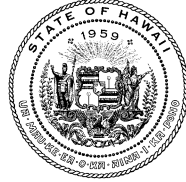


DAVID Y. IGE
GOVERNOR

JOSH GREEN M.D.
LT. GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TAXATION
P.O. BOX 259
HONOLULU, HAWAII 96809
Phone: (808) 587-1540 / Fax: (808) 587-1560
Email: Tax.Directors.Office@hawaii.gov

RONA M. SUZUKI
DIRECTOR OF TAXATION

DAMIEN A. ELEFANTE
DEPUTY DIRECTOR

To: The Honorable Glenn Wakai, Chair;
The Honorable Brian T. Taniguchi, Vice Chair;
and Members of the Senate Committee on Energy, Economic Development, and
Tourism

From: Rona M. Suzuki, Director
Department of Taxation

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

Date: Friday, January 31, 2020

Time: 2:55 P.M.

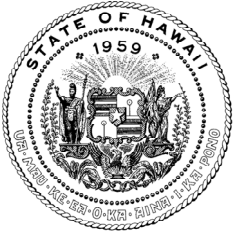
Place: Conference Room 414, State Capitol

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

S.B. 2821 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 multi-family residential and commercial properties by reducing the per system credit cap to \$0 after December 31, 2024. The RETTTC for other solar energy systems installed for single-family residential properties is not amended by this measure. S.B. 2821 is effective upon approval and would apply to taxable years beginning after December 31, 2019.

The Department notes that it is able to administer this measure with its current effective date as the substantive change in the RETTTC will not take effect until January 1, 2025.

Thank you for the opportunity to provide comments.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5TH 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 ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
Friday, January 31, 2020
2:55 PM
State Capitol, Conference Room 414

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

Chair Wakai, Vice Chair Taniguchi, and members of the Committee. The Hawaii State Energy Office (HSEO) offers comments on SB 2821, which eliminates the renewable energy technologies income tax credit for photovoltaic systems on multi-family resident and commercial properties, beginning January 1, 2025.

We note that there are several bills this session that propose to discontinue the tax credit for large commercial photovoltaic systems. We appreciate those bills that avoid disruption, especially to existing plans and projects that have made significant progress along multi-year project development timelines. Enabling affected entities to make the proper adjustments will help mitigate risks, enable more informed decisions, and avoid wasted time and effort.

One approach, such as taken in this bill, is to delay the change for a period of time that may allow for the currently ongoing projects to be completed.

Since projects may encounter additional unexpected delays, an alternative approach to avoid disruption to current projects may be to allow projects that had a signed interconnection agreement with the utility dated prior to December 31, 2020 or power purchase agreement signed prior to December 31, 2020 to be allowed to claim the tax credit that was in place prior to December 31, 2020 (or something similar). If this approach is of interest, we would be glad to work with the Committee to draft such language.

We defer to the appropriate agencies regarding administration of the tax credit or budgetary impact.

Thank you for the opportunity to testify.

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

INTRODUCED BY: WAKAI

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.

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 1/30/2020



SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

January 31, 2020, 2:55 p.m.
(*Testimony is 3 pages long*)

TESTIMONY IN OPPOSITION TO SB 2821

Aloha Chair Wakai and Members of the Committee:

Hawaii PV Coalition respectfully OPPOSES SB 2821, eliminating the renewable energy tax credit for multifamily and commercial buildings 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.**¹ 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.

Unfortunately, the 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 2011.² 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).

¹ See Hawaii Energy Facts & Figures at 5 (July 2019), available at https://energy.hawaii.gov/wp-content/uploads/2019/07/2019-FF_Final.pdf.

² 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.*

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 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 that 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, economic development, and so on.

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

Submitted on: 1/30/2020 8:40:51 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---|---------------------------|---------------------------|
| Lana Rose Olson | Testifying for Environmental Caucus of the Democratic Party of Hawaii | Oppose | No |

Comments:

SB-2821

Submitted on: 1/30/2020 7:12:55 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---|---------------------------|---------------------------|
| Ted Bohlen | Testifying for Climate Protectors Coalition | Oppose | No |

Comments:

Dear Chair Wakai, Vice Chair Taniguchi and members:

The Climate Protectors Coalition **strongly opposes SB2821!**

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, including by encouraging use of photovoltaics for multi-family residential and commercial properties. Eliminating the PV tax credits after 2024 would be a step in the wrong direction! Please defer this bill! Mahalo!

