



JOSH GREEN, M.D.
GOVERNOR | KE 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
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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. 587, RELATING TO RENEWABLE ENERGY

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

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) require the Public Utilities Commission (Commission) to establish a streamlined grid-ready homes interconnection process; (2) authorizes the use of the Hawaii electricity reliability surcharge for cost recovery of certain expenses of the Hawaii electricity reliability administrator associated with the grid-ready homes interconnection process; and (3) require a report to the Legislature on the grid-ready homes interconnection process.

The Department appreciates the bill's intent to facilitate the State's transition to renewable energy and fully supports the commitment to achieve the clean energy goals and renewable energy requirements of Act 97, Session Laws of Hawaii 2015. While the

Department agrees that a customer friendly process to enable widespread adoption of distributed energy resources (DER) and electrification technologies could facilitate the transition to a clean energy economy, the Department offers that many of the elements set forth in the measure are complicated and that these issues would best be addressed in the Commission's on-going proceeding regarding DER, Docket No. 2019-0323.

The Department has equity concerns with using ratepayer funds to cover costs of infrastructure upgrades that would allow customers with the financial means to cover the significant upfront costs of purchasing customer-sited renewable energy and storage systems.

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

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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. 587
Title: RELATING TO RENEWABLE ENERGY

Position:

The Public Utilities Commission ("Commission") offers comments on this measure for consideration.

Comments:

The Commission appreciates the intent of this measure to establish streamlined and transparent interconnection processes for residential customers.

This measure would task the Commission to establish a streamlined "grid-ready home" interconnection process for grid-tied renewable energy generation and storage systems within 180 days of the effective date of this legislation. The process includes a list of specific requirements, such as establishing a cost-sharing fee to address service upgrades where necessary and requiring the regulated electric utilities to process notifications and grant interconnection to grid-ready homes within two weeks for applicable systems. While the Commission supports efforts to expedite the interconnection of distributed energy resources, to establish the prescribed process in this measure would require considerable time and resources among various parties and stakeholders. Furthermore, this measure contemplates the role of a Hawaii Electricity Reliability Administrator ("HERA") to facilitate the implementation of this interconnection process. Currently, the Commission is in the process of acquiring the HERA who would assist in this effort.

The Commission suggests that the legislature allow the Commission and stakeholders an opportunity to fully examine and collaborate on establishing a streamlined grid-ready homes interconnection process. Within 180 days of the effective date of this legislation, the Commission would report back to the legislature with detailed steps and a timeline on how to best achieve the objectives and requirements outlined in this measure.

Thank you for the opportunity to testify on this measure.

TESLA

TO: Senator Jarrett Keohokalole, Chair
Senator Carol Fukunaga, Vice Chair
Members of the Committee on Commerce and Consumer Protection
Senator Glenn Wakai, Chair
Senator Stanley Chang, Vice Chair
Members of the Committee on Energy and Intergovernmental Affairs

FR: Noelani Derrickson *Noelani Derrickson*
Public Policy & Business Development
Tesla

RE: SB587 Relating to Renewable Energy - **SUPPORTS**

Thank you for the opportunity to provide testimony regarding S.B. 587, which requires the Hawaii Public Utilities Commission to establish a streamlined grid-ready homes interconnection process.

Tesla **strongly supports S.B. 587**, as it addresses a key obstacle for Hawaii residents to adopt innovative technologies in their homes. Simplifying the interconnection process for grid-interactive technologies directly supports residential energy cost savings, homeowner resilience, and grid reliability.

Tesla also proposes specific amendments which expand the bill to include electric vehicle charging technologies that can provide additive grid benefits. Vehicle-to-grid systems, which can provide backup power to a home and valuable energy services to the electric grid, have broad benefits and are an important future component of grid-ready homes.

Suggested Language:

Section 3. §269-142

(e) Within one hundred eighty days of the effective date of this Act, the commission shall open a proceeding to evaluate the readiness of the electric utility's interconnection requirements to support vehicle-to-grid systems. The Commission shall direct the electric utility to file updates to address identified interconnection gaps, including codification of standards to allow vehicle-to-grid systems to interconnect to the electric utility's system."

SB-587

Submitted on: 1/27/2025 11:43:42 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 "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition. Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB587.

