
A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

1 SECTION 1. The legislature notes that renewable energy
2 resources can greatly benefit Hawaii's economy, environment,
3 energy security, and sustainability. The increased use of
4 Hawaii's abundant renewable energy resources, such as wind,
5 solar, ocean thermal, wave, and biomass resources, are keys to
6 reducing Hawaii's dependence on imported fossil fuels, reducing
7 Hawaii's green house gas emissions, which contribute to global
8 warming, and creating new job opportunities and economic
9 diversification.

10 The legislature finds that Hawaii's trade deficit is also a
11 significant impediment to Hawaii's goal of economic and energy
12 security and sustainability. Specifically, in 2006, Hawaii
13 exported only \$16,300,000,000 in goods and services, including
14 visitor spending, while importing approximately \$24,000,000,000.
15 The legislature further finds that Hawaii's oil imports totaled
16 \$3,400,000,000 for the year, accounting for approximately 15 per
17 cent of the total imports. Over 93 per cent of Hawaii's energy
18 is supplied by fossil fuel.



1 Act 95, Session Laws of Hawaii 2004, established a
2 renewable portfolio standard, which requires that each electric
3 utility company generate ten per cent of its net electricity
4 sales from renewable resources by December 31, 2010, 15 per cent
5 by December 31, 2015, and 20 per cent by December 31, 2020.
6 Hawaii's electric utilities used fossil fuel to generate 92 per
7 cent of the electricity they sold in 2006. This represented
8 almost 25 per cent of the total fossil fuel imports and cost
9 approximately \$749,102,000. Since electric utilities can most
10 readily use renewable energy relative to Hawaii's other energy
11 sectors, the legislature mandated the renewable portfolio
12 standards.

13 The renewable portfolio standards, however, also included
14 electrical energy savings brought about by the use of renewable
15 displacement or off-set technologies, as well as electrical
16 energy savings brought about by the use of energy efficiency
17 technologies including energy efficiency programs. This is
18 unique among the 29 states that have renewable portfolio
19 standard requirements. It also results in double counting the
20 energy savings in calculating the renewable portfolio standard
21 achieved by the electric utilities.



1 From 2001 to the end of 2006, the Hawaiian Electric
2 companies (HECO utilities) have increased their electricity
3 generation from renewable resources by 37 per cent. During
4 the same period, the HECO utilities' electricity sales increased
5 by 746 gigawatthours, from 9,370 gigawatthours in 2001 to 10,116
6 gigawatthours in 2006. However, the amount generated from
7 renewable resources at facilities owned by the HECO utilities or
8 purchased from independent power producers only increased by
9 221.6 gigawatthours, from 606 gigawatthours in 2001 to 827.6
10 gigawatthours in 2006. This supplied less than one-third of the
11 increase in HECO utilities' electricity sales. In 2006, the
12 utilities' reported renewable portfolio standards achieved under
13 the current law, which includes energy savings from the use of
14 renewable displacement or off-set technologies, as well as from
15 energy efficiency and conservation programs totaled 1,399
16 gigawatthours, 59 per cent of which is accounted by the
17 electricity generation from renewable resources.

18 To ensure that the intent and purpose of this Act are
19 clearly and unambiguously communicated, the legislature states
20 its unequivocal support for all cost-effective, technically
21 feasible uses of energy efficiency and conservation resources
22 and technology and displacement or off-set technologies.



1 Therefore, nothing in this Act shall be taken to mean that the
2 legislature intends to prevent, preclude, or in any way inhibit
3 the use of such resources and technologies as the first and best
4 choice for diminishing Hawaii's dangerous dependency on imported
5 fossil fuels, especially petroleum. Moreover, the legislature
6 finds that in addition to strengthening Hawaii's renewable
7 portfolio standards, which is the purpose of this Act, the
8 separate establishment of similarly robust energy efficiency
9 standards is an extremely attractive policy option and deserves
10 serious consideration on its own merits.

11 A separate energy efficiency portfolio standard is an
12 important element in the development and management of any
13 energy efficiency and demand-side management programs funded
14 under the public benefits fund established under section 269-
15 121, Hawaii Revised Statutes. The legislature finds electrical
16 energy saving resulting from the use of energy-efficient
17 technologies, or from ratepayer-funded energy efficiency or
18 demand-side management programs, should be excluded from the
19 definition of renewable portfolio standard, but included in a
20 separate energy efficiency portfolio standard. However, until a
21 thorough review is completed by the public utilities commission
22 and a separate energy efficiency portfolio standard is



1 established under a public benefits fund, the legislature finds
2 that it is necessary to accurately categorize each type of
3 electrical energy generation to ensure an accurate reporting of
4 the sources of renewable electrical energy and energy efficiency
5 with the renewable portfolio standard.