SB-2821

Submitted on: 1/29/2020 7:57:54 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|--------------------------------------|---------------------------|---------------------------|
| David Mulinix | Testifying for Our Revolution Hawaii | Oppose | No |

Comments:



TESTIMONY REGARDING SB 2821

**being heard by the Senate Committee on Energy, Economic Development and Tourism
on Friday, January 31, 2020 at 2:55 PM in Room 414**

Aloha Chair Wakai, Vice Chair Taniguchi and Members of the Committee:

Thank you for the opportunity to provide testimony regarding SB 2821 which would sunset the Renewable Energy Income Tax Credit at the end of 2024 for multi-unit housing and commercial customers. 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 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 a portfolio of resources that encompasses a range of project types and scales is appropriate 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 and the Renewable Energy Income Tax Credit function to support the States' longer term objective of completely eliminating its reliance on fossil fuels. Tesla is concerned that this measure, by dramatically reducing the tax credit, will undermine these efforts by undercutting the economics of rooftop solar leading the state to rely largely on the Renewable Portfolio Standard 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 different set of benefits. Top of mind among these is resiliency. Large scale systems cannot provide power when transmission or power 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.

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 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 and utility scale projects, but will be completely eliminated for residential systems. In combination with a change in state level policy, this could deliver a devastating one-two punch to 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. Given what is at stake a more considered and thoughtful approach is needed. At a minimum any changes to the REITC should be introduced gradually, over a period of at least five to ten years, cognizant of other factors in play that will also impact this industry.

Thank you for the opportunity to submit this testimony.

SB-2821

Submitted on: 1/30/2020 10:28:37 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---|---------------------------|---------------------------|
| Joseph Kohn MD | Testifying for We Are One, Inc. - www.WeAreOne.cc - WAO | Oppose | No |

Comments:

Oppose SB 2821.

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. This bill goes in exactly the wrong direction.

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

Vote no on SB 2821.



45-781 Kamehameha Hwy., Kaneohe, Hawaii 96744
Phone (808) 236-1110 * Fax (808) 236-1700

www.adonrenewables.com

Good People, Great Service, Changing the way electricity is delivered to our community

Testimony to the Committee on Energy, Economic Development & Tourism

Friday, January 31, 2020

Conference Room 414, Hawaii State Capitol

Senate Bill 2821

Chair Wakai, Vice Chair Taniguchi, and members of the committee,

ADON supports the intent of SB 2821, which relates to renewable energy tax credits and offers these comments.

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

As the legislature knows, the cost of living in Hawaii is the highest in the nation, placing a tremendous burden on much of our population. For many in Hawaii, home ownership is simply out-of-reach, leaving over 56% of our population relying on rental properties just like the ones we work on. These renters are often the members of our communities most in need of our help, including senior citizens, working families, and low-income residents. 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, where most of these renters live, is not equitable with that offered to single family and commercial properties, these local residents are left out.

We also know from recently released data that over 30% of our Hawaii rental residents are looking to leave Hawaii for the Mainland because they simply can't afford to make ends meet here. Those departures deny us our next generations of innovators and community members, and they put our kupuna at risk at the most fragile point in their lives. These residents are often living on fixed incomes or working multiple jobs to simply make ends meet. Offering incentives that go directly to them can help our future generations make it in the state they want to call home.

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. At the current rate, without that tax credit, there is very little incentive for these projects to be pursued in multi-family dwellings, denying those who need it most a bigger break in their utility bills.

The developer relies on federal and state tax credits to subsidize the ratepayer's rate, making clean energy available to these residents at a rate they can afford.

The legislature has addressed tax incentives for renewable energy during past sessions. 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. SB2821 as written continues to protect the single-family residence tax incentives while negatively affecting the multi-family dwelling tax incentive.

