

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI A HO'OMĀKA'IKA'I

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813

Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Web site: dbedt.hawaii.gov

JOSH GREEN, M.D. GOVERNOR

CHRIS J. SADAYASU

DANE K. WICKER
DEPUTY DIRECTOR

Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of CHRIS J. SADAYASU

Director

Department of Business, Economic Development, and Tourism before the

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND

SENATE COMMITTEE ON COMMERCE, AND CONSUMER PROTECTION

Tuesday, March 21, 2023
9:45 AM
State Capitol, Conference Room 229
in consideration of
HB 949, HD2
RELATING TO RENEWABLE ENERGY.

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

The Department of Business, Economic Development and Tourism ("DBEDT") **supports** HB949, HD2, which establishes and appropriates funds for a program to provide low and moderate-income households with below market loans to install photovoltaic and energy storage systems.

Additional loan capital for solar+storage investments are necessary to help underserved ratepayers reduce their growing financial energy burdens, facilitate an equitable transition to renewable energy, and enhance the resiliency and stability of electrical grids. Expanding the Hawaii Green Infrastructure Authority's ability to finance rooftop solar is a necessary step in helping Hawaii achieve its goal of a 100% renewable portfolio standard in energy production by 2045.

We support this bill provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Thank you for this opportunity to testify in support of House Bill 949, HD2.



HAWAII GREEN INFRASTRUCTURE AUTHORITY

GWEN S. YAMAMOTO LAU

EXECUTIVE DIRECTOR

Telephone: (808) 587-3868

Web site: gems.hawaii.gov

No. 1 Capitol District Building, 250 South Hotel Street, Suite 501, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Testimony of Gwen Yamamoto Lau

Executive Director

Hawaii Green Infrastructure Authority

before the

Senate Committees on Energy, Economic Development and Tourism and Commerce and Consumer Protection

March 21, 2023, 9:45 AM State Capitol, Conference Room 229 in consideration of

House Bill No. 949, HD2 RELATING RENEWABLE TO ENERGY

Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga and Members of the Energy, Economic Development & Tourism and Commerce & Consumer Protection Committees:

Thank you for the opportunity to testify and provide comments on House Bill No. 949, HD2, relating to renewable energy. The Hawai'i Green Infrastructure Authority (HGIA) **strongly supports** this bill which establishes and appropriates funds for a program to provide low and moderate-income households with below market loans to install photovoltaic and energy storage systems.

HGIA, Hawai'i's Green Bank, works to advance the State's goals of a 100% renewable portfolio standard in energy production by leveraging innovative financing mechanisms to democratize clean energy by making financing more affordable and accessible to ratepayers previously locked out of solar. The State's efforts to achieve its clean energy goals rely on 100% of residential rooftops bearing solar, which will require an estimated \$15.0 billion in solar + storage investments over the next twenty-two years.

More importantly, with 44% of Hawaii's families classified as asset limited, income constrained, employed ("ALICE"), our underserved ratepayers are facing disproportionate financial burdens with rising inflation and unprecedented spikes in electricity costs, straining their already tight household budgets. Based on the Federal Reserve Bank's unbanked/underbanked metric, an estimated 75,000 rooftops may not qualify for traditional financing, representing a \$3.75 billion financing gap. This additional loan capital, which will allow HGIA to also finance energy storage systems, will be a game-changer helping underserved ratepayers reduce their energy burden while facilitating an equitable transition to renewable energy, and enhancing resiliency and grid stability. With the launch of Solarize808 campaigns and additional tax incentives for disadvantaged communities in the Inflation Reduction Act, this is a timely opportunity to assist our ALICE families decrease their electric utility bills with long-term savings expected over the life of the system that can be used toward necessary household expenses.

Unlike HGIA's existing GEMS loan funds, with all principal and interest repaid transferred to the Hawaii Public Utilities Commission on an annual basis, appropriations approved under this bill are intended to capitalize a revolving loan fund, with interest earned providing a revenue stream to become a financially self-sustaining program, and principal repaid to be recycled and re-invested to assist more ALICE families lower their cost of energy.

HGIA intends to also apply for Federal funds under the Inflation Reduction Act's Greenhouse Gas Reduction Funds. While matching funds are not required, the EPA has indicated that leveraging Federal funds will be the 3rd priority for this highly competitive grant application process, making this bill and appropriations even more important to attract additional Federal funds into Hawaii to reduce greenhouse gas emissions (1st priority) and deliver benefits to disadvantaged communities (2nd priority).

