

# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5<sup>TH</sup> Floor, Honolulu, HI 96813 | energy.hawaii.gov

DAVID Y. IGE  
GOVERNOR

SCOTT J. GLENN  
CHIEF ENERGY OFFICER

(808) 587-3807

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

before the  
**SENATE COMMITTEE ON WAYS AND MEANS**  
Thursday, February 20, 2020  
10:35 AM  
State Capitol, Conference Room 211

### Comments in consideration of **SB 2821, SD1** **RELATING TO RENEWABLE ENERGY TAX CREDITS.**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on SB 2821, SD1, which: (1) eliminates the renewable energy technologies income tax credit for solar energy systems for which the primary purpose is not to heat water (beginning January 1, 2025), (2) provides that a power purchase agreement for commercial properties that was approved by the Public Utilities Commission prior to 12/31/19 shall receive the tax credit regardless of any amendments made to the renewable energy technologies tax credit law, and (3) increases the renewable energy technology tax credit cap per unit for solar energy system for multi-family residential properties from \$350 to \$750.

HSEO notes that several bills this session have proposed to phase out or discontinue the renewable energy technologies income tax credit for commercial-scale projects, and appreciates the several approaches proposed to mitigate the potentially negative disruption caused by uncertainty of tax credits available for commercial projects currently under development.

The approach taken on page 2, lines 14-20, continuing on page 3, lines 1-2, avoids disruption of projects that are under contract to provide power at fixed prices, that included calculations based on the tax credit, under the competitive bidding framework.

HSEO is concerned that a similar situation may exist for other projects under development, including those under development for government agencies, and would suggest an additional measure: add a provision, similar to that provided by the Federal tax credit, establishing that the level of tax credit available to a project will be based on the level of credit in place at the beginning of construction.<sup>1</sup>

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<sup>1</sup> Internal Revenue Service factsheet, "Beginning of Construction for the Investment Tax Credit under Section 48," <https://www.irs.gov/pub/irs-drop/n-18-59.pdf>

This would be one method to reduce disruption to the important progress being made in increasing the use of renewable energy in Hawaii. HSEO notes that making use of definitions and reporting requirements already in use for projects seeking the Federal credit may provide efficiencies for both project developers and accounting personnel.

HSEO also appreciates the intent of the bill to help residents who live in a multi-family residential property to be able to participate in renewable energy and assist in achieving the State's clean energy goals. HSEO notes that this increase in the tax credit for multi-family residential properties would enable those who are owners of these multi-family units to benefit from the increased tax credit; the extent to which the increased credit would directly benefit those who are renters of these multi-family units is unknown.

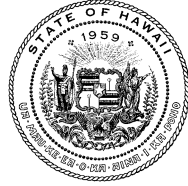
Anecdotal evidence indicates that many multi-family residential properties could make use of solar water heating and photovoltaic energy, as these properties have a demand for hot water, are in areas with good solar resources, and may be on circuits with remaining hosting capacity for solar.

HSEO defers to the appropriate agencies regarding administration of the provisions and budgetary considerations inherent to this bill.

Thank you for the opportunity to testify.

DAVID Y. IGE  
GOVERNOR

JOSH GREEN M.D.  
LT. GOVERNOR



STATE OF HAWAII  
**DEPARTMENT OF TAXATION**

P.O. BOX 259  
HONOLULU, HAWAII 96809  
PHONE NO: (808) 587-1540  
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RONA M. SUZUKI  
DIRECTOR OF TAXATION

DAMIEN A. ELEFANTE  
DEPUTY DIRECTOR

To: The Honorable Donovan M. Dela Cruz, Chair;  
The Honorable Gilbert S.C. Keith-Agaran, Vice Chair;  
and Members of the Senate Committee on Ways and Means;

From: Rona M. Suzuki, Director  
Department of Taxation

**Re: S.B. 2821, S.D. 1, Relating to Renewable Energy Tax Credits**

Date: Thursday, February 20, 2020

Time: 10:35 P.M.

Place: Conference Room 211, State Capitol

The Department of Taxation (Department) offers the following comments on S.B. 2821, S.D. 1.

S.B. 2821, S.D. 1, amends section 235-12.5, Hawaii Revised Statutes (HRS), which governs the Renewable Energy Technologies Income Tax Credit (RETTTC). This measure eliminates the RETTTC for solar energy systems not primarily used to heat water for single-family residential, multi-family residential, and commercial properties by reducing the per system credit cap to \$0 after December 31, 2024 and raises that cap on multi-family residential property from \$350 to \$750 for the taxable years before its eventual reduction to \$0. It also adds an exception for non-water-heating solar energy systems on commercial property subject to “a power purchase agreement approved by the public utilities commission prior to December 31, 2019,” stating that those systems shall continue to “receive thirty-five per cent of the actual cost or \$500,000 per megawatt direct current, whichever is less[.]” The measure is effective upon approval and would apply to taxable years beginning after December 31, 2019.

The Department notes that allowing certain taxpayers to claim a past version of the credit essentially means that Department must administer two versions of the credit. Even if a small number of taxpayers would qualify for the grandfathering, the Department would need to maintain the previous version of the credit like it does with any other credit. As such, the Department respectfully requests that the grandfathering provision in section 235-12.5(b)(2)(C), HRS, be amended so that the project is required to be installed and placed in service on or before December 31, 2026, which is two years after the general repeal would become effective.

