

HB 484, HD2



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development, and Tourism
before the
**SENATE COMMITTEES ON ENERGY AND ENVIRONMENT
AND
COMERCE AND CONSUMER PROTECTION**

Thursday, March 19, 2015
3:30 p.m.
State Capitol, Conference Room 225

in consideration of
HB 484, HD 2
RELATING TO ENERGY.

Chairs Gabbard and Baker, Vice Chairs Green and Taniguchi, and Members of the Committees.

The Department of Business, Economic Development & Tourism (DBEDT) supports HB 484, HD 2, with amendments as contained in the attached draft.

The measure requires the Public Utilities Commission (PUC) to establish a community-based renewable energy tariff or tariffs upon application by an electric utility, another party or upon its own motion.

DBEDT views the concept of a community-based renewable energy tariff as an attractive option for increasing the penetration of renewable energy on Hawaii's electric grids in a reliable, cost-effective and equitable manner. By allowing utility customers to obtain partial interests in renewable projects that can be sited in optimal locations, and then crediting those customers for the energy provided to the grid on their utility bills, a community-based renewable energy tariff creates an efficient mechanism for broadening and deepening the benefits of clean energy to Hawaii's residents. Moreover, we view the potential use of financing from the Green Energy Market Securitization (GEMS) program with the community-based renewable energy tariff as a viable option to expand access to under-served market segments.

In the interest of passing a bill this session, DBEDT worked collaboratively with the PUC on the attached draft. By requiring the utility to submit a tariff proposal by a certain date, and calling upon the utility to collaborate with DBEDT and other stakeholders in the tariff's design and development, we believe this draft offers a viable and inclusive pathway toward creating a successful community-based renewable energy program that is aligned with Hawaii's energy policy priorities.

Finally, in prior testimony on this measure, DBEDT recommended including a statutory requirement to ensure against cross-subsidies or cost-shifting. We also identified a potential issue whereby participation in a community renewables project would be characterized as a security interest for the purpose federal securities law. After conducting further research, we believe that the attached draft provides the PUC sufficient latitude and context to effectively address these matters, if necessary, as part of the tariff proceeding.

Thank you for the opportunity to offer these comments regarding HB 484, HD 2.

A BILL FOR AN ACT

RELATING TO ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that all Hawaii residents should be able to participate in and enjoy the economic, environmental, and societal benefits of renewable energy. Spurred by the Hawaii clean energy initiative and increasingly affordable clean energy options, such as solar photovoltaic systems, localized renewable energy generation technology has become increasingly attainable.

While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, or other impediments. The community-based renewable energy program seeks to rectify this inequity by dramatically expanding the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly

oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

The legislature finds that it is in the public interest to promote broader participation in self-generation by Hawaii residents and businesses through the development of community-based renewable energy facilities in which participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

Community-based renewable energy creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and assists in meeting the State's clean energy goals. Further, community-based renewable energy enables residents and businesses to save money on their electricity bills, thereby providing additional funds for purchasing, investment, or other economic activity.

The purpose of this Act is to establish the Hawaii community-based renewable energy program to make the benefits of renewable energy generation more accessible to a greater number of Hawaii residents. The Legislature also finds that, in order to facilitate the timely implementation of community-based renewable energy, electric utilities should collaborate with stakeholders on the development of a community-based renewable energy tariff prior to filing the tariff with the public utilities commission.

SECTION 2. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"§269- Community-based renewable energy tariffs. (a) Each electric utility in the State of Hawaii shall file a proposed community-based renewable energy tariff with the public utilities commission by October 1, 2015. The public utilities commission shall establish a community-based renewable energy tariff if the tariff is found to be in the public interest and is not unduly discriminatory.

(b) Subject to the community-based renewable energy tariff, any person or entity may participate in an eligible community-based renewable energy project.

(c) As used in this section, "eligible community-based renewable energy project" means a project that:

(1) Is subject to a community based renewable energy tariff;
and

(2) Generates or produces energy using one or more of the following sources:

(A) Wind;

(B) The sun;

(C) Falling water;

(D) Biogas, including landfill and sewage-based digester gas;

(E) Geothermal;

(F) Ocean water, currents, and waves, including ocean thermal energy conversion;

(G) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste;

(H) Biofuels; and

(I) Hydrogen produced from renewable energy sources.

(d) As used in this section, "community-based renewable energy tariff" means a tariff approved by the commission that:

(1) Allows an electric utility customer to participate in an eligible renewable energy project that is providing electricity to the electric utility;

(2) Allows the electric utility to implement a billing arrangement to compensate those customers for the electricity provided to the electric utility;

(3) Is designed, to provide fair compensation for electric grid services and other benefits provided to or by the utility, participating ratepayers, and non-participating ratepayers; and

(4) To the extent possible, standardizes the related interconnection processes for community-based renewable energy projects.

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect on July 1, 2015.



DAVID Y. IGE
GOVERNOR
SHAN S. TSUTSUI
LT. GOVERNOR

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CATHERINE P. AWAKUNI COLÓN
DIRECTOR
JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

TO THE SENATE COMMITTEES ON ENERGY AND ENVIRONMENT
AND COMMERCE AND CONSUMER PROTECTION

THE TWENTY-EIGHTH LEGISLATURE
REGULAR SESSION OF 2015

THURSDAY, MARCH 19, 2015
3:30 p.m.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER
AFFAIRS, TO THE HONORABLE MIKE GABBARD AND ROSALYN H. BAKER,
CHAIRS, AND MEMBERS OF THE COMMITTEES

HOUSE BILL NO. 484, H.D.2 – RELATING TO ENERGY

DESCRIPTION:

This measure proposes to require the Public Utilities Commission (“PUC”) to establish community-based renewable energy tariff or tariffs to take effect by no later than January 1, 2016, to allow more utility customers to participate in renewable energy production and use. This measure also proposes to prohibit cost-shifting to non-participants.

POSITION:

The Division of Consumer Advocacy supports this bill.

COMMENTS:

Thus far, distributed renewable energy systems, such as solar photovoltaic (“PV”) systems, have been largely limited to single-family homeowners. Renters have no incentive to make the capital investment for a PV system that will be owned by a landlord. Furthermore, high-rise apartment owners do not have sufficient roof space to benefit from solar PV. Therefore, a large segment of Hawaii’s population has been locked out of the distributed generation market for a number of reasons, including economic reasons even with the new financing and leasing options available for rooftop

solar PV systems. A properly designed community-based renewable energy program has the potential to provide significant energy cost-savings to this under-served market. It also opens up access to affordable renewable energy to schools and community organizations that might otherwise be unable to participate in renewable energy self-generation programs.

In establishing the appropriate tariff, the PUC should take the following into consideration:

- Participants should receive a per kilowatt-hour credit on their electricity bills based upon the cost of generation;
- Participants should be allowed access to capital through the Department of Business, Economic Development, and Tourism's Green Energy Market Securitization or "GEMS" program; and
- The PUC should have the discretion to revise, modify, or cancel the program, if, at any time, the PUC determines that the program is not in the public's interest.

There is also a suggested definition of "wheeling," which reads, "means the transmission of electricity over transmission or distribution lines by an entity that does not directly own or use the electricity being transmitted without any compensation to the electric utility for the cost of transmission and distribution lines by an entity that does not directly own or use the electricity being transmitted and without any compensation to the electric utility for the cost of transmission and distribution." The Consumer Advocate suggests the following definition: "means the transmission and/ or sale of electricity over transmission or distribution infrastructure by an entity that does not directly own the transmission and distribution infrastructure."

Therefore, the Consumer Advocate supports this bill that would require the PUC to establish a community-based renewable energy tariff that would take effect no later than January 1, 2016.

Thank you for this opportunity to testify.

TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
SENATE COMMITTEES ON
ENERGY AND ENVIRONMENT
&
COMMERCE AND CONSUMER PROTECTION

MARCH 19, 2015

3:30 p.m.

MEASURE: H.B. No. 484, H.D.2

TITLE: Relating to Energy

Chair Gabbard, Chair Baker, and Members of the Committees:

DESCRIPTION:

This measure would add a new section to Chapter 269, Hawaii Revised Statutes (“HRS”), to explicitly authorize the Public Utilities Commission (“Commission”) to establish community based renewable energy tariffs by which customers who have invested in renewable energy generation facilities are allowed to receive compensation from the utility for electricity produced by those facilities.

