



JOSH GREEN, M.D.
GOVERNOR | KA KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
KA 'OIHANA PILI KĀLEPA
335 MERCHANT STREET, ROOM 310
P.O. BOX 541
HONOLULU, HAWAII 96809
Phone Number: (808) 586-2850
Fax Number: (808) 586-2856
cca.hawaii.gov

NADINE Y. ANDO
DIRECTOR | KA LUNA HO'OKELE

DEAN I HAZAMA
DEPUTY DIRECTOR | KA HOPE LUNA HO'OKELE

Testimony of the Department of Commerce and Consumer Affairs

Before the
Senate Committee on Commerce and Consumer Protection
And
Senate Committee on Energy and Intergovernmental Affairs
Wednesday, January 29, 2025
9:45 a.m.
Conference Room 229

On the following measure:
S.B. 589, RELATING TO RENEWABLE ENERGY

Chair Keohokalole, Chair Wakai, and Members of the Committees:

My name is Michael Angelo, and I am the Executive Director of the Department of Commerce and Consumer Affairs (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to: (1) establish an installation goal for customer-sited distributed energy resources in the State; (2) ensure that fair compensation is provided to distributed energy resources exports as part of grid service programs; and (3) authorize retail wheeling of renewable energy and requires the Public Utilities Commission (Commission) to establish policies and procedures to implement retail wheeling and microgrid service tariffs.

The Department appreciates the bill's goal of increasing the deployment of clean renewable resources within the State and seeking to improve grid reliability. Distributed

energy resources (DER) are and will continue to always be a necessary component of the portfolio of solutions needed to achieve the State's clean energy goals and support the delivery of reliable electricity services. Indeed, society has recognized the value of DER for a significant amount of time by offering robust tax incentives at both the federal and State levels in Hawaii that significantly decrease the upfront costs to procure customer-sited renewable energy technologies and thereby facilitate their adoption into the grid. The Department also supports compensation for DER based on the value that they deliver to the grid at the time they provide the service.

Regarding establishing a cap for DER adoption, the Department notes that there are currently stakeholder driven processes in place to determine the most cost-effective mix of resources and technologies to meet Hawaii's Renewable Portfolio Standard goals and maintain grid reliability. The Department also notes that crediting customers at the "retail rate" of electricity raises equity concerns because the full usage rates paid by customers recover a range of costs beyond the cost of generating electricity such as the costs related to the infrastructure delivering the energy, maintaining reliability, and for the energy efficiency programs managed by a third-party administrator (i.e., the public benefits fund surcharge). The Department also notes that the Commission has initiated Phase 4 of the DER Program in Docket No. 2019-0323 where it intends to establish a new DER grid-services program. Establishing retail wheeling where a retail customer can purchase energy from any supplier raises concerns about how the reliability of the grid can be maintained and regulated from multiple suppliers.

Thank you for the opportunity to testify on this bill.

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR



STATE OF HAWAII
PUBLIC UTILITIES COMMISSION
465 S. KING STREET, #103
HONOLULU, HAWAII 96813

LEODOLOFF R. ASUNCION, JR.
CHAIR

NAOMI U. KUWAYE
COMMISSIONER

COLIN A. YOST
COMMISSIONER

Telephone: (808) 586-2020
Facsimile: (808) 586-2066

Website: puc.hawaii.gov
E-mail: puc@hawaii.gov

Testimony of the Public Utilities Commission

To the
Senate Committees on
Commerce and Consumer Protection
and
Energy and Intragovernmental Affairs

January 29, 2025
9:45 a.m.

Chairs Keohokalole and Wakai, Vice Chairs Fukunaga and Chang, and Members of the Committees:

Measure: S.B. No. 589
Title: RELATING TO RENEWABLE ENERGY.

Position:

The Public Utilities Commission ("Commission") offers the following comments for consideration.

Comments:

The Commission appreciates the intent of this measure to promote increased renewable energy production by encouraging customer investments in distributed energy resources ("DER"), particularly solar plus storage systems. The Commission supports examination of diverse measures that would promote the production of clean electricity and understands that generators of renewable energy play an important role in the State's transition to renewable energy and should be fairly compensated for the energy exports and grid services they provide.

