H.B. NO. ⁵⁵⁰ H.D. 1

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. Since that 7 time, the need to reduce carbon emissions globally to avoid the worst impacts of climate change has become increasingly urgent. 8 9 In addition, studies indicate that accelerating the adoption of 10 renewable energy will cost less than the course laid out by the 11 current renewable portfolio standard interim benchmarks. 12 Speeding up the deployment of renewable energy will also create

13 thousands of jobs and will position Hawaii at the forefront of14 energy innovation and investment.

15 Currently, the calculation of the renewable portfolio
16 standard, based on the definition of renewable portfolio
17 standard enacted in 2001 and amended in 2006, is the percentage

HB550 HD1 HMS 2019-1513

1 of electrical energy sales that is represented by renewable 2 electrical energy. The legislature finds that the calculation 3 of the renewable portfolio standard based on electrical energy 4 sales (renewable electrical energy sales divided by total 5 electrical sales), rather than on electrical energy generation (renewable electrical energy generation divided by total 6 7 electrical energy generation), overestimates the amount of 8 renewable energy serving Hawaii's electric utility customers. 9 There are two fundamental issues that lead to the current 10 discrepancy:

11 (1) The current renewable portfolio standard calculation 12 inflates the reported percentage of renewable energy 13 by excluding customer-sited, grid-connected energy 14 generation in the denominator, which becomes material 15 with higher levels of customer-sited, grid-connected 16 renewable energy generation and higher renewable 17 portfolio standard percentages; and

18 (2) The current electrical energy sales number does not
19 include energy losses that occur between the points of
20 electrical energy generation and the customer meter,
21 where sales are measured.

HB550 HD1 HMS 2019-1513

Failure to address these issues creates an incorrect measure of
 the State's progress toward its statutory goal of one hundred
 per cent renewable energy.

4 Furthermore, the legislature finds that Hawaii's energy 5 sector is undergoing a transition to renewable energy that is 6 strengthening the State's economy, helping to preserve the 7 environment, and increasing the State's security. To complete 8 this transition successfully, it is also important that all 9 relevant entities are aligned. The legislature is concerned 10 that requiring electric utilities but not gas utilities to 11 increase their reliance on renewable energy creates an unfair 12 playing field that may unintentionally harm consumers by 13 promoting suboptimal long-lived investments in fossil fuels 14 through gas-fired distributed electrical generation. These 15 effects may also have short-term and long-term impacts on the 16 viability of the State's electric and gas utilities.

17 The legislature finds that the simplest, fairest, and most 18 effective solution to this concern is to implement renewable 19 portfolio standard targets for gas utilities that are similar to 20 those established for electric utilities.

21 The purpose of this Act is to:

H.B. NO. ⁵⁵⁰ H.D. 1

1	(1)	Require the public utilities commission to study the
2		feasibility of implementing renewable portfolio
3		standards to encourage the use of renewable energy by
4		gas utility companies; and
5	(2)	Amend the renewable portfolio standard interim goals
6		for 2030 and 2040 to accelerate the adoption of
7		renewable energy.
8	SECT	ION 2. Chapter 269, Hawaii Revised Statutes, is
9	amended b	y adding a new section to be appropriately designated
10	and to re	ad as follows:
11	" <u>§</u> 26	9- Renewable gas portfolio standards study. The
12	public ut	ilities commission shall:
13	(1)	By December 31, 2021, develop and implement a utility
14		ratemaking structure, which may include performance-
15		based ratemaking, to provide incentives that encourage
16		Hawaii's gas utility companies to use cost-effective
17		renewable energy resources found in Hawaii to meet the
18		renewable portfolio standard of reaching one hundred
19		per cent by 2045, while allowing for deviation from
20		the standards in the event that the standards cannot
21		be met in a cost-effective manner or as a result of

HB550 HD1 HMS 2019-1513

1		events or circumstances beyond the control of a gas	
2		utility company that could not have been reasonably	
3		anticipated or ameliorated;	
4	(2)	Gather, review, and analyze empirical data to:	
5		(A) Determine the extent to which any proposed	
6		utility ratemaking structure would impact gas	
7		utility companies' profit margins; and	
8		(B) Ensure that the gas utility companies'	
9		opportunity to earn a fair rate of return is not	
10		diminished;	
11	(3)	Use funds from the public utilities special fund to	
12		contract with the Hawaii natural energy institute of	
13		the University of Hawaii to conduct independent	
14		studies to be reviewed by a panel of experts from	
15		entities such as the United States Department of	
16		Energy, National Renewable Energy Laboratory, Electric	
17		Power Research Institute, Hawaii gas utility	
18		companies, environmental groups, and other similar	
19		institutions with the required expertise. These	
20		studies shall include findings and recommendations	
21		regarding:	



