
A BILL FOR AN ACT

RELATING TO ENERGY.

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

1 SECTION 1. The legislature finds that Hawaii's dependence
2 on petroleum for about ninety per cent of its energy needs is
3 more than any other state in the nation. This makes the State
4 extremely vulnerable to any oil embargo, supply disruption,
5 international market dysfunction, and many other factors beyond
6 the control of the State. Furthermore, the continued
7 consumption of conventional petroleum fuel negatively impacts
8 the environment.

9 The legislature also finds that increased energy efficiency
10 and use of renewable energy resources would increase Hawaii's
11 energy self-sufficiency, achieving broad societal benefits,
12 including increased energy security, resistance to increases in
13 oil prices, environmental sustainability, economic development,
14 and job creation.

15 Over the years, the legislature has worked steadily to
16 encourage the deployment of renewable energy resources and
17 energy efficiency initiatives. This includes establishing a net
18 energy metering program, interconnection standards, and



1 renewable energy tax credits; establishing greenhouse gas and
2 energy consumption reduction goals for state facilities and
3 requiring the use of energy efficient products in state
4 facilities; and providing incentives for the deployment of solar
5 energy devices. The legislature also established an enforceable
6 renewable energy portfolio standard, under which twenty per cent
7 of Hawaii's electricity is to be generated from renewable
8 resources by the end of 2020.

9 To shape Hawaii's energy future and achieve the goal of
10 energy self-sufficiency for the State of Hawaii, our efforts
11 must continue on all fronts, integrating new and evolving
12 technologies and providing incentives and assistance to address
13 barriers. The purpose of this Act is to provide a comprehensive
14 approach to achieving energy self-sufficiency for the State by:

15 (1) Increasing the renewable energy technologies income
16 tax credit for certain wind-powered and photovoltaic
17 energy systems and removing the tax credits' 2008
18 sunset date;

19 (2) Authorizing the issuance of general obligation bonds
20 to develop and implement a pilot project to install
21 photovoltaic systems at public schools on the islands
22 of Oahu, Hawaii, Maui, and Kauai;



1 (3) Authorizing the issuance of general obligation bonds
2 to bring state facilities into compliance with the
3 purposes of Act 77, Session Laws of Hawaii 2002,
4 which, among other things, establishes greenhouse gas
5 and energy consumption reduction goals for state
6 facilities;

7 (4) Requiring the incorporation of Leadership in Energy in
8 Environmental Design silver standards for buildings
9 constructed or substantially renovated with funding
10 consisting of fifty per cent or more in state funds to
11 enable the State to access creative engineering and
12 design guidelines and promote green building
13 practices; and

14 (5) Establishing the Pay As You Save pilot project to
15 provide a financing mechanism to make purchases of
16 residential solar hot water heater systems more
17 affordable.

18 SECTION 2. Chapter 235-12.5, Hawaii Revised Statutes, is
19 amended to read as follows:

20 **"§235-12.5 Renewable energy technologies; income tax**
21 **credit.** (a) When the requirements of subsection (c) are met,
22 each individual or corporate resident taxpayer that files an

1 individual or corporate net income tax return for a taxable year
2 may claim a tax credit under this section against the Hawaii
3 state individual or corporate net income tax. The tax credit
4 may be claimed for every eligible renewable energy technology
5 system that is installed and placed in service by a taxpayer
6 during the taxable year. This credit shall be available for
7 systems installed and placed in service after June 30, 2003.

8 The tax credit may be claimed as follows:

9 (1) Solar thermal energy systems for:

10 (A) Single-family residential property: thirty-five
11 per cent of the actual cost or [~~\$1,750,~~] \$2,250,
12 whichever is less;

13 (B) Multi-family residential property: thirty-five
14 per cent of the actual cost or [~~\$350~~] \$1,000 per
15 unit, whichever is less; and

16 (C) Commercial property: thirty-five percent of the
17 actual cost or [~~\$250,000,~~] \$500,000, whichever is
18 less;

19 (2) Wind-powered energy systems for:

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



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

4 (C) Commercial property: twenty per cent of the
5 actual cost or \$250,000, whichever is less; and

6 (3) Photovoltaic energy systems for:

7 (A) Single family residential property: thirty-five
8 per cent of the actual cost or [~~\$1,750,~~] \$7,500,
9 whichever is less;

10 (B) Multi-family residential property: thirty-five
11 per cent of the actual cost or [~~\$350~~] \$1,000 per
12 unit, whichever is less; and

13 (C) Commercial property: thirty-five per cent of the
14 actual cost or [~~\$250,000,~~] \$500,000, whichever is
15 less;

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

20 In case of a partnership, S corporation, estate, or trust,
21 the tax credit allowable is for every eligible renewable energy
22 technology system that is installed and placed in service by the



1 entity. The cost upon which the tax credit is computed shall be
2 determined at the entity level. Distribution and share of
3 credit shall be determined pursuant to section 235-110.7(a).