To avoid ambiguity, the Department suggests amending the language that repeals the RETTTC in subparagraphs 235-12.5(b)(2)(A), (B) and (C) so that the repeal will affect all taxpayers equally regardless of the tax year that they follow. In addition, subparagraph (A), which applies to single-family residential property, contains language that applies to multi-family residential property. To resolve these issues, subparagraphs (A) and (B) should be amended to read:

- (A) \$5,000 per system for single-family residential property; provided that if all or a portion of

- the system is used to fulfill the substitute renewable energy technology requirement pursuant to section 196-6.5(a)(3), the credit shall be reduced by thirty-five per cent of the actual system cost or \$2,250, whichever is less~~[+]~~ until December 31, 2024, then \$0 per system for systems installed and placed in service thereafter;
- (B) ~~[\$350]~~ \$750 per unit per system for multi-family residential property~~[+]~~ until December 31, 2024, then \$0 per unit per system for systems installed and placed in service thereafter; and

In addition, the Department suggests amending the language which states “\$500,000 per megawatt direct current” in regard to the grandfathering. If the intent is to preserve the RETTTC as it currently exists for certain projects, the Department suggests subparagraph 235-12.5(b)(2)(C), HRS, to read:

- (C) \$500,000 per system for commercial property~~[+]~~ until December 31, 2024, then \$0 per system for systems installed and placed in service thereafter; provided that notwithstanding any other law to the contrary and any amendment made to this section, the credit, as was available on December 31, 2019, shall be available for solar energy systems installed and placed in service on or before December 31, 2026 to fulfill a power purchase agreement approved by the public utilities commission prior to December 31, 2019.

Finally, the Department notes that the measure’s raising of the multi-family residential property cap will require form and computer system changes to administer. As such, the Department respectfully requests that the measure be made applicable to taxable years beginning after December 31, 2020.

Thank you for the opportunity to provide comments.

**SB-2821-SD-1**

Submitted on: 2/18/2020 9:26:18 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
katherine kazlauskas	Testifying for 350Hawaii	Comments	No

Comments:

**Comments on SB 2821 SD1**

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

**Katherine Kazlauskas**



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183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The Senate Committee on Ways and Means  
From: Brodie Lockard, Founder, 350Hawaii.org  
Date: Thursday, February 20, 2020, 10:35 am

### **Comments on SB 2821 SD1**

Dear Chair Dela Cruz and members:

350Hawaii's 6,000 members oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Brodie Lockard  
Founder, 350Hawaii.org

# TAX FOUNDATION OF HAWAII

126 Queen Street, Suite 304

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Phase Out Renewable Energy Technologies Credit for Residential Photovoltaic

BILL NUMBER: SB 2821, SD-1

INTRODUCED BY: Senate Committee on Energy, Economic Development, and Tourism

EXECUTIVE SUMMARY: Beginning January 1, 2025, eliminates the renewable energy technologies income tax credit for solar energy systems for which the primary purpose is not to heat water for multi-family resident and commercial properties.

SYNOPSIS: Amends section 235-12.5, HRS, to amend the cap amounts for “other solar energy systems” (usually photovoltaic systems) to zero per system for taxable years after December 31, 2024. For multi-family residential property, raises the cap amount from \$350 to \$750 before phasing out. For commercial property, grandfatheres the tax treatment for power purchase agreement approved by the public utilities commission prior to December 31, 2019, such that the credit shall be 35% of the actual cost or \$500,000 per MW DC, whichever is less.

EFFECTIVE DATE: Taxable years beginning after December 31, 2019.

STAFF COMMENTS: The tax system is there to raise revenue to keep the government moving. Using the tax system to shape social policy merely throws the revenue raising system out of whack, making the system less than reliable as there is no way to determine how many taxpayers will avail themselves of the credit and in what amount.

Furthermore, tax credits are nothing more than the expenditure of public dollars, but out the back door. If, in fact, these dollars were subject to the appropriation process, would taxpayers be as generous about the expenditure of these funds when our kids are roasting in the public school classrooms, there isn't enough money for social service programs, or our state hospitals are on the verge of collapse?

This bill appears to be an attempt to wean our solar businesses off the credits and encourage them to be able to develop global competitiveness. The current version of the credit has been on the books since Act 207, SLH 2003, and it may be time to realize that tax credits can't go on forever.

Digested 2/17/2020



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

SENATE COMMITTEE ON WAYS & MEANS  
Thursday, February 20, 2020 — 10:35 a.m. — Room 211

**Ulupono Initiative offers comments on SB 2821 SD 1, Relating to Renewable Energy Tax Credits.**

Dear Chair Dela Cruz and Members of the Committee:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

**Ulupono offers comments on SB 2821 SD 1**, which eliminates the renewable energy technologies income tax credit for solar energy systems for which the primary purpose is not to heat water for multi-family resident and commercial properties beginning January 1, 2025 and provides that any power purchase agreement for commercial properties that was approved by the PUC prior to 12/31/19 shall receive the tax credit regardless of any amendments made to the renewable energy technologies tax credit law..

Ulupono believes that energy storage is the next key piece for Hawai'i to meet its 100% renewable portfolio standard goal. Energy storage systems allow for increased adoption of all types of renewable energy generation and improve the resilience of the electrical grid. Most of the utility's programs for residential rooftop solar currently require—or effectively require—energy storage because most systems are not permitted to export energy. Energy storage is therefore critical to enable continued adoption of residential rooftop solar and this need has mitigated steep price declines often associated with rooftop solar energy systems. Furthermore, the Federal solar tax credit for residential systems has already declined and is set to completely expire in 2022. As such, the committee should consider extending the proposed 2025 date and/or utilizing the income tax credit to cover the costs associated with renewable energy storage systems. Also, should this measure move forward, the committee should consider amending the deadline for PUC approved commercial properties to 7/1/2020.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR  
Senior Vice President, Communications & External Affairs

*Investing in a Sustainable Hawai'i*





## Testimony to the Committee on Ways and Means

Thursday, February 20, 2020

10:35 AM

Conference Room 211, Hawaii State Capitol

SB 2821 SD1

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee, Hawaii Clean Power Alliance (HCPA) supports SB2821 SD1, relating to Renewable Energy Tax Credits.

This bill proposes to take renewable energy tax credits for commercial properties to \$0 after December 31, 2024, however ensures that, notwithstanding any other law to the contrary or amendment made to this section, previously approved commercial utility-scale renewable energy projects that are currently under development are not to be affected by any subsequent amendments to the existing state law relating to renewable energy technologies tax credit.

The Hawaii Clean Power Alliance is a nonprofit association organized to advance the development and sustainability of clean energy in Hawaii. Our goal is to support the state's policy goal of 100 percent renewable energy by 2045. Our members are utility-scale independent power producers.