To determine fair compensation, the Commission oversees a collaborative process with the utility, the consumer advocate, and other stakeholders that relies on extensive analysis to determine the value that distributed energy exports provide to the grid. This process has determined that the value that distributed energy exports provide to the grid is typically lower than the retail rate. The Commission has also explored the value of resiliency, capacity, and ancillary services through this process, but it remains challenging to determine a precise quantitative figure for these benefits. The Commission also notes that the value of distributed energy exports will evolve during the renewable energy transition. For Hawaiian Electric's programs, the Commission has established an 'update

framework' that requires regular review of the compensation rate for distributed energy exports and a mechanism to update the program every three years to ensure that the programs are meeting the above goals and to continue to refine compensation for resiliency and other benefits.

Establishing the compensation rate for distributed energy exports through statute may limit the Commission's ability to investigate the role of distributed energy in the State and design programs to meet the above objectives. Additionally, the Commission emphasizes that it is important to understand the impact of this measure on non-participating ratepayers. A potential increasing in export credits may cause non-participating ratepayers to bear a larger energy burden, which is an important focus for the Commission. The Commission also notes that a definition of "full retail rate" in the context of this measure would need to be clarified, as there could be conflicting interpretations.

Regarding the Commission establishing a retail wheeling tariff, the Commission notes that electricity wheeling requires an examination of many complex and interrelated issues to ensure reliability and cost-effectiveness, such as interconnection, availability of transmission and distribution capacity, appropriate rates and rate design, back-up power requirements, amongst others. As discussed at the previous legislative session, the Commission agreed to open a docket to investigate whether electricity wheeling is in the State's public interest.

In July 2024, the Commission opened Docket No. 2024-0200 to prompt feedback from key stakeholders regarding the feasibility of wheeling in Hawaii and will determine whether intragovernmental wheeling, as part of its initial stage, is in the public interest. This would be followed by a report to the Legislature no later than twenty days prior to the convening of the regular session of 2026. The intent is to then shift this investigation to other forms of wheeling, including retail wheeling. Authorizing retail wheeling in statute prior to closing the Commission's open investigation regarding electricity wheeling, may deter from the intent of this measure to provide fair compensation mechanisms for distributed energy resource exports while enhancing grid reliability and resilience.

As detailed above, the Commission welcomes the integration of renewable energy into the built environment, such as parking shade structures and rooftops of State facilities. The following ongoing proceedings have identified and tailored compensation mechanisms for renewable energy generators that State departments and agencies are eligible to pursue:

- Docket No. 2019-0323 is the Commission's docket for distributed energy resources, which has established compensation structures for customer-sited renewable energy generation, such as solar and storage, connected to Hawaiian Electric's grid to help serve customer resilience and meet grid needs. The newest programs remove system size limits and encourage the development of larger renewable energy systems.

- Docket No. 2015-0389 is the Commission's docket focused on developing community-based renewable energy ("CBRE") programs, which allow customers to receive benefits for "shared solar" installations that are not customer-sited. This proceeding has resulted in over 4 megawatts of shared solar installations, with several additional projects under review or construction.
- Docket No. 2018-0163 is the Commission's Microgrid docket, through which the Commission has established a microgrid services tariff containing rules for two types of microgrids: hybrid microgrids, in which customers may combine customer-sited equipment with utility-owned infrastructure, and customer microgrids, where a customer's infrastructure is exclusively used to supply all their own electricity needs during emergencies.

As a result of these ongoing efforts, the Commission offers to file a report with the legislature by the start of the 2026 legislative session. In this report, the Commission will identify its efforts to address the objectives and requirements outlined in this measure.

Thank you for the opportunity to testify on this measure.



Testimony Before the Senate Committees on Commerce and Consumer
Protection and Energy and Intergovernmental Affairs

By David Bissell
President and Chief Executive Officer
Kaua'i Island Utility Cooperative
4463 Pahe'e Street, Suite 1, Līhu'e, Hawai'i, 96766-2000

Wednesday, January 29, 2025; 9:45 am
Conference Room #229 & Videoconference

Senate Bill No. 589 – RELATING TO RENEWABLE ENERGY

To the Honorable Chairs Jarrett Keohokalole and Glenn Wakai, Vice Chairs Carol Fukunaga and Stanley Chang, and Members of the Committees:

Kaua'i Island Utility Cooperative (KIUC) is a not-for-profit utility providing electrical service to more than 34,000 commercial and residential members.

KIUC opposes this measure.