4 (b) For the purposes of this section:

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

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

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

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



1 (c) ~~[The] For taxable years beginning after December 31,~~
2 ~~2005, the dollar amount of [any new federal energy tax credit~~
3 ~~similar to the credit provided in this section that is~~
4 ~~established after June 30, 2003, and] any utility rebate[7]~~
5 shall be deducted from the cost of the qualifying system and its
6 installation before applying the state tax credit.

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

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



1 be claimed. Failure to comply with this subsection shall
2 constitute a waiver of the right to claim the credit.

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

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

10 (A) Technology type (solar thermal, photovoltaic from
11 the sun, and wind); and

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

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

15 (A) Technology type; and

16 (B) Taxpayer type."

17 SECTION 3. Act 207, Session Laws of Hawaii 2003, is
18 amended by amending section 4 to read as follows:

19 "SECTION 4. This Act shall take effect on July 1, 2003 [7
20 and shall be repealed January 1, 2008]."

21 SECTION 4. The director of finance is authorized to issue
22 general obligation bonds in the sum of \$5,000,000, or so much



1 thereof as may be necessary, and the same sum, or so much
2 thereof as may be necessary, is appropriated for fiscal year
3 2006-2007 for the purpose of developing and implementing a
4 photovoltaic, net energy metered pilot project in public
5 schools. The project sites shall be determined by the
6 department of education as most suitable in meeting the pilot
7 project's objectives. The project objectives are:

- 8 (1) To have, at minimum, a project site at one public
9 school on each of the islands of Oahu, Hawaii, and
10 Kauai, and one public school within the county of
11 Maui;
- 12 (2) To allow installation of photovoltaic systems to be
13 timed in conjunction with substantial roof repairs or
14 roof replacement of the building to further reduce
15 project costs;
- 16 (3) To utilize the application of net energy metering to
17 offset costs of the system;
- 18 (4) To recapture system costs within three quarters of the
19 useful life of the photovoltaic system; and
- 20 (5) When advantageous, to utilize energy-savings contracts
21 such as third party lease/purchase contracts to
22 maximize the objectives of this section.



1 The sum appropriated shall be expended by the department of
2 education for the purposes of this Act.

3 The department of education shall submit an interim report
4 on the pilot project to the legislature no later than twenty
5 days prior to the convening of the regular session of 2007 and a
6 final report to the legislature no later than twenty days prior
7 to the convening of the regular session of 2008.

8 SECTION 5. Chapter 196, Hawaii Revised Statutes, is
9 amended by adding a new section to be appropriately designated
10 and to read as follows:

11 "§196- Leadership in Energy and Environmental Design
12 silver standards for newly constructed or substantially
13 renovated facilities. All design that is initiated on or after
14 January 1, 2006, for construction of a building or substantial
15 renovation of a building, utilizing fifty per cent or more in
16 state funds, shall incorporate Leadership in Energy and
17 Environmental Design silver standards developed by the United
18 States Green Building Council."

19 SECTION 6. The director of finance is authorized to issue
20 general obligation bonds in the sum of \$100,000,000, or so much
21 thereof as may be necessary, and the same sum, or so much
22 thereof as may be necessary, is appropriated for fiscal year



1 2006-2007 for the purpose of making improvements to state
 2 facilities to bring them into compliance with the purposes of
 3 Act 77, Session Laws of 2002; provided that priority for the
 4 energy conservation projects in existing public buildings shall
 5 be based on those buildings that result in immediate payback in
 6 cost savings and conservation. The sum appropriated shall be
 7 expended by the department of accounting and general services
 8 for the purposes of this Act.

9 SECTION 7. The appropriations made for the capital
 10 improvement projects authorized by this Act shall not lapse at
 11 the end of the fiscal biennium for which the appropriation is
 12 made; provided that all moneys from the appropriation
 13 unencumbered as of June 30, 2008, shall lapse as of that date.

14 SECTION 8. Chapter 269, Hawaii Revised Statutes, is
 15 amended by adding a new part to be appropriately designated and
 16 to read as follows:

17 **"PART . ENERGY EFFICIENCY MARKET-BASED INITIATIVE**

18 **§269- Definitions.** For the purposes of this part:

19 "Certification process" means a process approved by the
 20 commission whereby a public utility approves the pay as you save
 21 financing method for the renewable energy technology measure to



1 be installed in the dwelling unit as being cost effective and
2 efficient.

3 "Commission" means the public utilities commission.

4 "Cost-effective renewable energy technology measures" means
5 renewable energy technology measures with sufficient estimated
6 electricity or gas savings, determined by rates in effect at the
7 time of purchase, and other quantifiable non-energy savings that
8 are sufficient to cover all costs, including financing charges
9 and any program fees, by payments of no more than three-quarters
10 of the estimated savings within a period no greater than three-
11 quarters of the estimated useful life of the measure.

