
A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

1 SECTION 1. In January 2008, the United States Department
2 of Energy and the State of Hawaii signed a Memorandum of
3 Understanding to strengthen cooperation to implement clean
4 energy technologies that will increase energy-efficiency and
5 maximize use of the State's vast and abundant renewable
6 resources. The legislature finds that the establishment of this
7 long-term partnership, called the Hawaii Clean Energy
8 Initiative, is designed to transform Hawaii's energy system into
9 one that uses renewable energy and energy-efficient technologies
10 for a significant portion of its energy needs. The partnership
11 aims to put Hawaii on a path to supply seventy per cent of its
12 energy needs using clean energy by 2030, which can significantly
13 reduce Hawaii's current crude oil consumption. This type of
14 clean energy transformation will help to stabilize and
15 strengthen Hawaii's economy by reducing its dependency on
16 imported fossil fuels and protect its environment by sharply
17 reducing greenhouse gas emissions.



1 The United States Department of Energy, as a leader in
2 clean energy technologies, is working with the State of Hawaii
3 to further the potential of its natural resources, including
4 wind, sun, and bioenergy resources, and engage experts in clean
5 energy technology development to help Hawaii launch projects in
6 conjunction with public and private sector partners that target
7 opportunities and address critical needs for Hawaii's transition
8 to a clean energy economy, including:

- 9 (1) Designing cost-effective approaches for the exclusive
10 use of renewable energy on smaller islands;
- 11 (2) Designing systems to improve the stability of electric
12 grids operating with variable generating sources, such
13 as wind power plants on the islands of Hawaii and
14 Maui;
- 15 (3) Minimizing energy use while maximizing energy-
16 efficiency and renewable energy technologies at new
17 large military housing developments;
- 18 (4) Expanding Hawaii's capability to use locally-grown
19 crops and byproducts for producing fuel and
20 electricity; and



1 (5) Assisting in the development of comprehensive energy
2 regulatory and policy frameworks for promoting clean
3 energy technology use.

4 Similar to the establishment of a renewable energy
5 portfolio standard, an energy-efficiency portfolio standard sets
6 a target of electricity-use reduction to be achieved in
7 incremental stages, as end-use energy-efficiency programs can
8 make a significant and cost-effective contribution to achieving
9 the goals and objectives of the Hawaii Clean Energy Initiative.

10 The purpose of this Act is to maximize cost-effective
11 energy-efficiency programs and technologies to achieve
12 electricity-use reductions to the maximum extent feasible by
13 establishing an energy-efficiency portfolio standard, making
14 public buildings more energy-efficient, disclosing a property's
15 energy consumption at the time of sale, and providing a tax
16 credit for net-zero energy buildings, to achieve electricity use
17 reductions to the maximum extent feasible.

18 SECTION 2. The Hawaii Revised Statutes is amended by
19 adding three new sections to be appropriately designated and to
20 read as follows:

21 "§ - Energy-efficiency portfolio standards. (a) The
22 public utilities commission shall establish energy-efficiency



1 portfolio standards that will maximize cost-effective energy-
2 efficiency programs and technologies.

3 (b) The energy-efficiency portfolio standards shall be
4 designed to achieve four thousand three hundred gigawatt hours
5 of electricity use reductions statewide by 2030; provided that
6 the commission shall establish interim goals for electricity use
7 reduction to be achieved by 2015, 2020, and 2025 and may also
8 adjust the 2030 standard by rule or order to maximize cost-
9 effective energy-efficiency programs and technologies.

10 (c) The commission shall establish incentives and
11 penalties based on performance in achieving the energy-
12 efficiency portfolio standards by rule or order.

13 (d) The public utilities commission shall evaluate the
14 energy-efficiency portfolio standard every five years, beginning
15 in 2013, and may revise the standard, based on the best
16 information available at the time, to determine if the energy-
17 efficiency portfolio standard established by this section
18 remains achievable. The commission shall report its findings
19 and revisions to the energy-efficiency portfolio standard, based
20 on its own studies and other information, to the legislature no
21 later than twenty days before the convening of the regular
22 session of 2014, and every five years thereafter.