POSITION:

The Commission supports the intent of a tariff structure to enable new energy programs and offers the following comments for the Committees’ consideration.

COMMENTS:

The Commission views the intent of this measure as consistent with the principles articulated in the Commission’s white paper entitled, *Commission’s Inclinations on the Future of Hawaii’s Electric Utilities*. A properly implemented community based renewable energy tariff has the ability to increase renewable energy generation while improving customers’ options to manage energy use. The Commission notes that a properly implemented community based renewable energy tariff should ensure that the program is equitable to all ratepayers and that any new generation resources proposed under such a program maximize the use of cost-effective renewable resources. Further, the Commission notes that the discretion to revise and modify the parameters of the program should be left to the Commission so that appropriate adjustments can be made to ensure that the program remains in the public interest.

H.B. No. 484, H.D.2
Page 2

Please see the attached proposed draft, produced in collaboration with the Department of Business, Economic Development, and Tourism, for amendments to this measure that we feel will allow for the timely implementation of a flexible and viable community based renewable energy program going forward.

Thank you for the opportunity to testify on this measure.

A BILL FOR AN ACT

RELATING TO ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that all Hawaii residents should be able to participate in and enjoy the economic, environmental, and societal benefits of renewable energy. Spurred by the Hawaii clean energy initiative and increasingly affordable clean energy options, such as solar photovoltaic systems, localized renewable energy generation technology has become increasingly attainable.

While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, or other impediments. The community-based renewable energy program seeks to rectify this inequity by dramatically expanding the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or

improperly oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

The legislature finds that it is in the public interest to promote broader participation in self-generation by Hawaii residents and businesses through the development of community-based renewable energy facilities in which participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

Community-based renewable energy creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and assists in meeting the State's clean energy goals. Further, community-based renewable energy enables residents and businesses to save money on their electricity bills, thereby providing additional funds for purchasing, investment, or other economic activity.

The purpose of this Act is to establish the Hawaii community-based renewable energy program to make the benefits of renewable energy generation more accessible to a greater number of Hawaii residents. The Legislature also finds that, in order to facilitate the timely implementation of community-based renewable energy, electric utilities should collaborate with stakeholders on the development of a community-based renewable energy tariff prior to filing the tariff with the public utilities commission.

SECTION 2. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"§269- Community-based renewable energy

tariffs. (a) Each electric utility in the State of Hawaii shall file a proposed community-based renewable energy tariff with the public utilities commission by October 1, 2015. The public utilities commission shall establish a community-based renewable energy tariff if the tariff is found to be in the public interest and is not unduly discriminatory.

(b) Subject to the community-based renewable energy tariff, any person or entity may participate in an eligible community-based renewable energy project.

(c) As used in this section, "eligible community-based renewable energy project" means a project that:

(1) Is subject to a community-based renewable energy tariff; and

(2) Generates or produces energy using one or more of the following sources:

(A) Wind;

(B) The sun;

(C) Falling water;

(D) Biogas, including landfill and sewage-based digester gas;

(E) Geothermal;

(F) Ocean water, currents, and waves, including ocean thermal energy conversion;

(G) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste;

(H) Biofuels; and

(I) Hydrogen produced from renewable energy sources.

(d) As used in this section, "community-based renewable energy tariff" means a tariff approved by the commission that:

(1) Allows an electric utility customer to participate in an eligible renewable energy project that is providing electricity to the electric utility;

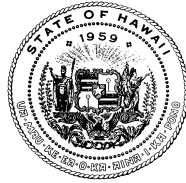
(2) Allows the electric utility to implement a billing arrangement to compensate those customers for the electricity provided to the electric utility;

(3) Is designed to provide fair compensation for electric grid services and other benefits provided to or by the utility, participating ratepayers, and non-participating ratepayers; and

(4) To the extent possible, standardizes the related interconnection processes for community-based renewable energy projects.

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect on July 1, 2015.



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**Testimony in SUPPORT of HB 484, HD2
RELATING TO ENERGY**

SENATOR MIKE GABBARD, CHAIR
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

SENATOR ROSALYN H. BAKER, CHAIR
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

Hearing Date: March 19, 2015, 3:30 p.m.

Room Number: 225

1 **Office Testimony:** The Office of Environmental Quality Control (OEQC) supports HB 484,
2 HD2, which allow more customers to participate in renewable energy production and use.

3 One of the mandates for the OEQC director under the Hawaii Revised Statutes, Chapter
4 341, is to “[E]ncourage public acceptance of proposed legislative and administrative actions
5 concerning ecology and environmental quality...” Promoting renewable energy will not only
6 contribute to the State’s Renewable Energy Portfolio but will also reduce CO² emissions from
7 fossil-fuel and support a healthier environment.

8 Thank you for the opportunity to testify.



**HB484 HD2
RELATING TO ENERGY**

Senate Committee on Energy and Environment
Senate Committee on Commerce and Consumer Protection

March 19, 2015

3:30 p.m.

Room 225

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on HB484 HD2, which establishes a community-based renewable energy framework, thereby expanding who can participate in the economic and environmental benefits associated with renewable energy.

By expanding who can participate in renewable energy generation projects, this bill will provide opportunities for more people to benefit from renewable energy related cost savings. Currently, many households and businesses in Hawai‘i are unable to benefit from the long-term cost savings associated with renewable energy. In some cases, the upfront costs are prohibitive, while in other cases, people may not own their own homes or business locations, or may live in condominiums. Despite having a labor force participation rate 4.5% higher than the statewide rate, Native Hawaiian families earn \$9,105 lower per-capita income than the state average, and thus are less able to afford the up-front costs of participating in and benefiting from the current renewable energy distributed-generation market.

The framework established by HB484 HD2 will also provide more of Hawai‘i’s residents, including Native Hawaiians, with the opportunity to help Hawai‘i meet its clean energy goals, and reduce its dependence on imported fossil fuels. By adopting the targets of the Aloha+ Challenge, the state, including OHA, has committed to achieving the use of clean energy for 70% of our islands’ energy needs by 2030. The principles underlying the Aloha+ Challenge support a renewed commitment to the sustainability practiced by our ancestors, and are perpetuated today through the traditional concept of mālama ‘āina. The Aloha+ Challenge is embodied in the Hawaiian saying: “E mālama i ka ‘āina i mohala i nā kānaka o ke kulāiwi” (When one cares and perpetuates and preserves the natural resources, the people shall thrive).

Mahalo for the opportunity to testify on this measure.

From: mailinglist@capitol.hawaii.gov
To: [ENETestimony](#)
Cc: prentissc001@hawaii.rr.com
Subject: Submitted testimony for HB484 on Mar 19, 2015 15:30PM
Date: Tuesday, March 17, 2015 10:27:01 PM

HB484

Submitted on: 3/17/2015

Testimony for ENE/CPN on Mar 19, 2015 15:30PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Charles Prentiss	Kailua Neighborhood Board	Support	No

Comments: This will help those who physically cannot install PV on their property to switch to renewable energy.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the Senate Committees on Energy and Environment and Commerce and Consumer Protection
Thursday, March 19, 2015, 3:30 p.m., room 225
HB 484 HD 2: Relating to Energy

Aloha Chairs Gabbard and Baker, Vice Chairs Green and Taniguchi, and members of the Committee,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in opposition to HB 484 HD 2 as currently drafted which establishes a community-based renewable energy program. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on residential and small commercial distributed generation for both solar hot water (SHW) and photovoltaics (PV). We currently represent 90 member companies, which employ thousands of local employees working in the solar industry. With 37 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Interest in renewable energy has grown exponentially but not all can directly benefit

The installation of rooftop PV has grown significantly since 2008, and Hawaii now boasts over 40,000 residential PV systems. However, not all residential customers can take advantage of having some or all of their power being generated from renewable energy for a variety of reasons. HB 484 would address this issue by making it possible for apartment dwellers and others to invest in renewable energy and pay for it directly through a community solar tariff on the electric bill, thus enabling more customers to invest in sustainable renewable energy and to benefit from a hedge against rising electric bills.