Thank you for this opportunity to testify and provide comments in support of HB 949, HD2.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

MARK B. GLICK CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: Web:

(808) 587-3807 energy.hawaii.gov

Testimony of MARK B. GLICK, Chief Energy Officer

before the SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND COMMERCE AND CONSUMER PROTECTION

Tuesday, March 21, 2023 9:45 AM State Capitol, Conference Room 229 & Videoconference

In SUPPORT of HB 949, HD2

RELATING TO RENEWABLE ENERGY.

Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and Members of the Committees, the Hawai'i State Energy Office (HSEO) supports HB 949, HD2, which would establish and appropriate funds for a solar energy storage system loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install solar energy storage systems.

HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, energy resiliency, and clean transportation to help achieve a decarbonized economy. With the Federal Reserve Bank increasing interest rates to combat inflation, the cost of capital to finance energy efficiency and solar projects is becoming more unattainable, especially for the economically disadvantaged.

HSEO supports providing mechanisms and funding to provide lower cost financing to help undeserved ratepayers reduce their utility bills as well as acquire storage systems that will assist with grid stability. In addition, a revolving loan fund that is capitalized by appropriations as proposed in this bill would offer significant benefits in

Hawai'i State Energy Office HB 949, HD2 – RELATING TO RENEWABLE ENERGY – Support March 21, 2023 Page 2

that the principal and interest repaid could be used in perpetuity to issue more loans supporting residential solar projects. The establishment of this program would also place Hawai'i in a more competitive position when applying for federal grants under the Inflation Reduction Act, where proof of a sustainable source of matching funds would bolster the chances of acquiring additional funding to support Hawai'i's energy initiatives.

HSEO defers to the Hawai'i Green Infrastructure Authority on matters pertaining to appropriations and revolving loan funds.

HSEO appreciates the intent of the proposal to increase the proliferation of PV solar systems and energy storage systems that will help us reach the goal of 100% renewable electricity.

Thank you for the opportunity to testify.



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

SYLVIA LUKELIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

STATE OF HAWAII | KA MOKUʻĀINA ʻO HAWAIʻI OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS KA ʻOIHANA PILI KĀLEPA

NADINE Y. ANDO DIRECTOR | KA LUNA HO'OKELE

DEAN I HAZAMADEPUTY DIRECTOR | KA HOPE LUNA HO'OKELE

335 MERCHANT STREET, ROOM 310 P.O. BOX 541 HONOLULU, HAWAII 96809 Phone Number: (808) 586-2850 Fax Number: (808) 586-2856

Testimony of the Department of Commerce and Consumer Affairs

cca.hawaii.gov

Before the
Senate Committee on Energy, Economic Development, and Tourism
And
Senate Committee on Commerce and Consumer Protection
Tuesday, March 21, 2023
9:45 a.m.
Conference Room 229

On the following measure: H.B. 949, H.D. 2, RELATING TO RENEWABLE ENERGY

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

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

The purpose of this bill is to establish and appropriate funds for: (1) a solar energy storage system loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install solar energy storage systems; and (2) a renewable energy system installation loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

The Department supports this bill since it would establish and provide funds that would allow low to moderate income households to take advantage of renewable energy technology and reduce their energy burden. Low to moderate income households pay a

Testimony of DCCA H.B. 949, H.D. 2 Page 2 of 2

disproportionately higher percentage of their income towards energy bills and do not have the financial means to pursue the installation of renewable energy technologies. The proposed solar energy system revolving fund would directly address the financial barrier that has prevented many struggling households from reducing their energy burden and moving towards energy independence.

The Department especially appreciates that the solar energy system revolving loan fund will be funded by the general fund and not through fees assessed on utility customers through their monthly bills. Other programs that seek funding through utility rates do not adequately consider that utility rates are regressive and will increase utility bills for all customers, especially low to moderate income households whose energy burden will only increase. Additional fees to pay for the loan fund through utility rates would further increase the energy bills that many customers have struggled to pay, especially during the pandemic and over the last year when significant bill increases occurred. As currently drafted, this measure avoids placing an additional financial burden on those households that this bill attempts to support.

Thank you for the opportunity to testify on this bill, and we respectfully ask the Committee to pass this bill.

JOSH GREEN, M.D. GOVERNOR

OFFICE OF THE PUBLIC DEFENDER

EMPLOYEES' RETIREMENT SYSTEM HAWAI'I EMPLOYER-UNION HEALTH BENEFITS TRUST FUND

OF HAM.

