

A Bill for an Act Relating to Energy Conservation.

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

SECTION 1. The legislature recognizes the need to promote and support energy conservation and renewable energy resources in the State of Hawaii. The legislature finds, however, that the State's dependency on imported fossil fuel remains unabated, even in the face of the emergence of cost-effective and energy-saving technologies. Accordingly, the use of commercially available energy conservation systems, the adoption of energy-saving measures, and the development of demand-side management programs should be promoted to encourage the consumer's efficient use of energy resources.

Solar water heating systems and heat pumps are off-the-shelf, commercially available energy conservation systems that give every resident the opportunity to use an abundant renewable energy resource—the sun. Additionally, ice storage systems are designed to shift the consumption of energy to off-peak periods.

Although solar energy systems and heat pumps for water heating can play a major role in energy conservation, the current low price of imported oil has adversely affected the competitive viability of such devices. Further, the continued prudent use of energy by devices, such as ice storage systems, should be encouraged. As such, the legislature finds that incentives in the form of higher state tax credits are needed to ensure that progress will continue toward the State's goals of reducing its dependence on imported oil and using energy prudently. One of the purposes of this Act then, is to provide for a tax credit increase for the installation of ice storage systems and of solar water heating systems and to clarify the tax credit for heat pumps in new and existing buildings.

Recognizing our dependency on imported oil and our fragile and vulnerable economic foundation, the Hawaii state plan promotes the prudent use of power and fuel supplies through conservation measures. Consumer demand for energy must be considered an important variable that can be influenced by public utility actions. Demand-side management is the planning and implementation of utility actions to influence consumer use of energy to affect the utility system's demand characteristics. Acknowledging the importance of demand-side management, this Act also amends the state policy relating to the use of energy to include demand-side management programs as a conservation measure.

SECTION 2. Section 226-18(c), Hawaii Revised Statutes, is amended by amending subsection (c) to read as follows:

“(c) To further achieve the energy objectives, it shall be the policy of this State to:

- (1) Support research and development as well as promote the use of renewable energy sources[.];
- (2) Ensure a sufficient supply of energy to enable power systems to support the demands of growth[.];

- (3) Promote prudent use of power and fuel supplies through conservation measures including [education and energy-efficient practices and technologies.]:
  - (A) Development of cost-effective demand-side management programs;
  - (B) Education; and
  - (C) Adoption of energy-efficient practices and technologies; and
- (4) Ensure that the development or expansion of power systems and sources adequately consider environmental, public health, and safety concerns, and resource limitations.”

SECTION 3. Section 235-12, Hawaii Revised Statutes, is amended to read as follows:

**“§235-12 [Solar or wind energy devices, heat pumps or ice storage systems;] Energy conservation; income tax credit.** (a) [Each] For taxable years ending before January 1, 1990, except in the case of ice storage systems for taxable years ending before January 1, 1991, each individual and corporate resident taxpayer who 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 any solar or wind energy device, heat pump, or ice storage system in an amount not to exceed ten per cent of the total cost of the device, heat pump, or ice storage system; provided that the tax credit shall apply only to the actual cost of the solar or wind energy device, the heat pump, or ice storage system, their accessories, and installation and shall not include the cost of consumer incentive premiums unrelated to the operation of the solar or wind energy device, the heat pump, or ice storage system offered with the sale of the solar or wind energy device, the heat pump, or ice storage system. The credit shall be claimed against net income tax liability for the year in which the solar or wind energy device, the heat pump, or ice storage system was purchased and placed in use; provided:

- (1) The tax credit shall be applicable only with respect to solar devices, which are erected and placed in service after December 31, 1974, but before [December 31, 1992;] January 1, 1990;
- (2) In the case of wind energy devices and heat pumps, the tax credit shall be applicable only with respect to wind energy devices and heat pumps which are installed and placed in service after December 31, 1980, but before [December 31, 1992; and] January 1, 1990; and
- (3) In the case of ice storage systems, the tax credit shall be applicable only with respect to ice storage systems which are installed and placed in service after December 31, 1985, but before [December 31, 1992.] January 1, 1990.

Tax credits which exceed the taxpayer’s income tax liability may be used as a credit against the taxpayer’s income tax liability in subsequent years until exhausted. If federal energy tax credits are not extended beyond December 31, 1985, are not retroactively extended or reenacted, or federal energy tax credits the same as or less in amount than the credits in effect during the 1985 taxable year are not enacted during the taxable year 1986, then the state tax credit shall be increased to [twenty] fifteen per cent of the total cost after [December 31, 1989, to December 31, 1992.

