

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. 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), rather than on electrical energy generation (renewable 14 15 electrical energy generation divided by total electrical energy 16 qeneration), overestimates the amount of renewable energy 17 serving Hawaii's electric utility customers.

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1	There	are	two	fundamental	issues	that	lead	to	the	current
2	discrepancy	7 :								

- (1) The current renewable portfolio standard calculation inflates the reported percentage of renewable energy by excluding customer-sited, grid-connected energy generation in the denominator, which becomes material with higher levels of customer-sited, grid-connected renewable energy generation and higher renewable portfolio standard percentages; and
- include energy losses that occur between the points of electrical energy generation and the customer meter where sales are measured. Failure to address these issues would create the incorrect public perception of the State's progress towards its one hundred per cent renewable energy statutory goal.

Furthermore, the legislature finds that Hawaii's energy sector is undergoing a transition to renewable energy that is strengthening the State's economy, environment, and security. To complete this transition successfully it is also important 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
- 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	ameliorate	ed:
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		<pre>development;</pre>
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	<u>(f)</u>	By July 1, 2020, each gas utility company shall submit
8	to the pu	blic utilities commission, for review and approval, a
9	procedure	that establishes how the gas utility company will
10	measure a	nd report the gas utility company's renewable portfolio
11	standard	status to the public utilities commission, and report
12	the progr	ess and the steps taken toward the renewable portfolio
13	standard	goals every five years thereafter.
14	<u>§269</u>	-B Achieving gas portfolio standard. (a) A gas
15	utility c	ompany and its affiliates may aggregate their renewable
16	portfolio	s to achieve the renewable portfolio standard.
17	<u>(b)</u>	If a gas utility company and its affiliates aggregate
18	their ren	ewable 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	nortion o	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:
- 1. By adding five new definitions to be appropriately
- 14 inserted and to read:
- ""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	<u>"Gri</u>	d-connected" means interconnected to the Hawaii
2	electric	system under an existing standard or rule approved by
3	the publi	c utilities commission. As used in this definition,
4	"intercon	nection" has the same meaning as defined in section
5	269-141.	
6	<u>"Haw</u>	aii electric system" has the same meaning as defined in
7	section 2	69-141.
8	"Ren	ewable 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	"renewabl	e portfolio standard" to read:
19	""Co	st-effective" in the context of an electric utility
20	company m	eans the ability to produce or purchase electric energy
21	or firm c	apacity, 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 accordance with section 269-27.2 4 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." SECTION 4. Section 269-92, Hawaii Revised Statutes, is 9 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 generated from grid-connected renewable energy systems divided 14 by total electrical energy generated from grid-connected energy 15 systems, expressed as a percentage, but excluding electrical 16 generation used exclusively for emergency service in the case of 17 failure of the normal supply from the Hawaii electric system. 18

[(a)] (b) Each electric utility company that sells

electricity for consumption in the State shall establish a

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renewable portfolio standard of:

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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	<u>(c)</u>	All electric grid-connected energy systems shall be
14	one hundr	ed per cent renewable energy systems by December 31,
15	2045; pro	vided 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	calculati	on as set forth in subsection (a).
19	(d)]] (d) The public utilities commission may establish
20	standards	for each <u>electric</u> utility <u>company</u> that prescribe
21	[what] <u>th</u>	e portion of the renewable portfolio standards that



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

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

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         [\frac{(c)}{c}] (e) If the public utilities commission determines
    that an electric utility company failed to meet the renewable
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    portfolio standard, after a hearing in accordance with chapter
3
    91, the utility shall be subject to penalties to be established
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    by the public utilities commission; provided that if the
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6
    commission determines that the electric utility company is
    unable to meet the renewable portfolio standards [due to]
7
    because of reasons beyond the reasonable control of an electric
8
    utility, as set forth in subsection \left[\frac{d}{d}\right] (f), the commission,
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10
    in its discretion, may waive in whole or in part any otherwise
    applicable penalties.
11
          [\frac{d}{d}] (f) Events or circumstances that are outside of an
12
    electric utility company's reasonable control may include, to
13
14
    the extent the event or circumstance could not be reasonably
    foreseen and ameliorated:
15
16
          (1)
               Weather-related damage;
17
          (2)
               Natural disasters;
         (3)
               Mechanical or resource failure;
18
               Failure of renewable electrical energy producers to
19
         (4)
               meet contractual obligations to the electric utility
20
21
               company;
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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	SECT	ION 5. Section 269-95, Hawaii Revised Statutes, is
5	amended to	o read as follows:
6	"§26	9-95 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		$\left[\frac{269-92(d)}{2}\right]$ $269-92(f)$, beyond the control of the
19		electric utility company that could not have been
20		reasonably anticipated or ameliorated;

(2) Gather, review, and analyze empirical data to:

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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) Proj	ected renewable portfolio standards to be set
18		five	and ten years beyond the then current
19		stan	dards;
20	(4)	Evaluate	the renewable portfolio standards every five
21		vears he	ginning 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 upon its approval.
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	INTRODUCED BY: Nivole & Former

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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.

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