Regarding multi-family residential references, this bill proposes to decrease renewable energy tax credits caps specifically for multi-family residential property to \$0 per unit per system for taxable year after December 31, 2024. We request that you consider changing the \$350 per unit per system referenced in the solar hot water heater section and for all other solar energy systems to \$750 effective after December 31, 2019 and keep this market segment at parity with the residential single-family dwellings.

Recommended amendments:

(1) If the primary purpose of the solar energy system is to use energy from the sun to heat water for household use, then the cap amounts shall be:

- (A) \$2,250 per system for single-family residential property;
- (B) ~~\$350~~ \$750 per unit per system for multi-family residential property; and
- (C) \$250,000 per system for commercial property;

(2) For all other solar energy systems, the cap amounts shall be:

- (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;
- (B) ~~\$350~~ \$750 per unit per system for multi-family residential property[;] until December 31, 2024, then \$0 per unit per system for taxable years thereafter; and

Thank you for the opportunity to testify and considering these amendments.



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

To: The Senate Committee on Energy, Economic Development, and Tourism
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Friday, January 31, 2020, 2:55 pm

In opposition to SB 2821

Dear Chair Wakai, Vice Chair Taniguchi, and members:

350Hawaii opposes SB 2821.

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. This bill goes in exactly the wrong direction.

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

Vote no on SB 2821.

Brodie Lockard
Founder, 350Hawaii.org



Email: communications@ulupono.com

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
Friday, January 31, 2020 — 2:55 p.m. — Room 414

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

Dear Chair Wakai 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, 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.

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 rooftop solar currently require—or effectively require—energy storage because most systems are not permitted to export energy. Energy storage has not yet seen the steep price declines that have been experienced in solar PV systems over the last decade. As such, the committee should consider utilizing the income tax credit to cover the costs associated with renewable energy storage.

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 Energy, Economic Development & Tourism
Friday, January 31, 2020
2:55 PM
Conference Room 414, Hawaii State Capitol
Senate Bill 2821**

Chair Wakai, Vice Chair Taniguchi, and members of the committee,

174 Power Global **supports** the intent of SB 2821 which relates to renewable energy tax credits. 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 stated 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—proposals that 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 their 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 finance-ability 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.

Therefore, we support SB2821 as a forward-thinking bill, but we ask that if the legislature chooses to make changes to the commercial property systems, that the legislature be mindful of commitments already made and ensure that those promises are kept. We request that if the legislature amends HRS



§235-12.5, that it include section to be clear about the preservation of the tax credits for commercial properties that had a power purchase agreement approved by the Public Utilities Commission prior to December 31, 2019.

Attached is our recommended amendment:

Page 3

SECTION 2. Provided that notwithstanding any law to the contrary and any change to section 235-12.5, 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 for systems installed on commercial property; whichever is less.

SECTION ~~2~~ 3. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION ~~3~~ 4. This Act, upon its approval, shall apply to taxable years beginning after December 31, 2019.

Thank you for the opportunity to testify.

SB-2821

Submitted on: 1/28/2020 11:16:43 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Caroline Kunitake | Individual | Oppose | No |

Comments:

Please oppose SB2821.

Mahalo,

Caroline Kunitake

SB-2821

Submitted on: 1/29/2020 4:47:18 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Nanea Lo | Individual | Oppose | No |

Comments:

Hello,

My name is Nanea Lo and I'm a lifelong resident of Hawai'i on the island of O'ahu. I am also a masters student at the university of Hawai'i at MÄ• noa in the Department of Urban and Regional Planning. I fully oppose this bill.

me ke aloha 'Ä• ina,

Nanea Lo

SB-2821

Submitted on: 1/29/2020 9:06:15 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| J Riverstone | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/29/2020 11:22:47 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|-----------------------|---------------------|---------------------------|---------------------------|
| Javier Mendez-Alvarez | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/29/2020 12:19:05 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Tamara Swift | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/29/2020 12:56:24 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Mark K.Wilson III | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/29/2020 2:58:19 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| tlaloc tokuda | Individual | Oppose | No |

Comments:

I oppose this bill

SB-2821

Submitted on: 1/29/2020 3:14:19 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|----------------------|---------------------|---------------------------|---------------------------|
| Stephanie Hall Morin | Individual | Oppose | No |

Comments:

We need to continue to support covering to green energy. Off setting the cost with tax credits is an excellent incentive. We need to keep these active.

