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# 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 finds that Act 97, Session Laws  
2 of Hawaii 2015, amended section 269-92, Hawaii Revised Statutes,  
3 to establish a one hundred per cent renewable portfolio standard  
4 by December 31, 2045, with the intent to transition the State  
5 away from imported fuels and toward renewable local resources  
6 that provide a secure source of affordable energy. However, the  
7 calculation of the renewable portfolio standard, based on the  
8 definition of renewable portfolio standard enacted in 2001 and  
9 amended in 2006, is the percentage of electrical energy sales  
10 that is represented by renewable electrical energy. The  
11 legislature finds that the calculation of the renewable  
12 portfolio standard based on electrical energy sales (renewable  
13 electrical energy sales divided by total electricity sales),  
14 rather than on electrical energy generation (renewable  
15 electrical energy generation divided by total electrical energy  
16 generation), overestimates the amount of renewable energy  
17 serving Hawaii's electric utility customers.



1           There are two fundamental issues that lead to the current  
2 discrepancy:

3           (1) The current renewable portfolio standard calculation  
4 inflates the reported percentage of renewable energy  
5 by excluding customer-sited, grid-connected energy  
6 generation in the denominator, which becomes material  
7 with higher levels of customer-sited, grid-connected  
8 renewable energy generation and higher renewable  
9 portfolio standard percentages; and

10          (2) The current electrical energy sales number does not  
11 include energy losses that occur between the points of  
12 electrical energy generation and the customer meter  
13 where sales are measured. Failure to address these  
14 issues would create the incorrect public perception of  
15 the State's progress towards its one hundred per cent  
16 renewable energy statutory goal.

17          Furthermore, the legislature finds that Hawaii's energy  
18 sector is undergoing a transition to renewable energy that is  
19 strengthening the State's economy, environment, and security.  
20 To complete this transition successfully it is also important  
21 that all relevant entities are aligned. Along these lines, the



1 legislature is concerned that requiring electric utilities, but  
2 not gas utilities, to increase their reliance on renewable  
3 energy creates an unfair playing field that may unintentionally  
4 harm consumers by promoting suboptimal long-lived investments in  
5 fossil fuels through gas-fired distributed electrical  
6 generation. These effects may also have near- and long-term  
7 impacts on the viability of the State's electric utilities, and  
8 near- and long-term impacts on the viability of the State's gas  
9 utilities.

10 The legislature finds that the simplest, fairest, and most  
11 effective solution to this concern is to implement renewable  
12 portfolio standard targets for gas utilities that mirror those  
13 being achieved by electric utilities. This Act requires all gas  
14 sold for grid-connected electrical energy generation by  
15 regulated gas utility operations in the State to become more  
16 renewable over time.

17 The purpose of this Act is to:

18 (1) Amend the definition of renewable portfolio standard  
19 to more accurately reflect the percentage of renewable  
20 energy penetration in the State; and



1           (2) Establish gas utility company renewable portfolio  
2           standards for electricity generation, ensuring that  
3           the State's market for gas embraces and supports the  
4           transition away from fossil fuels and toward renewable  
5           energy.

6           SECTION 2. Chapter 269, part V, Hawaii Revised Statutes,  
7           is amended by adding three new sections to be appropriately  
8           designated and to read as follows:

9           "§269-A Renewable portfolio standards for gas utility  
10          companies. (a) The renewable portfolio standard for a gas  
11          utility company means total heat energy in therms from renewable  
12          gas sold divided by total heat energy in therms from gas sold,  
13          expressed as a percentage. For the purposes of this definition,  
14          the terms "renewable gas sold" and "gas sold" are limited to gas  
15          sold for grid-connected electrical energy generation under  
16          regulated gas utility company operations in the State.

17          (b) Each gas utility company that sells gas for grid-  
18          connected electrical energy generation by regulated utility  
19          operations in the State shall establish a renewable energy  
20          portfolio standard of one hundred per cent by December 31, 2045.



1       (c) The public utilities commission may establish  
2 standards for each gas utility company that prescribe what  
3 portion of the renewable portfolio standards shall be met by  
4 specific types of renewable gas resources; provided that where  
5 gas is composed of commingled fossil and renewable gases, the  
6 renewable gas component of the gas shall be considered to be in  
7 direct proportion to the percentage of the total heat input  
8 value represented by the heat input value of the renewable gas.

9       (d) If the public utilities commission determines that a  
10 gas utility company failed to meet the renewable portfolio  
11 standard, after a hearing in accordance with chapter 91, the gas  
12 utility company shall be subject to penalties established by the  
13 public utilities commission; provided that if the commission  
14 determines that the gas utility company is unable to meet the  
15 renewable portfolio standards because of reasons beyond the  
16 reasonable control of the gas utility company, as set forth in  
17 subsection (e), the commission, in its discretion, may waive in  
18 whole or in part any otherwise applicable penalties.