Utility-scale renewable energy is critical to meeting the state's clean energy goals because it provides long-term stable costs for those drawing from the grid, thus hedging the volatility associated with the reliance on oil. To drive down costs that are passed on to the ratepayer, developers must assume the risks that are inevitably a part of the permitting, entitlements, and financing for these projects. The more ability we have to manage those risks, the more opportunity we have to deliver the projects at a low rate.

Projects that are underway after approval by the Public Utilities Commission in 2019 (RFP 1), under the guidance of Hawaiian Electric Company and the Public Utilities Commission, reflected rates established with the existing state and federal tax credits built into that pricing. While the federal incentives remain in place and can be locked in as soon as the PPA is approved, the state ITC can only be applied for after the solar farm is placed into service, several years into the future. Changes to those state tax credits, and Department of Taxation Administrative Rules threaten the viability of the projects.

This bill wisely recognizes these concerns and preserves the credits already in place for commercial utility-scale properties under development.

**Please pass SB2821 SD1.**



Thank you for the opportunity to testify.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Redell", written over a light gray rectangular background.

Frederick Redell, PE

*Executive Director*

(949) 701-8249

[www.hawaiicleanpoweralliance.org](http://www.hawaiicleanpoweralliance.org)



**Testimony to the Testimony to the  
Committee on Ways and Means**

**Thursday, February 20, 2020  
10:35 AM  
Conference Room 211, Hawaii State Capitol  
SB2821 SD1**

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee,

174 Power Global **supports** SB2821 SD1 which relates to renewable energy tax credits.

This bill proposes to take renewable energy tax credits for commercial properties to \$0 after December 31, 2024, however ensures that, notwithstanding any other law to the contrary or amendment made to this section, previously approved commercial utility-scale renewable energy projects that are currently under development are not to be affected by any subsequent amendments to the existing state law relating to renewable energy technologies tax credit.

We know how essential clean energy is to Hawaii's future, and we are proud to be among the developers that bring these projects to life across the state.

The legislature understands how important commercial utility-scale renewable energy projects are to the state's 2045 clean energy goal, and has wisely included investment tax credits to develop such projects. However, every year, the legislature is faced with considering proposals that change or eliminate renewable energy tax credits, such as the case in SB2821 SD1. This would dramatically impact renewable energy projects that are already under development and contracted through a competitive bid process with the guidance and mandates by the electric utility and the public utilities commission to bid with the reliance on the tax credits that were available at the inception of the project. However, this mandate put the burden of any tax credit changes on the project, because bid rates, once approved by the PUC are not adjustable.

These renewable energy tax credits are applied to the rates that are contracted with the electric utility and are ultimately reflected in the rates benefitting ratepayers. Changes to these credits, once a project is already contracted and underway, put in jeopardy the financeability and overall viability of the project. This unintended consequence creates several unfortunate scenarios: the ratepayers are denied the benefits originally contracted, the projects are put at risk, the state stands to lose any federal tax credits applied to the project, which are rapidly declining, and the state runs a risk of endangering its progress towards its 2045 goal.

Put simply, without those credits, the projects run the risk of not being viable and not bringing those benefits to those who need it most: the ratepayers of Hawaii.



So that projects can be assured that their financing and construction plans will not be derailed by a change in the tax credits originally included in the project, there is a clear need for certainty that those original credits will be consistent through its completion and execution. Commercial utility-scale projects that are currently under development are not eligible to apply for renewable energy tax credits until after projects are commercially operational.

The amendment in SD1 recognizes these issues and we support SB2821 SD1.

Thank you for the opportunity to testify.



**Testimony to the Testimony to the  
Committee on Ways and Means  
Thursday, February 20, 2020 10:35 AM  
Conference Room 211, Hawaii State Capitol  
SB2821 SD1**

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee,

ADON supports the SB2821 SD1, which relates to renewable energy tax credits.

ADON is a renewable energy technology company that partners with developers focusing on senior citizen and low-income housing developments. Our work includes the installation of renewable rooftop photovoltaics and solar hot water heaters in these developments.

The cost of living in Hawaii is the highest in the nation, placing a tremendous burden on much of our population. For many, home ownership is out-of-reach, leaving over 56% of our population relying on rental properties, often in multi-family dwellings. Others are leaving the state entirely. These renters are often the members of our communities most disadvantaged, including senior citizens, working families, and low-income residents. Electricity costs take a disproportionate share of their fixed income. Like most people in Hawaii, these renters also want to participate in Hawaii's clean and renewable energy, but because the existing investment tax credit for multi-family dwellings is not equitable with that offered to single family and commercial properties, these local residents are left out.

These incentive tax credits are essential to the affordability of renewable projects, which are passed on to the tenants in the form of discounted energy rates by the developer. At the current rate, without that tax credit, there is very little incentive for these renewable energy projects to be pursued in multi-family dwellings, denying those who need it most a bigger break in their utility bills.

The legislature has wisely addressed these issues during past sessions. Yet in 2006 (Act 240), the legislature increased the cap for photovoltaic energy systems for single family dwellings over 285% and for commercial dwellings by 200%. Multi-family dwellings, however, were left at the cap established in Session Laws of Hawaii, 2003, leaving this disadvantaged segment behind.

This bill helps to level and equalize the cap amount for multi-unit dwellings to that almost equal to the level that has been enjoyed by single family residents for the last 14 years. We appreciate the legislature's recognition of this previously under-served demographic and appreciate the amendment to change the cap amount for "other solar energy systems" to \$750.

We request consideration to amend the cap for solar water heaters amendment on page 1, line 11

(B) [~~\$350~~ \$750] per unit per system for multi-family residential property; and

Thank you for the opportunity to testify.

**SB-2821-SD-1**

Submitted on: 2/18/2020 9:52:28 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Climate Protector	Testifying for Climate Protectors Coalition	Comments	No

Comments:

**NOTICE OF DECISION MAKING**

DATE: Thursday, February 20, 2020

TIME: 10:35 A.M.

Conference Room 211

PLACE: State Capitol

415 South Beretania Street

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committee on Ways and Means

The Climate Protectors Coalition supports part of SB2821 SD1 and opposes part.

