THE SENATE
TWENTY-FIFTH LEGISLATURE, 2009
STATE OF HAWAII

S.B. NO. 1173 S.D. 1

A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

PART I

SECTION 1. Attaining independence from our detrimental reliance on fossil fuels has been a long-standing objective for the State.

Hawaii is the most petroleum dependent State for its energy needs. It pays the highest electricity prices in the United States, and its gasoline costs are among the highest in the country. Fuel surcharges that pass the increases in fuel costs to consumers have significantly increased the cost of over eighty per cent of the goods and services sold in Hawaii. Household fuels and utilities costs rose 36.4 per cent from the previous year, as reflected in the Honolulu Consumer Price Index during the second quarter of 2008. Hawaii's energy costs approach eleven per cent of its gross domestic product, whereas in most states energy costs are four per cent of gross domestic product. Between 2005 and 2008, state government consumption of electricity increased 3.9 per cent, but expenditures increased 56.8 per cent.

Reducing our oil dependence and the consequent price volatility and attaining a measure of energy security is critical. More than ninety-six per cent of petroleum in Hawaii now comes from foreign sources. Clean energy from indigenous renewable resources has the potential to provide an estimated one hundred fifty per cent of current installed electrical capacity.

On January 28, 2008, the signing of a Memorandum of Understanding between the State of Hawaii and the United States Department of Energy launched the Hawaii Clean Energy Initiative. This initiative and long-term partnership between Hawaii and the United States Department of Energy are aimed at accelerating the use and development of energy efficiency and renewable energy technologies; allowing Hawaii to serve as a model and demonstration for the United States and other island communities; and developing a national partnership to accelerate system transformation, whereby the following goals are attained:

(1) Achieve a seventy per cent clean energy economy for Hawaii within a generation;

(2) Increase Hawaii's energy security;

(3) Capture economic benefits of clean energy for all levels of society;

(4) Contribute to greenhouse gas reduction;

(5) Foster and demonstrate innovation;

(6) Build the workforce of the future; and

(7) Serve as a national model.

The purpose of this Act is to provide a first step in aligning Hawaii's energy policy laws with the State's energy goals. For Hawaii to realize energy independence and economic stability, the transformation of its energy system must encompass changes to:

(1) Hawaii's policy or regulatory framework;

(2) System-level technology development and integration;

(3) Financing or capital investment; and

(4) Institutional system planning.

Energy efficiency can contribute significantly towards the goal of utilizing clean energy in meeting seventy per cent of Hawaii's energy demand by 2030. The Hawaii Clean Energy Initiative set goals for energy efficiency that were developed by the United States Department of Energy; the department of business, economic development, and tourism; and members of the Hawaii Clean Energy Initiative working groups during 2008. This effort presents a range of measures—some proven elsewhere, some

innovative—to reach aggressive energy goals while balancing the interests of various stakeholders.

PART II

ENERGY EFFICIENCY

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

"§ - **Energy efficiency portfolio standard.** (a) The State shall set an energy efficiency portfolio standard with the goal of pursuing all cost-effective energy efficiency opportunities and off-setting forecasted electricity load growth to the maximum extent feasible.

The statewide target shall be four thousand three hundred gigawatt-hours of electricity savings by 2030. Interim electricity savings targets and any island-by-island targets shall be established by the public utilities commission.

(b) The public utilities commission shall establish all necessary parameters to implement the energy efficiency portfolio standards by rule or order, which energy efficiency portfolio standards may include, but not be limited to, identification of the parties or sectors who are responsible for each element of the energy efficiency portfolio standards and

establishment of incentives and penalties, as appropriate, based on performance by each entity to the extent within the jurisdiction of the public utilities commission.

(c) The public benefits fee administrator under part VII, chapter 269 shall be primarily responsible for achieving the level of energy efficiency established pursuant to this section by instituting energy efficiency programs as provided under chapter 269. The public benefits fee administrator shall submit annual reports to the public utilities commission by December 1 of each year, beginning in 2011, reporting energy efficiency savings achieved during the previous year. The public utilities commission shall monitor and evaluate the progress of energy savings performance against this energy efficiency portfolio standard.

(d) The public utilities commission shall evaluate the energy efficiency portfolio standards every five years beginning in 2013, and may revise the standards, based on the best information available at the time, to determine if the energy efficiency portfolio standards established by this section remain achievable. The commission shall report its findings and revisions to the energy efficiency portfolio standards, based on its own studies and other information, to the legislature no

later than twenty days before the convening of the regular session of 2014, and every five years thereafter.

