
A BILL FOR AN ACT

RELATING TO SOLAR ENERGY.

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

1 SECTION 1. The legislature finds that Hawaii is a unique
2 part of the United States in that it is replete with renewable
3 sources of energy - wind, wave, geothermal, and solar. With the
4 signing of the Hawaii Clean Energy Initiative as the latest in a
5 series of steps over the years to capitalize on our abundance of
6 renewable energy, the increased use of renewable energy
7 generated through mature technologies represents a common sense
8 step in the eventual move to a much reduced dependency on fossil
9 fuels.

10 The legislature further finds that technologies that use
11 the power of the sun to heat water and generate electricity are
12 amongst the most mature of the technologies to tap renewable
13 sources of energy, but that the cost of such systems still
14 represent a significant barrier for homeowners and businesses to
15 capitalize on this economical and clean source of energy.

16 Accordingly, the purpose of this Act is to provide a series
17 of incentives to lessen the cost of solar technology systems



1 such that cost is less of a disincentive for all people and
2 businesses to capitalize on solar technologies.

3 PART I

4 SECTION 2. The legislature finds that Act 204, Session
5 Laws of Hawaii 2008, imposed a mandate on new single-family
6 dwellings to include solar water heating systems, which would
7 build the costs of these systems into the price of a new home.
8 One incentive to follow the mandate was to restrict the use of
9 the renewable energy technologies tax credit. However, that
10 restrict created an ambiguity as to whether single-family
11 residential properties built after January 1, 2010 would be
12 eligible to take the credit, as not all single-family
13 residential properties are built by developers.

14 The legislature also finds that during these times of
15 economic struggle, the prohibition on residential home
16 developers taking the renewable energy technologies tax credit
17 even when installing solar water heaters on new single-family
18 dwellings according to the mandate of Act 204, Session Laws of
19 Hawaii 2008, is punitive and detrimental to the goals of keeping
20 the construction and trade industry as active as possible during
21 these economic struggles.



1 The purpose of this part is to amend the relevant statutes
2 affected by Act 204, Session Laws of Hawaii 2008, to (1) repeal
3 the prohibition on taking the renewable energy technologies tax
4 credit for residential home developers, (2) remove the ambiguity
5 of whether a non-residential home developer who builds a single-
6 family residential property can take the renewable energy
7 technologies tax credit, and (3) increase the tax incentives for
8 the purchase and installation of solar water heaters and
9 photovoltaic systems.

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

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



1 State after June 30, 2003. The tax credit may be claimed as
2 follows:

3 (1) Solar thermal energy systems for:

4 (A) Single-family residential property [~~for which a~~
5 ~~building permit was issued prior to January 1,~~
6 ~~2010: thirty-five~~] : fifty per cent of the
7 actual cost or [~~\$2,250~~] \$3,000, whichever is
8 less;

9 (B) Multi-family residential property: [~~thirty-five~~]
10 fifty per cent of the actual cost or [~~\$350~~] \$500
11 per unit, whichever is less; and

12 (C) Commercial property: [~~thirty-five~~] fifty per
13 cent of the actual cost or [~~\$250,000~~] \$300,000,
14 whichever is less;

15 (2) Wind-powered energy systems for:

16 (A) Single-family residential property: twenty per
17 cent of the actual cost or \$1,500, whichever is
18 less;

19 (B) Multi-family residential property: twenty per
20 cent of the actual cost or \$200 per unit,
21 whichever is less; and



1 (C) Commercial property: twenty per cent of the
2 actual cost or \$500,000, whichever is less; and

3 (3) Photovoltaic energy systems for:

4 (A) Single-family residential property: [~~thirty~~
5 ~~five~~] fifty per cent of the actual cost or
6 [~~\$5,000~~] \$7,500, whichever is less;

7 (B) Multi-family residential property: [~~thirty-five~~]
8 fifty per cent of the actual cost or [~~\$350~~] \$750
9 per unit, whichever is less; and

10 (C) Commercial property: [~~thirty-five~~] fifty per
11 cent of the actual cost or [~~\$500,000~~] \$750,000,
12 whichever is less;

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

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



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

3 (b) For the purposes of this section:

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

10 "Renewable energy technology system" means a new system
11 that captures and converts a renewable source of energy, such as
12 wind, heat (solar thermal), [~~or~~] light (photovoltaic) from the
13 sun into:

- 14 (1) A usable source of thermal or mechanical energy;
- 15 (2) Electricity; or
- 16 (3) Fuel.

17 "Solar or wind energy system" means any identifiable
18 facility, equipment, apparatus, or the like that converts
19 insolation or wind energy to useful thermal or electrical energy
20 for heating, cooling, or reducing the use of other types of
21 energy that are dependent upon fossil fuel for their generation.