Over the past 10 years, KIUC has significantly increased its renewable generation. In 2010, KIUC's energy mix included 10% renewable. Over the past five years, renewable production on Kaua'i has averaged between 50% and 70%. In addition, since 2019 KIUC has operated the Kaua'i electric grid at 100% renewable for thousands of hours on sunny days. KIUC's renewable mix currently includes biomass, biofuels, hydropower, utility-scale solar, utility-scale paired with battery energy storage systems (BESS), and distributed (rooftop) solar.

Specific to its solar generating capacity, KIUC currently has 119.7 megawatts of total solar generating capacity: roughly 35% of which comes from rooftop solar. The number of rooftop solar systems on Kaua'i has risen from 388 in 2010 to more than 6,500 today. Of that total, 2,100 have batteries. In 2024 KIUC members added 498 new rooftop solar systems with 323 members adding a battery storage component to either new or existing systems.

KIUC's board of directors has set a goal of reaching 100% renewable by 2033, twelve years ahead of the State of Hawai'i mandate. We have identified a viable path to reaching that goal via a combination of additional utility scale solar + BESS projects, projected continued growth in the number of member-owned rooftop solar systems, and expanded use of biofuels.

It is important to note that the unique circumstances of each of Hawai'i's distinct island grids must be considered when determining the relative value of customer-sited distributed energy resources. While an island like O'ahu is land-constrained and will presumably need to take advantage of as much rooftop space as possible to reach mandated renewable targets, the same is not true for Kaua'i. KIUC has taken advantage of the availability of tens of thousands of acres of fallow, sub-standard agricultural lands to develop utility-scale solar projects under long-term, fixed-price power purchase agreements.

As a result, KIUC's rates went from being the highest in the state to the lowest when Kauaʻi hit its peak renewable generating capacity between 2021 and 2024. This is directly attributable to the relatively low cost of solar generated by utility-scale solar projects brought online between 2015 and 2021.

While KIUC recognizes that supporting the expansion of distributed energy resources offers many benefits, it is important to remember that not all residents have the financial resources or ability to take advantage of rooftop solar. To that point, it is in the best interest of all KIUC's members that we maximize use of the lowest-cost solar resources, which are typically our utility-scale projects. Costs for various solar resources in January 2025 are as follows:

- ✓ AES Lāwaʻi solar plus storage: \$0.11 per kWh
- ✓ AES PMRF solar plus storage: \$0.1085 per kWh
- ✓ Schedule Q customer energy credit payment rate: \$0.15993 per kWh (*Schedule Q rates are equivalent to the rate paid to KIUC's other non-renewable fueled energy, otherwise known as "avoided cost"*)

Per our current tariff, it is typical for Schedule Q customers to receive a premium of roughly 50% above the PPA prices for our utility-scale projects. If Schedule Q customers were to be compensated at retail rates, as proposed in SB 589, that premium in January 2025 would be roughly four times the amount paid to independent power producers such as AES. This increased cost would be borne by all of KIUC's customers, creating a significant inequity that is especially burdensome on low- and moderate-income members who can't afford to take advantage of Schedule Q. Utility-scale solar + BESS projects also deliver benefits such as: providing hundreds of hours of dispatchable, firm power during non-solar hours, offering the ability to power localized microgrids during outages, and contributing significantly to grid reliability.

KIUC does agree that distributed solar and battery systems can be of benefit to customers in the event of power outages or disasters. We believe our current tariff and interconnection policies are providing adequate incentive to continue to expand the number of distributed resources, while protecting customers who can't install rooftop solar from significantly subsidizing those who can.

It is also important to note that the concept of wheeling is currently being explored in a docket before the Hawaiʻi Public Utilities Commission (PUC), with recommendations on wheeling due to be presented to the legislature in time for the 2026 legislative session.

In the event this legislation progresses, KIUC would recommend that member-owned electric cooperatives be exempted from its provisions. Cooperatives are extremely concerned about equity amongst their customer owners, and developing fair distributed solar rates for any recommended tariff changes is appropriately done within the cooperative structure. As an alternative, KIUC recommends that the PUC be directed to conduct a study on the relative benefits of grid export from distributed solar on an island-by-island basis. Following such a study, an appropriate tariff system can be developed that fairly compensates distributed energy providers, while recognizing each island's different load characteristics and renewable energy resources.