1 (e) Beginning in 2015, electric energy savings brought
2 about by the use of renewable displacement or off-set
3 technologies, including solar water heating and seawater air
4 conditioning district cooling systems, shall count toward this
5 standard.

6 (f) An electric utility company and its electric utility
7 affiliates may aggregate their efficiency portfolios to achieve
8 the energy-efficiency portfolio standard.

9 § - Public buildings; benchmarks; retro-commissioning
10 guidelines; energy savings performance contracts. (a) By
11 December 31, 2010, each state department with responsibilities
12 for the design and construction of public buildings and
13 facilities shall benchmark every existing public building that
14 is either larger than five thousand square feet or uses more
15 than eight thousand kilowatt-hours of electricity or energy per
16 year and shall use the benchmark as a basis in determining the
17 State's investment in improving the efficiency of its own
18 building stock. Benchmarking shall be conducted using the
19 ENERGY STAR portfolio management tool or an equivalent tool.
20 The energy resources coordinator shall provide training to
21 affected departments on the ENERGY STAR portfolio management
22 tool or an equivalent tool.



1 (b) Public buildings shall be retro-commissioned not less
2 than every five years. The energy resources coordinator shall
3 establish retro-commissioning guidelines by January 1, 2010.

4 (c) Departments may enter into energy savings performance
5 contracts with a third party to cover the capital costs of
6 energy-efficiency measures and distributed generation as long as
7 the terms of the energy savings performance contracts conform to
8 the benchmark standard. The comptroller may review and exempt
9 specific projects as appropriate to take into account cost-
10 effectiveness.

11 Energy savings performance contracts shall be executed
12 according to state guidelines issued by the comptroller, and the
13 contracts shall be reviewed by the comptroller. To expedite
14 energy saving performance contracting for public buildings, the
15 department of accounting and general services shall develop a
16 master energy savings performance contracts agreement that any
17 department may use to contract with an energy savings
18 performance contracts provider for energy-efficiency and
19 renewable energy services.

20 (d) Existing public buildings that undergo a major
21 retrofit or renovation shall make investments in efficiency;



1 provided that the cost of the measures shall be recouped within
2 twenty years.

3 § - Energy-efficiency consumer information in sale or
4 lease of real property. (a) Prior to the sale or leasing of
5 property, property owners and lessors shall provide utility
6 bills for the most recent three-month period in which the
7 property was occupied; provided that if the property has no
8 utility accounts associated with it, the property owner or
9 lessor is exempt from meeting this requirement.

10 (b) The energy resources coordinator shall develop
11 guidelines for format and content to assist the seller or lessor
12 in providing the information required in subsection (a)."

13 SECTION 3. Chapter 235, Hawaii Revised Statutes, is
14 amended by adding a new section to be appropriately designated
15 and to read as follows:

16 "§235- Tax credit for a net-zero energy building. (a)
17 There shall be allowed to each taxpayer who owns a net-zero
18 energy building affixed to real property located in the state,
19 an income tax credit that shall be deductible from the
20 taxpayer's net income tax liability, if any, imposed by this
21 chapter only for the first taxable year in which the building
22 meets the definition of net-zero energy building.



1 (b) The amount of the credit shall be:

2 (1) For a building that is up to and including one
3 thousand square feet, the tax credit shall be \$9 per
4 square foot;

5 (2) For a building that is more than one thousand square
6 feet but less than four thousand square feet, the tax
7 credit shall be \$6 per square foot;

8 (3) For a building that is four thousand square feet or
9 larger, the tax credit shall be \$3 per square foot for
10 a maximum credit of \$50,000.

11 (c) In the case of a partnership, S corporation, estate,
12 or trust, the tax credit allowable is for every net-zero energy
13 building owned by the entity. Distribution and share of the
14 credit shall be determined pursuant to section 235-110.7(a).

15 In the case of a building owned by more than one person,
16 the tax credit shall be determined as if owned by one person,
17 and then apportioned among the various owners in proportion to
18 their ownership interest in the building.