SB-2821

Submitted on: 1/29/2020 7:32:57 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Sherry Pollack | Individual | Oppose | No |

Comments:

This is a very harmful measure that takes us in the wrong direction. We should be doing everything possible to encourage adoption of renewable energy.

SB-2821

Submitted on: 1/29/2020 9:35:47 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Phaethon Keeney | Individual | Oppose | No |

Comments:

Please OPPOSE SB2821.

Governments around the world are declaring Climate Emergency. The UN IPCC gives us 10 years to reduce global emissions by 50% to hold to the 1.5C Paris Target. This bill is counterproductive to Hawaii's existing Clean Energy Goals, the need for more ambitious targets, and does not seem to be in touch with the reality, scope and scale of the Climate Crisis we face, and impacts to Hawaii in particular. Please oppose, mahalo!

Phaethon Keeney

Honokaa Hawaii

SB-2821

Submitted on: 1/30/2020 6:12:11 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Lynn Aaberg | Individual | Oppose | No |

Comments:

I strongly oppose SB 2821. Rooftop solar can help us make significant progress in reducing greenhouse gases. The renewable energy technology tax credit allows many citizens to install solar energy systems who otherwise would not install solar. Why would it be eliminated? This goes in the wrong direction in supporting solar energy and helping Hawai'i achieve its goals. We are on a trajectory to climate collapse and need to do everything we can. Please vote no on SB 2821

SB-2821

Submitted on: 1/30/2020 7:20:11 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Zoe Malia Ozoa Loos | Individual | Oppose | No |

Comments:

To: The Senate Committee on Energy, Economic Development, and Tourism

From: Zoë Malia Ozoa Loos

Date: 1/30/2020

In opposition to SB 2821

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I oppose SB 2821.

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. This bill goes in exactly the wrong direction.

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

Vote no on SB 2821.

Zoë Malia Ozoa Loos

SB-2821

Submitted on: 1/30/2020 7:49:41 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| helen raine | Individual | Oppose | No |

Comments:

To: The Senate Committee on Energy, Economic Development, and Tourism

From: Helen Raine

Date of bill: Friday, January 31, 2020, 2:55 pm

In strong opposition to SB 2821

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I oppose SB 2821 and am shocked that this bill is even on the table. This suggests that you are not taking the climate crisis seriously. I have looked extensively at the vast body of peer reviewed evidence and there is no doubt that there will be serious impacts to the quality of our life in Hawaii - we are already feeling them with flooding in Hanalei and coastal erosion. Complacency is not an option; we must act. You should be adding extra incentives for solar panel purchase, not taking them away.

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

Vote no on SB 2821.

Please consider the future of our children as you vote on this bill

Regards

Helen Raine

SB-2821

Submitted on: 1/30/2020 8:37:03 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Joy Silver | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/30/2020 10:25:32 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| David Dinner | Individual | Oppose | No |

Comments:

SB-2821

Submitted on: 1/30/2020 11:27:17 AM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Laurel Quarton | Individual | Oppose | No |

Comments:

LATE

SB-2821

Submitted on: 1/30/2020 2:58:44 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Matthew Geyer | Individual | Oppose | Yes |

Comments:

We need to continue to support renewable energy sources, and this bill would make it harder for people to switch. We are at a crucial junction right now where we need to cut down on fossil fuels as much as possible, and we need solar energy to help us achieve this goal. Please don't sabotage the gains we have made on tackling the climate crisis!



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 ENERGY, ECONOMIC DEVELOPMENT, AND
 TOURISM
 ON
 FRIDAY, JANUARY 31, 2020**

Chair Wakai, Vice-Chair Taniguchi, 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. 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 its 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.

