## **ACT 204**

S.B. NO. 644

A Bill for an Act Relating to Energy Resources.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. The legislature finds that Hawaii's economic viability is dependent on the availability of affordable energy pricing. In early 2008, the price of crude oil surpassed the \$100 per barrel mark from the 2007 annual average of \$65 per barrel, burdening Hawaii's residents and businesses with increasingly high electricity and gasoline costs.

Recognizing the critical importance of energy to the State, the legislature in 1976 enacted Act 189 establishing state income tax credits to encourage private investment in renewable energy systems among other measures, and these incentives have proven successful, beneficial, and cost effective. The original Act has been amended 11 times, varying credit rates, applicability, and duration, demonstrating that past progress and prior accomplishments in energy sustainability confer no license for complacence. The legislature finds, in fact, fossil fuel imports now account for a greater impact upon Hawaii's economy than at any prior time in the past, substantially exceeding that of every other state despite the fact that we are blessed with

the greatest number of renewable energy resources in the nation.

According to the January 2002 report of the energy-efficiency policy task force, in 2001 when oil prices averaged \$23 per barrel, the State of Hawaii refunded an estimated \$2,765,000 to 2,500 solar thermal system purchasers. This spending was estimated to have led to the following economic outcomes:

(1) Support for 300 jobs each year that the energy conservation income tax credit remained at a 35 per cent level and creation of 64 new jobs for

- every 2,500 new systems installed, a job impact that increased in relation to the number of systems continuously installed; and
- (2) A return to the State of \$5,200,000 in tax revenues for every 2,500 systems installed over the 25-year life of these systems, a revenue impact that increased in relation to the number of systems continuously installed. For example, if the number of systems installed each year grows to 5,000, it was predicted that \$10,400,000 in tax revenue would be generated over the life of these systems at current tax incentive levels.

However, the legislature finds that, with crude oil prices rising from \$65 to over \$100 per barrel in less than one year and with no relief under the State's direct control and jeopardizing the State's economic viability, the State must seriously consider requiring the installation of solar water heater systems in all new single-family dwellings constructed after December 31, 2009, to accelerate the installation of this type of energy saving device to benefit the owners and renters of newly constructed homes. A government mandate of this technology in new home construction effectively shifts from government investment in this technology via tax credits to a required investment by the private sector that will result in greater benefit to the public at large through the prudent investment in this type of renewable energy saving device.

The legislature finds that a conventional electric water tank accounts for 30 to 35 per cent of a home's electric bill. It is estimated that the savings from a home's electricity bill through the installation of a solar water heater system could result in the system being paid off in eight to ten years without a state tax incentive. If oil prices continue to rise, it is possible that energy savings may pay for the system even sooner. Furthermore, if the expense of the installation of a solar water heater system is included in the mortgage of a new home, given the high and unpredictable cost of oil, the savings from the lowered electricity costs may exceed the additional monthly payments for the solar water heater system, which itself has the added benefit of being an allowable tax deductible expense that may also be eligible for a federal renewable energy tax credit. Therefore, the legislature finds that with a solar water heater system mandate, and with a properly sized and installed solar water heater system, a household can increase its disposable income through this type of prudent, energy saving investment.

The legislature further finds that the favorable impact of this policy on the environment is undeniable. In 2006, there were 5,700 new residences constructed; assuming that the number of new single-homes constructed remains approximately the same, this would amount to over 10,260 tons of greenhouse gas emissions avoided per year.

The legislature recognizes and finds that the discontinuation of the tax credit for installation of solar energy water heating devices for homes with building permits issued prior to January 1, 2010, would remove an important financial incentive for the installation of these devices where the upfront cost, when not rolled into a mortgage, may be cost prohibitive. The availability of the tax credit, in this situation, has proven to be beneficial to the occupant of the home where the device is installed and also has provided a positive revenue impact to the State. Furthermore, the legislature has provided a mechanism for the establishment of other demand side incentives and benefits through the public benefits fund under part VII, chapter 269, Hawaii Revised Statutes. The legislature is confident that the transition provisions established in section 269-124, Hawaii Revised Statutes, will facilitate the provision of suitable demand-side management and energy-efficiency programs for energy consumers.

Accordingly, the purpose of this Act is to increase the use of renewable energy to protect our environment, reduce pollution, make housing more affordable, and enhance Hawaii's local economy by:

- (1) Requiring the installation of solar water heater systems, comparable renewable energy systems, or demand gas water heaters in all new residential development projects constructed after January 1, 2010; and
- (2) Restricting the solar thermal energy system tax credit available for single-family residential properties to those properties for which building permits were issued prior to January 1, 2010.

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

- **"§196-Solar water heater system required for new single-family residential construction.** (a) On or after January 1, 2010, no building permit shall be issued for a single-family dwelling that does not include a solar water heater system that meets the standards established pursuant to section 269-, unless the energy resources coordinator approves a variance. A variance shall only be approved if an architect or engineer licensed under chapter 464 attests that:
  - (1) Installation is impracticable due to poor solar resource;
  - (2) Installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed fifteen years;
  - (3) A substitute renewable energy technology system, as defined in section 235-12.5, is used as the primary energy source for heating water; or
  - (4) A demand water heater device approved by Underwriters Laboratories, Inc., is installed; provided that at least one other gas appliance is installed in the dwelling. For the purposes of this paragraph, "demand water heater" means a gas-tankless instantaneous water heater that provides hot water only as it is needed.
- (b) A request for a variance shall be submitted to the energy resources coordinator on an application prescribed by the energy resources coordinator and shall include, but not be limited to, a description of the location of the property and justification for the approval of a variance using the criteria established in subsection (a). A variance shall be deemed approved if not denied within thirty working days after receipt of the variance application.
- (c) Nothing in this section shall preclude any county from establishing procedures and standards required to implement this section.
- (d) Nothing in this section shall preclude participation in any utility demandside management program or public benefits fund under part VII of chapter 269."
- SECTION 3. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:
- **"§269- Solar water heater system standards.** Not later than July 1, 2009, or as soon as reasonably practicable, the public utilities commission shall adopt or establish by rule, tariff, or order, standards for solar water heater systems to include, but not be limited to, specifications for the performance, materials, components, durability, longevity, proper sizing, installation, and quality to promote the objectives of section 269-124."
- SECTION 4. 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) 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;

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) 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.

"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 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 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) 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) 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, 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) 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.
- (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."
- SECTION 5. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.<sup>1</sup>
- SECTION 6. This Act shall take effect upon approval; provided that section 4 shall apply to taxable years beginning after December 31, 2008.

(Approved June 26, 2008.)

Note

1. Edited pursuant to HRS §23G-16.5.