Mahalo for the opportunity to comment.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding SB589, Relating to Renewable Energy, Before the Senate Committee on Energy and Intergovernmental Affairs and Senate Committee on Commerce and Consumer Protection

Wednesday, January 29, 2025

Aloha Chairs Wakai and Keohokalole, Vice Chairs Chang and Fukunaga, and committee members,

The Hawaii Solar Energy Association (HSEA) **strongly supports SB589**, which sets a goal of 50,000 new distributed solar and battery storage installations over the next five years and directs the Public Utilities Commission (PUC) to design programs with sufficiently-calibrated incentives and mechanisms to achieve this target, ensuring Hawaii maintains its path to 100% renewable energy while addressing urgent and immediate grid needs.

Why This Bill is Critical

Hawaii's energy future depends on distributed energy resources (DERs) such as rooftop solar and energy storage to lower energy costs, stimulate economic growth, enhance resilience, and meet climate goals. By deploying 50,000 solar and battery storage systems in five years, this bill secures Hawaii's leadership in renewable energy while delivering broad benefits for all residents.

Lower Energy Costs: Rooftop solar and battery storage significantly reduce energy bills and shield customers from fossil fuel price volatility. By producing local energy, DERs ease grid strain and defer costly infrastructure upgrades, saving money for all ratepayers. Fair compensation for energy exports and other values ensures customers are rewarded equitably, encouraging widespread adoption of beneficial grid services programs.

Economic Benefits:

- According to the State of Hawaii's Department of Business, Economic Development, and Tourism's (DBEDT) Research and Economic Analysis Division (READ), every dollar



Hawaii Solar Energy Association
Serving Hawaii Since 1977

invested in construction of DERs generates 1.47- 2.12 additional dollars in direct economic output.¹

- A recent peer-reviewed economic analysis indicates even higher multiplier benefits with residential solar yielding 2.5-3.0x on each dollar invested and commercial systems returning 3.5-4.0x.²
- Hawaii's clean energy sector supports over 3,000 jobs, with thousands more expected as DER adoption grows. Each added megawatt of residential solar is estimated to add 27 jobs while each added megawatt for commercial adds 19 jobs.³
- State investments are highly leveraged, attracting an additional \$3.44 in private and federal funding for every state dollar.⁴

Resilience and Reliability: DERs strengthen energy security with the use battery storage and microgrids, providing localized power during emergencies and mitigating risks from aging infrastructure. Virtual Power Plants (VPPs) such as Hawaii's Battery Bonus or Bring-You-Own-Device (BYOD) programs aggregate DERs to enhance grid stability by offering peak load reduction and energy adequacy. Events like the 2023 Lahaina wildfires, and energy adequacy issues on Oahu and Hawaii Island, underscore the urgent need for resilient, decentralized energy systems.

Climate Leadership: DERs are vital to achieving Hawaii's 100% Renewable Portfolio Standard (RPS) by 2045, already contributing nearly half of the progress to date. By reducing reliance on imported fossil fuels, DERs lower greenhouse gas emissions and improve public health, especially in underserved and frontline communities disproportionately affected by pollution and climate risks. Hawaii's leadership also serves as a global model for decarbonizing energy systems, which we can harness to drive new opportunities for Hawaii's future economy.

¹ See DBEDT-READ 2017 *State Input-Output Study and Condensed Input-Output Transactions Table*, 'mining and construction' category. (https://dbedt.hawaii.gov/economic/reports_studies/2017-io/)

² Thomas A. Laudat and Prahlad Kasturi, 2017. "[The Economic and Fiscal Impacts of Hawaii's Solar Tax Credit](#)," *International Journal of Energy Economics and Policy, Econjournals*, vol.7(1), pages 224-252.

³ [Solar Foundation National Solar Jobs Census 2020](#); [SEIA Solar Market Insight Report 2020](#); and Bill Nussey, [Freeing Energy](#).

⁴ Based on the refundable tax credit rate of 22.5%, leaving 77.5% from other sources, private and federal. 77.5 divided by 22.5 equals 3.44.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

State Action is Crucial: With uncertain federal support and potential tariffs on solar equipment increasing costs for Hawaii consumers, bold state-level action is imperative. This bill ensures affordable and accessible clean energy solutions for residents.

Opportunities for Hawaii

Hawaii's leadership in DERs presents significant opportunities for economic and technological advancement. Sharing expertise in DER policy, microgrids, and VPPs with other states and nations positions Hawaii as a hub for renewable energy innovation. A robust DER ecosystem also attracts emerging industries in data-driven sectors that rely on sustainable and resilient energy.