LUIS P. SALAVERIA

SABRINA NASIR DEPUTY DIRECTOR

STATE OF HAWAI'I DEPARTMENT OF BUDGET AND FINANCE

Ka 'Oihana Mālama Mo'ohelu a Kālā P.O. BOX 150 HONOLULU, HAWAI'I 96810-0150 ADMINISTRATIVE AND RESEARCH OFFICE BUDGET, PROGRAM PLANNING AND MANAGEMENT DIVISION FINANCIAL ADMINISTRATION DIVISION OFFICE OF FEDERAL AWARDS MANAGEMENT

WRITTEN ONLY

TESTIMONY BY LUIS P. SALAVERIA
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND
TOURISM AND COMMERCE AND CONSUMER PROTECTION
ON
HOUSE BILL NO. 949. H.D. 2

March 21, 2023 9:45 a.m. Room 229 and Videoconference

RELATING TO RENEWABLE ENERGY

The Department of Budget and Finance (B&F) offers comments on this bill.

House Bill (H.B.) No. 949, H.D. 2: 1) establishes the Solar Energy Storage

System Loan Program (SESSLP) and the Renewable Energy System Installation Loan

Program (RESILP) to be administered by the Hawai'i Green Infrastructure Authority

(HGIA) of the Department of Business, Economic Development and Tourism;

- 2) establishes the Solar Energy System Revolving Loan Fund (SESRLF);
- 3) appropriates an undetermined amount of general funds for FY 24 to be deposited into the SESRLF; and 4) appropriates an undetermined amount of special funds out of the SESRLF for FY 24 to issue loans as provided for by the SESSLP and RESILP.

As a matter of general policy, B&F does not support the creation of any revolving fund which does not meet the requirements of Section 37-52.4, HRS. Revolving funds should: 1) serve a need as demonstrated by the purpose, scope of work and an explanation why the program cannot be implemented successfully under the general fund appropriation process; 2) reflect a clear nexus between the benefits sought and

charges made upon the users or beneficiaries or a clear link between the program and the sources of revenue; 3) provide an appropriate means of financing for the program or activity; and 4) demonstrate the capacity to be financially self-sustaining. Regarding H.B. No. 949, H.D. 2, it is difficult to determine whether the proposed revolving fund would be self-sustaining as there does not appear to be any significant source of revenues to support the SESRLF aside from appropriations from the Legislature, contributions from public or private partners, and interest earned or accrued on moneys deposited into the fund.

One point of concern is that other sub-accounts and/or sub funds for loan programs administered by the HGIA serve as revolving lines of credit within the HGIA special fund and were funded with proceeds from the HGIA special fund, thus these sub-accounts/sub funds are also special funded. This measure does not make a distinction as to whether the SESRLF will also serve as a special funded revolving line of credit, or if the SESRLF, which will be used for the new SESSLP and RESILP is a separate revolving fund within the HGIA.

Finally, it should be pointed out that H.B. No. 949, H.D. 2, does not include language addressing the deposit of revenues received as repayment for principal and interest of any loans issued under either program.

Thank you for your consideration of our comments.



Hawaii Solar Energy Association Serving Hawaii Since 1977

Testimony of The Hawaii Solar Energy Association (HSEA) Regarding HB949 HD2, Relating to Renewable Energy, Before the Senate Committee on Energy, Economic Development, and Tourism and the Senate Committee on Commerce and Consumer Protection

Tuesday, March 21, 2023

Aloha Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and committee members:

The Hawaii Solar Energy Association (HSEA) **strongly supports HB949 HD2**, which establishes and appropriates funds for a solar energy storage loan program and a renewable energy loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install residential photovoltaic and energy storage systems.

HSEA members include the majority of locally owned and operated renewable energy companies doing business in the State and leading global cleantech manufacturers and service providers that invest and sell in our market. We employ thousands of residents in diverse green economy jobs that innovate, design, and build our path to a renewable energy future. We advocate for policies that help Hawaii achieve critical climate and resilience goals by enabling residents and businesses to invest in and benefit from the transition to clean energy. These investments provide resilient power that reduces energy burden for all and contributes to energy security and reliability as we decarbonize our economy and electric grid.

HSEA and its members are actively engaged in efforts to remove barriers and increase access to affordable renewable energy. This bill would create a powerful tool to extend the benefits of distributed, rooftop solar and energy storage to underserved market segments and frontline communities, and greatly enhance Hawaii's resilience, sustainability, and equity as we decarbonize our economy and transition to clean energy.

HSEA strongly supports HB949 HD2 and urges the committee to advance this measure.

Thank you for the opportunity to testify.

Respectfully,

/s/ Rocky Mould



Hawaii Solar Energy Association Serving Hawaii Since 1977

Rocky Mould Executive Director



Hawaii Environmental Change Agents' Decarbonization of Buildings Task Force

March 18, 2023

Position: **Support** of HB949 HD2

Aloha Chair DeCoite, Chair Keohokalole, and Members of the EET and CPN Committees:

I am submitting testimony in **strong support** of HB949 HD2. This Act will do the following:

- Aid the state in an equitable transition to clean energy
- This bill seeks to solidify that commitment to this transition by making solar and energy storage systems affordable and accessible for those in the ALICE (Asset Limited, Income Constrained, Employed) population.
- Without this programs, capital constrained households will be unable to switch to lower, cleaner sources of electricity.
- As solar energy is currently about one-half the cost of oil-fired electricity, this population would directly benefit from a program that helps them overcome financial challenges such as high electricity costs and inflation.