19       (e) Events or circumstances that are outside a gas utility  
20 company's reasonable control may include, to the extent the



1 event or circumstance could not be reasonably foreseen and  
2 ameliorated:

3 (1) Weather-related damage;

4 (2) Natural disasters;

5 (3) Mechanical or resource failure;

6 (4) Failure of renewable gas producers or suppliers to  
7 meet contractual obligations to the gas utility  
8 company;

9 (5) Labor strikes or lockouts;

10 (6) Actions of governmental authorities that adversely  
11 affect the procurement of renewable gas under contract  
12 to a gas utility company;

13 (7) Inability to acquire sufficient renewable gas because  
14 of lapsing of tax credits related to renewable gas  
15 development;

16 (8) Inability to obtain permits or land use approvals for  
17 renewable gas projects;

18 (9) Inability to acquire sufficient cost-effective  
19 renewable gas;

20 (10) Inability to acquire sufficient renewable gas to meet  
21 the renewable portfolio standard goals by 2045 in a



1 manner that is beneficial to Hawaii's economy in  
2 relation to comparable fossil fuel resources;

3 (11) Substantial limitations, restrictions, or prohibitions  
4 on utility renewable gas projects; and

5 (12) Other events and circumstances of a similar nature  
6 that are not reasonably foreseen and ameliorated.

7 (f) By July 1, 2020, each gas utility company shall submit  
8 to the public utilities commission, for review and approval, a  
9 procedure that establishes how the gas utility company will  
10 measure and report the gas utility company's renewable portfolio  
11 standard status to the public utilities commission, and report  
12 the progress and the steps taken toward the renewable portfolio  
13 standard goals every five years thereafter.

14 §269-B Achieving gas portfolio standard. (a) A gas  
15 utility company and its affiliates may aggregate their renewable  
16 portfolios to achieve the renewable portfolio standard.

17 (b) If a gas utility company and its affiliates aggregate  
18 their renewable portfolios to achieve the renewable portfolio  
19 standard, the public utilities commission may distribute,  
20 apportion, or allocate the costs and expenses of all or any  
21 portion of the respective renewable portfolios among the gas



1 utility company, the gas utility company's affiliates, and the  
2 gas utility company's affiliates' respective ratepayers, as is  
3 reasonable under the circumstances.

4 (c) A gas utility company may recover, through an  
5 automatic rate adjustment clause, the gas utility company's  
6 revenue requirement resulting from the distribution,  
7 apportionment, or allocation of the costs and expenses of the  
8 renewable portfolios of the gas utility company and its  
9 affiliates.

10 (d) To provide for timely recovery of the revenue  
11 requirement under subsection (c), the public utilities  
12 commission may establish a separate automatic rate adjustment  
13 clause, or approve the use of a previously approved automatic  
14 rate adjustment clause, without a rate case filing. The use of  
15 the automatic rate adjustment clause to recover the revenue  
16 requirement shall be allowed to continue until the revenue  
17 requirement is incorporated in rates in the respective gas  
18 utility company's rate case.

19 §269-C Waivers, extensions, and incentives. (a) Any gas  
20 utility company failing to meet the renewable portfolio standard  
21 shall report to the public utilities commission within ninety





1 days following the goal date established in section 269-A, and  
2 provide an explanation for the failure to meet the renewable  
3 portfolio standard. The public utilities commission, after  
4 allowing an appropriate period of public comment, shall grant or  
5 deny a request for a waiver from the renewable portfolio  
6 standard or for an extension to meet the prescribed standard.

7 (b) The public utilities commission may provide incentives  
8 to encourage gas utility companies to exceed their renewable  
9 portfolio standards, or meet their renewable portfolio standards  
10 before the prescribed date, or both."

11 SECTION 3. Section 269-91, Hawaii Revised Statutes, is  
12 amended to read as follows:

13 1. By adding five new definitions to be appropriately  
14 inserted and to read:

15 "Cost-effective" in the context of a gas utility company  
16 means the ability to produce or purchase gas from renewable gas  
17 resources at or below avoided costs or as the public utilities  
18 commission otherwise determines to be just and reasonable.

19 "Gas utility company" means a public utility, as defined  
20 under section 269-1, for the production, conveyance,  
21 transmission, delivery, or furnishing of gas.



1       "Grid-connected" means interconnected to the Hawaii  
2 electric system under an existing standard or rule approved by  
3 the public utilities commission. As used in this definition,  
4 "interconnection" has the same meaning as defined in section  
5 269-141.

6       "Hawaii electric system" has the same meaning as defined in  
7 section 269-141.