1 (c) For taxable years beginning after December 31, 2005,
2 the dollar amount of any utility rebate shall be deducted from
3 the cost of the qualifying system and its installation before
4 applying the state tax credit.

5 (d) The director of taxation shall prepare any forms that
6 may be necessary to claim a tax credit under this section,
7 including forms identifying the technology type of each tax
8 credit claimed under this section, whether for solar thermal,
9 photovoltaic from the sun, or wind. The director may also
10 require the taxpayer to furnish reasonable information to
11 ascertain the validity of the claim for credit made under this
12 section and may adopt rules necessary to effectuate the purposes
13 of this section pursuant to chapter 91.

14 (e) If the tax credit under this section exceeds the
15 taxpayer's income tax liability, the excess of the credit over
16 liability may be used as a credit against the taxpayer's income
17 tax liability in subsequent years until exhausted. All claims
18 for the tax credit under this section, including amended claims,
19 shall be filed on or before the end of the twelfth month
20 following the close of the taxable year for which the credit may
21 be claimed. Failure to comply with this subsection shall
22 constitute a waiver of the right to claim the credit.



1 (f) By or before December, 2005, to the extent feasible,
2 using existing resources to assist the energy-efficiency policy
3 review and evaluation, the department shall assist with data
4 collection on the following:

5 (1) The number of renewable energy technology systems that
6 have qualified for a tax credit during the past year
7 by:

8 (A) Technology type (solar thermal, photovoltaic from
9 the sun, and wind); and

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

11 (2) The total cost of the tax credit to the State during
12 the past year by:

13 (A) Technology type; and

14 (B) Taxpayer type.

15 ~~[(g) For systems installed and placed in service in 2009,~~
16 ~~no residential home developer shall be entitled to claim the~~
17 ~~credit under subsections (a) (1) (A), (a) (2) (A), and (a) (3) (A). A~~
18 ~~residential home developer is defined as a person who holds more~~
19 ~~than one residential dwelling for sale as inventory.]"~~

20 PART II

21 SECTION 4. The legislature finds that solar water heating
22 systems are a renewable energy technology that uses solar



1 collectors placed on roofs to heat water. These systems
2 decrease reliance on imported oil used to generate electricity
3 to heat water because they use less energy than the electric hot
4 water heating system replaced.

5 The legislature also finds that the up-front cost of
6 installation is a barrier preventing many Hawaii residents from
7 installing solar water heating systems. The legislature further
8 finds that the renewable energy technologies income tax credit
9 and electric utility rebates, as currently constituted, have not
10 been enough of an incentive to overcome these up-front costs,
11 especially for rental housing and homes in need of retrofit for
12 these important energy-saving devices.

13 The purpose of this part is to expand the "solar water
14 heating pay as you save" program to photovoltaic systems.

15 SECTION 5. Act 240, Session Laws of Hawaii 2006, is
16 amended by amending section 13 to read as follows:

17 "SECTION 13. **Solar [water heating] pay as you save**
18 **program; purpose; establishment; tariff filing.** (a) Solar
19 water heating systems are a renewable energy technology that
20 uses solar collectors placed on roofs to heat water. [~~These~~]
21 Photovoltaic systems use solar collectors to generate
22 electricity. Solar water heating systems decrease reliance on



1 imported oil used to generate electricity to heat water because
2 they use less energy than the electric hot water heating systems
3 replaced. Photovoltaic systems also decrease reliance on
4 imported oil by generating electricity on site for residential
5 use.

6 The legislature finds that the up-front cost of
7 installation is a barrier preventing many Hawaii residents from
8 installing solar water heating systems[-] and photovoltaic
9 systems. The legislature further finds that the renewable
10 energy technologies income tax credit and electric utility
11 rebates have not been enough of an incentive to overcome these
12 up-front costs, especially for rental housing and homes in need
13 of retrofit for these important energy-saving devices.

14 The purpose of this section is to authorize the public
15 utilities commission to implement a pilot project to be called
16 the "solar [~~water heating~~] pay as you save program".