12 "Pay as you save model system" means the market-based
13 system based on the "Pay As You Save" model:

14 (1) Whereby a residential electric and gas utility
15 customer may purchase cost-effective renewable energy
16 technology products or services with no upfront
17 payment, pay the cost of the renewable energy
18 technology over time on the customer's electric or gas
19 bill, and bear no obligation to continue payments if
20 the residential customer no longer can receive the
21 benefit of the energy savings; and

22 (2) That contains the following three essential elements:



1 (A) A pay as you save model system fee that assigns
2 repayment of permanent measures to the meter
3 location;

4 (B) Billing and payment through a charge included in
5 the energy utility distribution charges; and

6 (C) Certification that the measures and installations
7 are appropriate and that estimated savings will
8 exceed payments.

9 "Pay as you save model system fee" means the fee that is
10 established by the public utility to defray costs of the
11 program, subject to approval by the commission.

12 "Permanent measures" means renewable energy technology
13 measures that are likely to remain in the premises where
14 installed, notwithstanding the subsequent departure by occupants
15 of the premises.

16 "Portable measures" means renewable energy technology
17 measures that are susceptible of being removed by occupants upon
18 their departure from the premises where these measures were
19 installed.

20 "Renewable energy" means energy produced by solar, energy
21 conserved by passive solar design, or daylighting.



1 "Renewable energy technology" means technology that uses
2 renewable energy to provide hot water to a dwelling unit.

3 "Residential consumer" means a residential tenant or
4 property owner who resides in the dwelling unit in which the
5 cost-effective renewable energy technology measure is installed
6 and operated.

7 **§269- Pay as you save model system for residential**
8 **consumers; established.** No later than March 1, 2007, the
9 commission shall adopt rules and procedures in accordance with
10 chapter 91 to monitor a public utility's pay as you save model
11 system program for residential consumers of electricity and gas
12 utilities as required under this part.

13 **§269- Gas and electric utilities; pay as you save model**
14 **system; established.** (a) No later than July 1, 2007, each
15 Hawaii gas and electric utility shall:

- 16 (1) Submit for approval by the commission a pay as you
17 save model system, including the proposed fee to
18 defray the costs of the program;
- 19 (2) Prepare and make available suitable agreements,
20 releases, and other necessary forms for residential
21 customers, landlords, capital providers, and vendors
22 to make use of the pay as you save model system;



1 (3) Determine the methodology for certifying energy
2 efficiency measures as appropriate for the intended
3 use and cost-effectiveness;

4 (4) Identify the capital providers who pay the up front
5 costs for these products, including vendors who
6 finance the sale and installation of their products;
7 and

8 (5) Prepare a plan to disseminate information concerning
9 the pay as you save model system to the public,
10 potential participating residential customers,
11 vendors, financing entities, and other interested
12 persons.

13 (b) The public utility may adopt the pay as you save model
14 as modified by this part or any program that meets the
15 objectives of this part.

16 (c) Payments made by utilities to administer the program
17 required under this part may be offset by charges to residential
18 consumers of renewable energy technology measures using the pay
19 as you save model system; provided that for each residential
20 consumer, this charge and all other program charges, except for
21 interest costs, shall not exceed:



1 (1) One-half of one per cent of the total cost of the
2 installed renewable energy technology product or
3 service for projects less than \$7,000; or

4 (2) One per cent of the total cost of projects greater
5 than \$7,000.

6 **§269- Certification of renewable energy technology**

7 **measures.** Only renewable energy technology measures certified
8 as being cost effective and appropriate may be purchased using
9 the pay as you save model fee. The utility may extend the term
10 of a pay as you save model fee to the original or successor
11 residential consumers at a location where permanent renewable
12 energy technology measures have been installed until all costs
13 for these measures have been recovered, including costs due to
14 repairs and missed payments.

15 **§269- Participation in the pay as you save program;**

16 **consumer contract simplification.** In the interest of reducing
17 transaction costs and simplifying the pay as you save model
18 system for residential consumers, if requested by a residential
19 consumer, an electric utility shall include gas saving measures
20 under its fee, or the gas utility shall include electricity
21 saving measures under its fee, so residential consumers who
22 purchase renewable energy technology products under this program



1 shall only have to sign one contract and pay a single pay as you
2 save model system fee charge."

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

11 SECTION 10. This Act does not affect rights and duties
12 that matured, penalties that were incurred, and proceedings that
13 were begun, before its effective date.

14 SECTION 11. Statutory material to be repealed is bracketed
15 and stricken. New statutory material is underscored.

16 SECTION 12. This Act shall take effect on July 1, 2050.



Report Title:

Tax Credit; Renewable Energy Technologies

Description:

Increases renewable energy tax credit for photovoltaic systems and removes the credits' 2008 sunset date; authorizes bond issuances to install photovoltaic systems at public schools statewide and enable state facilities to meet greenhouse gas and energy consumption reduction goals; requires incorporation of leadership in energy in environmental design silver standards for certain state-funded facilities; establishes the pay as you save pilot project to help finance residential solar hot water systems. (SD1)