8       "Renewable gas" means gas generated or produced using the  
9 following sources:

10       (1) Biogas, including landfill and sewage-based digester  
11 gas;

12       (2) Biomass, biomass crops, agricultural and animal  
13 residues and wastes, municipal solid waste, and other  
14 solid waste;

15       (3) Biofuels; and

16       (4) Hydrogen produced from renewable energy sources."

17       2. By amending the definitions of "cost-effective" and  
18 "renewable portfolio standard" to read:

19       "Cost-effective" in the context of an electric utility  
20 company means the ability to produce or purchase electric energy  
21 or firm capacity, or both, from renewable energy resources at or



1 below avoided costs or as the public utilities commission  
2 otherwise determines to be just and reasonable consistent with  
3 the methodology set by the public utilities commission in  
4 accordance with section 269-27.2

5 "Renewable portfolio standard" [~~means the percentage of~~  
6 ~~electrical energy sales that is represented by renewable~~  
7 ~~electrical energy.~~] has the same meaning as defined in sections  
8 269-92 and 269-A."

9 SECTION 4. Section 269-92, Hawaii Revised Statutes, is  
10 amended to read as follows:

11 "§269-92 Renewable portfolio standards[-] for electric  
12 utility companies. (a) The renewable portfolio standard for an  
13 electric utility company means total renewable electrical energy  
14 generated from grid-connected renewable energy systems divided  
15 by total electrical energy generated from grid-connected energy  
16 systems, expressed as a percentage, but excluding electrical  
17 generation used exclusively for emergency service in the case of  
18 failure of the normal supply from the Hawaii electric system.

19 [(+a)] (b) Each electric utility company that sells  
20 electricity for consumption in the State shall establish a  
21 renewable portfolio standard of:



- 1 (1) Ten per cent [~~of its net electricity sales~~] by  
2 December 31, 2010;
- 3 (2) Fifteen per cent [~~of its net electricity sales~~] by  
4 December 31, 2015;
- 5 (3) Thirty per cent [~~of its net electricity sales~~] by  
6 December 31, 2020;
- 7 (4) Forty per cent [~~of its net electricity sales~~] by  
8 December 31, 2030;
- 9 (5) Seventy per cent [~~of its net electricity sales~~] by  
10 December 31, 2040; and
- 11 (6) One hundred per cent [~~of its net electricity sales~~] by  
12 December 31, 2045.

13 (c) All electric grid-connected energy systems shall be  
14 one hundred per cent renewable energy systems by December 31,  
15 2045; provided that generation that is used exclusively for  
16 emergency service in the event of failure of the normal supply  
17 from the Hawaii electric system shall be excluded from such  
18 calculation as set forth in subsection (a).

19 ~~[(b)]~~ (d) The public utilities commission may establish  
20 standards for each electric utility company that prescribe  
21 ~~[what]~~ the portion of the renewable portfolio standards that



1 shall be met by specific types of renewable energy resources;  
2 provided that:

- 3 (1) Prior to January 1, 2015, at least fifty per cent of  
4 the renewable portfolio standards shall be met by  
5 electrical energy generated using renewable energy as  
6 the source, and after December 31, 2014, the entire  
7 renewable portfolio standard shall be met by  
8 electrical generation from renewable energy sources;
- 9 (2) Beginning January 1, 2015, electrical energy savings  
10 shall not count toward renewable energy portfolio  
11 standards;
- 12 (3) Where electrical energy is generated or displaced by a  
13 combination of renewable and nonrenewable means, the  
14 proportion attributable to the renewable means shall  
15 be credited as renewable energy; and
- 16 (4) Where fossil and renewable fuels are co-fired in the  
17 same generating unit, the unit shall be considered to  
18 generate renewable electrical energy (electricity) in  
19 direct proportion to the percentage of the total heat  
20 input value represented by the heat input value of the  
21 renewable fuels.



1           ~~[(e)]~~ (e) If the public utilities commission determines  
2 that an electric utility company failed to meet the renewable  
3 portfolio standard, after a hearing in accordance with chapter  
4 91, the utility shall be subject to penalties to be established  
5 by the public utilities commission; provided that if the  
6 commission determines that the electric utility company is  
7 unable to meet the renewable portfolio standards ~~[due to]~~  
8 because of reasons beyond the reasonable control of an electric  
9 utility, as set forth in subsection ~~[(d)],~~ (f), the commission,  
10 in its discretion, may waive in whole or in part any otherwise  
11 applicable penalties.