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 developments during this time period were large scale build-outs of rooftop photovoltaics

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

Figure 1 Avg. Customer Elec. Rates 2011-2018

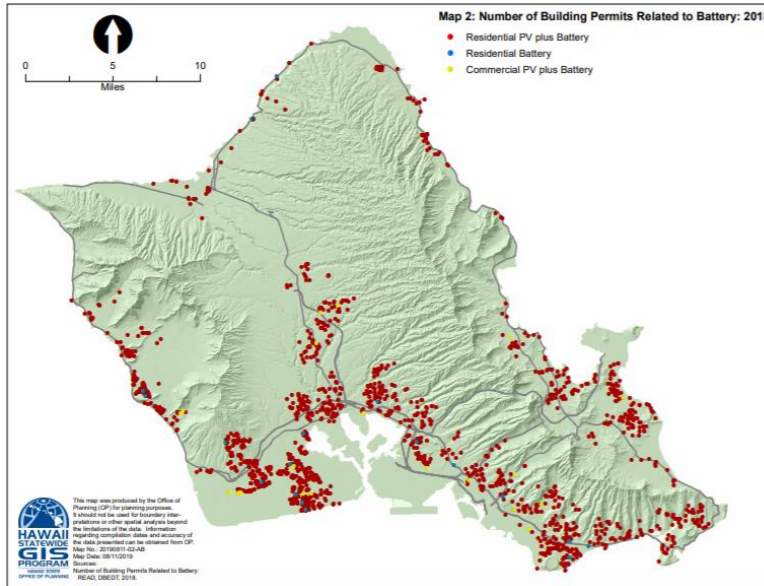


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and energy efficiency programs. Regardless of whether a Hawaii electric customer has a solar system, they still benefit from every new system that is placed on the grid. Additionally, technologies like energy storage provide further benefits to grid 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.

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 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



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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.

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, as well as bills like HB202. 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.



**Testimony to the Committee on Energy, Economic Development & Tourism
Friday, January 31, 2020
9:00 AM
Conference Room 414, Hawaii State Capitol
Senate Bill 2821**

Chair Wakai, Vice Chair Taniguchi, and members of the committee,

The Hawaii Clean Power Alliance (HCPA) **supports** the intent SB2821, which relates to renewable energy tax credits.

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, 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, threats to those state tax credits threaten the viability of the projects.

Changes to this statute without allowing for those projects already in place to be exempt from future adjustments puts an unnecessary and onus burden back on the ratepayer—our residents and neighbors we are all committed to protect with affordable, reliable energy.

We appreciate the legislature's forward-thinking proposal, but we respectfully ask that should this bill move forward, that the legislature is mindful of those agreements and projects already underway. Agreements made under those incentives should be able to count on them being there when the time comes. Although the bill as written delays any changes until after December 31, 2024, more explicit language on this issue is appreciated.



We request that a provision protecting those projects with power purchase agreements already approved by the Public Utilities Commission prior to December 31, 2019, be added to the bill.

Our proposed amendment is included, here:

Page 3

SECTION 2. Provided that notwithstanding any law to the contrary and any change to section 235-12.5, 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 for systems installed on commercial property; whichever is less.

SECTION ~~2~~ 3. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION ~~3~~ 4. This Act, upon its approval, shall apply to taxable years beginning after December 31, 2019.

Thank you for your ongoing work in this arena and for taking the time to consider our testimony.

Sincerely,


Frederick Redell, PE
Executive Director
(949) 701-8249
www.hawaiicleanpoweralliance.org

LATE

SB-2821

Submitted on: 1/30/2020 6:39:12 PM

Testimony for EET on 1/31/2020 2:55:00 PM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Noel Morin | Individual | Oppose | No |

Comments:

Dear Chair Wakai, Vice Chair Taniguchi, and members:

I strongly oppose SB 2821.

Rooftop solar PV systems are a critical part of our strategy to reduce greenhouse gas emissions. We're blessed with abundant sunshine and we must take advantage of this.

The renewable energy technology tax credit has allowed many residents to install rooftop PV. It allows residents to contribute to our renewable energy goals, reduce their energy expenditure, and improve their economic situation.

Elimination of the credit, especially when we must step up even more to curb emissions, does not make sense. We need to encourage even greater adoption of renewable energy systems. This bill does just the opposite.

Please vote no on SB 2821.

Sincerely,

Noel Morin

Hilo