
A BILL FOR AN ACT

RELATING TO ENERGY RESOURCES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that Hawaii is replete
2 with renewable sources of energy, including wind, wave,
3 geothermal, and solar. With such resources, there is a
4 compelling state interest for every resident to use solar energy
5 devices. According to the U.S. Energy Information
6 Administration, the State spent an estimated \$7,796,000,000 on
7 oil in 2012. The State's dependence on fossil fuels is not
8 sustainable.

9 The legislature further finds that the goal of the Hawaii
10 Clean Energy Initiative is to achieve seventy per cent clean
11 energy by 2030 with thirty per cent from efficiency measures and
12 forty per cent from locally generated renewable sources. In
13 response to the Clean Energy Initiative, the legislature finds
14 that individual residents wish to do their part to help meet the
15 goals of the Clean Energy Initiative.

16 The legislature further finds that solar energy is a proven
17 clean and renewable energy. Solar energy provides benefits to



1 residents by lowering the cost of living, maintaining money in
2 the local economy, and protecting our environment.

3 The legislature also finds that solar water heating systems
4 are a renewable energy technology that uses solar collectors
5 placed on roofs to heat water. These systems decrease reliance
6 on imported oil used to generate electricity to heat water
7 because they use less energy than the electric hot water heating
8 system replaced. Furthermore, the legislature finds that the
9 up-front cost of installation is a barrier preventing many
10 Hawaii residents from installing solar water heating systems,
11 and therefore the State should provide residents the ability to
12 take advantage of this renewable energy resource.

13 Accordingly, the purpose of this Act is to require all
14 existing single-family homes to be retrofitted with solar energy
15 systems and aid in meeting the Clean Energy Initiative.

16 SECTION 2. Chapter 196, Hawaii Revised Statutes, is
17 amended by adding a new section to be appropriately designated
18 and to read as follows:

19 "§196- Solar water heater system; retrofit. (a) No
20 later than January 1, 2020, each owner of a single-family
21 residence that has an electrical or gas-powered system for



1 heating water shall retrofit the residence with a solar water
2 heater system that meets the standards established pursuant to
3 section 269-44, unless the energy resources coordinator approves
4 a variance. A variance shall only be approved if an architect
5 or engineer licensed under chapter 464 attests that:

6 (1) Installation is impracticable due to poor solar
7 resource;

8 (2) Installation is cost-prohibitive based upon a life
9 cycle cost-benefit analysis that incorporates the
10 average residential utility bill and the cost of the
11 new solar water heater system with a life cycle that
12 does not exceed fifteen years;

13 (3) A substitute renewable energy technology system, as
14 defined in section 235-12.5, is used as the primary
15 energy source for heating water; or

16 (4) A demand water heater device approved by Underwriters
17 Laboratories, Inc., is installed; provided that at
18 least one other gas appliance is installed in the
19 dwelling. For the purposes of this paragraph, "demand
20 water heater" means a gas-tankless instantaneous water
21 heater that provides hot water only as it is needed.



1 (b) A request for a variance shall be submitted to the
2 energy resources coordinator on an application prescribed by the
3 energy resources coordinator and shall include, but not be
4 limited to, a description of the location of the property and
5 justification for the approval of a variance using the criteria
6 established in subsection (a). A variance shall be deemed
7 approved if not denied within thirty working days after receipt
8 of the variance application.

9 (c) An individual may claim a renewable energy
10 technologies income tax credit for a solar water heater system
11 under section 235-12.5.

12 (d) Any individual not claiming a renewable technologies
13 income tax credit under subsection (c) may receive a loan for up
14 to \$5,000 from the green infrastructure loan program under part
15 IV of chapter 196 to be used for compliance with this section.

16 (e) An individual who does not qualify for a loan under
17 the green infrastructure loan program under part IV of chapter
18 196 shall be exempted under this section.

19 (f) Nothing in this section shall preclude any county from
20 establishing procedures and standards required to implement this
21 section.



1 (g) Nothing in this section shall preclude participation
2 in any utility demand-side management program or public benefits
3 fund under part VII of chapter 269.

