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**Testimony of the Department of Commerce and Consumer Affairs**

**Before the  
Senate Committee on Commerce and Consumer Protection  
Tuesday, March 29, 2022  
10:00 AM  
Conference Room 229 & Videoconference**

**On the following measure:  
H.B. 2089, HD1, SD1, RELATING TO RENEWABLE PORTFOLIO STANDARDS**

Chair Baker and Members of the Committee:

My name is Dean Nishina, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department supports this bill.

The purpose of this bill is to amend the definition of "renewable portfolio standard" to be a percentage of electrical energy generation, rather than sales, excluding customer-sited fossil fuel generation; expand the events or circumstances that are beyond an electric utility company's reasonable control to include non-renewable energy generated by electric generation facilities over or of which the electric utility does not have direct control or ownership; and; require electric utility companies to track and annually report data and trends on customer retention and attrition to further inform the calculation of the renewable portfolio standards.

This SD1 version amends the bill by creating a new section in the Hawaii Revised Statutes establishing the requirement of electric utility companies to track and annually report data and trends on customer retention and attrition.

The Department continues to support the State's goal of 100% renewable energy on its electric grids by 2045, and so the Department supports the proposal to modify the existing Renewable Portfolio Standards (RPS) calculation in Hawaii Revised Statutes (HRS) section 269-91 by replacing "sales" with "generation" in the calculation, effective July 1, 2022. This modification will eliminate the existing "loophole" that could allow the State to achieve a 100% RPS but still have a significant contribution from fossil-fueled generation sources, as well as suggest that more than 100% of generation is from renewable energy.

The Department notes how this bill modifies the calculation of the interim 2030 and 2040 calculations and offers that, when the RPS calculation is modified, the corrected calculation will automatically require more grid-connected renewable energy than is currently required.

The Department appreciates how the Sec. 2 in this version creates a new and separate section in HRS Ch. 269 to require electric utility companies to report data and trends relating to customer retention or attrition.

Thank you for the opportunity to testify on this bill.



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

DAVID Y. IGE  
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CHUNG I. CHANG  
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Statement of  
**MIKE MCCARTNEY**  
Director

**LATE**

Department of Business, Economic Development, and Tourism  
before the

**SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

Tuesday, March 29, 2022  
10:00 AM

State Capitol, Conference Room #229 & Videoconference

In consideration of  
**HB2089, HD1, SD1**  
**RELATING TO RENEWABLE PORTFOLIO STANDARDS.**

Chair Baker, Vice Chair Chang, and members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) strongly supports this Administrative measure, HB2089, HD1, SD1, that amends the definition of renewable portfolio standard to be a percentage of electrical energy generation, rather than sales.

This bill will simplify the calculation, using renewable generation in the numerator and total generation in the denominator and allow the results of the calculation (the math) to better match Hawai'i's stated energy goal (the language).

Thank you for the opportunity to testify.

TESTIMONY OF  
JAMES P. GRIFFIN, Ph.D.  
CHAIR, PUBLIC UTILITIES COMMISSION  
STATE OF HAWAII

TO THE  
SENATE COMMITTEE ON  
COMMERCE AND CONSUMER PROTECTION

March 29, 2022  
10:00 a.m.

Chair Baker and Members of the Committee:

**MEASURE:** H.B. No. 2089, HD1, SD1

**TITLE:** RELATING TO RENEWABLE PORTFOLIO STANDARDS.

**DESCRIPTION:** Amends the definition of "renewable portfolio standard" to be a percentage of electrical energy generation, rather than sales, excluding customer-sited fossil fuel generation. Expands the events or circumstances that are beyond an electric utility company's reasonable control to include non-renewable energy generated by electric generation facilities over or of which the electric utility does not have direct control or ownership. Requires electric utility companies to track and annually report data and trends on customer retention and attrition to further inform the calculation of the renewable portfolio standards. Effective 7/1/2100. (SD1)

**POSITION:**

The Public Utilities Commission ("Commission") supports this administration measure and offers the following comments for consideration.