HB 484 HD 2 would allow the utility or any third party to propose, own, or operate a community based project

HB 484 HD 2 has the advantage of allowing either the utility or any third party to propose, own, or operate a community based project and still make use of the community solar tariff created by this legislation. This means that the power to create a community solar project would not rest solely with the utility, and this provision might even the playing field when it comes to project development and approval. This provision is in alignment with the PUC's inclinations in which the PUC states that the utility should move more in the direction of a wires company and leave development and generation to third parties.

HB 484 HD 2 should not be tied to the concept of cross-subsidy or cost-shift

However, HSEA is concerned over the language that has been included in the bill regarding "cross-subsidy" (§ 269-(a)). Traditional rate making is based upon a series of complicated equations which invariably involve some version of cross-subsidy or cost shift in an effort to make energy affordable and to fulfill specific policy goals.

For example, in Hawaii commercial rates essentially "subsidize" residential rates as commercial customers pay more for power than residential customers do. Another example is the public benefit fee, which appears on each customer's utility bill, and pays for a variety of efficiency measures including energy efficient lighting, appliances, solar hot water, and chillers for apartments. All of these energy improvements are therefore "subsidized" by each rate payer, as each improvement goes to directly benefit one particular customer. The same is true of the Green Energy Market Securitization program (GEMS)—

each utility customer pays to support this program through a fee on each bill, and the program benefits individual customers who cannot traditionally invest in renewable energy (the “hard to reach” customer). Through legislation and implementation by the commission, the state has determined that it is in the best interests of ALL customers if the state as a whole uses energy more efficiently and makes the most of renewable resources.

HSEA is therefore concerned over the added language in HB 484 HD 2 which states that no community solar tariff will create any cross-subsidy. Not only would this be difficult to prove, but the directive is also in conflict with years of energy policy crafted by the state. HSEA respectfully asks that this section be deleted from the bill, or, in the alternative, that §269 (a) of HB 484 HD 2 be replaced with §269 (a) of SB 1050 SD 2. SB 1050 SD 2 directs the commission to consider various mechanisms regarding cross-subsidy, while still allowing the commission sufficient leeway to make decisions grounded in our current energy policy.

HSEA has always advocated for maximizing all of our renewable energy resources, and the development of a community solar program would be a welcome step to diversifying our renewable portfolio.

Thank you for the opportunity to testify
Leslie Cole-Brooks
Executive Director HSEA



Directors

Jody Allione
Project Development
Consultant

Joe Boivin
Hawaii Gas

Kelly King
Pacific Biodiesel

Warren S. Bollmeier II
WSB-Hawaii

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE
HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE
SENATE COMMITTEES ON ENERGY AND ENVIRONMENT AND
CONSUMER PROTECTION AND COMMERCE

HB 484 HD2, RELATING TO ENERGY

March 19, 2015

Chairs Gabbard and Baker, Vice-Chairs Green and Taniguchi and members of the Committees, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is an industry-based, nonprofit corporation in Hawaii established in 1995. Our mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of our goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purposes of HB 484 HD2 are to: (i) require the PUC to establish community-based renewable energy tariff or tariffs by no later than January 1, 2016, to allow more utility customers to participate in renewable energy production and use; and (ii) prohibit cost-shifting to non-participants.

HREA **supports** the intent of this measure with the following comments and recommendations:

- 1) Clean Energy Goals. In our opinion, we need to facilitate the installation and operation of community-based renewable systems to the greatest extent possible if we are to meet our clean energy goals. Such systems will provide an option to customers who have not able to install renewable systems due to lack space on or adequate renewable resources at their property.
- 2) Discussion. We offer the following comments and recommendations:
 - a) Section 2. (b): Issue of Potential Cross-Subsidy. The potential issue of cross-subsidy with community renewable energy projects should be considered, but only in the context of all existing cross-subsidies within and across all rate classes. Therefore, we recommend this section be deleted.
 - b) Sections 2 and 3: Issue of Wheeling. We are not sure the issue of "wheeling" is relevant to this measure. If it is to be included, the definition of wheeling is technically not correct and needs to be clarified. Specifically, wheeling **does** include an access charge to the utility for access to the grid. We recommend the committee consider this definition:

"Wheeling is the process of moving electricity from the point of generation across utility-owned transmission and distribution systems to a customer."

Note: historically on the mainland, wheeling has been in the wholesale sector of the market, and more recently also at the retail. It currently does not legally exist in Hawaii.

Mahalo for this opportunity to testify.



Thursday, March 19, 2015

Relating to House Bill 484, House Draft 2
Testifying in Support

Aloha, Chairs Gabbard and Baker, Vice-Chairs Green and Taniguchi, and Members of the Senate Committees on Energy and Environment and on Commerce and Consumer Protection,

The Democratic Party of Hawaii **supports HB484 HD2 Relating to Energy**, which requires the Public Utilities Commission to establish a community-based renewable energy tariff, or tariffs, by no later than January 1, 2016, allows more utility customers to participate in renewable energy production and use, and prohibits cost-shifting to non-participants.

Photovoltaic installation has grown exponentially across the islands in the past decade. Despite this growth, too many Hawaii residents are still unable to share in the benefits it provides. This bill will allow more residents an equal opportunity to access and participate in renewable energy generation, which is essential to the state's sustainable energy future.

HB484 HD2 provides a suitable timeline and process to secure future community investment in renewable energy. Using economies of scale and renewable resource locations, community-oriented renewable energy products will allow greater buy-in by more residents and could serve as catalysts for future sustainable energy projects, as well.

Thank you for this opportunity to testify,
The Legislation Committee of the Democratic Party of Hawaii



Email: communications@ulupono.com

SENATE COMMITTEES ON ENERGY & ENVIRONMENT AND COMMERCE & CONSUMER
PROTECTION

Thursday, March 19, 2015 — 3:30 p.m. — Room 225

**Ulupono Initiative Strongly Supports HB 484 HD 2 with an Amendment, Relating to
Energy**

Dear Chair Gabbard, Vice Chair Green, Chair Baker, Vice Chair Taniguchi, and Members of the Committees:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment company that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally grown food, increase clean, renewable energy, and waste reduction. We believe that self-sufficiency is essential to our future prosperity, and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono strongly supports HB 484 HD 2, which establishes a community-based renewable energy program, because it aligns with our goal of producing more clean, renewable energy in Hawai'i. We believe the intent of the Legislature is to allow the utility, independent power producers, and communities of ratepayers to participate in, and benefit from, the efficiencies provided by larger scale community solar projects. The bill requires an amendment to avoid unintended consequences of Section 269 (b) – “the commission shall ensure there shall be no cross-subsidy by or shifting of costs to non-participants” (page 3, line 16-20).

While this language on the surface appears to be addressing a potential equality issue, it is actually a mechanism to tilt these solar projects towards utility shareholders. This is because it solely addresses cost increases between classes of ratepayers and not cost increases that benefit shareholders at the expense of all ratepayers. Cross subsidies between shareholders and ratepayers are not considered in the bill's language.

If a community builds a 5 MW solar project for \$20 million, and even though that project reduces the utilities fuel costs, if the loss of revenues to cover the utilities fixed costs exceeded the fuel savings, then the project could not be built under Section 269 (b). If the utility built the exact same project using the same costs, even if it had the same total impact on rates, the project could be built under Section 269(b) because the rate impact was borne

Investing in a Sustainable Hawai'i

by all customers, not just some. When the utility builds the project, it is the shareholders who benefit at the ratepayer expense.

We would like to request an amendment, on page 3 lines 16 – 20, please delete that paragraph (section b) and instead add the following language:

(b) In establishing the community-based renewable energy tariff or tariffs, the commission shall consider mechanisms to address potential cross-subsidy or shifting of costs and benefits between participants and non-participants and between the ratepayers and the utility shareholders. Such considerations may include, but shall not be limited to, time-of-use rates, demand charges, system efficiency, ancillary services, and other elements of a dynamic rate structure to promote an appropriate balance of costs and benefits in the interest of both participating and non-participating ratepayers.

The language we recommend above would allow the Public Utilities Commission to receive guidance from the Legislature to address these complex issues, while avoiding potential unintended negative consequences.