SB-587

Submitted on: 1/27/2025 12:55:17 PM

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

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

Comments:

To the Members of the Hawaii State Legislature,

I am writing to express my strong support for Senate Bill 587, which aims to establish a streamlined interconnection process for grid-ready homes and further Hawaii's commitment to achieving a 100% renewable energy portfolio standard by 2045. This bill is not only a logical progression of the State's clean energy goals but also a vital step toward ensuring equitable access to renewable energy solutions for Hawaii's residents.

The Value of SB587

Hawaii has long been a leader in renewable energy initiatives. With its heavy reliance on imported fossil fuels, transitioning to locally sourced renewable energy is paramount to achieving energy independence, economic sustainability, and environmental resilience. However, the existing interconnection processes are often cumbersome, leading to delays, unanticipated costs, and dissatisfaction among consumers eager to adopt distributed energy resources.

SB587 addresses these barriers by establishing a clear, transparent, and customer-friendly process that ensures timely interconnection while mitigating power quality issues. Key provisions, such as the cost-sharing mechanism for necessary utility upgrades and the implementation of virtual commissioning protocols, are innovative solutions that will encourage the adoption of clean energy technologies.

The Importance of Grid-Ready Homes

By enabling homes to be "grid-ready," the bill ensures that residents can easily integrate technologies like photovoltaic systems, electric vehicle chargers, and advanced grid modernization equipment. This foresight reduces future grid investments and enhances reliability, which is crucial in a state where resilience against natural disasters and grid disturbances is critical.

Moreover, the streamlined process reduces administrative hurdles, allowing utilities to plan proactively and consumers to adopt renewable technologies with confidence. This not only accelerates progress toward Hawaii's renewable energy targets but also supports economic growth by driving demand for clean energy products and services.

Additional Supporting Arguments

1. **Economic Benefits:** Streamlining interconnection will reduce costs for consumers and utilities alike. It will create local jobs in renewable energy installation and grid modernization, bolstering Hawaii's economy.
2. **Environmental Stewardship:** Reducing reliance on fossil fuels decreases greenhouse gas emissions and aligns with global efforts to combat climate change, protecting Hawaii's unique and vulnerable ecosystems.
3. **Equity and Accessibility:** The bill's provisions ensure fair access to renewable energy across diverse communities, helping to bridge the energy equity gap.

In conclusion, SB587 is a forward-thinking piece of legislation that lays the groundwork for a clean, sustainable, and resilient energy future for Hawaii. It is critical for ensuring that the State continues to lead by example in the global transition to renewable energy.

I urge you to support SB587 and ensure its swift passage. This legislation is not only essential for achieving our renewable energy goals but also for securing a more sustainable and equitable future for all of Hawaii's residents.

Thank you for your consideration.

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



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. 587 – 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 appreciates the intent but opposes this measure as written.

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 interconnection and utility service upgrade process has been designed to be as streamlined and "user friendly" as possible. When the applicant provides all necessary information and materials up front, the process can usually be completed within 30 days. This process ensures that KIUC can thoroughly review application materials and electrical drawings to ensure that the system can safely be connected to the grid. Upon completion of the installation of the system, KIUC conducts a field "witness test" to ensure that the proper system components were installed based on plan specifications and to prevent the connection of any illegal equipment or components. This is a reasonable timeframe to ensure the work is completed correctly and in a manner that ensures no negative impact to the grid.

KIUC's primary concern with this measure is the timeframes it prescribes for completion of work related to interconnections and service upgrades. It is not unusual for there to be information missing from an application, or complications that are unforeseen by the customer and/or KIUC. Also, other high priority work might arise (e.g., response to weather or other emergencies), which would temporarily divert staff attention and prevent us from meeting the deadlines currently contained in the bill.

A flat-rate cost-sharing fee of \$350 to be paid by all PV customers would prevent KIUC from charging individual customers for the upgrades resulting from the installation of their system. This would be a major change to our current procedure and the \$350 would not cover the costs associated with upgrades, especially with the influx of transformer upgrades needed to support the rise in PV connections. This arbitrary flat fee does not seem equitable and would have smaller systems pay the same amount as those installing massive systems. Any costs over and above what the fee would cover would be borne by all customers.

KIUC also does not permit the use of "meter socket adapters" for any PV installation.

We recommend that the timeframes included in (d) (3), (d) (4), and (d) (5) be removed from the measure. KIUC also recommends that "meter socket adapters" be removed from (c) (1) and that the fee charged under (d) (2) be further evaluated.

Mahalo for the opportunity to comment.



**Hawaiian
Electric**

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

**SB 587
Relating to Renewable Energy**

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

LATE

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 ("Company") **in opposition** to SB 587.