We are a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

The first part of this bill would be a step backwards and should be deleted; it would eliminate in 2025 the renewable energy technologies income tax credit for residential

single-family photovoltaic systems. We need to continue to encourage the installation of PV systems in order to reach our carbon neutrality goal by 2045. The bill's second change would help Hawaii reach its critical goals to combat the climate crisis— increasing the tax credit from \$350 to \$750 per unit per system for multi-family residential until 2025. This section of the bill should be amended to continue these tax credits after 2025, however. Please pass this bill with the proposed amendments. Mahalo!



**Hawaiian  
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEE ON  
WAYS AND MEANS**

**S.B. 2821, SD1**

**Relating to Renewable Energy Tax Credits**

February 20, 2020

10:35 a.m.

State Capitol, Conference Room 211

Rich Barone

Director, Strategic Consulting for Customer Resources and Markets  
Hawaiian Electric Company, Inc.

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee,

My name is Rich Barone and I am testifying on behalf of Hawaiian Electric Company, Inc. (Hawaiian Electric) with **comments on S.B. 2821, SD1**, Relating to Renewable Energy Tax Credits.

S.B. 2821, SD1 proposes to amend Section 235-12.5(b) of the Hawaii Revised Statutes (HRS) to eliminate the renewable energy technologies income tax credit for solar energy systems for single family residential, multi-family residential, and commercial property as of December 31, 2024, to increase the cap amount for multi-family residential solar projects from \$350 to \$750, and to clarify that, notwithstanding any law to the contrary or subsequent amendments to the state renewable energy tax credit law, a power purchase agreement approved by the Public Utilities Commission (PUC) prior to December 31, 2019 shall receive thirty-five per cent of the actual cost or up to the applicable cap amount of \$500,000 per solar energy system. With respect to residential solar energy systems, Hawaiian Electric supports a sunset of the tax credits.



Since residential income tax credits were intended to spur early adoption in a nascent industry, they have served their purpose now that Hawai'i is leading the nation in customer adoption of rooftop solar. Furthermore, to date, the segment of customers who have benefited from this tax credit are generally homeowners who are financially able to invest in a rooftop solar system. In the future, Distributed Energy Resources (DER) initiatives will focus on developing more attractive opportunities to customers who have not been able to readily participate in these offerings to date. State residential tax credits also introduce some risk to the market in that there is the possibility that they could change in any given legislative session, which causes instability and uncertainty in the Hawai'i market. Going forward in the new DER proceeding, rather than relying on residential tax credits, Hawaiian Electric plans to design new offerings that will be (1) economically compelling to customers, (2) factor in the decrease and/or absence of state and federal tax credits, and (3) fair and sustainable for all customers. We therefore support a reasonable sunset date that would allow for homeowners and developers to plan accordingly and provide time to implement proposed new programs.

The proposed revisions to HRS Section 235-12.5(b)(2)(C) would also sunset the tax credit for solar energy systems on commercial property as of December 31, 2024. However, the bill provides that any project with "a power purchase agreement approved by the public utilities commission prior to December 31, 2019 shall receive thirty-five percent of the actual cost or \$500,000 per megawatt direct current, whichever is less, for systems installed under this subparagraph" regardless of the sunset provision.

Hawaiian Electric notes that through a PUC-approved first phase of a request for proposals for variable renewable dispatchable generation, Hawaiian Electric executed

power purchase agreements for eight utility-scale renewable energy projects (the “Phase 1 Projects”). Seven of these projects would fall within the scope of this bill. If the state renewable energy tax law changes, and these projects are not grandfathered, the success of these projects and the benefits they are expected to provide to customers of Hawaiian Electric may be lost.

Hawaiian Electric therefore supports the overall concept of grandfathering as proposed by S.B. 2821, SD1, as the bill would reduce the risk to these projects and help ensure that the projects receive the tax credits contemplated by the parties involved. These projects were required to pass through the full value of the renewable energy technologies income tax credit to ratepayers in the form of lower power prices. If the projects are unable to claim the tax credit, which they currently cannot secure until after project completion and reaching commercial operations, there is a risk that these projects may become uneconomical, unfinanceable, and ultimately, may not be developed.

Hawaiian Electric supports changing the tax credit law to include a grandfathering provision, but suggests modifications to S.B. 2821, SD1 to (1) ensure that all Phase 1 Projects are captured by the provision, (2) extend the grandfathering provision to other eligible utility scale projects, and (3) allow adjustments to the tax credit amount while still allowing for possible grandfathering of future projects. As currently drafted, one of the eight Phase 1 Projects would be excluded from the grandfathering provision, as the power purchase agreement for that project has not yet been approved. At a minimum, we believe the grandfathering provision should be revised to include this eighth project and respectfully suggest that the language in Subsection (b)(2)(C) be further amended to be inclusive of “all projects with a power

purchase agreement that is either approved by a decision or order by the Public Utilities Commission or has filed with, or is pending approval from, the Commission prior to December 31, 2019”, instead of as currently drafted in subsection (b)(2)(C) to only apply to projects “with a power purchase agreement approved by the public utilities commission prior to December 31, 2019.”

While Hawaiian Electric appreciates that the sunset will not occur until December 31, 2024, which provides developers with advanced notice to be able to plan, and will not leave projects beyond the eight Phase 1 Projects mentioned above in limbo, Hawaiian Electric opposes the change in S.B. 2821, SD1 to sunset the tax credit for commercial property. Hawaiian Electric **opposes** such a change, as the tax credit allows for the procurement of lower cost energy, which is needed if we are to reach our 100% renewable energy goals in a cost-effective manner. Unlike tax credits for residential properties which benefit the owner of the system, tax credits for commercial properties that involve a new power purchase agreement with the utility, result in the tax credits being passed through to utility customers resulting in lower electricity rates for all. Doing away with the tax credit for new projects will raise the cost of energy to our customers, primarily impacting those who do not have rooftop solar.