The "50,000 in Five" initiative offers transformative economic benefits, potentially injecting billions into Hawaii's economy, supporting small businesses, and creating thousands of green jobs. This effort will solidify Hawaii's status as a global clean energy leader while fostering long-term economic sustainability and environmental stewardship.

Conclusion

HSEA urges these committees to advance SB589 to accelerate Hawaii's clean energy transition. This bill will lower energy costs, drive economic growth, strengthen resilience, and achieve critical climate goals. By prioritizing fair compensation, robust incentives, and innovative grid solutions, Hawaii can continue to lead in clean energy innovation while ensuring equitable benefits for all residents.

Thank you for the opportunity to testify in **strong support of SB589**. HSEA remains committed to working with the legislature, PUC, utilities, and stakeholders to advance Hawaii's clean energy and resilience goals.

Respectfully submitted,

/s/ Rocky Mould

Executive Director



Hawaii Solar Energy Association
Serving Hawaii Since 1977

About HSEA

Since 1977, HSEA has been advocating for policies that help Hawaii achieve critical climate, energy security, and resilience goals by enabling residents and businesses to invest in and benefit from the transition to clean energy. These investments provide reliable and affordable power, reducing energy cost burdens and contributing to Hawaii's economic sustainability as we decarbonize our economy and electric grid.

HSEA's membership includes the majority of locally owned and operated solar and energy storage companies doing business in Hawaii, along with leading global cleantech manufacturers and service providers active in our market. Together, we employ thousands of Hawaii residents in diverse green economy jobs that drive innovation, design, and construction of Hawaii's renewable energy infrastructure.

Hawaii is a global leader in renewable energy deployment, particularly in customer-sited rooftop solar and energy storage. Customer-sited rooftop solar accounts for 47% of renewable energy added to grids in Hawaiian Electric service areas (Oahu, Maui County, and the Big Island) and 21% in the Kauai Island Utility Cooperative area. Additionally, Hawaii leads the nation in pairing rooftop solar with battery storage, with 96% of new residential installations including storage. These achievements underscore Hawaii's role as a pioneer in clean energy transformation.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEES ON
COMMERCE AND CONSUMER PROTECTION &
ENERGY AND INTERGOVERNMENTAL AFFAIRS**

**SB 589
Relating to Renewable Energy**

Wednesday, January 29, 2025
9:45 am
State Capitol, Conference Room 229

Kaiulani Shinsato
Director, Customer Energy Resources
Hawaiian Electric

Dear Chairs Keohokalole and Wakai, Vice Chairs Fukunaga and Chang, and Members of the Committees,

My name is Kaiulani Shinsato and I am testifying on behalf of Hawaiian Electric or “Company” **in opposition** to SB 589.

Hawaiian Electric supports the intent of this bill -- to continue to grow Distributed Energy Resources (“DER”) in Hawai‘i. Hawai‘i leads the nation in the adoption of DERs, yet the Company fully understands that we need to continue to grow DERs going forward. DERs are part of the pathway to achieve our clean energy goals and to provide options to our customers to better manage their electric bills, have resiliency at their homes and businesses, and contribute to Hawai‘i's clean energy future.

However, this bill would require energy exported to the electric grid past a participating customer-generator’s point of common coupling from photovoltaic solar systems paired with energy storage as part of a grid service program to be credited at the full retail rate for electricity for the relevant time period.

This issue was fully vetted over multiple years and already decided in the Public Utilities Commission's ("Commission") proceeding on DER, Docket No. 2019-0323. On December 4, 2023, in an almost 200-page Decision and Order, the Commission denied retail crediting for energy exports enrolled in grid services based on the full record in the proceeding. This bill effectively circumvents years of consideration among multiple stakeholders and thoughtful deliberation by the Commission in Docket No. 2019-0323. More recently, the Commission directed the parties in the DER docket to reevaluate Hawaiian Electric's current grid services program. The parties are currently researching best practices and vetting proposals before the Commission. As a part of this process, Hawaiian Electric is currently considering offering retail crediting, but only under limited emergency-type circumstances. This bill would effectively circumvent this process that is already underway before the Commission.

More importantly, providing retail crediting exacerbates concerns about equity and affordability. Retail crediting will significantly increase the cost of Hawaiian Electric's grid services program. These costs are paid for by all customers, including low-to-moderate income customers, and customers on fixed incomes. Hawaiian Electric acknowledges that its grid services programs should provide sufficient incentives for customers to invest in DERs and participate in grid services programs. However, these incentives should not come at a cost that unfairly impacts non-DER customers, including many who are facing financial hardship.