**COMMENTS:**

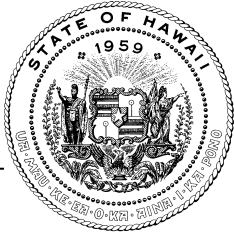
The Commission believes that calculating renewable portfolio standard ("RPS") achievement in the manner proposed by this measure will present a more accurate picture of how much of the state's electricity is produced from renewable energy sources, ensuring alignment with the intent of the renewable portfolio standards goals.

The definition proposed in this measure is consistent with the RPS achievement performance incentive mechanism for Hawaiian Electric ("RPS-A PIM") under the

performance-based regulation framework, which is calculated as the total system renewable generation divided by total generation of electricity.

The Commission notes that expressing RPS requirements in terms of electricity generation rather than utility sales will require a higher level of renewable generation to achieve the same target level. The Commission will continue to support renewable energy efforts and create a regulatory environment that facilitates achievement of the State's energy goals.

Thank you for the opportunity to testify on this measure.



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE  
GOVERNOR

SCOTT J. GLENN  
CHIEF ENERGY OFFICER

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Testimony of  
**SCOTT J. GLENN, Chief Energy Officer**

before the  
**SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

Tuesday, March 29, 2022  
10:00 AM  
State Capitol, Conference Room 229 & Videoconference

SUPPORT  
**HB 2089 HD1, SD1**  
**RELATING TO RENEWABLE PORTFOLIO STANDARDS.**

Chair Baker, Vice Chair Chang, and Members of the Committee, the Hawai'i State Energy Office (HSEO) strongly supports HB 2089, HD1, SD1, an Administration measure, which amends the definition of "renewable portfolio standard" to be a percentage of electrical energy generation, rather than sales, excluding customer-sited fossil fuel generation; expands the events or circumstances that are beyond an electric utility company's reasonable control to include non-renewable energy generated by electric generation facilities over or of which the electric utility does not have direct control or ownership; and requires electric utility companies to track and annually report data and trends on customer retention and attrition to further inform the calculation of the renewable portfolio standards.

The Senate Committee on Commerce and Consumer Protection (CPN) heard the companion bill, SB 3057 on February 24, 2022 and passed the measure with amendments on March 1, 2022. Standing Committee Report No. 2847 reported several amendments to the measure. One amendment contained in SB 3057 SD2, unfortunately, has drawn the opposition of a key stakeholder, Hawaiian Electric.

HSEO would like to ask your consideration to pass HB 2089 HD1 SD1 with a corrected date to take effect July 1, 2022. The version HB 2089 HD1 received the support of all key stakeholders and focuses narrowly on correcting the core issue of

how to calculate the renewable portfolio standard and the SD1 makes a minor amendment. As CPN is the last committee for this measure, inserting a correct effective date would allow this measure to move forward toward an early, successful resolution for all involved.

HSEO finds that HB2089 HD1, SD1 acknowledges the importance of activities and policies beyond those of the utility, while clarifying and increasing the statutory renewable energy requirements applicable to Hawai'i's electric utilities after 2030.

Importantly, the bill allows the law's existing provisions for necessary adjustment by the Public Utilities Commission, including adjustments of requirements, and penalties and incentives, to remain in place.

It has been generally understood for several years that the calculation should and must change to be consistent with public understanding, Hawai'i's policies (including the enactment in 2018 of Hawai'i's carbon net negative goal),<sup>1</sup> and increasing concerns over continued reliance on imported fossil fuels.

Making this change now, just after completing the 2020 milestone and several years in advance of the 2030 milestone, gives a greater degree of clarity and certainty to Hawai'i's electric utilities, as well as to the public, regarding Hawai'i's "100% renewable" objective.

It is important that we make this change at this time. As noted in the bill, it would be possible to reach the "100 per cent renewable portfolio standard" (with the current definition, based on sales) with only 79 per cent of Hawai'i's electricity produced from renewable sources and the other 21 per cent still generated from fossil fuel.

When the original version of the renewable portfolio standards law was enacted, over twenty years ago, there were several competing objectives that led to the bill language as it exists today, in which a formula is used to calculate the renewable energy percentage in a way that does not accurately capture the amount of renewable energy on the system and allows for greater use of fossil fuels. HSEO believes that the more intuitively correct approach to the RPS calculation, in addition to numerous

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<sup>1</sup> [Section 225P-5, Hawai'i Revised Statutes](#).

policies, incentives, requirements, and other constraints, will together accelerate the reduction in the use of fossil fuels to generate electricity in Hawai'i.

