

JAN 24 2007

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# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY TECHNOLOGIES.

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

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

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

13 The legislature also finds that increased energy efficiency  
14 and use of renewable energy resources would increase Hawaii's  
15 energy self-sufficiency, achieving broad societal benefits,  
16 including increased energy security, resistance to increases in  
17 oil prices, environmental sustainability, economic development,  
18 and job creation.



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

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

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

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

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

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

19 Hydrogen technology development is already attracting  
20 billions of dollars in investment capital not only in the United  
21 States, but also in other countries in Europe, and Japan. On a  
22 national level, federal initiatives are resulting in the



1 development of hydrogen and fuel cell technologies in  
2 partnership with automakers and major energy companies.  
3 Analysts predict that these initiatives, along with efforts in  
4 other countries, will lead to the development of markets for  
5 hydrogen and supportive hydrogen fuel cell technologies and  
6 infrastructure. The question is no longer "if", but "when."

7 Current commercial fuel cell technologies have a viable  
8 path forward and can lead to future market adoption of renewable  
9 hydrogen technologies. The legislature recognizes the need for  
10 programs around nonrenewably generated hydrogen, available today  
11 with current technologies, to increase customer acceptance and  
12 public awareness that will ultimately lead to adoption of  
13 technology that utilizes renewably generated hydrogen.

14 Locally, the historic confluence of the State's desire for  
15 energy self-sufficiency through development of renewable energy  
16 with the global opportunity of the emerging hydrogen economy  
17 calls for a major, far-sighted initiative, sustainable over the  
18 long-term, to develop Hawaii's renewable energy resources and,  
19 ultimately, to transition Hawaii to an indigenous-resource-based  
20 energy economy.

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



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

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

16           To shape Hawaii's energy future and achieve the goal of  
17 energy self-sufficiency for the State of Hawaii, our efforts  
18 must continue on all fronts, integrating new and evolving  
19 technologies, seizing upon economic opportunities to become more  
20 energy efficient and economically diversified, and providing  
21 incentives and assistance to address barriers.



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

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

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

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

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

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

18           "(a) When the requirements of subsection (c) are met, each  
19 individual or corporate resident taxpayer that files an  
20 individual or corporate net income tax return for a taxable year  
21 may claim a tax credit under this section against the Hawaii  
22 state individual or corporate net income tax. The tax credit



1 may be claimed for every eligible renewable energy technology  
2 system that is installed and placed in service by a taxpayer  
3 during the taxable year. This credit shall be available for  
4 systems installed and placed in service after June 30, 2003.

5 The tax credit may be claimed as follows:

6 (1) Solar thermal energy systems for:

7 (A) Single-family residential property: thirty-five  
8 per cent of the actual cost or \$2,250, whichever  
9 is less;

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

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

15 (2) Wind-powered energy systems for:

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

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



- 1 (C) Commercial property: twenty per cent of the
- 2 actual cost or \$500,000, whichever is less; [and]
- 3 (3) Photovoltaic energy systems for:
- 4 (A) Single-family residential property: thirty-five
- 5 per cent of the actual cost or \$5,000, whichever
- 6 is less;
- 7 (B) Multi-family residential property: thirty-five
- 8 per cent of the actual cost or \$350 per unit,
- 9 whichever is less; and
- 10 (C) Commercial property: thirty-five per cent of the
- 11 actual cost or \$500,000, whichever is less; and
- 12 (4) Fuel cell systems for:
- 13 (A) Single-family residential property: thirty-five
- 14 per cent of the actual cost or \$5,000 per unit,
- 15 whichever is less;
- 16 (B) Multi-family residential property: thirty-five
- 17 per cent of the actual cost or \$10,000 per unit,
- 18 whichever is less; and
- 19 (C) Commercial property: thirty-five per cent of the
- 20 actual cost or \$15,000 per unit, whichever is
- 21 less;



1 provided that multiple owners of a single system shall be  
2 entitled to a single tax credit; and provided further that the  
3 tax credit shall be apportioned between the owners in proportion  
4 to their contribution to the cost of the system.

5 In the case of a partnership, S corporation, estate, or  
6 trust, the tax credit allowable is for every eligible renewable  
7 energy technology system that is installed and placed in service  
8 by the entity. The cost upon which the tax credit is computed  
9 shall be determined at the entity level. Distribution and share  
10 of credit shall be determined pursuant to section 235-110.7(a)."

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

13 SECTION 4. This Act shall take effect upon its approval  
14 and shall apply to taxable years beginning after December 31,  
15 2006.

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INTRODUCED BY: Norman S. Scafaro





**Report Title:**

Renewable Energy Technologies; Tax Credit; Fuel Cell Systems

**Description:**

Expands the renewable energy technologies tax credit to include fuel cell systems.