As imported fossil fuel prices have become more volatile, clean energy options like solar PV have become more economically attractive. Yet, to participate in the benefits of solar PV, a resident would need to have access to a roof with direct sunlight, access to the utility's grid, and be located in an area on the grid that can incorporate intermittent renewable energy. This leaves out many from participating, including renters and apartment dwellers. This bill creates a structure that would allow increased participation by residents and eventually maximize solar energy production throughout the grid.

Through increased renewable energy production, the State can be in a better position to meet its clean energy goals and obtain energy self-sufficiency. Community solar will stimulate the economy and create new jobs including many in the construction industry. Furthermore, solar PV is often the most recognizable clean energy source for the average person. If more people are better able to participate in solar energy production, the more aware they will be about the benefits of clean energy and this could create a more informed and supportive general public toward clean energy policies overall. This bill also allows the utility to obtain cost recovery for the transmission of electricity through its grid infrastructure.

As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay

Managing Partner



**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M., Room 225

(Testimony is 7 pages long)

**TESTIMONY IN STRONG SUPPORT OF HB 484 HD2
PROPOSED AMENDMENT**

Aloha Chairs Gabbard and Baker and members of the committees:

Thank you for hearing HB 484. The Blue Planet Foundation strongly supports this measure, which establishes a community renewables program to expand the number of Hawai'i residents who can participate in the benefits of clean energy. This measure would allow residents to obtain a beneficial interest in solar and wind energy systems—even if those systems are not sited on their property.

House Bill 484 is focused on creating **fair access** for many Hawai'i residents, businesses, and agencies who cannot currently take advantage of energy cost savings available from solutions like rooftop solar photovoltaic energy. Community-based renewable energy can boost private investment in our green energy infrastructure while also maximizing the flexibility of our clean energy solutions. In doing so, it will benefit all Hawai'i residents by reducing the amount of money we send out of the state to pay for imported fossil fuels.

To ensure that HB 484 successfully delivers clean energy access, it must retain three key features. First, HB 484 enables anyone (community, renewable developer, land or building owner, etc.) to propose a community renewables project (subject to technical interconnection)—not just the electric utility. This truly enables the democratization of our renewable energy resources. Second, the measure directly establishes a program and a timeline, ensuring that the program is launched in a timely way. Finally, the bill makes it clear that the legislation will not preclude an electric utility from developing and implementing their own community renewables program—it simply establishes a framework for others to develop projects and broaden the competitive renewable landscape.

For these reasons, and the reasons outlined below, Blue Planet Foundation strongly supports HB 484 and asks that you forward it. **On page 4 of this testimony, we request one key amendment to subsection (b). House Draft 2 includes a prohibition on “cross-subsidies” for the community renewables program. For several reasons, this language would unintentionally create bad policy. For example, it may prohibit the creation of any**

community renewables program aimed to benefit low-income ratepayers. More balanced language is proposed in this testimony.

With this amendment, and for the reasons outlined below, we respectfully ask that you forward this bill.

Our current system leaves many Hawai'i households, businesses, and public agencies unable to directly participate in renewable energy

Many residents and businesses have been using solar power and other technologies to break free from energy costs being driven upward by fossil fuels. Unfortunately, many individuals and households are currently unable to directly participate in renewable energy because of their location, building type, access to the electric utility grid, or other impediments. For example, (a) it may be difficult for a single condominium owner to install solar panels, without a wider installation on behalf of the entire condominium; (b) it may be difficult for homeowners with shaded roofs to harness as much of the sun's energy as their neighbors; or (c) a homeowner may find that the utility is limiting the amount of energy from the homeowner's particular circuit.

All of these situations can be addressed with community-based renewable energy.

Community Renewables unlocks clean energy solutions, improves our economy, and benefits our electrical grid

Community Renewables allows residents to join together to find energy solutions. For example, several condominium owners in different buildings may collectively install solar panels in another location with spare rooftop capacity. Even larger communities can join together to install renewable energy in ways that are most effective and efficient for their particular community. Or public agencies, such as schools, colleges, universities, and local governments will have more flexibility to access renewable energy across their systems. The cost savings can benefit important educational programs, social services, and new hiring.

Community Renewables can also help make our energy system more robust, by evening out the distribution of renewable energy on the grid. For example, homeowners on a crowded circuit can install solar panels on another circuit, and receive the credit against their energy bill. By promoting renewable energy on under-utilized circuits, it can help the utility to operate our electrical system more effectively and efficiently. In addition to these benefits, group net metering creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and will assist in meeting and exceeding the state's clean energy goals.

Community Renewables can also empower new energy innovations. For example, a community electric vehicle charger could participate in the program, tying charging to the availability of 100% renewable energy generated elsewhere on the grid. The program can also become a catalyst for smart energy pricing, where the value of renewable energy changes as supply and demand change on the grid throughout the course of a day.

Ensuring Fairness for All Utility Customers

The promise of Community Renewables is that, if scaled up appropriately, it can provide fair access to clean power for all consumers. But this promise will only be realized if the program (i) promotes broad participation by many customers, (ii) invites innovation and competition from clean energy companies, (iii) grows beyond the confines of the traditional utility business model, and (iii) takes a forward-looking view on how to value clean energy. A program that is too utility-centric would risk closing the door on competition from innovative and entrepreneurial solutions. A program limited to large utility-scale energy projects, each subject to individualized negotiation with the utility, and each potentially limited by a traditional utility business model, will struggle to achieve the promise of fair access for all. Consumers need a broad, open, program that encourages new innovations and utility business models.

Too often, the concept of “fairness” is shifted away from focusing on fair access for all consumers, and instead becomes about protecting utility revenues under the traditional business model. Many assume that large “cost shifts” from solar energy customers to non-solar energy customers are inevitable, even though Hawai‘i does not yet have the benefit of an accounting that addresses all the costs and benefits of solar power. Hawai‘i has not yet implemented a dynamic rate structure that would comprehensively capture all costs and benefits as they change over time, or that would encourage new utility revenue streams for promoting distributed power. Thus, public dialogue is narrowly focused on the utility’s “lost revenues” rather than a comprehensive view of costs, benefits, solutions, and access for all consumers.¹

The myth of a detrimental solar “cost shift” also ignores the fundamental fact that the regulated monopoly utility is built on “cross-subsidies” between customers. A regulated utility is intended

¹ In the HECO Companies’ Testimony on earlier drafts of HB 484, the HECO Companies testified that “[a]s of December 2014, the annualized total fixed cost shift was \$53MM.” It is unclear whether this “total fixed cost-shift” accounts for many benefits of distributed solar energy, such as reduced transmission losses, forfeited customer energy credits, reduced utility capital expenditures on renewable generation, or other potentially substantial benefits. Nor does it account for benefits that many ratepayers may value, such as consumer choice and protecting our environment. A focus on lost utility revenues, rather than a total accounting of costs and benefits, cannot capture the state’s energy policies. For example, if a similar analysis was applied to energy efficiency (which is functionally the same as solar generation that is used on-site at the same time it is generated) the utility might argue that efficiency is not “fair for ALL consumers.” Plainly, energy policy favors efficiency. Just as energy policy favors clean energy.

to ensure that all customers receive equal access to power. But the cost of providing that power is not the same for all customers.

For example, the regulated utility rate structure does not charge rural residents more, even though the fixed costs of delivering energy a longer distance may be higher than in settings with higher population density.

In another example, the regulated utility rate structure allows commercial customers to pay lower rates than residential customers, while invoking a capacity charge or other mechanism. In contrast, residential customers pay higher rates but do not typically see differentiation based on their capacity demand. Thus, it is inevitable that some residential customers are providing a cross-subsidy to other residential customers. It is likely that commercial customers are providing a cross-subsidy to residential customers, or vice-versa.

And most-importantly, it is bad energy policy to zealously slam the door on “cross-subsidies” because it may be desirable to create programs that provide a “cross-subsidy” for low-income ratepayers. The cross-subsidy language inserted into this measure is too broad; it would prohibit this outcome in favor of low-income ratepayers.