I thank the Committee for hearing this bill and respectfully request your approval of it. Thank you for the opportunity to testify.





Email: [communications@ulupono.com](mailto:communications@ulupono.com)

SENATE COMMITTEE ON COMMERCE & CONSUMER PROTECTION  
Tuesday, March 29, 2022 — 10:00 a.m.

**Ulupono Initiative supports HB 2089 HD 1 SD 1, Relating to Renewable Portfolio Standards.**

Dear Chair Baker and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

**Ulupono supports HB 2089 HD 1 SD 1**, which amends the definition of renewable portfolio standard (RPS) to be a percentage of electrical energy generation rather than sales, excluding customer-sited fossil fuel generation and expands the events or circumstances that are beyond an electric utility company's reasonable control to include non-renewable energy generated by electric generation facilities over or of which the electric utility does not have direct control or ownership. This measure also requires the electric utility companies to track and annually report data and trends on customer retention and attrition to further inform the calculation of the RPS.

Ulupono remains supportive of amending the RPS definition to more accurately reflect the percentage of renewable energy use in the State by including customer-sited generation distributed energy resources (DER) into the denominator of the RPS calculation. Under the current RPS definition, customer-sited, grid-connected DER is only included in the numerator. This overstates the electric utility's actual progress on the State's level of renewable energy adoption. Pursuant to Act 97, SLH 2015 (Act 97), for the year 2020, Hawai'i was to generate 30 percent of the state's electricity from renewable resources. According to Hawaiian Electric's 2020 RPS Status Report, under the current RPS definition, the utility reported a consolidated RPS of 34.5 percent, of which customer-sited generation accounted for 47.3 percent of the total consolidated megawatt hours (MWh) of electrical energy generated from renewable energy sources.<sup>i</sup> In comparison, if the corrected RPS definition was applied for 2020, Hawaiian Electric's consolidated RPS would be 25.6 percent, 8.9 percent less than the reported consolidated RPS total for 2020, and 4.4 percent

*Investing in a Sustainable Hawai'i*

less than 2020 RPS target established by Act 97.

If passed, this measure would more accurately reflect the legislative intent of Act 97, SLH 2015, and would be appropriately aligned with the Public Utilities Commission's (PUC) recent decision in the Performance-Based Regulation docket, to provide the electric utility with financial rewards for exceeding interim year RPS targets based on the corrected RPS percentage.<sup>ii</sup>

As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that support the continued implementation of renewable energy resources throughout the islands.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata  
Director of Government Affairs

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<sup>i</sup>See Hawai'i Public Utilities Commission, Docket 2007-0008, [Hawaiian Electric's 2020 Renewable Portfolio Standard Status Report](#), filed February 12, 2021.

<sup>ii</sup>See Hawai'i Public Utilities Commission, Docket 2018-0088 – Instituting a Proceeding to Investigate Performance Based Regulation, Decision and Order 37507 at 116. "The structure of the [Renewable Portfolio Standard-Accelerated] PIM is as follows...the metric will be the Companies' annual compliance with the RPS (% and year-based milestone), on a consolidated basis. The PIM will utilize a "corrected" methodology, where the RPS will be calculated based on the total system renewable generation divided by total system generation of electricity, rather than division by net sales."



To: The Senate Committee on Commerce and Consumer Protection  
From: Sherry Pollack, Co-Founder, 350Hawaii.org  
Date: Tuesday, March 29, 2022, 10am

**In support of HB2089**

Aloha Chair Baker, Vice Chair Chang, and Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org is in support of HB2089 HD1 SD1 which would amend the renewable portfolio standard (RPS) to more accurately reflect the percentage of renewable energy penetration in the State, however **we respectfully suggest this bill be amended back to its original form.**

This bill, **with the original language in HB2089**, provides a simple, yet necessary correction to how the RPS is calculated by changing reference to energy “sales” to energy “generation”, helping to correct the overestimation of renewable energy produced in the state, and also accounting for energy losses that occur from energy transmission. It is important that this calculation is corrected to ensure that the intended outcome is achieved.