6 The purpose of this Act is to clarify and ensure that more
7 renewable resources will be deployed in energy generation to
8 meet the renewable portfolio standards with attendant reductions
9 in greenhouse gas emissions, replacement of fossil fuel oil, and
10 other economic and environmental benefits.

11 SECTION 2. Section 269-91, Hawaii Revised Statutes, is
12 amended as follows:

13 1. By adding a new definition to be appropriately inserted
14 and to read:

15 "Energy efficiency portfolio standard" means the
16 requirement that electric utility companies meet a portion of
17 their annual increase in electricity demand through energy
18 efficiency measures."

19 2. By amending the definitions of "renewable electrical
20 energy" and "renewable portfolio standard" to read:

21 "Renewable electrical energy" means:



1 (1) Electrical energy generated using renewable energy as
2 the source; or

3 (2) Electrical energy savings brought about by the use of
4 renewable displacement or off-set technologies,
5 including solar water heating, seawater air-
6 conditioning district cooling systems, solar air-
7 conditioning, and customer-sited, grid-connected
8 renewable energy systems; ~~[or]~~ and

9 ~~[+]~~ (3) ~~[+]~~ ~~[Electrical]~~ Until a separate energy efficiency
10 portfolio standard is established, electrical energy
11 savings brought about by the use of energy efficiency
12 technologies, including heat pump water heating, ice
13 storage, ratepayer-funded energy efficiency programs,
14 and use of rejected heat from co-generation and
15 combined heat and power systems, excluding fossil-
16 fueled qualifying facilities that sell electricity to
17 electric utility companies and central station power
18 projects.

19 "Renewable portfolio standard" means the percentage of
20 electrical energy sales that is ~~[represented]~~ generated by
21 renewable ~~[electrical]~~ energy."



1 SECTION 3. Section 269-92, Hawaii Revised Statutes, is
2 amended as follows:

3 1. By amending subsections (a) and (b) to read:

4 "(a) Each electric utility company that sells electricity
5 for consumption in the [~~State~~] state shall establish a renewable
6 portfolio standard of:

7 (1) Ten per cent of its net electricity sales by December
8 31, 2010;

9 (2) Fifteen per cent of its net electricity sales by
10 December 31, 2015; and

11 (3) Twenty per cent of its net electricity sales by
12 December 31, 2020.

13 (b) The public utilities commission may establish
14 standards for each utility that prescribe what portion of the
15 renewable portfolio standards shall be met by specific types of
16 renewable [~~electrical~~] energy resources; provided that:

17 (1) At least [~~fifty~~] seventy-five per cent of the
18 renewable portfolio standards shall be met by
19 electrical energy generated using renewable energy as
20 the source;

21 (2) Where electrical energy is generated or displaced by a
22 combination of renewable and nonrenewable means, the



1 proportion attributable to the renewable means shall
2 be credited as renewable energy; and

3 (3) Where fossil and renewable fuels are co-fired in the
4 same generating unit, the unit shall be considered to
5 generate renewable electrical energy (electricity) in
6 direct proportion to the percentage of the total heat
7 value represented by the heat value of the renewable
8 fuels."

9 2. By amending subsection (d) to read:

10 "(d) Events or circumstances that are outside of an
11 electric utility company's reasonable control may include, to
12 the extent the event or circumstance could not be reasonably
13 foreseen and ameliorated:

14 (1) Weather-related damage;

15 (2) Natural disasters;

16 (3) Mechanical or resource failure;

17 (4) Failure of renewable [~~electrical~~] energy producers to
18 meet contractual obligations to the electric utility
19 company;

20 (5) Labor strikes or lockouts;

21 (6) Actions of governmental authorities that adversely
22 affect the generation, transmission, or distribution



- 1 of renewable electrical energy under contract to an
2 electric utility company;
- 3 (7) Inability to acquire sufficient renewable electrical
4 energy due to lapsing of tax credits related to
5 renewable energy development;
- 6 (8) Inability to obtain permits or land use approvals for
7 renewable [~~electrical~~] energy projects;
- 8 (9) Inability to acquire sufficient cost-effective
9 renewable [~~electrical~~] energy;
- 10 (10) Substantial limitations, restrictions, or prohibitions
11 on utility renewable [~~electrical~~] energy projects; and
12 (11) Other events and circumstances of a similar nature."

13 SECTION 4. Statutory material to be repealed is bracketed
14 and stricken. New statutory material is underscored.

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



Report Title:

Renewable Energy; electricity

Description:

Requires that the renewable portfolio standards of 20 per cent by 2020 be met by classic electricity generation from renewable sources and energy savings from the use of renewable displacement or off-set technologies, or energy efficiency, until such time as a separate energy efficiency portfolio standard is established. (HB3068 HD1)