1	(A) The	capability of Hawaii's gas utility companies
2	to a	chieve renewable portfolio standards in a
3	cost	-effective manner and shall assess factors
4	such	as:
5	<u>(i)</u>	The impact on consumer rates;
6	<u>(ii)</u>	Utility system reliability and stability;
7	<u>(iii)</u>	Costs and availability of appropriate
8		renewable energy resources and technologies,
9		including the impact of renewable portfolio
10		standards, if any, on the energy prices
11		offered by renewable energy developers;
12	<u>(iv)</u>	Permitting approvals;
13	<u>(v)</u>	Effects on the economy;
14	<u>(vi)</u>	Balance of trade, culture, community,
15		environment, land, and water;
16	(vii)	Climate change policies;
17	(viii)	Demographics;
18	<u>(ix)</u>	Cost of fossil fuel volatility; and
19	<u>(x)</u>	Other factors deemed appropriate by the
20		commission;

1	<u>(B)</u>	Projected renewable portfolio standards to be set
2		five and ten years beyond the then current
3		standards;
4	(C)	The technical feasibility of establishing
5		renewable portfolio standards for gas utility
6		companies in Hawaii, including:
7		(i) Identifying renewable alternatives, such as
8		the procurement and importation of biogas;
9		and
10		(ii) Recommendations for interim renewable
11		targets before one hundred per cent
12		renewable gas is achieved by December 31,
13		2045;
14	<u>(D)</u>	Unregulated gas sales and what requirements are
15		needed for the transition of gas that is
16		unregulated to a renewable energy source; and
17	<u>(E)</u>	If a renewable gas portfolio standard is
18		established, the equity issues between renewable
19		gas projects and if all the projects shall have
20		access to the same incentives, such as tax
21		credits;



H.B. NO. ⁵⁵⁰ H.D. 1

1	(4)	Evaluate the renewable portfolio standards every five
2		years, beginning in 2022, and may revise the standards
3		based on the best information available at the time to
4		determine if the standards remain effective and
5		achievable; and
6	(5)	Report its findings and revisions to the renewable
7		portfolio standards, based on its own studies and
8		other information, to the legislature no later than
9		twenty days before the convening of the regular
10		session of 2021, and every five years thereafter."
11	SECT	ION 3. Section 269-92, Hawaii Revised Statutes, is
12	amended t	o read as follows:
13	"§26	9-92 Renewable portfolio standards. (a) Each
14	electric	utility company that sells electricity for consumption
15	in the St	ate shall establish a renewable portfolio standard of:
16	(1)	Ten per cent of its net electricity sales by
17		December 31, 2010;
18	(2)	Fifteen per cent of its net electricity sales by
19		December 31, 2015;
20	(3)	Thirty per cent of its net electricity sales by
21		December 31, 2020;

HB550 HD1 HMS 2019-1513

Page 9

•

H.B. NO. ⁵⁵⁰ H.D. 1

1	(4)	[Forty] Sixty-five per cent [of its net electricity	
2	+	sales] by December 31, 2030;	
3	(5)	[Seventy] Eighty-five per cent [of its net electricity	
4	4	sales] by December 31, 2040; and	
5	(6) (One hundred per cent [of its net electricity sales] by	
6	1	December 31, 2045.	
7	(b) 2	All electric grid-connected energy systems shall be	
8	one hundred	d per cent renewable energy systems by December 31,	
9	2045; prov:	ided that generation that is used exclusively for	
10	emergency	service in the event that the normal supply from the	
11	Hawaii eleo	ctric system fails shall be excluded from the	
12	<u>calculation</u>	n as set forth in the definition of renewable	
13	portfolio standard in section 269-91.		
14	[-(b)]	(c) The public utilities commission may establish	
15	standards :	for each <u>electric</u> utility <u>company</u> that prescribe	
16	[what] <u>the</u> portion of the renewable portfolio standards <u>that</u>		
17	shall be m	et by specific types of renewable energy resources;	
18	provided t	hat:	
19	(1)	Prior to January 1, 2015, at least fifty per cent of	
20	ł	the renewable portfolio standards shall be met by	
21		electrical energy generated using renewable energy as	