4 (h) The public utilities commission may authorize
5 electrical utilities to collect a yearly surcharge of \$20.00
6 from customers who are not in compliance with this section. The
7 surcharge collected shall be deposited into the Hawaii green
8 infrastructure special fund under section 196-65."

9 SECTION 3. Section 235-12.5, Hawaii Revised Statutes, is
10 amended to read as follows:

11 **"§235-12.5 Renewable energy technologies; income tax**
12 **credit.** (a) When the requirements of subsection (d) are met,
13 each individual or corporate taxpayer that files an individual
14 or corporate net income tax return for a taxable year may claim
15 a tax credit under this section against the Hawaii state
16 individual or corporate net income tax. The tax credit may be
17 claimed for every eligible renewable energy technology system
18 that is installed and placed in service in the State by a
19 taxpayer during the taxable year. The tax credit may be claimed
20 as follows:



(1) For each solar energy system: [~~thirty-five~~] fifty per cent of the actual cost or the cap amount determined in subsection (b), whichever is less; or

(2) For each wind-powered energy system: twenty per cent of the actual cost or the cap amount determined in subsection (b), whichever is less;

provided that multiple owners of a single system shall be entitled to a single tax credit; and provided further that the tax credit shall be apportioned between the owners in proportion to their contribution to the cost of the system.

In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every eligible renewable energy technology system that is installed and placed in service in the State by the entity. The cost upon which the tax credit is computed shall be determined at the entity level.

Distribution and share of credit shall be determined pursuant to section 235-110.7(a).

(b) The amount of credit allowed for each eligible renewable energy technology system shall not exceed the applicable cap amount, which is determined as follows:



1 (1) If the primary purpose of the solar energy system is
2 to use energy from the sun to heat water for household
3 use, then the cap amounts shall be:

4 (A) [~~\$2,250~~] \$5,000 per system for single-family
5 residential property;

6 (B) \$350 per unit per system for multi-family
7 residential property; and

8 (C) \$250,000 per system for commercial property;

9 (2) For all other solar energy systems, the cap amounts
10 shall be:

11 (A) \$5,000 per system for single-family residential
12 property; provided that if all or a portion of
13 the system is used to fulfill the substitute
14 renewable energy technology requirement pursuant
15 to section 196-6.5(a)(3), the credit shall be
16 reduced by thirty-five per cent of the actual
17 system cost or \$2,250, whichever is less;

18 (B) \$350 per unit per system for multi-family
19 residential property; and

20 (C) \$500,000 per system for commercial property; and



(3) For all wind-powered energy systems, the cap amounts shall be:

(A) \$1,500 per system for single-family residential property; provided that if all or a portion of the system is used to fulfill the substitute renewable energy technology requirement pursuant to section 196-6.5(a)(3), the credit shall be reduced by twenty per cent of the actual system cost or \$1,500, whichever is less;

(B) \$200 per unit per system for multi-family residential property; and

(C) \$500,000 per system for commercial property.

(c) For the purposes of this section:

"Actual cost" means costs related to the renewable energy technology systems under subsection (a), including accessories and installation, but not including the cost of consumer incentive premiums unrelated to the operation of the system or offered with the sale of the system and costs for which another credit is claimed under this chapter.



1 "Household use" means any use to which heated water is
2 commonly put in a residential setting, including commercial
3 application of those uses.

4 "Renewable energy technology system" means a new system
5 that captures and converts a renewable source of energy, such as
6 solar or wind energy, into:

- 7 (1) A usable source of thermal or mechanical energy;
- 8 (2) Electricity; or
- 9 (3) Fuel.

10 "Solar or wind energy system" means any identifiable
11 facility, equipment, apparatus, or the like that converts solar
12 or wind energy to useful thermal or electrical energy for
13 heating, cooling, or reducing the use of other types of energy
14 that are dependent upon fossil fuel for their generation.

15 (d) For taxable years beginning after December 31, 2005,
16 the dollar amount of any utility rebate shall be deducted from
17 the cost of the qualifying system and its installation before
18 applying the state tax credit.