The largest procurement of renewable energy in the State’s history is currently ongoing. If developers are eligible for the tax credit, those savings would be passed on to our customers directly without a markup by the utility. If the tax credit were to be eliminated for future projects, these projects would be more costly. Tax credits for utility scale generation allow those that cannot afford rooftop solar or who live in a condo or rent the ability to benefit from low cost renewable energy.

Thank you for this opportunity to testify.



## TESTIMONY REGARDING SB 2821 SD1

**being heard by the Senate Committee on Ways and Means  
on Thursday, February 20, 2020 at 10:35 AM in Room 211**

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee:

Thank you for the opportunity to provide testimony regarding SB 2821, SD1 which would sunset the Renewable Energy Income Tax Credit at the end of 2024. Tesla is opposed to this measure given the significant and adverse implications it will have on the development of solar energy in the State of Hawaii.

Motivated by the profound threat of climate change, Tesla's mission is to accelerate the world's transition to sustainable energy through the deployment of electric vehicles and sustainable energy products, like battery storage and solar energy systems. Tesla develops projects of all scales, ranging from behind the meter solar and storage projects deployed at individual residences, to multi-megawatt projects that provide power to regional grids. Tesla believes that a range of project types and scales is needed to ensure that an energy system meets the ideal of being clean, reliable, resilient and affordable.

Hawaii currently has a number of policies in place which are consistent with this objective. The combination of policies, including, though not limited to, the Renewables Portfolio Standard (RPS) and the Renewable Energy Income Tax Credit (REITC) function to support the States' longer term objective of completely eliminating its reliance on fossil fuels. Tesla is concerned that this measure, by eliminating the tax credit, will undermine these efforts by undercutting the economics of rooftop solar. This will in turn lead the state to rely largely on the RPS as the means by which it achieves its renewable energy objectives.

While the large-scale projects the RPS supports certainly have an important role to play in achieving the state's renewable energy objectives, it is important to note that distributed resources, like rooftop solar, offer a number of incremental benefits. Top of mind among these is resiliency. Large, utility-scale systems cannot provide power to end use customers when transmission or distribution lines are down. They also do not provide customers the ability to manage their energy consumption and bills in the way that local, behind-the-meter resources provide. Additionally, localized resources can be further leveraged by aggregating and dispatching them to provide grid services, helping reduce costs on the system by avoiding the need to expand local distribution or transmission capacity in the face of growing demand or distribution system investment needs.

Tesla appreciates that tax credits like the REITC cannot last forever, and that a transition path to reduce and eventually eliminate them may be appropriate. However, any such transition needs to be pursued in a carefully considered manner, recognizing the significance of this policy in facilitating Hawaii's transition to a sustainable future as well as the impacts on the thousands of Hawaiians that make their living



designing, deploying and maintaining these systems. It is also important to understand the context within which significant changes to state policies are taking place. For example, in the case of solar, the Federal Investment Tax Credit is currently scheduled to step down as well, dropping from the current 26% level to 22% in 2021. In 2022, the tax credit will drop to a permanent 10% for commercial-owned systems including utility scale projects, but will be completely eliminated for customer-owned residential systems. In combination with a change in state-level policy, this could deliver a devastating one-two punch to the solar industry. Furthermore, rate design remains in flux, and represents a significant unknown in terms of its implications on the solar industry and the state's energy goals more broadly.

Given all of these factors, Tesla is concerned that this measure runs the risk of doing too much too soon. A more considered and thoughtful approach is needed. At a minimum any changes to the REITC should be introduced gradually, cognizant of other factors in play that will also impact this industry.

Thank you for the opportunity to submit this testimony.



**LATE**

**Hawaii Solar Energy Association**  
*Serving Hawaii Since 1977*

**TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO SB 2821, RELATING TO RENEWABLE ENERGY TAX  
CREDITS  
BEFORE THE  
SENATE COMMITTEE ON WAYS AND MEANS  
ON  
THURSDAY, FEBRUARY 20, 2020**

Chair Dela Cruz, Vice-Chair Keith-Agaran, and members of the committee, my name is Will Giese, and I am the Executive Director of the Hawaii Solar Energy Association, Inc. (HSEA).

The HSEA was founded in 1977 to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the Hawaiian Islands. Our membership includes the vast majority of locally owned and operated solar installers, contractors, distributors, manufacturers, and inspectors across all islands.

HSEA **OPPOSES SB2821 SD1**. This measure, beginning January 1, 2025, eliminates the renewable energy technologies income tax credit for solar energy systems for which the primary purpose is not to heat water for multi-family resident and commercial properties.

The HSEA has generally been in favor of tax credits for energy storage and renewable energy systems as a way for the state to direct customer behavior towards it's renewable energy goals. This has been incredibly successful, and Hawaii enjoys one of the highest amounts of renewable energy installed per capita than any other state.

**1. SOLAR SAVES ALL RATEPAYERS MONEY**

It is important to understand the impact that behind-the-meter resources have on the average consumer electric bills. According to DBEDT's own data, the AVERAGE consumer electric bill DECLINE by more than 20% between 2011 and 2018, despite the cost of electricity remaining approximately the same (See Fig 1.). The two biggest clean energy

Table 3: RESIDENTIAL, AVERAGE RATE (\$/KWH)

Year	State Total	Oahu	Hawaii	Kauai	Lanai	Maui	Molokai
2011	\$0.35	\$0.32	\$0.42	\$0.43	\$0.44	\$0.36	\$0.43
2012	\$0.37	\$0.35	\$0.42	\$0.45	\$0.47	\$0.39	\$0.46
2013	\$0.37	\$0.35	\$0.42	\$0.44	\$0.46	\$0.38	\$0.46
2014	\$0.37	\$0.35	\$0.42	\$0.43	\$0.46	\$0.38	\$0.47
2015	\$0.30	\$0.28	\$0.35	\$0.34	\$0.38	\$0.31	\$0.38
2016	\$0.28	\$0.26	\$0.32	\$0.34	\$0.34	\$0.29	\$0.33
2017	\$0.30	\$0.28	\$0.34	\$0.35	\$0.36	\$0.31	\$0.36
2018	\$0.33	\$0.31	\$0.37	\$0.37	\$0.40	\$0.34	\$0.37