Please pass this bill out of your committees.
Respectfully,
Paul Bernstein
Chair of HECA's Decarbonization of Buildings Task Force



WRITTEN TESTIMONY BEFORE THE SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND COMMERCE AND CONSUMER PROTECTION

HB 949, HD 2 Relating to Renewable Energy

Tuesday, March 21, 2023 9:45 am Conference Room 229

Kaʻiulani Shinsato Director, Customer Energy Resources Programs Hawaiian Electric

Aloha Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and Committee Members.

My name is Kaʻiulani Shinsato and I am testifying on behalf of Hawaiian Electric in support of HB 949, HD2.

HB949, HD2 establishes and appropriates funds for a solar energy storage system loan program to provide asset limited, income constrained, employed ("ALICE") households with low-interest loans to purchase and install solar energy storage systems. It establishes and appropriates funds for a renewable energy system installation loan program to provide low-interest loans to ALICE households for the purchase and installation of residential solar and energy storage systems.

Hawaiian Electric supports HB949, HD2. While Hawaii already leads the nation in the adoption of customer-sited rooftop solar, the continued growth of customer energy resources, such as rooftop solar and energy storage, is critical to achieving Hawaii's decarbonization and renewable energy goals. Thus, Hawaiian Electric is continuously seeking ways to expand access of rooftop solar and energy storage

systems to customers -- in particular, ALICE households -- in a way that is fair and sustainable to all customers. HB949, HD2 is aligned with that objective because it would provide a financing mechanism for ALICE households to have access to rooftop solar and energy storage systems. Expanding access to underserved communities will greatly enhance Hawai'i's resilience, sustainability, and equity as we decarbonize our economy and electric grids and transition to clean energy.

Thank you for this opportunity to provide testimony in support of HB 949, HD2.



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

and

The Senate Committee on Commerce and Consumer Protection (CPN)

From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, March 21, 2023, 9:45am

In strong support of HB949 HD2

Aloha Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and members of the EET 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 is in **strong support of HB949 HD2** that would establish and appropriates funds for a solar energy storage system loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install solar energy storage systems. This measure further establishes and appropriates funds for a renewable energy system installation loan program to provide low- and moderate-income families with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

Hawaii will not be able to reach its carbon reduction goals if we do not enact policies that support these outcomes. 350Hawaii fully supports efforts by the legislature to establish social equity as a foundational principle in the State's efforts to strengthen climate resilience, including low-interest loan programs as described in this measure. Without this program, capital constrained households will be unable to switch to lower, cleaner sources of electricity. Furthermore, as solar energy is currently about one-half the cost of oil-fired electricity, ALICE (Asset Limited, Income Constrained, Employed) households would directly benefit from a program that helps overcome financial challenges such as high electricity costs and inflation.

A Just Transition means leaving no one behind. That includes efforts such as HB949 HD2 that help to remove barriers and increase access to affordable renewable energy.

Mahalo for the opportunity to testify in **strong support** of this important legislation.

Sherry Pollack Co-Founder, 350Hawaii.org

Submitted on: 3/19/2023 8:11:34 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Helen Cox	Testifying for Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Aloha Committee Chair and Members,

I am writing on behalf of Kauai Climate Action Coalition (KCAC), a group of about 150 Kauai residents who are committed to address the climate crisis we face through education, policy change, and direct action. Please pass HB949, a loan program for low-income residents to purchase phtovoltaic systems and energy storage. We all know we must make the transition away from fossil fuels, but that transition cannot be successful unless it is also equitable. This bill will enable employed low income residents to purchase solar systems and battery stoarge. As renewable energy becomes less expensive this will not only help with the needed transition away from fossil fuels, it will also save these residents money. As an owner of a photovoltaic system, battery storage, EV, and EV charger, some of us in KCAC are well aware of the convenience and the savings that this allows. However, we also recognize that not all residents are in the position to move in these directions. Please assist the state to make an equitable and necessary transition to renewable energy. P.lease pass HB949. Mahalo!

Helen Cox, Chair

Kauai Climate Action Coalition



To: The Honorable Chairs Lynn DeCoite and Jarrett Keohokalole, the Honorable Vice Chairs Glenn Wakai and Carol Fukunaga, and Members of the Committees on Energy, Economic Development and Tourism and Commerce and Consumer Protection

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB949 HD2 RELATING TO RENEWABLE ENERGY

Hearing: Tuesday March 21, 2023, 9:45 a.m., room 229

Aloha Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and Members of the Committees on Energy, Economic Development and Tourism and Commerce and Consumer Protection

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate.