Hawaiian Electric supports the intent of this bill -- to continue to grow Distributed Energy Resources ("DER") in Hawai'i, and develop a streamlined interconnection process for "grid-ready homes." 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 a critical piece of our resource portfolio. They are necessary 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 appears to require a streamlined approval process solely based on the DERs using UL 1741 or equivalent certified functionality. While these types of equipment certifications are important and provide confirmation that inverters meet

stringent technical and safety standards, the utility needs to review more information about the system to safely interconnect the system to the Company's grid. Specifically, in Hawaiian Electric's interconnection process, the Company reviews the advanced inverter qualifications and whether the total electric grid (system-level) and the neighboring area (distribution-level) can accept the proposed size of the DER. This bill would appear to undermine the interconnection review and approval process that is needed for the Company to ensure safe interconnections and reliable service to all customers. It is worth noting that the Company has continued to perform exceptionally well in this area as evidenced by its continued achievement for the past four years of performance incentives designed by the Public Utilities Commission and stakeholders to improve DER interconnection approval timelines.

In addition, this bill appears to focus on streamlining the Company's service upgrade process. On this issue, the Company has multiple questions about the proposals in the bill. It is not clear how the \$350 cost for upgrades was based, and which entity would receive those funds. The bill would require that upgrades be made within three months, but it does not clarify when the starting point of that timeframe would be. The Company has had multiple discussions with the solar industry on the service upgrade process. The Company submits that improvements to the process are better made through the collaborative process rather than through legislation.

HB 340 would also allow the use of the Hawai'i electricity reliability surcharge to recover costs related to the streamlined interconnection process and the work of the Hawai'i Electricity Reliability Administrator ("HERA"). As mentioned above, while the Company supports the intent of this bill, it opposes the process proposed by the bill and submits that HERA is not needed to oversee such a process. The Company further

notes that any use of the Hawai'i electricity reliability surcharge and HERA would result in additional costs to Hawaiian Electric customers and is not the most cost-effective way to achieve the goals stated in this bill.

For all these reasons, Hawaiian Electric opposes SB 587. Thank you for this opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding SB587, 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 SB587**, which establishes a grid-ready home interconnection process to accelerate the adoption of advanced distributed energy resources (DERs) and electrification technologies. ***We also offer amendments to add electric vehicle charging, vehicle-to-home, and vehicle-to-grid (V2G) technologies to the bill.***

Hawaii's transition to a 100% renewable energy future, as mandated by Act 97 (2015), is a vital step toward energy independence and affordability, economic sustainability, and environmental resilience. The "Grid Ready Homes" initiative addresses key barriers to this transition by streamlining interconnection processes, minimizing delays, and enabling proactive utility planning—all of which are essential to meeting our state's clean energy, affordability, and resilience goals.

Supporting DER Adoption to Reduce Energy Costs for All Ratepayers

Grid-ready homes represent a low-cost, high-impact solution to expedite the deployment of advanced DERs, such as paired solar and energy storage, electric vehicle charging, and vehicle-to-grid technologies. By reducing interconnection bottlenecks and costly infrastructure upgrades, this bill enables customers to install grid-interactive clean energy technologies rapidly and affordably. More widespread adoption of these advanced DERs helps stabilize and ultimately reduce electricity rates for all ratepayers by:

1. **Reducing Dependence on Fossil Fuels:** Rapidly transitioning to locally available renewable energy sources will lessen Hawaii's vulnerability to global fuel price volatility and the aging and increasingly unreliable electricity grid dependent on those fossil fuels.
2. **Lowering Infrastructure Costs:** By empowering customer-sited generation and storage, and other electrification technologies, we can avoid or defer costly utility-scale investments in transmission and distribution infrastructure.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Driving Economic Growth and Innovation

The "Grid Ready Homes" initiative will stimulate Hawaii's clean energy economy by creating jobs in the solar, energy storage, and electrification industries. Local contractors, electricians, and energy companies will benefit from the streamlined permitting and interconnection processes, driving investment in innovative technologies and services. Furthermore, incorporating advanced grid modernization standards, such as V2G functionality, further solidifies Hawaii as a leader in the clean energy transition and builds resilience into our energy systems.