Source: State of Hawaii Data Book

Table 4: RESIDENTIAL, AVERAGE MONTHLY BILL

Year	State Total	Oahu	Hawaii	Kauai	Lanai	Maui	Molokai
2011	\$202	\$195	\$218	\$205	\$192	\$219	\$161
2012	\$203	\$197	\$210	\$209	\$192	\$222	\$159
2013	\$189	\$181	\$199	\$205	\$199	\$211	\$153
2014	\$185	\$178	\$192	\$199	\$203	\$206	\$147
2015	\$149	\$141	\$157	\$163	\$159	\$168	\$115
2016	\$135	\$127	\$142	\$163	\$142	\$147	\$102
2017	\$145	\$137	\$154	\$170	\$150	\$157	\$115
2018	\$163	\$155	\$175	\$187	\$179	\$180	\$121

Source: State of Hawaii Data Book

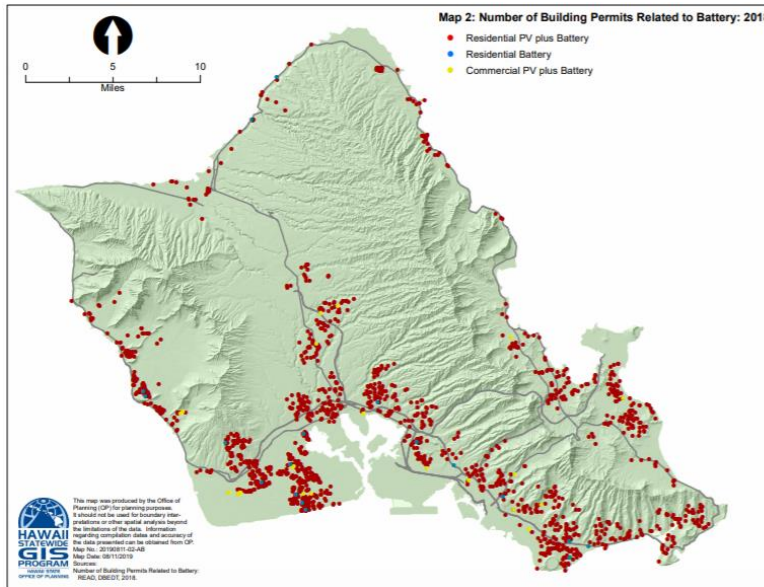


## Hawaii Solar Energy Association

Serving Hawaii Since 1977

developments during this time period were large scale build-outs of rooftop photovoltaics and energy efficiency programs. Regardless of whether a Hawaii electric customer has a solar system, they still benefit from every new system that is placed on the grid. Additionally, technologies like energy storage provide further benefits to grid stability and resilience, utility infrastructure cost savings, and peak shaving.

Additionally, arguments that “solar is for the rich” are patently untrue. Besides a common



sense understanding of the solar market, such as the fact that most affluent residents already have installed solar over 5 years ago, or that LMI consumers have a greater financial incentive to adopt solar, this is also backed up by DBEDT’s data. The figure below shows widespread geographic dispersion of residential energy storage developments, regardless of AMI (See Fig 2.).

Figure 2: Number of Building Permits w/ Energy Storage 2018

The fact of the matter is that the solar tax credit is working as intended. It has brought thousands of good paying jobs to the state of Hawaii, helped drive down consumer electric prices, furthered state goals, and allowed electric customer to take control of their energy choices.

## **2. SOLAR IS AN IMPORTANT PART OF ACHIEVING RPS GOALS**

It also isn’t just the solar industry that benefits from more rooftop solar. The 2018 Transcending Oil report (link: <https://www.transcendingoil.com/>) found that increasing the speed of our RPS goals would be cheaper over time to all ratepayers than if we remain on the 2045 RPS track. HECO itself said in Appendix H, Book 3, Page H-4 of its Power Supply Improvement Plan that it is planning for 100% of single family homes to have PV by 2045.

The Hawaii State Legislature also must be cognizant of developments regarding the federal tax credit. The solar industry is currently experiencing an increased amount of business activity for the past 12 months, driven almost completely by the first step down in the federal tax credit, from 30% to 26%. Another step down will happen in 2021, to



## **Hawaii Solar Energy Association**

*Serving Hawaii Since 1977*

22%, and then the credit will be gone in 2022. This increased business activity is a false positive and likely does not reflect a resurgence of the market. The state needs to consider the full impact this step down will have to the industry (70% of which is locally owned and operated), state's energy goals, and the people of Hawaii. Unless there are significant changes to Hawaii's clean energy market, such as more well-structured tax credit, better interconnection programs that provide greater values streams for consumers, or ideally both, the outlook for the state's energy goals is grim.

### **3. WE NEED TO UNDERSTAND THE TRUE IMPACT OF CHANGING THE TAX CREDIT**

If the legislature intends to eliminate the tax credit in the manner described in SB2821, we suggest that they find a compelling and fact based reason to do so. Currently, every major energy stakeholder in Hawaii, from the HSEA to HECO to the PUC, has contended in some form or another that customer sighted distributed energy resources are an important and essential part to getting the state to 100% RPS by 2045. The HSEA is open to discussing longer step down structures to the tax credit and has supported the intent of these types of bills in past legislative sessions.

We are also open to a study that examines the impacts of stepping down or removing the tax credit on rate payers, the industry, and the state's energy goals and would be more than willing to provide it's expertise in this manner. Absent that, we cannot in good faith support this measure in any way.

Respectfully, the HSEA **opposes SB2821**, and we ask the legislature to defer this measure unless one of the above actions are taken.

Thank you for the opportunity to testify.



**LATE**



## SENATE COMMITTEE ON WAYS AND MEANS

February 20, 2020, 10:35 a.m.  
(Testimony is 3 pages long)

### TESTIMONY IN OPPOSITION TO SB 2821 SD1

Aloha Chair Dela Cruz and Members of the Committee:

Hawaii PV Coalition respectfully OPPOSES SB 2821 SD1, eliminating the renewable energy tax credit after the year 2024.