In addition, SB 589 requires the Commission to establish a goal of installing fifty thousand new installations of DERs in the State by 2030. Hawaiian Electric again supports the intent behind setting this goal that would incentivize additional growth of DERs in Hawai'i. However, Hawaiian Electric has already set this goal of 50,000 new

rooftop solar systems by 2030 based on extensive modeling and analysis as a part of its Climate Action Plan and Integrated Grid Plan (“IGP”). The goal in SB 589 does not appear to be based in any analysis and seems duplicative and unnecessary given Hawaiian Electric’s Climate Action Plan and IGP that already call for growth of DERs by 2030.

With respect to the sections of SB 589 that require the Commission to implement retail wheeling and microgrid service tariffs, the Commission has already opened a wheeling docket (Docket No. 2024-0200), which is ongoing, and microgrid services tariff docket (Docket No. 2018-0163), although this docket is currently suspended. Hawaiian Electric recommends that these important and complex matters get fully vetted and determined with the right stakeholders through the regulatory process before the Commission.

For all of these reasons, Hawaiian Electric opposes SB 589. Thank you for this opportunity to testify.

January 29, 2025

Senator Wakai and Senator Keohokalole
Senate Committee on Energy and Intergovernmental Affairs
Senate Committee on Commerce and Consumer Protection

RE: SB589 – Relating to Renewable Energy
Hearing: Wednesday, January 29, 9:45 a.m.
Position: **STRONG SUPPORT**

Chairs Wakai and Keohokalole and members of the committee:

My name is Will Giese. I am the Senior Director of Government Affairs of The Solaray Corporation. Solaray was founded in 1975 and does business in Hawai'i as Inter-Island Solar Supply. Solaray also wholly owns Pacific Panel Cleaners ("PPC"), Generator & Power Systems ("GPS"), both Hawai'i Corporations, SunEarth, Inc., a California Corporation, and Alternate Energy Technologies (AET), a Florida Corporation. SunEarth & AET are domestic manufacturing companies producing American made clean energy products, much of which is installed and operated throughout Hawaii for 50 years. GPS is the Generac Industrial generator distributor for Hawai'i. Solaray Corp., and its wholly owned subsidiaries, are proudly 100% employee owned.

I am testifying **in STRONG SUPPORT of SB589** relating to Renewable Energy.

This bill establishes an installation goal for customer-sited distributed energy resources in the State. Ensures that fair compensation is provided to distributed energy resources exports as part of grid service programs. Authorizes retail wheeling of renewable energy and requires the PUC to establish policies and procedures to implement retail wheeling and microgrid service tariffs..

COMMENTS

As an invested stakeholder in Hawaii's clean energy transition, we strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Rooftop solar is an essential part of Hawaii's electric grid and currently provides over 1.1 gigawatts of energy able to power over 360,000 homes and businesses across the state, over

half of the 568,000 housing units built.¹ The rooftop solar industry is the primary driver of renewable capacity in the state, one that is largely built through locally owned and operated developers and businesses like ours. However, the state, while acknowledging the importance of rooftop solar in the overall mix of energy, has never set a concrete, future-focused deployment goal to guide regulatory frameworks in building this critically needed asset. This is all the more important as the state's primary utility continues to risk financial instability and major developers of large renewable energy projects face a riskier investment climate than before, and are forced to reevaluate their project's long-term viability and the utility's ability to meet its obligations.²

Unlike other states, rooftop solar is the foundation upon which the state's renewable energy future is constructed. Setting state goals for rooftop solar deployment is essential in creating a stable regulatory environment to allow these resources the ability to meet demands for energy generation and resilience.

Solaray is a local, employee-owned solar business owned and operated in Hawaii for over 50 years, we are testifying in **STRONG SUPPORT of SB589** and urge the committee to pass this measure.