The Climate Protectors Hawai'i STRONGLY SUPPORTS HB949 HD2!

This bill would democratize residential access to less expensive rooftop solar power. It would fund a low interest loan program to help asset-limited, income-

constrained, employed ("ALICE") working family households purchase and install residential solar photovoltaic and energy storage systems. By establishing a low interest loan program, this bill would make cheaper solar electricity more available for lower income households. This would particularly help the areas of the Neighbor Islands that have lower incomes and suffer higher electricity rates. For example, the 2022 average residential rate for electricity on Molokai and Lanai was 53-54 cents per KwH!

The bill would also help the State reach its net negative carbon clean economy target (as soon as practicable but not later than 2045), while reducing our carbon footprint and mitigating the climate emergency that the Hawaii Legislature has declared.

Please pass this bill!

Mahalo!

Climate Protectors Hawaii (by Ted Bohlen)



Email: communications@ulupono.com

SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, & TOURISM AND COMMERCE & CONSUMER PROTECTION Tuesday, March 21, 2023 — 9:45 a.m.

Ulupono Initiative supports HB 949 HD2, Relating to Renewable Energy.

Dear Chair DeCoite, Chair Keohokalole, and Members of the Committees:

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

Ulupono <u>supports</u> **HB 949 HD2**, which establishes and appropriates funds for a solar energy storage system loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install solar energy storage systems; and, establishes and appropriates funds for a renewable energy system installation loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

Ulupono supports the State's commitment to generate 100% of its electricity from renewable energy sources by 2045. The State should consider various innovative financing measures to support renewable energy's equitable adoption island-wide. This bill seeks to solidify that commitment by making solar and energy storage systems affordable and accessible for those in the ALICE (Asset Limited, Income Constrained, Employed) population. As solar energy is currently about one-half the cost of oil-fired electricity, this population would directly benefit from a program that helps them overcome financial challenges such as high electricity costs and inflation.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs



Testimony of Elemental Excelerator to the EET/CPN Committee in consideration of HB 949 HD2, March 21, 2023

Dear Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and distinguished Members of the Committees on Energy, Economic Development, and Tourism and Commerce and Consumer Protection:

Elemental Excelerator respectfully submits our **strong support for HB 949 HD2** (hereafter "HB 949").

Elemental Excelerator is a Honolulu-based non-profit organization that supports climate positive startup companies that help solve Hawai'i's most urgent environmental problems. Each year we select 15-20 companies that advance climate technology and social equity, then fund each company with up to \$1 million in investment and support. To date, we have awarded over \$50 million to 150+ companies, and additionally supported more than 100 new tech demonstration projects right here in Hawai'i & the Asia Pacific.

HB 949 will: 1) establish and appropriate funds for a solar energy storage system loan program to provide asset limited, income constrained, employed (ALICE) households with low-interest loans to purchase and install solar energy storage systems; and, 2) establish and appropriate funds for a renewable energy system installation loan program to provide ALICE households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

HB 949 is a critical tool to advance equitable climate solutions in Hawai'i and leverage federal funds to help our residents. The federal Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) have the potential to offer hundreds of millions in federal funding to help Hawai'i residents - particularly those with low- and moderate-income - benefit from the clean energy transition in the short and medium term. Additional benefits from these federal climate funds include less pollution in communities, reduced energy and transportation costs, an increase in good jobs, investment in the local economy rather than spending on imported oil, and reducing dangerous greenhouse gas emissions.

Enabling state and local policies are necessary, however, to ensure that these federal funds (especially competitive funds) can be secured and expeditiously deployed in Hawai'i versus flowing to other jurisdictions. Most federal funds under the IIJA and IRA will be distributed over the next five years. We are now in the formative period of this deployment, and it is essential to ensure conditions are set for successful competition and implementation here in Hawai'i. The

timing is therefore essential - during this legislative session - to address barriers and to prepare for future rounds of funding. HB 949 is an important enabling policy to support successful IIJA and IRA deployment in Hawai'i by ensuring that local matching and leveraging funds are available to attract federal programs.