Building Resilience and Reliability in the Face of Climate Change

With an aging and costly fossil fuel-based energy infrastructure, Hawaii faces increased risks of outages and power quality issues. Grid-ready homes with integrated DERs enhance resilience by decentralizing energy generation and enabling communities to maintain power during disruptions. The bill's focus on smart inverter functionality and managed power export/import ensures that grid reliability is maintained while accommodating increased customer demand.

A Pragmatic and Cost-Effective Solution

This legislation offers a pragmatic pathway to achieving Hawaii's clean energy and resilience goals. Key provisions, such as the \$350 cost-sharing fee for necessary upgrades and the streamlined interconnection timeline, balance customer affordability with utility operational needs. By enabling virtual commissioning and expediting interconnection processes, this bill ensures that customers can adopt clean energy technologies without unnecessary delays or costs.

Adding Electric Vehicle Charging, Vehicle-to-Grid, and Vehicle-to-Home Functionalities

We offer the following amendments to ensure that Hawaii is at the forefront of integrating electric vehicles and related functionalities:

Under Section 3 (d) add subpart 5:

5. Requirements obligating regulated utilities to update their interconnection rules by July 1, 2025, to incorporate V2G compliance requirements to allow for the interconnection and



Hawaii Solar Energy Association
Serving Hawaii Since 1977

utilization of vehicle-to-grid capabilities, including vehicle to home and vehicle to grid services. Updates to the interconnection rules pursuant to this section should include recognition of UL 1741 SC and the UL 1741 QIKP certification.

Under Section 5 (c) subpart 1 add “electric vehicle charging”:

(c) The grid-ready home interconnection process aligns with principles of advanced grid modernization technology by:

1. Streamlining customer access to renewable energy, **electric vehicle charging**, and storage resources.
2. Enhancing customer participation in resilience enhancing energy programs through rapid integration.
3. Optimizing grid operations to accommodate increased electrification while minimizing infrastructure costs.

Conclusion

SB587 aligns with Hawaii’s commitment to a 100% renewable and affordable energy future, while simultaneously addressing current barriers to DER adoption. It is a low-cost, effective solution that reduces energy costs for ratepayers, drives economic growth and innovation, and builds resilience and reliability into our energy systems. I urge this committee to advance this measure and take a critical step toward securing a low-cost, resilient, and clean energy future for the people of Hawaii.

Thank you for the opportunity to testify in strong support of this important legislation.

Sincerely,

/s/ Rocky Mould

Executive Director

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



Hawaii Solar Energy Association
Serving Hawaii Since 1977

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.



To: The Senate Committee on Energy and Intergovernmental Affairs (EIG)
And
The Senate Committee on Commerce and Consumer Protection (CPN)
From: Sherry Pollack, 350Hawaii.org
Date: Wednesday, January 29, 2025, 9:45am

In support of SB587

Aloha Chairs Wakai and Keohokalole, Vice Chairs Chang and Fukunaga, and members of the EIG and CPN committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports SB587** that requires the Public Utilities Commission to establish a streamlined grid-ready homes interconnection process.

With the highest electrical rates in the country and the impacts of climate change already being felt, we need to move forward on smart solutions that will help facilitate our clean energy transition, help families lower their electricity bills, and at the same time make us more resilient. This bill will help to do all of that.

Establishing a grid—ready home interconnection process that supports the rapid adoption of clean energy technologies is a much-needed common sense solution and an important step toward Hawaii meeting our clean energy goals. Bottom line, Hawaii will not be able to reach its carbon reduction goals if we do not enact policies that support these outcomes. Removing unnecessary obstacles that impede progress on Hawaii's renewable energy and climate resilience goals is critical.

Climate change is happening now, we are causing it, and the longer we wait to act, the more we lose.

Mahalo for the opportunity to testify.

Sherry Pollack
Co-Founder, 350Hawaii.org

January 29, 2025

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

RE: SB587 – 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 SB587** relating to Renewable Energy.

This bill requires the Public Utilities Commission to establish a streamlined grid-ready homes interconnection process. Authorizes the use of the Hawaii electricity reliability surcharge for cost recovery of certain expenses of the Hawaii electricity reliability administrator associated with the grid-ready homes interconnection process. Requires report to the Legislature on the grid-ready homes interconnection process.

COMMENTS

As an invested stakeholder in Hawaii's clean energy transition, we strongly support the "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition.

Interconnection and permitting costs are one of the main drivers of total installation costs for solar energy, representing anywhere from 20-30% of the total cost to install the system. By expediting the interconnection process for systems that have demonstrated a grid benefit, this bill not only lowers costs but allows for beneficial technology to be installed that helps all electric customers.

