# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY TECHNOLOGIES.

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

1 SECTION 1. The legislature finds that Hawaii's dependence 2 on petroleum for about ninety per cent of its energy needs is 3 more than any other state in the nation. This makes the State 4 extremely vulnerable to any oil embargo, supply disruption, 5 international market dysfunction, and many other factors beyond 6 the control of the State. Furthermore, the continued 7 consumption of conventional petroleum fuel negatively impacts 8 the environment. At the same time, Hawaii has among the most 9 abundant renewable energy resources in the world, in the form of 10 solar, geothermal, wind, biomass, and ocean energy assets.

11 The legislature also finds that increased energy efficiency 12 and use of renewable energy resources would increase Hawaii's 13 energy self-sufficiency, achieving broad societal benefits, 14 including increased energy security, resistance to increases in 15 oil prices, environmental sustainability, economic development, 16 and job creation.



1	Over t	he years, the legislature has worked steadily to			
2	encourage t	he deployment of renewable energy resources and			
3	energy efficiency initiatives. This includes:				
4	(1) E	stablishing a net energy metering program,			
5	i	nterconnection standards, and renewable energy tax			
6	c	redits;			
7	(2) E	stablishing greenhouse gas and energy consumption			
8	r	eduction goals for state facilities and requiring the			
9	u	se of energy efficient products in state facilities;			
10	a	nd			
11	(3) P	roviding incentives for the deployment of solar			
12	e	nergy devices.			
13	The le	gislature 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				
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1 development of hydrogen and fuel cell technologies in 2 partnership with automakers and major energy companies. Analysts predict that these initiatives, along with efforts in 3 4 other countries, will lead to the development of markets for hydrogen and supportive hydrogen fuel cell technologies and 5 infrastructure. The question is no longer "if", but "when." 6 Current commercial fuel cell technologies have a viable 7 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 uses renewably generated hydrogen.

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.

21 Right now, the greatest immediate opportunity to achieve22 this vision resides on the island of Hawaii.



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

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.

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.



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1	The purpose of this Act is to provide one segment of a
2	larger comprehensive approach to achieving energy self-
3	sufficiency for the State by expanding the renewable energy
4	technologies income tax credit to include fuel cell systems.
5	SECTION 2. Section 235-12.5, Hawaii Revised Statutes, is
6	amended as follows:
7	1. By amending subsection (a) to read:
8	"(a) When the requirements of subsection (c) are met, each
9	individual or corporate resident taxpayer that files an
10	individual or corporate net income tax return for a taxable year
11	may claim a tax credit under this section against the Hawaii
12	state individual or corporate net income tax. The tax credit
13	may be claimed for every eligible renewable energy technology
14	system that is installed and placed in service by a taxpayer
15	during the taxable year. This credit shall be available for
16	systems installed and placed in service after June 30, 2003.
17	The tax credit may be claimed as follows:
18	(1) Solar thermal energy systems for:
19	(A) Single-family residential property: thirty-five
20	per cent of the actual cost or \$2,250, whichever
21	is less;



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1		(B)	Multi-family residential property: thirty-five
2			per cent of the actual cost or \$350 per unit,
3			whichever is less; and
4		(C)	Commercial property: thirty-five per cent of the
5			actual cost or \$250,000, whichever is less;
6	(2)	Wind	-powered energy systems for:
7		(A)	Single-family residential property: twenty per
8			cent of the actual cost or \$1,500, whichever is
9			less;
10		(B)	Multi-family residential property: twenty per
11			cent of the actual cost or \$200 per unit,
12			whichever is less; and
13		(C)	Commercial property: twenty per cent of the
14			actual cost or \$500,000, whichever is less; [and]
15	(3)	Phot	ovoltaic energy systems for:
16		(A)	Single-family residential property: thirty-five
17			per cent of the actual cost or \$5,000, whichever
18			is less;
19		(B)	Multi-family residential property: thirty-five
20			per cent of the actual cost or \$350 per unit,
21			whichever is less; and



1	(0	2)	Commercial property: thirty-five per cent of the
2			actual cost or \$500,000, whichever is less; and
3	<u>(4)</u> <u>F</u> u	uel	cell systems for:
4	(1	<u>A)</u>	Single-family residential property: per
5			cent of the actual cost or per unit,
6			whichever is less;
7	(1	<u>B)</u>	Multi-family residential property: per
8			cent of the actual cost or \$ per unit,
9			whichever is less; and
10	((	<u>C)</u>	Commercial property: per cent of the
11			actual cost or \$ per unit, whichever is
12		·	less;
13	provided that	at ı	multiple owners of a single system shall be
14	entitled to	a	single tax credit; and provided further that the
15	tax credit :	sha	ll be apportioned between the owners in proportion
16	to their co	ntr	ibution to the cost of the system.
17	In the	ca	se of a partnership, S corporation, estate, or

18 trust, the tax credit allowable is for every eligible renewable 19 energy technology system that is installed and placed in service 20 by the entity. The cost upon which the tax credit is computed 21 shall be determined at the entity level. Distribution and share 22 of credit shall be determined pursuant to section 235-110.7(a)."



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2. By amending subsection (d) to read:

2 "(d) The director of taxation shall prepare any forms that 3 may be necessary to claim a tax credit under this section, 4 including forms identifying the technology type of each tax 5 credit claimed under this section, whether for solar thermal, 6 photovoltaic from the sun, [or] wind, or fuel cells. The director may also require the taxpayer to furnish reasonable 7 8 information to ascertain the validity of the claim for credit 9 made under this section and may adopt rules necessary to effectuate the purpose of this section pursuant to chapter 91." 10 SECTION 3. Statutory material to be repealed is bracketed 11 and stricken. New statutory material is underscored. 12 SECTION 4. This Act shall take effect on January 1, 2020 13

and shall apply to taxable years beginning after December 31,

15 2006.

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#### Report Title:

Renewable Energy Technologies; Tax Credit; Fuel Cell Systems

#### Description:

Expands the renewable energy technologies tax credit to include fuel cell systems. (HB840 HD1)