Thank you for your time and consideration,

Will Giese
Senior Director, Government Affairs
Inter-Island Solar Supply

¹ <https://files.hawaii.gov/dbedt/census/popestimate/2022/2022-housing/2022-dbedt-housing-highlights.pdf>

² <https://www.energy-storage.news/clearway-withdraws-solar-plus-storage-from-hawaiian-electric-procurement-citing-utilitys-ongoing-financial-uncertainty/>



Green Power Projects LLC
Alan Lennard, Managing Director
P.O. Box 818
Haleiwa, HI 96712
T 808.381.3447
E alan.lennard@greenpowerprojects.com

www.greenpowerprojects.com

Testimony of Alan Lennard
Managing Director of Green Power Projects LLC
e-mail: alan.lennard@greenpowerprojects.com

LATE

In Strong Support for SB589 DER Acceleration

COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

Senator Jarrett Keohokalole, Chair

Senator Carol Fukunaga, Vice Chair

COMMITTEE ON ENERGY AND INTERGOVERNMENTAL AFFAIRS

Senator Glenn Wakai, Chair

Senator Stanley Chang, Vice Chair

NOTICE OF HEARING

DATE: Wednesday, January 29, 2025
TIME: 9:45 AM
PLACE: Conference Room 229 & Videoconference
State Capitol
415 South Beretania Street
TIMESLOT: CPN

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

My name is Alan Lennard. I am the Managing director of Green Power Projects LLC. Green Power Projects LLC is a Solar project facilitation company working towards 100% Renewable Energy capacity in Hawaii. Our vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

Respectfully,

Alan Lennard -dig. signature

Alan Lennard
Managing Director
Green Power Projects LLC
P.O. Box 818
Haleiwa, HI 96712-0818

Aloha Chairs Wakai and Keohokalole, Vice Chairs Chang and Fukunaga, and Members of the Committees,

My name is Rachel Ah Sue, Co-Founder and President of Mālama Solar, a local company dedicated to accelerating Hawaii's transition to clean energy. I am submitting testimony in **strong support** of both **SB587** and **SB589**, which represent critical steps in achieving Hawaii's renewable energy goals.

SB587 – Grid Ready Homes

Streamlining the interconnection process for advanced, grid-interactive distributed energy resources (DERs) is an essential step toward stabilizing electricity rates, improving grid reliability, and reducing unnecessary infrastructure costs. By certifying technologies under UL1741 standards, this bill promotes safer and more efficient integration of solar, energy storage, and electric vehicle charging technologies into our grid. These updates will not only benefit current ratepayers but also open up significant economic opportunities for Hawaii's clean energy sector.

SB589 – DER Acceleration

Setting an ambitious yet achievable target of 50,000 new DER installations over the next five years underscores Hawaii's commitment to clean energy and equitable access. SB589 prioritizes programmatic adjustments that incentivize these installations, allowing more families and businesses to benefit from renewable energy solutions. The focus on microgrids, grid services, and retail wheeling enhances system resilience while fostering economic growth and job creation in Hawaii's renewable energy sector.

These measures work hand-in-hand to modernize Hawaii's grid, provide cost-effective solutions, and pave the way for a sustainable energy future.

Mahalo for the opportunity to provide testimony on these innovative and essential bills. I strongly urge the committees to advance both SB587 and SB589 for the benefit of our communities and the environment.

Mahalo nui loa,



Rachel Ah Sue
Co-Founder & President
Mālama Solar

SB-589

Submitted on: 1/27/2025 12:21:14 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Kathryn Troyan	Testifying for Alternate Energy Inc.	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawai‘i’s clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawai‘i achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

Mahalo,
Kathryn Troyan
Project Manager, Alternate Energy Inc.



INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL UNION 1260 EMPOWERING THE PACIFIC

THIRTY-THIRD LEGISLATURE, 2025, Joint Committee on Energy and Intergovernmental Affairs and Commerce and Consumer Affairs

HEARING DATE: Wednesday, January 29, 2025

TIME: 9:45 a.m.

PLACE: Senate Committee Room 229

RE: Senate Bill 589- OPPOSE

Aloha Honorable Chair(s) Wakai and Keohokalole, Vice-Chair(s) Chang and Fukunaga, and Joint Committee Members;

The International Brotherhood of Electrical Workers Local 1260 (IBEW 1260) would like to offer the following testimony in OPPOSITION to Senate Bill 589.

IBEW Local 1260, is comprised of approximately 3,000 members throughout Hawaii and Guam and consists of a diverse and highly-skilled workforce that supports the electric utility infrastructure across our state as well as government service contracts and broadcasting. It's our duty to serve and to protect the well-being of our members, but beyond that, it is incumbent upon all of us to serve and protect the well-being of our island home.