In light of these important issues, consumers need more than a “fairness” sound bite. Based on the above rationale, we believe that the HD1 language prohibiting all cross-subsidies is problematic. We propose that the following revised language for subsection (b) to ensure that both costs and benefits to participants and non-participants are evaluated:

(b) In establishing the community-based renewable energy tariff or tariffs, the commission shall ~~ensure that there shall be no cross-subsidy by or shifting of costs to non participants to fund any part of the community based renewable energy program.~~ consider mechanisms to address potential cross-subsidy or shifting of costs and benefits between participants and non-participants and between the ratepayers and the utility shareholders. Such considerations may include, but shall not be limited to, time-of-use rates, demand charges, system efficiency, ancillary services, and other elements of a dynamic rate structure to promote an appropriate balance of costs and benefits in the interest of both participating and non-participating ratepayers.

This proposed language is similar to that found in SB 1050 SD1 (which was inserted by these committees). Blue Planet supports that language.

For the prior committee, the HECO Companies proposed substantial changes to the Community Renewables Bill. These changes do not promote fair access for all customers.

- **HECO’s proposed changes would bar any entity other than the utility from proposing a Community Renewables program structure.** A fair and open program should be open to all consumers and energy developers, and should welcome the

competitive benefits of being open to innovative business and development models. HECO proposes to limit the program to a utility-centric model. *The existing draft is preferable because the program will be established by the legislature, and will be open to everyone. Even if the utility never prepares a proposed Community Renewables tariff, another party could submit a proposed program design to the PUC for approval, with the HECO Companies as a party.*

- **HECO’s proposed changes eliminate the legislature’s policy guidance favoring streamlined standardized approval processes.** Eliminating this language creates the risk that the Community Renewables program will be constrained by increased transaction costs associated with individualized utility negotiations. This will favor larger utility-centric projects, rather than empowering a market for project designs that work for various communities. It will also ultimately constrain the potential size of the Community Renewables program. *The existing draft is preferable because it calls for streamlined standardized processes. A prior draft included a particular policy calling for streamlining of small, community-scale projects less than 1 MW. Blue Planet believes that size differentiation would have been effective in promoting access for community-based solutions. But at a minimum, HD 2 should retain its call for standardized approval and interconnection processes for community renewables projects. This will help to promote greater access by all customers.*
- **HECO’s proposed changes impose a vague standard of “transmit[ting] the most cost effective renewable energy to ALL customers.”** Although at first blush this standard seems favorable, the legislature has already issued a measured and rational cost-effectiveness mandate. H.R.S. § 269-6(b) states:

“In making determinations of the reasonableness of the costs of utility system capital improvements and operations, the commission shall explicitly consider, quantitatively or qualitatively, the effect of the State's reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions. The commission may determine that short-term costs or direct costs that are higher than alternatives relying more heavily on fossil fuels are reasonable, considering the impacts resulting from the use of fossil fuels.”

The standard proposed by HECO’s amendments would conflict with this existing legislative policy guidance, and may prescribe a standard that would limit the availability of the program even in the face of consumer demand. *The existing draft is preferable because it allows the PUC to evaluate cost effectiveness under clear existing guidelines.*

Community Renewables is an innovative solution that is already happening in at least ten other states, such as California, Colorado, Massachusetts, Washington, Maryland, and Maine.²

² The U.S. Dep’t of Energy’s National Renewable Energy Laboratory has reported on elements of these programs, <http://www.nrel.gov/docs/fy11osti/49930.pdf>.

California calls it “shared renewables.” Colorado and Minnesota call them “community solar gardens.” Massachusetts calls it “neighborhood” metering. Washington D.C. calls it “community renewables.” Under any name, this is a good idea, urgently needed in Hawai‘i.

We respectfully request that HB 484 be forwarded for further consideration. Thank you for the opportunity to testify.

***The following pages contain an “FAQ” on community renewables
and an article from Pacific Business News.***

Community-based renewable energy FAQ

Q: Why is community renewables necessary?

A: While solar has been an incredible success story in Hawai‘i, the majority of residents simply cannot directly participate in renewable energy because of their lack of access to a suitable rooftop for solar, such as many of the 40% of residents who live in multi-unit housing such as condos, or those whose roofs are shaded or otherwise incapable of supporting solar. Community-based renewable energy allows residents to invest in and benefit from solar and wind energy systems—even if those systems weren't directly on their property. It’s a matter of fairness and equality. Everyone should be able to participate in Hawai‘i's clean energy future, not just those fortunate enough to have a big roof over their heads.

Q: What are the benefits of community renewables?

Aside from making Hawai‘i's clean energy policies more equitable, community renewables can bring real economic value to those who need it the most. Under California's Multifamily Affordable Solar Housing program (established in 2008, with at least 7 MW installed, and 13 MW signed up), community renewables is estimated to save low-income households 30% on their electric bills.

Q: Is anyone else doing community renewables?

A: Yes, as of November 2010, utilities, public utility commissions, and communities in California, Florida, Arizona, Utah, Colorado, Washington, Vermont, Massachusetts, Maryland, and Maine had all taken steps to adopt innovative community renewables programs. According a report by the U.S. Dep't of Energy National Renewable Energy Laboratory (NREL), the Interstate Renewable Energy Council (IREC) examined “the various community solar approaches that have been implemented thus far,” to develop “model” rules for community based renewable energy programs. These model rules could be used to develop a program for Hawai‘i.

Q: Aren't there other approaches to solve the same problem of lack of access to renewable energy?

A: Yes, there are, such as a the potential for a utility-sponsored “green pricing” program. But this is not available in Hawai‘i and there are no current plans to make such a program available. Moreover, a community-based renewable energy program would empower residents to take

control of their energy situation with their own resources, leveraging the efficiency of efficiency of the market.

OUR VIEW

Solar gardens can make everyone a winner



A proven technology that is gaining popularity on the Mainland deserves some serious consideration here in Hawaii, where the sun is part of our brand identity.

The concept is especially important on Oahu as we grow upward with high-rise condominium towers that offer their residents few options for renewable energy.

We're talking about community solar gardens, which enable businesses and residents to invest in renewable energy by subscribing to a solar electric array that is connected to the utility grid. Subscribers will then receive a credit on their electric bills.

Solar energy has been one of Hawaii's fastest-growing industries during the past decade, helped in large part by federal and state tax credits. Even so, its market penetration is under 10 percent.

One of the problems is that approximately 40 percent of Hawaii residents live in multifamily households, many of them without enough roof space to accommodate renewable-energy equipment. There also are economic barriers in rental units where tenants would reap the benefits while landlords pay for the equipment.

Community solar gardens would remove some of those barriers.

The Blue Planet Foundation, which introduced legislation last year, calls it a win-win-win proposition.

"Households everywhere can win by accessing affordable clean energy," the foundation says. "The utility wins by adding another tool to solve energy-interconnection questions. And businesses win because they can access a market that has long been cut off."

Hawaiian Electric Co. also likes the concept, according to spokesman Peter Rosegg.

"We are looking for a model for customers who want to invest in and benefit from solar PV but do not have the opportunity because they are high-rise residents, home renters or other reasons," he said. "The model should also offer potential lower-cost renewable energy and economic benefits for all our customers, not just those investing in community solar or single-family homeowners who can benefit from solar on their own roofs."

As one would expect, solar contractors also think it's a great idea. It would mean more business for them and expand solar's reach.

So, what's stopping us?

The Blue Planet Foundation's House Bill 1363 attracted some attention in the 2013 Legislature, but it was one of those complicated issues whose "time had not yet come." The foundation will submit a new draft this session.

We think the time has come to give community solar gardens serious attention. In our bid to rely more on renewable energy and less on fossil fuels, here's a concept that holds promise to move us in the right direction.



**Testimony of Hawai'i Green Growth In Support of HB484 HD2
Relating to Energy
Senate Committee on Energy & Environment and Consumer Protection & Commerce
19 March 2015, 3:30pm, Room 325**

Audrey Newman
Hawai'i Green Growth
P.O. Box 535 Ho'olehua, Hawai'i 96729

Hawai'i Green Growth is a voluntary partnership of more than 60 state, county, federal, business, and non-governmental leaders from energy, food production, natural resources, waste reduction, planning, green jobs, and other sectors who have come together to support a shared statewide commitment and tangible actions toward sustainability and a model green economy.