This bill could be further improved by streamlining the interconnection process for two way and one way EV chargers, allowing these assets to be deployed in a way that increases resilience in homes and communities. We ask that you include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Solaray is a local, employee-owned solar business owned and operated in Hawaii for over 50 years, we are testifying in **STRONG SUPPORT of SB587** and urge the committee to incorporate our suggested amendments to this measure.

Thank you for your time and consideration,

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

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



Green Power Projects LLC
Alan Lennard, Managing Director
P.O. Box 818
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LATE

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

In Strong Support for SB587 Grid Ready Homes

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 "Grid Ready Homes" initiative.

This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers.

Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition.

Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Respectfully,

Alan Lennard -dig signature

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

SB-587

Submitted on: 1/27/2025 1:51:57 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 "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition. Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB587.

Mahalo piha,

Ella H. Aki

SB-587

Submitted on: 1/27/2025 1:56:47 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 "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition. Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Mahalo.

SB-587

Submitted on: 1/27/2025 12:00:28 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 "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition. Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB587.

SB-587

Submitted on: 1/27/2025 12:38:58 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 "Grid Ready Homes" initiative. This legislation will streamline the interconnection process, enabling faster and more affordable deployment of advanced distributed energy resources (DERs) like solar, energy storage and electric vehicle charging (with the appropriate amendments). By reducing interconnection bottlenecks and costly infrastructure upgrades, the bill will help stabilize and lower electricity rates for all ratepayers. Additionally, it will drive economic growth by creating jobs in the solar and energy storage sectors, positioning Hawaii as a leader in the clean energy transition. Please include amendments to add electric vehicle charging, vehicle-to-grid (V2G) and vehicle-to-home functionalities to the bill.

Mahalo for hearing this critically important and innovative bill and providing me the opportunity to testify. Please advance SB587.

SB-587

Submitted on: 1/27/2025 2:43:58 PM

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

Submitted By	Organization	Testifier Position	Testify
David Thompson	Individual	Support	Written Testimony Only

Comments:

I'm in strong support of this bill.

To the Honorable Chair and Members of the Committee:

My name is Tahan Bapna, and I am a sophomore in high school. I strongly support S.B. 587 because it takes a significant step toward making clean energy adoption more accessible, efficient, and reliable for Hawaii residents. This bill addresses some of the key barriers to renewable energy integration and promotes grid modernization in a way that benefits both individual homeowners and the state as a whole.

Hawaii's commitment to achieving a 100% renewable portfolio standard by 2045 is admirable, but progress has been hindered by outdated and complex interconnection processes. Homeowners who want to adopt distributed energy resources like solar panels and batteries often face delays, unexpected costs, and uncertainty when connecting to the grid. These challenges not only discourage clean energy adoption but also make it difficult for utilities to plan and maintain grid reliability.

S.B. 587 introduces the concept of "grid-ready homes," which ensures that residential properties are pre-equipped to seamlessly integrate clean energy technologies such as solar panels, batteries, and EV chargers. By streamlining the interconnection process, this bill enables faster adoption of clean technologies and reduces administrative hurdles for both homeowners and utilities.

One of the most impactful provisions in this bill is the requirement for regulated electric utilities to process interconnection notifications and grant approvals for grid-ready homes within two weeks. This creates a predictable and customer-friendly process that encourages more residents to invest in renewable energy. Additionally, the inclusion of smart inverter standards and managed power export capabilities ensures that the grid can remain stable and reliable as more homes adopt clean technologies.

The bill also includes practical measures to address costs associated with grid upgrades. The \$350 cost-sharing fee ensures that infrastructure upgrades are fairly distributed while incentivizing investments in grid modernization. Furthermore, the virtual commissioning process eliminates unnecessary delays by allowing installers to confirm compliance remotely, saving time and resources.

S.B. 587 aligns with Hawaii's broader goals of reducing greenhouse gas emissions, improving energy resilience, and ensuring a sustainable future for all residents. By making clean energy adoption easier and more efficient, this bill not only supports environmental goals but also reduces long-term energy costs for homeowners and enhances grid reliability statewide.

As someone who is passionate about the future of renewable energy, I urge you to pass S.B. 587. This legislation is an essential step toward achieving Hawaii's clean energy goals and empowering residents to participate in the transition to a sustainable energy economy.

Thank you for the opportunity to testify in strong support of this bill.

Sincerely,
Tahan Bapna