In 2022, 44 percent of Hawai'i households fell below the ALICE threshold, a new statewide high of families struggling to make ends meet. With assistance such as the loan programs in HB 949, ALICE families and other low- and moderate-income households will be provided the financial tools to install renewable distributed energy systems – lowering utility bills and the cost of living for these households and providing multiple other community benefits. The loan programs established by HB 949 will be complementary to the federal funding from the IIJA and IRA, help make the clean energy transition accessible to low- and moderate-income communities, and equitably accelerate progress towards Hawai'i's 100% renewable portfolio standard (RPS) by 2045. Rooftop solar is a critical aspect of the state's clean energy portfolio, making up 44.6% of all renewable energy in the state. Hawai'i can fully leverage residential decarbonization technology and minimize the number of large, utility-scale energy projects needed to be built if we:

- Support innovative financing mechanisms such as the loan programs in HB 949 and coordinate closely to compete for additional federal funding available to make these decentralized improvements happen more quickly and at lower cost;
- 2. Update our permitting process to lower barriers to small-scale residential renewable energy, efficiency, and storage projects through sensible measures such as SB 781 and HB 217; and,
- 3. Support the development of new, efficient climate and energy technologies and the accelerators and entrepreneurs that are innovating towards an efficient and clean energy economy.

Elemental Excelerator has helped support dozens of climate tech companies that create solid jobs, transition our economy to 100% clean energy, and accelerate equitable access to zero emission solutions for all residents. By passing this bill, Hawai'i will take full advantage of the availability of current federal resources, empower entrepreneurs and workers, and dramatically lower the barrier for low- and moderate-income residents to benefit from the clean energy transition.

HB 949 is a key piece of climate and community legislation, and we believe it is critical to pass to ensure we meet the climate and clean economy goals the State has established. **Elemental Excelerator strongly supports the passage of HB 949.**

Thank you for the opportunity to testify.

¹ https://www.boh.com/siteassets/files/community/alice-report-2022.pdf

² https://energy.hawaii.gov/what-we-do/clean-energy-vision/

³ https://www.hawaiianelectric.com/about-us/performance-scorecards-and-metrics/renewable-energy



Legislative Testimony of Sunrun Inc.
Before the EET/CPN Committee
March 21, 2023

IN SUPPORT of HB949 HD2 - Relating to Renewable Energy

Dear Chairs DeCoite and Keohokalole, Vice Chairs Wakai and Fukunaga, and distinguished Members of the Committees on Energy, Economic Development, and Tourism and Commerce and Consumer Protection,

Sunrun is the nation's leading home solar, battery storage and energy services company, and has a long and proud history in Hawai'i with office and warehouse locations on O'ahu, Maui, and Hawai'i Island. We employ more than 350 professionals across the islands, including sales/marketers, customer experience professionals, and installation team members including electrical inspectors, technicians, forepersons and warehouse personnel.

Sunrun strongly supports HB949 HD2 (hereafter "HB949"), which would 1) establish and appropriate funds for a solar energy storage system loan program to provide asset limited, income constrained, employed (ALICE) households with low-interest loans to purchase and install solar energy storage systems; and 2) establish and appropriate funds for a renewable energy system installation loan program to provide ALICE households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

As of 2022, 44 percent of Hawai'i households were below the ALICE threshold – a new statewide high.
For the almost half of the households in the state struggling to make ends meet, upgrading home energy systems is likely not possible without additional funding or external assistance. According to the Federal Reserve Bank's unbanked/banked metric, there is an estimated \$3.75 billion financing gap due to the ~75,000 rooftops which do not qualify for traditional financing. The loan financing included in HB949 would reduce the energy burden for ALICE families, resulting in cost savings which may be used towards other critical living expenses. This bill presents a timely opportunity to build on the efforts of Solarize808 and the tax incentives for low- and moderate-income households in the Inflation Reduction Act to expand clean energy access to frontline communities, benefiting those which have historically and disproportionately suffered the negative effects of a fossil fuel driven economy.

In addition to the equity benefits, HB949 is an important innovative financing tool to reach Hawai'i's 100% renewable portfolio standard (RPS) by 2045.³ In 2020, solar power generated nearly 17% of the state's total electricity, largely due to the rapid uptake of small-scale, customer-sites solar systems.⁴ In 2021, Hawaiian Electric (HECO) achieved 38% renewable generation, attributed to "a full year of geothermal production and an increase in private rooftop solar." Furthermore, rooftop solar is the leading

¹ https://www.boh.com/siteassets/files/community/alice-report-2022.pdf

² https://www.capitol.hawaii.gov/sessions/session2023/Testimony/HB949 HD2 TESTIMONY FIN 02-27-23 .PDF

³ https://energy.hawaii.gov/what-we-do/clean-energy-vision/

⁴ https://www.eia.gov/state/?sid=HI#tabs-1

⁵ https://www.hawaiianelectric.com/hawaiian-electric-hits-38-renewable-energy-in-2021

contributor to Hawai'i's clean energy portfolio making up 44.6% of all renewable energy in the state.⁶ Continued implementation of rooftop solar has proven to be a strong component of the state's renewable energy generation and contributes to a more resilient energy system, and must be done so in a way that includes frontline communities. This bill is a powerful tool to remove barriers for low- and moderate income households to access clean energy, resulting in cost savings benefits and community resilience.

