(l) LABELS FOR CERTAIN COMMERCIAL WATER
19 HEATERS.—

20 “(1) IN GENERAL.—Notwithstanding any other
21 provision of this section, water heaters described in
22 section 321(27)(B) shall be required to bear a per-
23 manent label, applied at the point of manufacture,
24 that, subject to paragraph (3), satisfies the require-
25 ments described in paragraph (2).

1 “(2) REQUIREMENTS.—A label required under
2 paragraph (1) shall—

3 “(A) be made of material not adversely af-
4 fected by water;

5 “(B) be attached by means of nonwater-
6 soluble adhesive; and

7 “(C) bear the following notice printed in
8 16.5 point Arial Narrow Bold font: ‘IMPOR-
9 TANT INFORMATION: Exclusively intended
10 for commercial installations. This model is not
11 certified by the U.S. Department of Energy as
12 a residential water heater. This model does not
13 have a certified First Hour or UEF rating.’.

14 “(3) REVISION UPON PETITION.—On receipt of
15 a petition by an interested party, the Secretary may
16 conduct a rulemaking to revise the scope and re-
17 quirements of the label required under paragraph
18 (1).”.

19 (e) EFFECTIVE DATE.—This section and the amend-
20 ments made by this section shall take effect 180 days after
21 the date of enactment of this Act.