§ - Public buildings; benchmarks. (a) By December 31, 2010, each state department with responsibilities for the design and construction of public buildings and facilities shall benchmark every existing public building that is either larger than five thousand square feet or uses more than eight thousand kilowatt-hours of electricity or energy per year, and shall use the benchmark as a basis in determining the State's investment in improving the efficiency of its own building stock. Benchmarking shall be conducted using the ENERGY STAR portfolio management tool or an equivalent tool, as determined by the public benefits fee administrator. The energy resources coordinator shall provide training to affected departments on the ENERGY STAR portfolio management tool or an equivalent tool.

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

(c) Departments may enter into energy savings performance contracts with a third party to cover the capital costs of energy efficiency measures and distributed generation as long as

the terms of the energy savings performance contracts conform to this standard. The comptroller may review and exempt specific projects as appropriate to take into account cost-effectiveness.

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

(d) Existing public buildings that undergo a major retrofit or renovation shall make investments in efficiency, provided that the cost of the measures shall be recouped within twenty years.

§ - Energy efficiency consumer information in sale or lease of real property. Energy consumption information shall be disclosed by the seller or lessor in the sale or lease of real property. Financial institutions and new occupant consumers shall be provided energy information by the seller or lessor before the sale or lease of real property."

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

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

(b) The amount of the credit shall be:

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

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

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

(c) In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every net-zero energy

building owned by the entity. Distribution and share of the credit shall be determined pursuant to section 235-110.7(a).

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

(d) For purposes of this section:

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

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

(e) The director of taxation shall prepare any forms that may be necessary to claim a tax credit under this section. The director of taxation may require the taxpayer to furnish reasonable information to ascertain the validity of the claim for credit made under this section and may adopt rules necessary to effectuate the purposes of this section pursuant to chapter 91.

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

(g) This section shall apply to taxable years beginning after December 31, 2009, and shall not apply to taxable years beginning after December 31, 2019.

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

(i)(1) If, during any taxable year, a net-zero energy building ceases to be a net-zero energy building and is owned by the taxpayer who claimed the tax credit, then the tax credit shall be recaptured. To recapture, the taxpayer shall add to taxable income for the taxable year in which the building ceases to be a net-zero energy building, the amount of the

recapture percentage of the credits allowed and claimed under this section.

(2) For purposes of paragraph (1), the recapture percentage shall be determined in accordance with the following:

If the property ceases to be a net-zero energy building within the time specified, then the recapture percentage is:

(A) One full year after the taxable year in which the credit is claimed: 100 per cent.

(B) One full year after the close of the period described in subparagraph (A): 80 per cent.

(C) One full year after the close of the period described in subparagraph (B): 60 per cent.

(D) One full year after the close of the period described in subparagraph (C): 40 per cent.

(E) One full year after the close of the period described in subparagraph (D): 20 per cent.

(j) If a deduction is taken under section 179 of the Internal Revenue Code, no tax credit shall be allowed for that portion of the cost for which the deduction is taken.

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

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

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

(1) Identifying, developing, administering, promoting, implementing, and evaluating programs, methods, and technologies that support energy-efficiency and demand-side management programs;

(2) Encouraging the continuance or improvement of efficiencies made in the production, delivery, and use of energy-efficiency and demand-side management programs and services;

(3) Using the energy-efficiency expertise and capabilities that have developed or may develop in the State and consulting with state agency experts;

(4) Promoting program initiatives, incentives, and market strategies that address the needs of persons facing the most significant barriers to participation;

(5) Promoting coordinated program delivery, including coordination with electric public utilities regarding the delivery of low-income home energy assistance, other demand-side management or energy-efficiency programs, and any utility programs;

(6) Consideration of innovative approaches to delivering demand-side management and energy-efficiency services, including strategies to encourage third-party financing and customer contributions to the cost of demand-side management and energy-efficiency services; [~~and~~]

(7) Conducting energy efficiency assessments to identify current energy use patterns in this State and areas of greatest potential for energy efficiency savings. The assessments shall include end use research regarding Hawaii's homes, businesses, and other utility

customers. The energy potential assessments shall help the public benefits fee administrator to identify and recommend energy efficiency programs to target. The energy potential assessments shall be forwarded to the legislature, the public utilities commission, the energy resources coordinator, and the electricity producing public utilities;