17 (b) The public utilities commission shall implement a
18 pilot project to be called the "solar [~~water heating~~] pay as you
19 save program", which shall:

20 (1) Allow a residential electric utility customer to
21 purchase a solar water heating or photovoltaic
22 system[÷], or both:



- 1 (A) With no upfront payments; and
- 2 (B) By paying the cost of the system or systems over
- 3 time on the customer's electricity bill;
- 4 provided that the estimated life cycle electricity
- 5 savings from the solar [~~water heating~~] system or
- 6 systems exceeds the cost of the system;
- 7 (2) Provide for billing and payment of the solar [~~water~~
- 8 ~~heating~~] system or systems on the utility bill;
- 9 (3) Provide for disconnection of utility service for non-
- 10 payment of the solar [~~water heating~~] system or systems
- 11 pay as you save payments; and
- 12 (4) Allow for assignment of system or systems repayment
- 13 costs attached to the meter location.
- 14 (c) The public utilities commission shall determine the
- 15 time frame of the pilot program and shall gather and analyze
- 16 information to evaluate the pilot program.
- 17 (d) No later than December 31, [~~2007,~~] 2009, each electric
- 18 utility shall implement by tariff a pay as you save model system
- 19 program for residential consumers that is consistent with this
- 20 section. Each utility shall provide at least six months prior
- 21 notice of its proposed tariff to the public utilities commission
- 22 as prescribed in section 269-12(b), Hawaii Revised Statutes.



1 Within the prescribed notice period, the public utilities
2 commission shall review the proposed tariff and after a hearing
3 may require modifications to the proposed tariff as necessary to
4 comply with or effectuate the purposes of this section.

5 (e) The commission shall ensure that all reasonable costs
6 incurred by electric utilities to start up and implement the pay
7 as you save model system are recovered as part of the utility's
8 revenue requirement, including necessary billing system
9 adjustments and any costs for pay as you save model system
10 efficiency measures that are not recovered via participating
11 residential consumers' pay as you save model system bill
12 payments or otherwise."

13 PART III

14 SECTION 6. The legislature finds that some people and
15 businesses prefer financing options as opposed to outright
16 purchase or 'pay as you save' programs because of budgeting
17 reasons. The purpose of this part is to create a lease-to-own,
18 low-interest loan, and grant program for the purchase of solar
19 water heaters or photovoltaic systems.

20 SECTION 7. Section 201-12.8, Hawaii Revised Statutes, is
21 amended to read as follows:



1 " [§201-12.8] **Energy security special fund; uses.** (a)

2 There is created within the state treasury an energy security
3 special fund, which shall consist of:

4 (1) Moneys appropriated to the fund by the legislature;

5 (2) All interest attributable to investment of money
6 deposited in the fund; and

7 (3) Moneys allotted to the fund from other sources.

8 (b) Moneys from the fund shall be expended by the
9 department of business, economic development, and tourism for
10 the following purposes and shall be used for no other purposes
11 except for those set forth in this section:

12 (1) To support its energy program~~[, including projects]~~;

13 (2) Projects that ensure dependable, efficient, and
14 economical energy, promote energy self-sufficiency,
15 and provide greater energy security for the State,
16 including low-interest loan, lease, and grant programs
17 for solar water heaters and photovoltaic systems; and

18 (2) To fund the renewable energy facilitator pursuant to
19 section 201-12.5 and any other positions necessary for
20 the purposes of paragraph (1) as determined by the
21 legislature.



1 (c) The department shall adopt rules pursuant to chapter
2 91 for the creation and implementation of a low-interest loan,
3 lease, and grant programs for solar water heaters and
4 photovoltaic systems; provided that any interest rates charged
5 through either program shall be no more than the federal
6 discount rate plus two per cent and no grants shall be made
7 available to persons or households whose income level is more
8 than eighty-five per cent of the state poverty level."

9 SECTION 8. There is appropriated out of the general
10 revenues of the State of Hawaii, and deposited into the energy
11 security special fund, the sum of \$_____ or so much thereof as
12 may be necessary for fiscal year 2009-2010 and the same sum or
13 so much thereof as may be necessary for fiscal year 2010-2011.

14 SECTION 9. There is appropriated out of the energy
15 security special fund the sum of \$_____ or so much thereof as
16 may be necessary for fiscal year 2009-2010 and the same sum or
17 so much thereof as may be necessary for fiscal year 2010-2011
18 for the purposes of the energy security special fund.

19 The sums appropriated shall be expended by the department
20 of business, economic development, and tourism for the purposes
21 of this Act.



1 SECTION 10. Statutory material to be repealed is bracketed
2 and stricken. New statutory material is underscored.

3 SECTION 11. This Act shall take effect upon its approval;
4 provided that sections 8 and 9 shall take effect on July 1, 2009
5 and section 3 shall be applicable to taxable years beginning
6 after December 31, 2008.

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INTRODUCED BY:

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Report Title:

Solar energy; affordable options

Description:

Creates a series of incentives to allow individuals and businesses to choose solar heating or photovoltaic units to reduce dependence on fossil-fuel based electricity.