19 (d) The director of taxation shall prepare any forms that
20 may be necessary to claim a tax credit under this section. The
21 director of taxation may require the taxpayer to furnish
22 reasonable information to ascertain the validity of the claim



1 for credit made under this section and may adopt rules necessary
2 to effectuate the purposes of this section pursuant to chapter
3 91.

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

13 (f) This section shall apply to taxable years beginning
14 after December 31, 2009, and shall not apply to taxable years
15 beginning after December 31, 2019.

16 (g) Taxpayers claiming tax credits for renewable energy
17 systems under this section are not eligible for tax credits
18 under section 235-12.5.

19 (h) If, during any taxable year, a net-zero energy
20 building ceases to be a net-zero energy building and is owned by
21 the taxpayer who claimed the tax credit, then the tax credit
22 shall be recaptured. To recapture, the taxpayer shall add to



1 taxable income, for the taxable year in which the building
2 ceases to be a net-zero energy building, the amount of the
3 recapture percentage of the credits allowed and claimed under
4 this section.

5 For the purposes of this subsection, if the property ceases
6 to be a net-zero energy building within the time specified, then
7 the recapture percentage is:

- 8 (1) One full year after the taxable year in which the
9 credit is claimed: One hundred per cent;
- 10 (2) One full year after the close of the period described
11 in paragraph (1): Eighty per cent;
- 12 (3) One full year after the close of the period described
13 in paragraph (2): Sixty per cent;
- 14 (4) One full year after the close of the period described
15 in paragraph (3): Forty per cent; and
- 16 (5) One full year after the close of the period described
17 in paragraph (4): Twenty per cent.
- 18 (i) If a deduction is taken under Section 179 (relating to
19 the election to expense certain depreciable business assets) of
20 the Internal Revenue Code, no tax credit shall be allowed for
21 that portion of the cost for which the deduction is taken.



1 (j) The basis of eligible property for depreciation or
2 accelerated cost recovery system purposes for state income taxes
3 shall be reduced by the amount of credit allowable and claimed.
4 In the alternative, the taxpayer shall treat the amount of the
5 credit allowable and claimed as a taxable income item for the
6 taxable year in which it is properly recognized under the method
7 of accounting used to compute taxable income.

8 (k) For purposes of this section:

9 "Net-zero energy building" means any building that produces
10 more electricity from renewable energy technology systems than
11 it consumes from all sources on a monthly basis during any nine
12 months of the tax year.

13 "Renewable energy technology system" means a system that
14 captures and converts a renewable source of energy into
15 electricity."

16 SECTION 4. Section 269-123, Hawaii Revised Statutes, is
17 amended by amending subsection (b) to read as follows:

18 "(b) The public benefits fee administrator's duties and
19 responsibilities shall be established by the public utilities
20 commission by rule or order, and may include:

21 (1) Identifying, developing, administering, promoting,
22 implementing, and evaluating programs, methods, and



- 1 technologies that support energy-efficiency and
2 demand-side management programs;
- 3 (2) Encouraging the continuance or improvement of
4 efficiencies made in the production, delivery, and use
5 of energy-efficiency and demand-side management
6 programs and services;
- 7 (3) Using the energy-efficiency expertise and capabilities
8 that have developed or may develop in the State and
9 consulting with state agency experts;
- 10 (4) Promoting program initiatives, incentives, and market
11 strategies that address the needs of persons facing
12 the most significant barriers to participation;
- 13 (5) Promoting coordinated program delivery, including
14 coordination with electric public utilities regarding
15 the delivery of low-income home energy assistance,
16 other demand-side management or energy-efficiency
17 programs, and any utility programs;
- 18 (6) Consideration of innovative approaches to delivering
19 demand-side management and energy-efficiency services,
20 including strategies to encourage third-party
21 financing and customer contributions to the cost of



1 demand-side management and energy-efficiency services;

2 [and]