(8) Establishing aggressive energy efficiency plans with the provision that efficiency shall be the first loaded resource in all cases where it is cost effective. For purposes of this paragraph, it shall be "cost effective" when all resources are deemed to effectively cover the incremental cost of investment within fifteen years when measured against average electricity rates for residential, small commercial, large commercial, industrial, and agricultural customers;

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

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

(11) Conducting building codes analysis and review, and developing and implementing recommendations, which shall include, but not be limited to:

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

(B) Conducting analysis of the energy intensity of residential and commercial buildings built pursuant to the building code compared to baseline homes;

(C) Surveying builders to determine costs associated with meeting building code requirements for residential and commercial buildings;

(D) Delivering the results of these analyses and surveys to the public utilities commission annually, which results shall include recommendations for building code updates, to be provided to the state building code council as petitions for rules changes;

(E) Assessing the feasibility of implementing a net-zero energy building code for residential and commercial construction;

(F) Recommending technical code amendments to the international energy conservation codes in order to take advantage of Hawaii's climate;

(G) Evaluating the costs and benefits of requiring:

(i) Advanced meters and energy "dashboard" technologies that improve the ability of the occupant to monitor and improve building performance;

(ii) Cool roof standards;

(iii) Roofs of new homes to be solar-ready;

(iv) All homes built or rehabilitated in this State to have and present an energy label; and

(v) Any other measures that will improve the ability of the homeowner to better understand and manage the homeowner's energy use;

(H) Establishing building energy efficiency commissioning guidelines appropriate for building practices, including recommending enforcement mechanisms in this State by January 1, 2010;

(12) Establishing programs and information to educate financial institutions, mortgage brokers, and consumers on the economics of energy efficient properties, including savings over the life-cycle of the properties; and

(13) Processing variances from solar water heating installations required under chapter 196."

PART III

RENEWABLE ENERGY INCOME TAX CREDIT

SECTION 5. Section 235-12.5, Hawaii Revised Statutes, is amended to read as follows:

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

individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for every eligible renewable energy technology system that is installed and placed in service in the State by a taxpayer during the taxable year. [~~This credit shall be available for systems installed and placed in service in the State after June 30, 2003.~~] The tax credit may be claimed as follows:

[~~(1) Solar thermal energy systems for:~~

~~(A) Single-family residential property for which a building permit was issued prior to January 1, 2010: thirty-five per cent of the actual cost or $2,250, whichever is less;~~

~~(B) Multi-family residential property: thirty-five per cent of the actual cost or $350 per unit, whichever is less; and~~

~~(C) Commercial property: thirty-five per cent of the actual cost or $250,000, whichever is less;~~

~~(2) Wind-powered energy systems for:~~

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

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

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

~~(3) Photovoltaic energy systems for:~~

~~(A) Single-family residential property: thirty-five per cent of the actual cost or $5,000, whichever is less;~~

~~(B) Multi-family residential property: thirty-five per cent of the actual cost or $350 per unit, whichever is less; and~~

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

(1) For each solar energy system: thirty-five 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) If the primary purpose of the solar energy system is to use energy from the sun to heat water for household use, then the cap amounts shall be:

(A) $2,250 per system for single-family residential property;

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

(C) $250,000 per system for commercial property.

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

(A) $5,000 per system for single-family residential property;

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

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

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

(A) $1,500 per system for single-family residential property;

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

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

[~~(b)~~] (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.

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

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

(1) A usable source of thermal or mechanical energy;

(2) Electricity; or

(3) Fuel.

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

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

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

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

[~~(f) By or before December, 2005, to the extent feasible, using existing resources to assist the energy-efficiency policy~~

~~review and evaluation, the department shall assist with data collection on the following:~~

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

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

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

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

~~(A) Technology type; and~~

~~(B) Taxpayer type.~~

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

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

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

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

(h) For any renewable energy technology system, an individual taxpayer may elect to have any excess of the credit over payments due refunded to the taxpayer, if:

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

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

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

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

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

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

(j) To the extent feasible, using existing resources to assist the energy-efficiency policy review and evaluation, the department shall assist with data collection on the following for each taxable year:

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

(A) Technology type; and

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

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

(A) Technology type; and

(B) Taxpayer type.

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

PART IV

MISCELLANEOUS

SECTION 6. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 7. This Act shall take effect upon approval; provided that section 5 shall apply to taxable years beginning after December 31, 2008.

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. (SD1)