Sunrun strongly supports HB949 and respectfully urges the committee to advance this measure. Mahalo for the opportunity to provide testimony on this critical legislation. As a national solar, storage and energy services company, Sunrun has a broad view of states' clean energy policies and stands ready to assist Hawai'i with its policy goals.

Sincerely,

Steven Rymsha

Director Grid Solutions, Public Policy steven.rymsha@sunrun.com

808-220-7377

⁶ https://www.hawajianelectric.com/about-us/performance-scorecards-and-metrics/renewable-energy

March 20, 2023



Senator Lynn DeCoite, Chair
Senator Glenn Wakai, Vice Chair
Committee on Energy, Economic Development & Tourism
Senator Jarrett Keohokalole, Chair
Senator Carol Fukunaga, Vice Chair
Committee on Commerce and Consumer Protection
Tuesday, March 21, 2023
9:45 am
via Video Conference



RE: **HB949 HD2** Relating to Renewable Energy (**Support**)

Dear Chairs DeCoite & Keohokalole, Vice Chairs Wakai & Fukunaga, & Committee Members,

Chamber of Sustainable Commerce offers this testimony in support of HB949 HD2, which establishes and appropriates funds for a solar energy storage system loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install solar energy storage systems, and establishes and appropriates funds for a renewable energy system installation loan program to provide asset limited, income constrained, employed households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems.

As business owners who strive for a triple bottom line and know we can strengthen our economy without hurting workers, consumers or the environment, we urge this committee to vote in favor of passing HB949 HD2 because without this program, capital constrained households will be unable to switch to lower, cleaner sources of electricity – and we will not be able to achieve the state's 2045 carbon emission goals without more households on board.

Furthermore, as the cost of solar energy is currently about one-half the cost of oil-fired electricity, ALICE households would directly benefit from a program that helps overcome financial challenges such as high electricity costs and inflation.



SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

March 21, 2023, 9:45 AM Room 229

TESTIMONY IN SUPPORT OF HB 949 HD2

Aloha Chair DeCoite, Chair Keohokalole, and members of the Committees:

Blue Planet Foundation **supports HB 949 HD2**, which will help to expand access to solar battery storage systems by providing low-interest loans for asset limited, income constrained, employed (ALICE) households in Hawai'i. ALICE residents face many challenges including a high cost of living, lack of affordable housing, and an increasingly serious climate crisis. This bill will incentivize the adoption of solar energy—helping us meet our climate goals, improve grid resiliency, and provide utility savings to low- and moderate-income homeowners and ratepayers.

The State of Hawai'i has committed to a decisive and irreversible transition away from fossil fuels. The legislature has passed aggressive carbon reduction goals, including a mandate to achieve 100% renewable electricity by 2045 (Act 97 of 2015), and a goal to be carbon-negative by 2045 (Act 15 of 2018). Setting these bold targets is important, but alone it is insufficient. Hawai'i needs equitable and implementation-focused policies, such as HB 949, if we hope to achieve our clean energy and climate goals in a way that uplifts all of Hawai'i's residents.

Hawaiian Electric's current plan for achieving Hawai'i's 100% renewable energy goal includes power generation from the rooftop of nearly every home across the islands. Over 96,900 homes on O'ahu, Maui, and Hawai'i island¹ and 6,000 homes on Kaua'i² have already installed rooftop solar. Residential rooftop solar is a proven tool to help homeowners and renters save money and reduces the need for utility investments in the power grid. When paired with batteries, rooftop solar panels can also increase resiliency in neighborhoods, helping homes keep the lights on and communication powered during a blackout.

Blue Planet supports HB 949 to expand Hawai'i's existing solar energy loan program to battery storage systems to help remove barriers for ALICE households to adopt clean energy solutions.

https://www.capitol.hawaii.gov/sessions/session2023/Testimony/SB781_TESTIMONY_EET-GVO_02-09-23_.PDF

¹ "Cumulative Installed PV - As of December 2022" *Hawaiian Electric Company*. Accessed February 27, 2023. (https://www.hawaiianelectric.com/documents/clean_energy_hawaii/clean_energy_facts/pv_summary_4Q_2022.pdf)
² Per KIUC testimony on SB 781, page 12 see:

By reducing imports of fossil fuel, decreasing monthly utility bills, and reducing carbon emissions, HB 949 is a smart policy response for Hawai'i's future.

Thank you for the opportunity to provide testimony.

Submitted on: 3/19/2023 11:49:31 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Testifying for Kauai climate Action Coalition	Sunnort	Written Testimony Only

Comments:

It's about environmental and social justice and helping everyone make the transition to clean, affordable energy. As solar energy is currently about one-half the cost of oil-fired electricity, those in the ALICE population would directly benefit from a program that helps them overcome financial challenges such as high electricity costs and inflation.