(b)<sup>1</sup> The director of taxation shall prepare such forms as may be necessary to claim a credit under this section. The director may also require the taxpayer to furnish reasonable information in order 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.]<sup>1</sup> December 31, 1985, but before January 1, 1990.

[(c)]<sup>1</sup> As used in this [section:] subsection:

“Solar or wind energy device” means any new identifiable facility, equipment, apparatus, or the like which makes use of solar or wind energy for heating, cooling, or reducing the use of other types of energy dependent upon fossil fuel for their generation.

“Heat pump” means and refers to an electric powered compression heating system which [utilizes] extracts energy from warm ambient air or recovers waste heat [heated gas] to assist in the production of hot water.

“Ice storage system” refers to ice banks or other cool energy storage tanks, containers, accessories, and controls that are specifically designed to store ice or chilled fluids for the express purpose of shifting the consumption of energy to off-peak periods.

(c)<sup>1</sup> For taxable years beginning after December 31, 1989, each individual or corporate resident taxpayer who 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 as follows:

- (1) For wind energy systems that are installed and placed in service after December 31, 1989, but before January 1, 1999, the credit shall be twenty per cent of the actual cost;
- (2) For solar energy systems that are installed and placed in service after December 31, 1989, but before January 1, 1999, on new and existing single family residential buildings, the credit shall be in an amount not to exceed thirty-five per cent or \$1,750, whichever is less, of the actual cost of the solar energy system;
- (3) For solar energy systems that are installed and placed in service after December 31, 1989, but before January 1, 1999, on new and existing multi-unit buildings used primarily for residential purposes, the credit shall be in an amount not to exceed thirty-five per cent or \$350 per building unit, whichever is less, of the actual cost of the solar energy system; provided that a registered, professional engineer approves the design of the system and certifies that the solar design provides not less than eighty per cent of the daily annual average hot water needs of all the occupants of the building;
- (4) For solar energy systems that are installed and placed in service after December 31, 1989, but before January 1, 1999, in new and existing hotel, commercial, and industrial facilities, the credit shall be in an amount not to exceed thirty-five per cent of the actual cost of the solar energy system;
- (5) For heat pumps that are installed and placed in service after December 31, 1989, but before January 1, 1999, in new and existing single-family residential buildings, the credit shall be in an amount not to exceed twenty per cent or \$400, whichever is less, of the actual cost of the heat pump;
- (6) For heat pumps that are installed and placed in service after December 31, 1989, but before January 1, 1999, in new and existing multi-unit buildings used primarily for residential purposes, the credit shall be in an amount not to exceed twenty per cent or \$200 per building unit, whichever is less, of the actual cost of the heat pump; provided that a registered, professional engineer approves the design of the system and certifies that the heat pump provides not less

than ninety per cent of the daily annual average hot water needs of all of the occupants of the building:

- (7) For heat pumps that are installed and placed in service after December 31, 1989, but before January 1, 1999, in new and existing hotel, commercial, and industrial facilities, the credit shall be in an amount not to exceed twenty per cent of the actual cost of the heat pump; and
- (8) For ice storage systems that are installed and placed in service after December 31, 1990, but before January 1, 1999, the credit shall be in an amount not to exceed fifty per cent of the actual cost of the ice storage system.

The per unit of actual cost of a solar energy system or heat pump referred to in subsection (c)(3) and (6) shall be determined by multiplying the actual cost of the solar energy system or heat pump installed and placed in service in the multi-unit building by a fraction, the numerator being the total square feet of that unit in the multi-unit building, and the denominator being the total square feet of all the units in the multi-unit building.

(d) Tax credits shall apply only to the actual cost of the solar or wind energy system, heat pump, or ice storage system, including their accessories and installation, and shall not include the cost of consumer incentive premiums unrelated to the operation of the system or offered with the sale of the system or heat pump. The tax credit shall be claimed against net income tax liability for the year in which the solar or wind energy system, heat pump, or ice storage system was purchased and placed in use in Hawaii. Tax credits that exceed the taxpayer's income tax liability may be used as credit against the taxpayer's income tax liability in subsequent years until exhausted.

(e) The director of taxation shall prepare such forms as may be necessary to claim a credit under this section. 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.

(f) As used in this section:

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

"Heat pump" means an electric powered compression heating system that extracts energy from warm ambient air or recovers waste heat to assist in the production of hot water.

"Ice storage system" refers to ice banks or other cool energy storage tanks, containers, accessories, and controls that are specifically designed to store ice or chilled fluids for the express purpose of shifting the consumption of energy to off-peak periods."

SECTION 4. Statutory material to be repealed is bracketed. New statutory material is underscored.

SECTION 5. This Act shall take effect upon its approval.

(Approved July 3, 1990.)

#### Note

- 1. So in original.