Aloha Chairs Gabbard and Baker, Vice Chairs Green and Taniguchi, and Members of the Committee,

Hawai'i Green Growth (HGG) supports HB484 HD2 to establish a community-based renewable energy program that allows the Public Utilities Commission to establish a tariff for all electric utility customers to obtain an interest in a portion of an eligible renewable energy project that is providing electricity to the electric utility and receive compensation for the energy provided to the electric utility.

HGG supports a community-based renewable energy program that allows Hawai'i ratepayers to obtain an interest in renewable energy equipment, or otherwise benefit from renewables located anywhere on their island grid. HGG agrees that participants should receive credit on their electricity bill as determined by a tariff approved the Public Utilities Commission.

HB484 HD2 is a clean energy priority that will help advance action on the *Aloha+ Challenge: A Culture of Sustainability – He Nohona 'Ae'ōia*, a joint leadership commitment to achieve six sustainability targets by 2030 in the areas of clean energy, local food production, natural resource management, solid waste reduction, smart growth and climate resilience, green jobs and education. The *Aloha+ Challenge* was unanimously endorsed by the 2014 Legislature (SCR 69) and signed by Hawai'i's Governor, Mayors and Office of Hawaiian Affairs. It was also internationally recognized as a model of integrated sustainability at the UN Conference on Small Island Developing States in Samoa.

Mahalo nui for your consideration,

A handwritten signature in black ink that reads "Audrey Newman".

Audrey Newman

Senior Advisor, Hawai'i Green Growth (HGG)

Bringing leaders together to achieve sustainability in Hawai'i & be a model for a green economy

<http://www.hawaiigreengrowth.org>



Testimony prepared by Clean Energy Collective for the Senate Committee on Energy and Environment and Committee on Commerce and Consumer Protection hearing on Thursday, March 19th, 2015

HB484 HD2 is an important piece of legislation for Hawaii and its residents. The legislation would open up access to renewable energy for all residents, allowing the potential for everyone to enjoy the economic and environmental benefits of clean energy. Clean Energy Collective (CEC) appreciates the opportunity to provide written testimony to the Senate Committee on Energy and Environment and Committee on Commerce and Consumer Protection today regarding HB484 HD2.

Clean Energy Collective (CEC) is the nation's leading developer of community shared solar solutions, and can directly testify to the importance of strong, well-designed community renewable energy legislation. Community-based renewable energy projects allow anyone, regardless of whether or not they can put solar panels on their roof, to own and control their own renewable energy generation. By doing so, each individual is allowed to choose their own energy future, supplying their energy needs from local generation that they control. We have over 50 projects built or under development in 8 states and can testify directly to the positive impacts they have in their community.

In general, we are very supportive of HB484 HD2 and thank the sponsors for their efforts. We urge you to pass the bill and allow all Hawaiians the chance to access their own clean energy. However, in the spirit of constructive input, CEC recommends that you consider the following changes or clarifications:

- 1) **Add language to require a percentage of small subscribers for each community-based renewable energy facility, to ensure that small customers are included.** One of the appealing qualities of community-based renewable systems is that they allow all citizens the ability to own and benefit from renewable energy. And while it is important for all customers to be able to participate, CEC has found that the best balance comes when community-based renewable facilities have subscribers from all sectors and sizes, and detailed language in the legislation is needed to ensure this delicate balance. Without this, large customers may crowd out individuals and small businesses. CEC recommends adding language similar to what is found in Massachusetts' Renewable Energy Portfolio Standard Class I 225CMR14 – requiring each community-based renewable facility to have no more than two customers consuming over 25 kW of capacity, with those two customers making up no more than 50% of overall project capacity.
- 2) **CEC recommends that the Hawaii PUC refer to successful community renewable energy programs when implementing HB484 HD2.** Many of the details of the community-based renewable energy programs enabled by HB484 HD2 are left up to implementation by the PUC. CEC is supportive of this approach, as the PUC has the expertise and knowledge needed to handle such program details. In doing so, we



suggest that the PUC use examples of successful community-based renewable energy program implementations. This will allow faster implementation and greater chance of success in Hawaii. Some examples are Colorado's Community Solar Gardens program and Massachusetts' Community Shared Solar program. Examples of important details to consider include: contract length between consumers and the facility owner, minimum number of subscribers per project, and interconnection standards and policies for allowing interconnection of a facility before 100% subscription.

- 3) **Allow projects up to 5 MW to be eligible as community-based renewable projects.** Section 2 (g) (3) give the PUC the authority to set megawatt limitations for projects eligible for the community-based renewable tariff. CEC recommends that the PUC set the maximum project size at 5 MW with all projects subject to the interconnection processes approved by the commission. This structure will allow the efficient deployment of community-based renewables, while maximizing the ability for customers to get higher economic benefits out of the program through the economies of scale that come with projects up to 5 MW.

- 4) **Implement the program with reasonable expediency,** given the demand for renewables in Hawaii and the proven success of these programs nationwide.

CEC appreciates the opportunity to provide feedback and looks forward to staying engaged in this process as the Legislature moves forward with this important piece of legislation. By developing a program for community-based renewables, Hawaii will see an increase in renewable energy deployment across the state, while creating a means for all citizens to control and receive the benefits of clean energy generation.

Sincerely,

A handwritten signature in black ink, appearing to read "TH", written over a white background.

Tom Hunt
VP of Corporate Development
Clean Energy Collective



Testimony Before the Senate Committees on

Energy and Environment
and
Commerce and Consumer Protection

By Michael Yamane, P.E.
Chief of Operations
Kauai Island Utility Cooperative
4463 Pahee Street, Suite 1, Lihue, Hawaii, 96766-2000

Thursday, March 19, 2015, 3:30 p.m.
Conference Room #225

House Bill No. 484 HD2 – Relating to Energy

To the Honorable Mike Gabbard and Rosalyn H. Baker, Chairs; Josh Green and Brian T. Taniguchi, Vice-Chairs, and Members of the Committees:

Thank you for the opportunity to testify on this measure. I am Michael Yamane, Chief of Operations at Kauai Island Utility Cooperative (“KIUC”).

KIUC would like to offer comments on HB 484, HD2 which proposes a community based solar tariff.

By May of this year, KIUC will have more than 30 megawatts of utility-scale solar PV online, which will provide more than 50% of the electricity needed to meet Kauai’s daytime demand. This will result in a lower cost of generation which benefits all of Kauai’s residents.

KIUC is actively investigating a Time of Use (TOU) pilot that will allow our members to voluntarily participate in a program that encourages them to shift their energy consumption to the daytime hours, when they will be billed at a reduced rate. This gives consumers an incentive to use cheaper, cleaner solar energy during the day and helps ensure that there is sufficient demand for KIUC’s abundant solar resources.

Two focus groups recently conducted for KIUC found strong support for the concept of TOU rates, with participants approving the plan not only because it would save their households money but because they understood the greater community benefit of shifting power consumption from night to day.

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KIUC is an equal opportunity provider and employer.

KIUC believes that the PUC already has the ability to establish a community base tariff and no legislative action is required. However should the legislature proceed with this measure we ask that the PUC should have the flexibility as to the timing and the details of the establishment of this tariff. To impose a deadline and prescriptive details could have unintended consequences on KIUC's efforts.

Thank you for your consideration.



**Testimony before the Senate Committee on Energy and Environment and
Senate Committee on Commerce and Consumer Protection**

**March 19, 2015, 3:30 pm
Conference Room 225
H.B. 484 HD 2 – Relating to Energy**

**By Keiki-Pua Dancil, Ph.D.
Director, Business Strategy Development
Hawaiian Electric Company, Inc.**

Chairs Gabbard & Baker, Vice Chairs Green & Taniguchi, and Members of the Committees:

My name is Keiki-Pua Dancil. I am Director of Business Strategy Development at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric and its subsidiary utilities, Maui Electric and Hawaii Electric Light (collectively “Companies”). The Companies are in **strong support of community renewables**ⁱ. However we have **concerns about the language proposed in HB 484 HD 2**. We have **included edits for consideration** into HB 484 SD 1.

Our vision is to deliver cost-effective, clean, reliable, and innovative energy services to our customers, creating meaningful benefits for Hawaii's economy and environment, and making Hawaii a leader in the nation's energy transformation. To drive our vision for Hawaii, we anchor our strategies in a set of common objectives; lowering customer bills 20 percent by 2030, increasing renewables in our generation portfolio, modernizing our grid, and expanding customer options.