But while it is very important to correct this calculation, it is also important to ensure our targets better reflect the current science. The UN IPCC report makes clear we must limit warming to 1.5 degrees Celsius, and that to do this it requires a major and immediate transformation across all sectors to achieve the needed emissions reductions. In light of this scientific information about the climate emergency, we need to accelerate our adoption of renewable energy.

But aside from the climate benefits, modeling studies have demonstrated that a fast, decisive shift to clean, renewable energy will yield significant economic benefits. **Bottomline: going faster is cheaper.**

That said, we respectfully recommend that the renewable energy target for 2030 be increased from the current 40% to 80% of generation. **Accelerating our pathway to transition to 100% renewable energy is not only critically necessary, but doable, and with the added benefit that it will save us money.** We urge you to consider this amendment.

Mahalo for the opportunity to testify.

Sherry Pollack  
Co-Founder, 350Hawaii.org



**Hawaiian  
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEE ON  
COMMERCE AND CONSUMER PROTECTION**

**HB 2089 SD1**

**Relating to Renewable Portfolio Standards**

Tuesday, March 29, 2022

10:00 am, Agenda Item #3

State Capitol, Conference Room 229 & Videoconference

Marc Asano

Director, Integrated Grid Planning

Hawaiian Electric

Chair Baker, Vice Chair Chang, and Members of the Committee:

My name is Marc Asano and I am testifying on behalf of Hawaiian Electric Company **in support of HB 2089 SD1, with opposition to Section 2**, Relating to Renewable Portfolio Standards.

HB 2089 SD1 amends the definition of renewable portfolio standard for electric utility companies to be a percentage of electrical energy generation, rather than sales, and requires electric utility companies to track and annually report data and trends on customer retention and attrition.

Hawaiian Electric supports SD1 to change the RPS definition for an electric utility from a percentage of sales to a percentage of generation, excluding customer-sited fossil fuel generation as described below; however, offers the following comments to Section 2 of SD1.

The proposed addition to Hawaii Revised Statutes Chapter 269 to require additional reporting to track customer trends, attrition, and retention is unnecessary and redundant to existing rules and reporting the Public Utilities Commission (“PUC”) has already established. As a general matter, the PUC already has the authority to require

the utility to report these metrics. Further pursuant to §269-16.1, the PUC has established performance based regulation since June 2021, which requires Hawaiian Electric to report and track on a number of key areas, such as, affordability, cost control, customer engagement and equity, GHG reduction, service reliability, renewable energy, rates and revenues, among others. Additionally, Hawaiian Electric annually reports on customer counts and sales. The existing reporting requirements already in place already track customer trends, attrition, and retention. To the extent additional metrics are desired, the PUC can direct Hawaiian Electric to provide such reports. Therefore, Hawaiian Electric suggests striking Section 2 from the bill.

Hawaiian Electric supports the remaining parts of SD1. In 2021, Hawaiian Electric achieved an RPS of 38 percent as a percentage of sales, which translated to roughly 31.5 percent of renewable electrical energy generation. Hawaiian Electric expects to continue to make significant progress on the RPS over the next few years. This includes executing on our ambitious Climate Change Action Plan to reduce carbon emissions in 2030 by as much as 70 percent below 2005 levels. Over the next eight years we anticipate a steady pace of cost-effective renewable energy resources coming online to reduce the use of fossil fuels to generate electricity. Key elements of Hawaiian Electric's 2030 plan include:

- Shutting down the state's last coal plant in 2022;
- Adding nearly 50,000 rooftop solar systems to the 90,000 now online;
- Retiring at least 6 fossil-fueled generating units and significantly reducing the use of others as new renewable resources come online;
- Adding renewable energy projects capable of generating a total of at least 1 gigawatt, including shared solar (community-based renewable energy);

- Using more grid-scale and customer-owned energy storage;
- Expanding geothermal resources; and
- Creating innovative programs that provide customers incentives for using clean, lower-cost energy at certain times of the day and using less fossil-fueled energy at night.

