THE SENATE
TWENTY-FOURTH LEGISLATURE, 2008
STATE OF HAWAII

S.B. NO. 2455

JAN 18 2008

A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY TECHNOLOGIES.

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

SECTION 1. Act 240, Session Laws of Hawaii 2006, is amended by amending section 1 to read as follows:

"SECTION 1. The legislature finds that Hawaii's dependence on petroleum for about ninety per cent of its energy needs is more than any other state in the nation. This makes the State extremely vulnerable to any oil embargo, supply disruption, international market dysfunction, and many other factors beyond the control of the State. Furthermore, the continued consumption of conventional petroleum fuel negatively impacts the environment. At the same time, Hawaii has among the most abundant renewable energy resources in the world, in the form of solar, geothermal, wind, biomass, and ocean energy assets.

The legislature also finds that increased energy efficiency and use of renewable energy resources would increase Hawaii's energy self-sufficiency, achieving broad societal benefits, including increased energy security, resistance to increases in

oil prices, environmental sustainability, economic development, and job creation.

Over the years, the legislature has worked steadily to encourage the deployment of renewable energy resources and energy efficiency initiatives. This includes:

(1) Establishing a net energy metering program, interconnection standards, and renewable energy tax credits;

(2) Establishing greenhouse gas and energy consumption reduction goals for state facilities and requiring the use of energy efficient products in state facilities; and

(3) Providing incentives for the deployment of solar energy devices.

The legislature also established an enforceable renewable energy portfolio standard under which twenty per cent of Hawaii's electricity is to be generated from renewable resources by the end of 2020.

There now exists an unprecedented, historical opportunity for Hawaii to emerge as a leader in the hydrogen economy.

Hydrogen technology development is already attracting billions of dollars in investment capital not only in the United

States, but also in other countries in Europe, and Japan. On a national level, federal initiatives are resulting in the development of hydrogen and fuel cell technologies in partnership with automakers and major energy companies. Analysts predict that these initiatives, along with efforts in other countries, will lead to the development of markets for hydrogen and supportive hydrogen fuel cell technologies and infrastructure. The question is no longer "if", but "when."

Current and potential commercial hydrogen energy technologies have a viable path forward and can lead to future market adoption of renewable hydrogen technologies. The legislature recognizes the need for programs around renewable and nonrenewably generated hydrogen, available today with current technologies, to increase customer acceptance and public awareness that will ultimately lead to statewide adoption of hydrogen for both transportation fuel and electricity.

Locally, the historic confluence of the State's desire for energy self-sufficiency through development of renewable energy with the global opportunity of the emerging hydrogen economy calls for a major, far-sighted initiative, sustainable over the long-term, to develop Hawaii's renewable energy resources and,

ultimately, to transition Hawaii to an indigenous-resource-based energy economy.

Right now, the greatest immediate opportunity to achieve this vision resides on the island of Hawaii.

On the island of Hawaii, more electricity is produced from renewable resources than can currently be used. Several wind projects are expected to be completed in the near term, exacerbating this problem. Furthermore, the Puna geothermal project is planning to increase its energy contribution only if the electric utility can take and use the energy. This provides an opportunity to use excess geothermal and other renewable energy resources to produce hydrogen using water electrolysis. This clean, renewable hydrogen would then be used as an energy carrier for stationary power and transportation fuels, making the island self-sufficient.

Hydrogen could also be exported to Oahu and other islands as the clean fuel of choice for power generation and transportation fuels, achieving greater self-sufficiency for the State of Hawaii.

To shape Hawaii's energy future and achieve the goal of energy self-sufficiency for the State of Hawaii, our efforts must continue on all fronts, integrating new and evolving

technologies, seizing upon economic opportunities to become more energy efficient and economically diversified, and providing incentives and assistance to address barriers.

The purpose of this Act is to provide [~~a~~] one segment of a larger comprehensive approach to achieving energy self-sufficiency for the State by:

(1) Increasing the renewable energy technologies income tax credit for certain solar-thermal, wind-powered, [~~and~~] photovoltaic energy, and hydrogen energy systems and removing the tax credits' 2008 sunset date;

(2) Establishing a program and strategy for increased hydrogen and biofuel research and use in the State;

(3) Establishing state support for achieving alternate fuels standards; and

(4) Establishing the pay as you save pilot project to provide a financing mechanism to make purchases of residential solar hot water heater systems more affordable."

SECTION 2. Section 235-12.5, Hawaii Revised Statutes, is amended by amending subsection (a) to read as follows:

"(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: 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; and

(4) Hydrogen energy systems for:

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

(B) Multi-family residential property: thirty-five per cent of the actual cost or $10,000 per unit, whichever is less; and

(C) Commercial property: thirty-five per cent of the actual cost or $15,000 per unit, 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)."

SECTION 3. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval and shall apply to taxable years beginning after December 31, 2007.

INTRODUCED BY: Russell S. Kokubun B/R

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Report Title:
Renewable Energy Technologies; Tax Credit; Hydrogen Energy Systems

Description:
Expands the renewable energy technologies tax credit to include hydrogen energy systems.