We have the following guiding principles for a fair and sustainable community renewables program:

- **Access**: Expand options to more of our customers, meeting their ever-changing energy needs in a fair and sustainable manner. Community renewables will be one of a suite of products and services that allow us to tailor a package of solutions to address customers' energy needs.
- **Fairness to ALL customers**: Develop community renewables in the most cost effective manner that benefits ALL customers, not just participants in the community renewables program and does not increase the net energy metering (NEM) cost shift.ⁱⁱ

Access

The Companies support increasing options for ALL customers. A community renewables program is an option that will provide the benefits of renewable energy to those customers (participants) who either choose not to or do not have access to install renewables on their property. As of December 2014, twelve percent of our customers have received the benefits of solar energy through our NEM program, which is only accessible to those with access to on-site generation. A community renewable program would be available to everyone with a utility bill that is not currently in the NEM program.

Fairness to ALL customers

The Companies supports a community renewables program that is fair and sustainable to ALL customers, not just participants in the program. The most cost effective renewable energy would be developed in optimal locations to the electric system (interconnection), at scale, and areas with high solar irradiance or wind capacity. Collectively, optimizing size (economies of scale), capacity factor, and interconnection to the electric system ensures ALL customers will get the most benefit from renewables.ⁱⁱⁱ



The Companies suggest the following edits for consideration in HB 484 SD 1 (see attached bill, explanations below):

- Page 3 line 11 According to the definition of a tariff (per PUC’s GO 7, Rule 1.3.d) and HRS 269-16(a), “[A]nother party” is not governed by the PUC, therefore “[A]nother party” does not need to file its tariffs. **Suggested strike of language.**
Upon application by an electric utility ~~or another party~~, or upon its own motion, the public utilities commission shall establish a community-based renewable energy tariff or tariffs. The commission shall establish a community-based renewable energy tariff or tariffs no later than January 1, 2016.
- Page 4 lines 1-3—Inserted language is proposed to provide clarity to which projects are eligible for the community based renewable energy tariff. **Suggested language inserted in bold.**
Any person or entity may propose, own, or operate a community-based renewable energy project **pursuant to the “community-based renewable energy tariff”**, subject to the commission’s review and approval.
- Page 4 lines 8-10—There are established policies addressing interconnection of generating resources established by the PUC (e.g. Rule 14H). Persons or entities should be following these policies. Redundant language. **Suggested strike of language.**
~~(c) Community-based renewable energy tariffs and related interconnection processes shall, to the extent possible, be standardized.~~
- Page 4 lines 15-18—The Community-based renewable energy tariff program should benefit ALL customers in a fair and equitable manner. Renewable energy from a community-based renewable energy project should be procured in the most cost effective manner.^{iv} **Suggested language is inserted in bold and removal of language is strikethrough.**
 - (1) Allows all **the electric utility to procure the most cost effective renewable energy to benefit all customers regardless of their participation in the community-based renewable energy tariff program, ensuring fairness to all customers.**
 - (2) **Allows electric utility customers not participating in the net energy metering (NEM) program, irrespective of rate class, to obtain an interest in a portion or portions of an eligible community-based renewable energy project that is providing electricity to the electric utility; and**
- Page 4 lines 19-20 and Page 5 lines 1-2—The suggested language is not clear on the crediting mechanism for the participating customers’ interest in the community-based renewable energy project. **Suggested language is inserted in bold and removal of language is strikethrough.**
 - (3) Allows the electric utility to implement a billing arrangement to ~~compensate~~ **credit** those customers **participating in the community –based renewable energy tariff program equal to their pro rata** ~~who have such an interest in the community-based renewable energy project~~ for the electricity provided to the electric utility.
- Page 5 lines 3-5: Suggest striking the language as it restricts the ability for the utility to procure low cost renewable energy by achieving economies of scale and therefore reduced cost of renewable energy. **Suggested strike of language.**
~~(3) Applies to community-based renewable energy projects that do not exceed megawatt limitations established by the commission.”~~
- Page 5 lines 8-12: The definition of wheeling is expanded, the current definition is limited. **Suggested language is inserted in bold and removal of language is strikethrough**
~~“”Wheeling” means the the transmission of electricity over transmission or distribution lines by an entity that does not directly own or use the electricity being transmitted and without any compensation to the electric utility for the cost of transmission and distribution.”~~ **process of transmitting electric power, which the utility has not produced or purchased, from a seller’s point of generation across a utility owned transmission and distribution system to a wholesale purchaser or the seller’s retail customer; or the**



simultaneous purchase and sale or exchange of electric power without the physical movement of the electric power over a transmission or distribution system.”

Thank you for the opportunity to testify.

ⁱ <http://www.energy.gov/eere/sunshot/solar-market-pathways>. Hawaiian Electric is a participating utility stakeholder in Solar Electric Power Association’s (SEPA) Department Of Energy’s Sun Shot Initiative grant to explore community solar business models and consumer demographics to develop more standardized program design options.

ⁱⁱ As of December 2014, the annualized total fixed cost shift was \$53MM, a \$15MM increase from December 2013.

ⁱⁱⁱ http://www.hawaiianelectric.com/heco/_hidden/Hidden/CorpComm/Hawaiian-Electric-sends-six-more-Oahu-solar-contracts-to-Public-Utilities-Commission-for-approval?cpsextcurrchannel=1 (average price of solar \$0.14/kWh).

^{iv} §269-145.5(b)(3) Maximizing interconnection of distributed generation to the State's electric grids on a cost-effective basis at non-discriminatory terms and at just and reasonable rates, while maintaining the reliability of the State's electric grids, and allowing such access and rates through applicable rules, orders, and tariffs as reviewed and approved by the commission

HOUSE OF REPRESENTATIVES
TWENTY-EIGHTH LEGISLATURE, 2015
STATE OF HAWAII

A BILL FOR AN ACT

RELATING TO ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that all Hawaii residents
2 should be able to participate in and enjoy the economic,
3 environmental, and societal benefits of renewable energy.

4 Spurred by the Hawaii clean energy initiative and increasingly
5 affordable clean energy options, such as solar photovoltaic
6 systems, localized renewable energy generation technology has
7 become increasingly attainable.

8 While residential solar energy use has grown dramatically
9 across the State in recent years, many residents and businesses
10 are currently unable to directly participate in renewable energy
11 because of their location, building type, access to the electric
12 utility grid, or other impediments. The community-based
13 renewable energy program seeks to rectify this inequity by
14 dramatically expanding the market for eligible renewable energy
15 resources to include residential and business renters, occupants
16 of residential and commercial buildings with shaded or

H.B. 484
[PROPOSED SD 1]

1 improperly oriented roofs, and other groups who are unable to
2 access the benefits of onsite clean energy generation.

3 The legislature finds that it is in the public interest to
4 promote broader participation in self-generation by Hawaii
5 residents and businesses through the development of community
6 renewable energy facilities in which participants are entitled
7 to generate electricity and receive credit for that electricity
8 on their utility bills.

9 Community based renewable energy creates new construction
10 jobs, stimulates the economy, reduces emissions of greenhouse
11 gases, promotes energy independence, and assists in meeting the
12 State's clean energy goals. Further, community-based renewable
13 energy enables residents and businesses to save money on their
14 electricity bills, thereby providing additional funds for other
15 purchasing, investment, or other economic activity.

16 While the concept of "wheeling" electricity over utility
17 infrastructure has been the subject of discussion for years, the
18 community-based renewable energy program contemplated in this
19 Act should not be construed as "wheeling" because the tariff or
20 tariffs established by the commission will address the utility

H.B. 484
[PROPOSED SD 1]

1 costs related to transmission and distribution infrastructure
2 and grid operations.

3 The purpose of this Act is to establish the Hawaii
4 community-based renewable energy program to make the benefits of
5 renewable energy more accessible to a greater number of Hawaii
6 residents.

7 SECTION 2. Chapter 269, Hawaii Revised Statutes, is
8 amended by adding a new section to be appropriately designated
9 and to read as follows:

10 "§269- Community-based renewable energy tariffs. (a)

11 Upon application by an electric utility ~~or another party~~, or
12 upon its own motion, the commission shall establish a community-
13 based renewable energy tariff or tariffs. A community-based
14 renewable energy tariff or tariffs shall take effect no later
15 than January 1, 2016.