Rooftop solar benefits all Hawaii residents. **Since 2011, the average electric bill has dropped by over 15%, largely as a result of the wide-spread deployment of rooftop solar.**<sup>1</sup> In state where the high cost of living is a foremost concern, Hawaii's renewable energy income tax credit is an incredible success story. Hawaii residents, on average, see \$30 to \$40 more in their pocket per month because of rooftop solar.

Adoption of utility-scale renewable energy resources has *not* similarly reduced the cost of living. Despite the overall reduction in the worldwide cost of oil and numerous new wind and utility-scale solar farms, the overall electricity rate — the amount people pay for electricity — has stayed largely the same since 2011.<sup>2</sup> Put another way: while utility-scale renewable energy is important to Hawaii's energy and environmental goals, it has not yet and is unlikely in the near term to decrease the highest electrical rates in the country (more than 2-3 times the national average).

Hawaii's renewable tax credit has empowered residents to install rooftop solar from Aiea to Wahiawa. ***One in three homes in Hawaii now has rooftop solar.*** It has become

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<sup>1</sup> See Hawaii Energy Facts & Figures at 5 (July 2019), available at [https://energy.hawaii.gov/wp-content/uploads/2019/07/2019-FF\\_Final.pdf](https://energy.hawaii.gov/wp-content/uploads/2019/07/2019-FF_Final.pdf).

<sup>2</sup> In 2011, the average residential rate was \$0.32 per kilowatt hour on Oahu. In 2018, the average residential rate was \$0.31 kWh. *See id.*

ubiquitous. In turn, rooftop solar has become the single largest contributor of renewable energy in Hawaii — nearly 40% of all renewable energy in Hawaii now comes from rooftop solar.

While the renewable energy tax credit could be weaned down over time, such a reduction must be coordinated with Hawaii's clean energy goals and be fair to the remaining residents who have not yet had a chance to adopt rooftop solar. This is particularly true of multifamily and affordable housing, where equity and fairness principles come into play as new technology comes online to address these types of units.

Despite a great deal of progress, the goals of the renewable energy tax credit remain the same:

Hawaii's dependence on petroleum for about ninety per cent of its energy needs is more than any other state in the nation. This makes the State extremely vulnerable to any oil embargo, supply disruption, international market dysfunction, and many other factors beyond the control of the State. Furthermore, the continued consumption of conventional petroleum fuel negatively impacts the environment. At the same time, Hawaii has among the most abundant renewable energy resources in the world, in the form of solar, geothermal, wind, biomass, and ocean energy assets.

Act 240 (2006). Further "increased . . . use of renewable energy resources would increase Hawaii's energy self-sufficiency, achieving broad societal benefits, including increased energy security, resistance to increases in oil prices, environmental sustainability, economic development, and job creation." *Id.*

**Hawaii residents strongly support more rooftop solar.** A 2015 SMS poll demonstrated that 77% of Hawaii residents "strongly support" and 20% "somewhat support" more rooftop solar in Hawaii. Only 1 per cent "somewhat oppose" and no one polled "strongly opposed" more rooftop solar. Few issues have ever resulted in such an unanimous concurrence among Hawaii residents.

Hawaii PV Coalition welcomes a discussion about the future of Hawaii's solar tax credit. Nonetheless, in light of the federal income tax credit step down, and the ambitious nature of Hawaii's clean energy goals, we propose taking this step in conjunction with a broader clean energy plan. We recommend this Committee direct DBEDT to conduct a study on how Hawaii can best achieve its 100% RPS with a nod towards related policy goals such as equity, average bill reduction, job stimulus, and economic development.

Mahalo for the opportunity to submit these comments.

*The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.*

**SB-2821-SD-1**

Submitted on: 2/17/2020 9:21:54 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
ryan christopher	Individual	Oppose	No

Comments:

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Ryan Christopher,

Honokaa HI

**SB-2821-SD-1**

Submitted on: 2/18/2020 6:24:59 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Janet Pappas	Individual	Oppose	No

Comments:

Dear Chair Dela Cruz and WAM members,

I oppose bill SB2821 SD1 because of the removal of the income tax credit for homeowners or other building owners wanting to install rooftop solar. Why would the State want to do away with such a popular program? It is one of the best ways for people to feel like they are helping the planet (because they are), and has the added benefit of saving them tons of money over the long haul. Hawaii leads the nation in rooftop solar installation, and reaching 100% would be an awesome accomplishment. Plus, when people get rooftop solar, they start thinking about getting an electric car, which is a more formidable (but much more critical) goal in our State.

We installed rooftop solar early (2008) and got an electric vehicle by 2011. We loved the cost savings and have never regretted either decision. We plan to get an electric truck when available.

Only now are Hawaii residents becoming aware (again) of the energy cost savings available for them. (Hawaiian Electric's on-again off-again promotion of rooftop solar appears to be on again.) This energy savings across Hawaii is incentivized by the tax credit. Don't be penny-wise and pound foolish. Give people this small break and we all reap the long-term benefits.

I support the second part of this bill--increasing the tax credit for multi-dwelling structures having rooftop solar. Any credit that incentivizes the use of renewables over fossil fuels should be retained for the good of our State and our planet.

Thank you for listening,

Jan Pappas

Aiea, Hawaii

**SB-2821-SD-1**

Submitted on: 2/18/2020 8:50:45 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Comments	No

Comments:

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Mahalo,

Caroline Kunitake

**SB-2821-SD-1**

Submitted on: 2/18/2020 9:58:16 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lynn Aaberg	Individual	Comments	No

Comments:

Dear Chair Dela Cruz and Members,

I am writing to oppose parts of this bill, yet support others. Elimination of the tax credit for solar power other than for heating water will not help the state move towards carbon neutrality, nor will it save the state money in the long run while we are dealing with a bigger climate problem. Rooftop solar is one the the few ways individuals can lower carbon emissions, and will help all of us in the long run. Please keep the tax credits in place and continue to encourage solar installations. .

At the same time, I support increasing the tax credit for multifamily properties to increase PV useage.