Hawaiian Electric notes a couple of policy implications of this bill. First, calculating RPS as a percentage of generation versus sales, will require more renewable generation to achieve the same percentage. Therefore, additional land may be required to site renewable energy projects. As indicated above, in 2021 there was about a 6.5 percent difference in RPS between the current RPS calculation and the proposed calculation under this bill. Second, to truly achieve the state's net negative decarbonization goal pursuant to H.R.S. §225P-5, the availability of fossil fuels for use in the State should be addressed at a broader policy level to ensure that transportation, industry, electricity, and other sectors, are mandated to comply with State energy policy. For example, customers choosing to generate their own electricity using fossil fuels, would be counterproductive to achieving the State's decarbonization goals. Today, there are large customers who have on-site generation that use fossil fuels. In the future, this could increase if, for example, renewable energy is more expensive than fossil fuels, and makes economic sense for large (or residential) customers to therefore supply their own load with fossil fueled generation.

Accordingly, Hawaiian Electric supports HB 2089 SD1 while offering other comments and opposition to Section 2 for your consideration. Thank you for this opportunity to testify.

**HB-2089-SD-1**

Submitted on: 3/28/2022 9:51:28 AM

Testimony for CPN on 3/29/2022 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Testifying for Climate Protectors Hawai'i	Support	Written Testimony Only

Comments:

To: The Honorable Senator Rosalyn Baker, Chair, the Honorable Senator Stanley Chang, Vice Chair, and members of the Committee on Commerce and Consumer Protection:

From Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

RE: Hearing RELATING TO RENEWABLE PORTFOLIO STANDARDS, Tuesday, March 29 2022, 10:00 am

Aloha Chair Baker, Vice Chair Chang, and members of the Committee on Commerce and Consumer Protection: Position: **Climate Protectors Hawai'i supports HB2089 HD1 SD1!**

This bill would amend the renewable portfolio standard (RPS) definition to more accurately reflect the percentage of renewable energy use in the State, by basing it on generation rather than sales. It would add customer-sited generation into the denominator of the RPS calculation. Under the current RPS definition, customer-sited, grid-connected is only included in the numerator. This overstates the electric utility's actual progress on renewable energy adoption. **This change is needed to accurately track utilities' renewable energy percentages and the Climate Protectors Hawai'i strongly supports it!**

Please pass this bill!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)

HB 2089 HD 1 SD 1 TESTIMONY

To: Senate Committee on Consumer Protection  
Hearing on March 29, 2022 at 10:00 a.m.

**LATE**

From: John Kawamoto

Position: Support with amendments

The Hawaii Legislature passed the renewable portfolio standard law more than 20 years ago to ensure that the generation of electrical energy transitions from fossil fuels to renewable energy.

The current standard based on sales is misleading because it can overestimate the proportion of electricity generated by renewables. A 100% renewable portfolio standard level can be attained when actually only 79% of the electricity is renewable and 21% still fossil fuel. Changing the renewable portfolio standard so that it is based on generation, rather than sales, would ensure that the intended outcome is achieved.

However, the bill is deeply flawed because it excludes customer-sited, grid connected generation that does not produce renewable energy. Due to the climate emergency that the Legislature recognized in adopting SCR 44 last year, Hawaii should be advancing as quickly as possible toward a clean, renewable energy future. All energy bills passed by the Legislature should promote clean, renewable energy. The bill should be amended by removing this flawed provision from it that allows non-renewable energy to generate electricity.

With this amendment, I support the bill.



**LATE**

**HB-2089-SD-1**

Submitted on: 3/28/2022 8:41:47 PM

Testimony for CPN on 3/29/2022 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Baker, Vice Chair Chang, and Members of the CPN Committee:

I'm writing in support of HB2089 because this bill corrects an error in how the RPS percentage is computed. The existing RPS formula provides no such guarantee since the numerator includes customer-sited, grid-connected energy generation, but the denominator does not. So using the current formula can lead to RPS levels greater than 100% when the system is producing electricity from fossil fuels, which makes no sense. This bill corrects the error in the formula by including customer-sited, grid-connected energy generation in the denominator. This change will ensure that the standard of 100% renewables in 2045 will mean that all generation will come from renewable energy sources.

Respectfully,

Paul Bernstein