3 (7) Conducting energy-efficiency assessments to identify
4 current energy use patterns in the state and areas of
5 greatest potential for energy savings. The
6 assessments shall include end-use research regarding
7 Hawaii's homes, businesses, and other utility
8 customers. The energy-efficiency assessments shall
9 help the public benefits fee administrator to identify
10 and recommend energy-efficiency programs to target.
11 The energy-efficiency assessments shall be forwarded
12 to the legislature, the public utilities commission,
13 the energy resources coordinator, and the electric
14 public utilities;

15 (8) Establishing aggressive energy-efficiency plans with
16 the provision that efficiency shall be the first
17 loaded resource in all cases where it is cost-
18 effective. For the purposes of this paragraph, "cost-
19 effective" means that all resources are deemed to
20 effectively cover the incremental cost of investment
21 within fifteen years, when measured against average
22 electricity rates for residential, small commercial,



1 large commercial, industrial, and agricultural
2 customers;

3 (9) Establishing on-bill financing programs to promote and
4 encourage the consumer acquisition of more efficient
5 major electrical appliances, solar water heaters, and
6 photovoltaic systems;

7 [~~7~~] (10) Submitting, to the public utilities commission
8 for review and approval, a multi-year budget and
9 planning cycle that promotes program improvement,
10 program stability, and maturation of programs and
11 delivery resources [-];

12 (11) Conducting building code analysis and review and
13 developing and implementing recommendations including:

14 (A) Instituting procedures for, and measurement and
15 verification of, buildings and homes constructed
16 under the building code to assess building code
17 compliance and building performance. The results
18 will provide information on necessary changes
19 that should be implemented to the building code
20 and in the delivery of building code training;

21 (B) Conducting analysis of the energy intensity of
22 residential and commercial buildings built



- 1 pursuant to the building code compared to
- 2 baseline homes;
- 3 (C) Surveying builders to determine costs associated
- 4 with meeting building code requirements for
- 5 residential and commercial buildings;
- 6 (D) Delivering the results of these analyses and
- 7 surveys to the public utilities commission
- 8 annually, the results of which shall include
- 9 recommendations for building code updates to be
- 10 provided to the state building code council as
- 11 petitions for rules changes;
- 12 (E) Assessing the feasibility of implementing a
- 13 net-zero energy building code for residential and
- 14 commercial construction;
- 15 (F) Recommending technical amendments to the
- 16 international energy conservation code to take
- 17 advantage of Hawaii's climate;
- 18 (G) Evaluating the costs and benefits of requiring:
- 19 (i) Advanced meters and energy "dashboard"
- 20 technologies that improve the ability of the
- 21 occupant to monitor and improve building
- 22 performance;



- 1 (ii) Cool roof standards;
- 2 (iii) Roofs of new homes to be solar-ready;
- 3 (iv) All homes built or rehabilitated in the
- 4 state to have and present an energy label;
- 5 and
- 6 (v) Any other measures that will improve the
- 7 ability of the homeowner to better
- 8 understand and manage the homeowner's energy
- 9 use;
- 10 and
- 11 (H) Establishing building energy-efficiency
- 12 commissioning guidelines appropriate for building
- 13 practices, including recommending enforcement
- 14 mechanisms in the state by January 1, 2010;
- 15 (12) Establishing programs and information to educate
- 16 financial institutions, mortgage brokers, and
- 17 consumers on the economics of energy-efficient
- 18 properties, including savings over the life-cycle of
- 19 the properties; and
- 20 (13) Processing variances from solar water heater
- 21 installations required under chapter 196."

1 SECTION 5. Statutory material to be repealed is bracketed
2 and stricken. New statutory material is underscored.
3 SECTION 6. This Act shall take effect on January 1, 2090.



S.B. NO. 1173
S.D. 2
H.D. 2

Report Title:

Energy-Efficiency

Description:

Establishes energy-efficiency initiatives necessary for and contributing to the transition of Hawaii's energy sector to non-petroleum energy sources. Effective 01/01/90. (SB1173 HD2)

SB1173 HD2 HMS 2009-3337