Mahalo,

Lynn Aaberg

**SB-2821-SD-1**

Submitted on: 2/18/2020 9:38:59 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John Nix	Individual	Comments	No

Comments:

To: The Senate Committee on Ways and Means

From: **Dr. John and Debra Nix, Kihei**

Date: Thursday, February 18, 2020

**Comments on SB 2821 SD1**

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Mahalo,





**SB-2821-SD-1**

Submitted on: 2/19/2020 10:32:28 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Henri Etta Schmitz	Individual	Oppose	No

Comments:

**SB-2821-SD-1**

Submitted on: 2/18/2020 7:14:51 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Quinn	Individual	Oppose	No

Comments:

Dear Honorable Committee Members:

Please oppose SB2821. Tax credits reduce tax dollars, and shouldn't be given out for renewable energy without some kind of benefit to the environment.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei, Maui

**SB-2821-SD-1**

Submitted on: 2/18/2020 12:17:52 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Phaethon Keeney	Individual	Oppose	No

Comments:

**SB-2821-SD-1**

Submitted on: 2/17/2020 3:17:21 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Elif Beall	Individual	Comments	No

Comments:

To: The Senate Committee on Ways and Means

From: Elif Beall

Date: Thursday, February 20, 2020, 10:35 am

**Comments on SB 2821 SD1**

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

SD1 changed the original bill in two ways, one good and one bad. It erased the tax credit for rooftop solar systems on single-family homes. But it increased the tax credit for rooftop PV on multi-family properties.

I oppose the first change. Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions. It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

The single-family tax breaks help families make a long-term investment that will pay for itself in four to five years and then save them many thousands of dollars over the life of the PV system. PV systems typically last twenty years at the least.

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction. It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

Thank you for considering my comments,

Elif Beall

Kilauea, Kauai



**SB-2821-SD-1**

Submitted on: 2/17/2020 7:24:54 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sherry Pollack	Individual	Oppose	No

Comments:

This is a very harmful measure that takes us in the wrong direction and works against efforts to achieve our renewable energy goals.

**SB-2821-SD-1**

Submitted on: 2/17/2020 12:25:02 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Nanea Lo	Individual	Oppose	No

Comments:

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

me ke aloha 'Ä• ina,

Nanea Lo



**SB-2821-SD-1**

Submitted on: 2/17/2020 11:24:23 AM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Glenn Metzler	Individual	Comments	No

Comments:

I oppose some parts of this bill and support other parts.

We need as much rooftop solar as possible to reduce our greenhouse gas emissions. It's one of the best ways individuals can contribute to meeting our clean energy goals and it saves money in the long run.

I would like to install solar energy on my home in the near future and the renewable energy technology tax credit would allow me and many citizens to install solar energy systems, whereas without it we may not. The change to single-family dwellings in SD1 is the wrong direction to go. Please to not eliminate it.

I agree with the second change in SD1 is an improvement to increase the tax credit for multi-family properties and support it strongly.

In summary, I ask that the committee eliminate the first change from the original bill to eliminate single-family solar credits, and keep the second change.

Thank you,

Glenn Metzler

**SB-2821-SD-1**

Submitted on: 2/17/2020 12:46:47 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Laura Gray	Individual	Oppose	No

Comments:

I support the original bill and the second part of the amendments. I do not want to eliminate individual roof-top credits. I do support the credits on multifamily dwellings. Why don't you want to help our local economy by allowing people to save lots of money on their power bills for years and years, and put that money into their local economy. Saving the planet and our islands from sea level rise is another benefit. Why not stop all the green washing and start actually doing something important? For a "progressive" state, we are lagging far behind in our efforts to convert to green energy by 2045. Mahalo for doing the right thing, Laura Gray R.N.

**SB-2821-SD-1**

Submitted on: 2/16/2020 9:46:50 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Koohan Paik	Individual	Comments	No

Comments:

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Koohan Paik

**SB-2821-SD-1**

Submitted on: 2/16/2020 9:33:58 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
tlaloc tokuda	Individual	Comments	No

Comments:

I belong to 350HI.

Dear Chair Dela Cruz and members:

I oppose some parts of SB 2821 SD1, but support other parts.

Rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions.

It's one of the few ways individuals can contribute significantly to meeting our clean energy goals.

Rooftop PV pays for itself in a few years, and then saves a great deal of money in the long term.

The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not. Why would you eliminate it?

We need to be encouraging and supporting solar energy systems of all types. The change to single-family dwellings in SD1 goes in exactly the wrong direction.

It discourages people from decreasing greenhouse gas emissions, and it costs taxpayers money in our expensive state.

The second change in SD1 is an improvement to the original bill. Increasing the tax credit for multi-family properties will boost PV adoption on those properties.

350Hawaii requests that the committee eliminate the first change from the original bill, and keep the second change.

Tlaloc Tokuda, Kailua Kona 96740-

**LATE**

**SB-2821-SD-1**

Submitted on: 2/19/2020 5:03:33 PM

Testimony for WAM on 2/20/2020 10:35:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mark A. Koppel	Individual	Oppose	No

Comments:

IF THIS IS WHAT I THINK IT IS, IT IS ONE OF THE STUPIDEST BILLS EVER.

I AM ON SOLAR. Everyone should be. MORE tax credits, not less.

**SB-2821-SD-1**

Submitted on: 2/19/2020 8:50:48 PM

Testimony for WAM on 2/20/2020 10:35:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Individual	Comments	No

Comments:

Dear Chair Dela Cruz and members:

I'd like to offer comment on SB 2821 SD1. I **OPPOSE** the phase out of the renewable energy tax credit for residential rooftop solar. I **SUPPORT** the increase of the renewable energy tax credit for multi-family residential properties.

Rooftop solar is an important component of our renewable energy strategy. It offers homeowners the opportunity to contribute to our 100% RPS goals while benefiting from lower energy costs. The renewable energy technology tax credit allows many to install solar PV systems. The change phase out of the tax credit for single family homes will slow the adoption of roof top solar while we should be doing just the opposite.

The second part of this legislation which calls for Increases in the tax credit for multi-family properties will encourage rooftop solar and is commendable.

Noel Morin - Hilo