Submitted on: 3/17/2023 10:58:34 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Cards Pintor	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this bill.

Mahalo nui,

Cards Pintor

Submitted on: 3/18/2023 6:23:58 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Members of the Energy, Economic Development and Tourism and Commerce and Consumer Protection Committees,

I strongly support HB949 HD2 because it will

- Aid the state in its transition to clean energy
- Solidify the commitment to this transition by making solar and energy storage systems affordable and accessible for those in the ALICE (Asset Limited, Income Constrained, Employed) population.
- Without this programs, capital constrained households will be unable to switch to lower, cleaner sources of electricity.
- As solar energy is currently about one-half the cost of oil-fired electricity, this population would directly benefit from a program that helps them overcome financial challenges such as high electricity costs and inflation

Mahalo for this opportunity to testify.

Virginia Tincher

Submitted on: 3/18/2023 12:54:15 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Doug Kroll	Individual	Support	Written Testimony Only

Comments:

I am in full support of this bill and its coverage providing for battery back up. I have lived in Hawaii all my life, and this inflation cycle is the worst in my 60 plus years. Most Alice individuals and households are being pushed to the brink. The GEM\$ program provides a non-traditional financing for Alice to invest in themselves and have their roofs working for them. From my perspective, this is better than the scattered different Alice programs with plenty of paperwork.

I believe there should be more funding than the additional 200 million of this involving Fund. Mahalo Doug Kroll

<u>HB-949-HD-2</u> Submitted on: 3/18/2023 2:53:47 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
TOM DIGRAZIA	Individual	Support	Written Testimony Only

Comments:

Srong support.

Submitted on: 3/18/2023 6:08:01 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Severine Busquet	Individual	Support	Written Testimony Only

Comments:

Dear chairs and committee members,

I support the bill HB949 HD2 that establishes and appropriates funds for a renewable energy system installation loan program to provide Asset Limited, Income Constrained, Employed (ALICE) households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems. More must be done to accelerate our transition 100% clean renewable energy. HB 949 HD2 will help the state in its transition to clean energy by making solar and energy storage systems affordable and accessible for those in ALICE households. Without this program, capital constrained households will be unable to switch to lower, cleaner sources of electricity.

For these reasons, please support HB949 HD2.

Thank you for your attention.

Severine Busquet

Honolulu, 96825

Submitted on: 3/18/2023 8:01:48 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

HB949 HD2 establishes and appropriates funds for a renewable energy system installation loan program to provide Asset Limited, Income Constrained, Employed (ALICE) households with low-interest loans to purchase and install residential photovoltaic and energy storage systems, including battery storage systems. This could be a game changer for this group of people, to be producing their own energy with PV's!

Submitted on: 3/18/2023 8:44:32 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Jotis Russell-Christian	Individual	Support	Written Testimony Only

Comments:

Aloha,

- --HB 949 HD2 will help the state in its transition to clean energy by making solar and energy storage systems affordable and accessible for those in ALICE (Asset Limited, Income Constrained, Employed) households.
- -- Without this program, capital constrained households will be unable to switch to lower, cleaner sources of electricity.
- --As solar energy is currently about one-half the cost of oil-fired electricity, ALICE households would directly benefit from a program that helps overcome financial challenges such as high electricity costs and inflation.

Mahalo nui for the opportunity to testify,

Jotis Russell-Christian

Submitted on: 3/19/2023 2:16:19 PM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

I support HB 949 as a means to assist lower-income residents to participate in the benefits of the clean energy revolution.

Submitted on: 3/20/2023 8:10:17 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Members,

I respecfully ask that you support HB949 HD2 which is the solar energy storage system loan program.

Thank you for your attention and courtesy.

Melissa Barker

Kapaa, HI

Submitted on: 3/20/2023 8:24:41 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
P Noel Bobilin	Individual	Support	Written Testimony Only

Comments:

As someone of privledged means who has installed solar on my house I know how expensive it is up front. Everyone should be able to afford a basic clean energy system. HB 949 HD2 will help the state in its transition to clean energy by making solar and energy storage systems affordable and accessible for those in ALICE (Asset Limited, Income Constrained, Employed) households.

Without this program, capital constrained households will be unable to switch to lower, cleaner sources of electricity.

As solar energy is currently about one-half the cost of oil-fired electricity, ALICE households would directly benefit from a program that helps overcome financial challenges such as high electricity costs and inflation. Thank you

<u>HB-949-HD-2</u> Submitted on: 3/20/2023 9:07:36 AM

Testimony for EET on 3/21/2023 9:45:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

Support