HB550 HD1 HMS 2019-1513

H.B. NO. ⁵⁵⁰ H.D. 1

1 the source, and after December 31, 2014, the entire 2 renewable portfolio standard shall be met by 3 electrical generation from renewable energy sources; 4 (2)Beginning January 1, 2015, electrical energy savings 5 shall not count toward renewable energy portfolio 6 standards: 7 (3) Where electrical energy is generated or displaced by a 8 combination of renewable and nonrenewable means, the 9 proportion attributable to the renewable means shall 10 be credited as renewable energy; and 11 (4)Where fossil and renewable fuels are co-fired in the 12 same generating unit, the unit shall be considered to 13 generate renewable electrical energy (electricity) in 14 direct proportion to the percentage of the total heat 15 input value represented by the heat input value of the 16 renewable fuels. 17 $\left[\frac{d}{d}\right]$ (d) If the public utilities commission determines 18 that an electric utility company failed to meet the renewable

20 91, the utility shall be subject to penalties to be established
21 by the public utilities commission; provided that if the

portfolio standard, after a hearing in accordance with chapter

HB550 HD1 HMS 2019-1513

19

1	commissior	n determines that the electric utility company is	
2	unable to	meet the renewable portfolio standards [due to]	
3	because of	reasons beyond the reasonable control of an electric	
4	utility, a	as set forth in subsection (d), the commission, in its	
5	discretion, may waive in whole or in part any otherwise		
6	applicable penalties.		
7	[-(d) -]	<u>(e)</u> Events or circumstances that are [outside of]	
8	beyond an	electric utility company's reasonable control may	
9	include, t	to the extent the event or circumstance could not be	
10	reasonably	foreseen and ameliorated:	
11	(1)	Weather-related damage;	
12	(2)	Natural disasters;	
13	(3)	Mechanical or resource failure;	
14	(4)	Failure of renewable electrical energy producers to	
15		meet contractual obligations to the electric utility	
16		company;	
17	(5)	Labor strikes or lockouts;	
18	(6)	Actions of governmental authorities that adversely	
19		affect the generation, transmission, or distribution	
20		of renewable electrical energy under contract to an	
21		electric utility company;	

HB550 HD1 HMS 2019-1513

11

Page 11

į

•

H.B. NO. ⁵⁵⁰ H.D. 1

1	(7)	Inability to acquire sufficient renewable electrical
2		energy due to lapsing of tax credits related to
3		renewable energy development;
4	(8)	Inability to obtain permits or land use approvals for
5		renewable electrical energy projects;
6	(9)	Inability to acquire sufficient cost-effective
7		renewable electrical energy;
8	(10)	Inability to acquire sufficient renewable electrical
9		energy to meet the renewable portfolio standard goals
10		beyond 2030 in a manner that is beneficial to Hawaii's
11		economy in relation to comparable fossil fuel
12		resources;
13	(11)	Substantial limitations, restrictions, or prohibitions
14		on utility renewable electrical energy projects; and
15	(12)	Other events and circumstances of a similar nature $[-,]$
16		that could not be reasonably foreseen and
17		ameliorated."
18	SECT	ION 4. There is appropriated out of the general
19	revenues	of the State of Hawaii the sum of \$ or so much
20	thereof a	s may be necessary for fiscal year 2019-2020 and the
21	same sum	or so much thereof as may be necessary for fiscal year

HB550 HD1 HMS 2019-1513

1 2020-2021 for the public utilities commission to carry out the 2 renewable gas portfolio standards study as required by section 3 269- , Hawaii Revised Statutes; provided that the public 4 utilities commission may contract with another institution to 5 carry out the requirements set forth in section 269- , Hawaii 6 Revised Statutes. 7 The sums appropriated shall be expended by the public 8 utilities commission for the purposes of this Act. 9 SECTION 5. This Act does not affect rights and duties that 10 matured, penalties that were incurred, and proceedings that were 11 begun before its effective date. 12 SECTION 6. Statutory material to be repealed is bracketed 13 and stricken. New statutory material is underscored. 14 SECTION 7. This Act shall take effect on July 1, 2100.

HB550 HD1 HMS 2019-1513

Report Title: Renewable Portfolio Standard; Gas; Electricity; Study; Appropriation

Description:

Requires the Public Utilities Commission to study the feasibility of implementing renewable portfolio standards to encourage the use of renewable energy by gas utility companies. Amends the renewable portfolio standard interim goals for 2030 and 2040 to accelerate the adoption of renewable energy. Appropriates funds. (HB550 HD1)

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