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

- 16           (1) Weather-related damage;  
17           (2) Natural disasters;  
18           (3) Mechanical or resource failure;  
19           (4) Failure of renewable electrical energy producers to  
20 meet contractual obligations to the electric utility  
21 company;



- 1 (5) Labor strikes or lockouts;
- 2 (6) Actions of governmental authorities that adversely  
3 affect the generation, transmission, or distribution  
4 of renewable electrical energy under contract to an  
5 electric utility company;
- 6 (7) Inability to acquire sufficient renewable electrical  
7 energy due to lapsing of tax credits related to  
8 renewable energy development;
- 9 (8) Inability to obtain permits or land use approvals for  
10 renewable electrical energy projects;
- 11 (9) Inability to acquire sufficient cost-effective  
12 renewable electrical energy;
- 13 (10) Inability to acquire sufficient renewable electrical  
14 energy to meet the renewable portfolio standard goals  
15 beyond 2030 in a manner that is beneficial to Hawaii's  
16 economy in relation to comparable fossil fuel  
17 resources;
- 18 (11) Substantial limitations, restrictions, or prohibitions  
19 on utility renewable electrical energy projects; and



1 (12) Other events and circumstances of a similar nature[-]  
2 that could not be reasonably foreseen and  
3 ameliorated."

4 SECTION 5. Section 269-95, Hawaii Revised Statutes, is  
5 amended to read as follows:

6 "§269-95 Renewable portfolio standards study. The public  
7 utilities commission shall:

- 8 (1) By December 31, 2007, develop and implement a utility  
9 ratemaking structure, which may include performance-  
10 based ratemaking, to provide incentives that encourage  
11 Hawaii's electric utility companies to use cost-  
12 effective renewable energy resources found in Hawaii  
13 to meet the renewable portfolio standards established  
14 in section 269-92, while allowing for deviation from  
15 the standards in the event that the standards cannot  
16 be met in a cost-effective manner or as a result of  
17 events or circumstances, such as described in section  
18 [~~269-92(d)~~], 269-92(f), beyond the control of the  
19 electric utility company that could not have been  
20 reasonably anticipated or ameliorated;
- 21 (2) Gather, review, and analyze empirical data to:





1 (A) Determine the extent to which any proposed  
2 utility ratemaking structure would impact  
3 electric utility companies' profit margins; and

4 (B) Ensure that the electric utility companies'  
5 opportunity to earn a fair rate of return is not  
6 diminished;

7 (3) Use funds from the public utilities special fund to  
8 contract with the Hawaii natural energy institute of  
9 the University of Hawaii to conduct independent  
10 studies to be reviewed by a panel of experts from  
11 entities such as the United States Department of  
12 Energy, National Renewable Energy Laboratory, Electric  
13 Power Research Institute, Hawaii electric utility  
14 companies, environmental groups, and other similar  
15 institutions with the required expertise. These  
16 studies shall include findings and recommendations  
17 regarding:

18 (A) The capability of Hawaii's electric utility  
19 companies to achieve renewable portfolio  
20 standards in a cost-effective manner and shall  
21 assess factors such as:

- 1 (i) The impact on consumer rates;
- 2 (ii) Utility system reliability and stability;
- 3 (iii) Costs and availability of appropriate
- 4 renewable energy resources and technologies,
- 5 including the impact of renewable portfolio
- 6 standards, if any, on the energy prices
- 7 offered by renewable energy developers;
- 8 (iv) Permitting approvals;
- 9 (v) Effects on the economy;
- 10 (vi) Balance of trade, culture, community,
- 11 environment, land, and water;
- 12 (vii) Climate change policies;
- 13 (viii) Demographics;
- 14 (ix) Cost of fossil fuel volatility; and
- 15 (x) Other factors deemed appropriate by the
- 16 commission; and
- 17 (B) Projected renewable portfolio standards to be set
- 18 five and ten years beyond the then current
- 19 standards;
- 20 (4) Evaluate the renewable portfolio standards every five
- 21 years, beginning in 2013, and may revise the standards



1 based on the best information available at the time to  
2 determine if the standards established by section  
3 269-92 remain effective and achievable; and  
4 (5) Report its findings and revisions to the renewable  
5 portfolio standards, based on its own studies and  
6 other information, to the legislature no later than  
7 twenty days before the convening of the regular  
8 session of 2014, and every five years thereafter."

9 SECTION 6. In codifying the new sections added by section  
10 2 of this Act, the revisor of statutes shall substitute  
11 appropriate section numbers for the letters used in designating  
12 the new sections in this Act.

13 SECTION 7. This Act does not affect rights and duties that  
14 matured, penalties that were incurred, and proceedings that were  
15 begun before its effective date.

16 SECTION 8. Statutory material to be repealed is bracketed  
17 and stricken. New statutory material is underscored.

18 SECTION 9. This Act shall take effect on January 28, 2045.



**Report Title:**

Energy; Utilities; Renewable Portfolio Standard

**Description:**

Amends the definition of "renewable portfolio standard" to more accurately reflect the percentage of renewable energy penetration in the State. Establishes renewable portfolio standards and targets for gas utility companies that mirrors those set for electric utility companies. (HB1801 HD1)

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