SB589 proposed to establish an installation goal for customer-sited distributed energy resources in the State and ensures its fair compensation as well as authorizes retail wheeling of renewable energy and requires that the PUC establish policies and procedures to implement wheeling and micro grid service tariffs.

IBEW Local 1260 generally supports the intent of this measure, however we do not believe that micro grids and retail wheeling have been fully vetted. The safety of our members and the State's electric utility workforce is of paramount concern when accepting third-party non-utility power generation into the utilities distribution infrastructure. The public utilities commission has re-opened discussions (Public Utilities Commission Docket No. 2024-0200) to explore the efficacy of such concepts, but have yet to provide clear guidance.

Until the time that such guidance from the PUC is provided and all concerns have been fully discussed, vetted, and addressed, IBEW Local 1260 believes any effort to establish micro grid and retail wheeling policies and procedure is premature and could adversely affect the electric utility's capacity to provide firm, safe, and reliable energy to the people of Hawaii. Moreover, the safety of the public and of the electric utility workforce must be considered and addressed before any such measure is adopted. Hawaii depends on a stable, reliable, resilient, and safe electric utility. As such we respectfully request that you HOLD this measure.

Mahalo for the opportunity to testify.

SB-589

Submitted on: 1/27/2025 11:16:12 AM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Fredrick Brooks	Testifying for Pacific Panel Cleaners	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation. This is the work needed to keep my local company thriving and to help support my teams families. We are a solar maintenance company.

Mahalo for our Kokua and hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589

SB-589

Submitted on: 1/27/2025 11:44:54 AM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Charles Chacko	Testifying for Credence Projects LLC	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/27/2025 12:58:49 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Julian Kahumana	Testifying for Alternate Energy Hawaii	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members,

As an invested stakeholder in Hawaii's clean energy future and a representative of Alternate Energy Hawaii, I write in strong support of SB589. This important bill aims to install 50,000 new rooftop solar and energy storage systems within five years, a goal critical to accelerating our renewable energy transition.

Hawaii's leadership in integrating solar and storage systems has demonstrated the potential of distributed energy resources to stabilize grid costs, enhance energy resilience, and reduce reliance on imported fossil fuels. Programs like the battery bonus initiative have already shown that investments in these technologies can address urgent grid challenges while providing affordable and reliable energy for all residents.

SB589's focus on expanding microgrids, community-based renewable energy, and fair compensation mechanisms aligns with the State's objectives of promoting energy independence and resilience. These efforts will ensure that clean energy solutions remain accessible to diverse communities, driving equitable economic growth and reducing energy costs statewide.

Mahalo for hearing this forward-thinking bill and allowing me the opportunity to voice my support. I urge the committee to advance SB589 to ensure a sustainable and resilient energy future for Hawaii.

Sincerely,
Julian Kahumana
Alternate Energy Hawaii
96-1276 Waihona St, Suite 114
Pearl City, HI 96782

SB-589

Submitted on: 1/27/2025 1:53:30 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Ella Aki	Testifying for Sol-Ark	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

Mahalo piha,

Ella H. Aki

SB-589

Submitted on: 1/27/2025 12:01:24 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Jeffrey Lum	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/27/2025 12:07:55 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Radford Nakamura	Individual	Support	Written Testimony Only

Comments:

Aloha,

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

Thanks,

Radford Nakamura

SB-589

Submitted on: 1/27/2025 12:29:40 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Justin Furuta	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/27/2025 12:34:31 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Miles	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

Sincerely,

Miles Yoshimoto

SB-589

Submitted on: 1/27/2025 12:40:29 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Yuko Ahina	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/27/2025 1:57:33 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
wei lian	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/27/2025 2:42:38 PM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Dason Fujimoto	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Wakai and Keohokalole; Vice Chairs Chang and Fukunaga, and committee members:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589.

SB-589

Submitted on: 1/28/2025 12:07:10 AM

Testimony for EIG on 1/29/2025 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Chelsea Uwekoolani-Vierra	Individual	Support	Written Testimony Only

Comments:

As an invested stakeholder in Hawaii's clean energy transition, I strongly support the implementation of a target to install 50,000 new rooftop solar and energy storage systems over the next five years, along with the necessary program modifications and adjustments to ensure the success of these incentives. New grid services capabilities, microgrids, and other innovative structures will not only help Hawaii achieve critical energy policy goals but will do so in a balanced manner that increases access to affordable energy, stabilizes grid costs, and drives economic growth and job creation.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB589, and thank you!