19 (e) The director of taxation shall prepare any forms that
20 may be necessary to claim a tax credit under this section,
21 including forms identifying the technology type of each tax



1 credit claimed under this section, whether for solar or wind.
2 The director may also require the taxpayer to furnish reasonable
3 information to ascertain the validity of the claim for credit
4 made under this section and may adopt rules necessary to
5 effectuate the purposes of this section pursuant to chapter 91.

6 (f) If the tax credit under this section exceeds the
7 taxpayer's income tax liability, the excess of the credit over
8 liability may be used as a credit against the taxpayer's income
9 tax liability in subsequent years until exhausted, unless
10 otherwise elected by the taxpayer pursuant to subsection (g) or
11 (h). All claims for the tax credit under this section,
12 including amended claims, shall be filed on or before the end of
13 the twelfth month following the close of the taxable year for
14 which the credit may be claimed. Failure to comply with this
15 subsection shall constitute a waiver of the right to claim the
16 credit.

17 (g) For solar energy systems, a taxpayer may elect to
18 reduce the eligible credit amount by [~~thirty~~] fifty per cent and
19 if this reduced amount exceeds the amount of income tax payment
20 due from the taxpayer, the excess of the credit amount over
21 payments due shall be refunded to the taxpayer; provided that



1 tax credit amounts properly claimed by a taxpayer who has no
2 income tax liability shall be paid to the taxpayer; and provided
3 further that no refund on account of the tax credit allowed by
4 this section shall be made for amounts less than \$1.

5 The election required by this subsection shall be made in a
6 manner prescribed by the director on the taxpayer's return for
7 the taxable year in which the system is installed and placed in
8 service. A separate election may be made for each separate
9 system that generates a credit. An election once made is
10 irrevocable.

11 (h) Notwithstanding subsection (g), for any renewable
12 energy technology system, an individual taxpayer may elect to
13 have any excess of the credit over payments due refunded to the
14 taxpayer, if:

15 (1) All of the taxpayer's income is exempt from taxation
16 under section 235-7(a)(2) or (3); or

17 (2) The taxpayer's adjusted gross income is \$20,000 or
18 less (or \$40,000 or less if filing a tax return as
19 married filing jointly);

20 provided that tax credits properly claimed by a taxpayer who has
21 no income tax liability shall be paid to the taxpayer; and



1 provided further that no refund on account of the tax credit
2 allowed by this section shall be made for amounts less than \$1.

3 A husband and wife who do not file a joint tax return shall
4 only be entitled to make this election to the extent that they
5 would have been entitled to make the election had they filed a
6 joint tax return.

7 The election required by this subsection shall be made in a
8 manner prescribed by the director on the taxpayer's return for
9 the taxable year in which the system is installed and placed in
10 service. A separate election may be made for each separate
11 system that generates a credit. An election once made is
12 irrevocable.

13 (i) No taxpayer shall be allowed a credit under this
14 section for the portion of the renewable energy technology
15 system required by section 196-6.5 that is installed and placed
16 in service on any newly constructed single-family residential
17 property authorized by a building permit issued on or after
18 January 1, 2010.

19 (j) To the extent feasible, using existing resources to
20 assist the energy-efficiency policy review and evaluation, the



1 department shall assist with data collection on the following
2 for each taxable year:

3 (1) The number of renewable energy technology systems that
4 have qualified for a tax credit during the calendar
5 year by:

6 (A) Technology type; and

7 (B) Taxpayer type (corporate and individual); and

8 (2) The total cost of the tax credit to the State during
9 the taxable year by:

10 (A) Technology type; and

11 (B) Taxpayer type.

12 (k) This section shall apply to eligible renewable energy
13 technology systems that are installed and placed in service on
14 or after July 1, 2009."

15 SECTION 4. Statutory material to be repealed is bracketed
16 and stricken. New statutory material is underscored.

17 SECTION 5. This Act shall take effect upon its approval.

18

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Report Title:

Energy Resources; Solar Water Heater Systems; Retrofits

Description:

Requires existing single-family homes to be retrofitted with solar water heater systems. Allows for a tax credit or loan for compliance. Authorizes the PUC to permit electrical utilities to collect a surcharge for non-compliance, to be deposited into the Hawaii green infrastructure special fund.

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