16 (b) In establishing the community-based renewable energy
17 tariff or tariffs, the commission shall ensure that there shall
18 be no cross-subsidy by or shifting of costs to non-participants
19 to fund any part of the community-based renewable energy
20 program.

H.B. 484
[PROPOSED SD 1]

1 (c) Any person or entity may propose, own, or operate a
2 community-based renewable energy project pursuant to the
3 "community-based renewable energy tariff", subject to the
4 commission's review and approval.

5 (d) An electric utility may develop and implement its own
6 community-based renewable energy project or projects; provided
7 that the project or projects shall be subject to the
8 commission's review and approval.

9 ~~(e) Community based renewable energy tariffs and related~~
10 ~~interconnection processes shall, to the extent possible, be~~
11 ~~standardized.~~

12 (f) Nothing in this section shall be construed to permit
13 wheeling.

14 (g) As used in this section, "community-based renewable
15 energy tariff" means a tariff approved by the commission that:

16 (1) Allows ~~all the~~ electric utility to procure the most
17 cost effective renewable energy to benefit all
18 customers regardless of their participation in the
19 community-based renewable energy tariff program,
20 ensuring fairness to all customers.

H.B. 484
[PROPOSED SD 1]

1 | (2) Allows electric utility customers– not participating in
2 | the net energy metering (NEM) program, irrespective of
3 | rate class, to obtain an interest in a portion or
4 | portions of an ~~eligible-community-based~~ renewable
5 | energy project that is providing electricity to the
6 | electric utility; and

7 | (32) Allows the electric utility to implement a billing
8 | arrangement to ~~compensate-credit~~ those customers
9 | participating in the community-based renewable energy
10 | tariff program equal to their pro rata ~~who have such~~
11 | ~~an-interest~~ in the community-based renewable energy
12 | project for the electricity provided to the electric
13 | utility.

14 | ~~(3) Applies to community-based renewable energy projects~~
15 | ~~that do not exceed megawatt limitations established by~~
16 | ~~the commission."~~

17 | SECTION 3. Section 269-1, Hawaii Revised Statutes, is
18 | amended by adding a new definition to be appropriately inserted
19 | and to read as follows:

20 | "Wheeling" means the ~~transmission of electricity over~~
21 | ~~transmission or distribution lines by an entity that does not~~

H.B. 484
[PROPOSED SD 1]

1 ~~directly own or use the electricity being transmitted and~~
2 ~~without any compensation to the electric utility for the cost of~~
3 ~~transmission and distribution.”~~ process of transmitting electric
4 power, which the utility has not produced or purchased, from a
5 seller’s point of generation across a utility owned transmission
6 and distribution system to a wholesale purchaser or the seller’s
7 retail customer; or the simultaneous purchase and sale or
8 exchange of electric power without the physical movement of the
9 electric power over a transmission or distribution system.”

10

11 SECTION 4. New statutory material is underscored.

12 SECTION 5. This Act shall take effect upon its approval.

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and, Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,

Ari Matsumura

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of HB 484 in its current form to enable community solar for all.

Brit Reis, MD
Reis Pediatrics
30 Aulike Street, Suite 500
Kailua, HI 96734

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

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Sincerely,
Clare Loprinzi

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,
Craig Kawamura

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

My name is David Thompson and I strongly support opening up the grids in Hawaii.

It has already been proven our grids can handle more PV.

I strongly oppose the sale of HEI to NextEra.

I also strongly oppose HECO changing the current Net Metering system.

How are they allowed to dangle this carrot about allowing more PV if Net Metering ends?

Please submit testimony on my behalf for all bills pertaining to these subjects.

Sincerely,

David Thompson

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I am writing this in support of promoting renewable energy in our State. We are a family that strives to create a clean, sustainable environment and hope to become energy independent in the near future. We support the Community Solar House Bill 484 and the Update of our Renewable Portfolio Standards to 70 % By 2035 and 100% by 2040 House Bill 623. As the parent of 2 teenagers, I am deeply concerned with both the nature of power supply and environmental impact of energy resources on our planet. As a family, we drive EV and are in the process of obtaining approval for PV for our home. We are among the fortunate homeowners that have a rooftop with room for solar panels. However, residents that don't have that privilege should still be able to access the suns magnificent power. Our state is unique in its ability to offer the resource of energy that causes no known harm to body or environment. Let us take action to make it available to everyone.

Sincerely,

Elizabeth Kawanakoa

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of HB 484 in its current form to enable community solar for all.

Henry Chang

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I want legislators to hear from me so they understand that there is widespread support for community solar to help residents and businesses who are unable to put panels on their own roofs.

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of HB 484 in its current form to enable community solar for all.

Thank you
Jeff Barone~

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,
Jeff Lum

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of SB 1050 in its current form to enable community solar for all.

Jennie L Sine

Thanks!

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

As a condo dweller, I would hope that future legislation advances condo access to solar panals that help reduce the individual electric bills of resident and slow global warming.

Joan Larcom

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people of Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their roof top. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. PLEASE PASS THIS BILL. Power should be on the community's terms--not the utility's.

Sincerely,

Janet Mac Neal, Hilo, HI (born in Honolulu)

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

“I strongly support HB 484. With each new solar panel, Hawaii gets cleaner and cheaper energy, but not everyone can put panels on their own roof. Please make community solar a priority so that everyone has access to solar power. Please pass this bill.

Laura Gray

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

Aloha. I installed PV panels 10 years ago (when it cost more) because I am truly afraid of climate change. Unfortunately, I don't produce enough to cover our use, and could never power an electric car. My neighbors old, tall coconut trees limit the amount of sun I have access to. The house is an illegal vacation rental and they are not open to cutting the trees. So, I want personal access to Community Solar to add to what I can produce at home. Please give me that opportunity.

Thank you, Lisa Marten

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support HB484. With each new solar panel, Hawaii gets cleaner and cheaper energy, but not everyone can put panels on their own roof. Please make community solar a priority so that everyone has access to solar power. Please pass this bill.

Lois Crozer
Kailua

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mattson C. Davis'. The signature is stylized with a large initial 'M' and a long horizontal stroke.

Mattson C. Davis

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

My husband and I strongly support Senate Bill 1050 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

We have invested in solar panels on our home roof and are enjoying running our home on them AND driving our 2011 Nissan Leaf on sunshine for, usually, a monthly electric bill of \$18. We realize that we are privileged.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

We believe everyone has the right to benefit from renewable energy. Please vote in favor of SB 1050 in its current form to enable community solar for all.

Mele Stokesberry
Charles M. Carletta
51 Mano Drive, Kula, (Maui) HI 96790

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Best regards,

Miles Yoshimoto
Project Developer

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,
Reggie Salvador

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,
Rene' Julian

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,

--

Ross M Kutsunai
Alternate Energy Inc.
808-478-5631

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

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Sincerely,
Roy Skaggs

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

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Tatyana E. Cerullo

**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION**

March 19, 2015, 3:30 P.M.

Room 225

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Gabbard, Chair Baker, Vice Chair Green, Vice Chair Taniguchi and Members of the Committees:

As a citizen of Hawai'i and also a member of the Blue Planet Board, I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof – in our home, we have no more room for panels. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Mahalo – Virginia S. Hinshaw

From: mailinglist@capitol.hawaii.gov
To: [ENETestimony](#)
Cc: amybrinker@mac.com
Subject: *Submitted testimony for HB484 on Mar 19, 2015 15:30PM*
Date: Tuesday, March 17, 2015 8:15:06 PM

HB484

Submitted on: 3/17/2015

Testimony for ENE/CPN on Mar 19, 2015 15:30PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Amy Brinker	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
To: [ENETestimony](#)
Cc: rbergstrom@surfrider.org
Subject: *Submitted testimony for HB484 on Mar 19, 2015 15:30PM*
Date: Thursday, March 19, 2015 8:31:58 AM

HB484

Submitted on: 3/19/2015

Testimony for ENE/CPN on Mar 19, 2015 15:30PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Rafael Bergstrom	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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