TESTIMONY OF RANDY IWASE CHAIR, PUBLIC UTILITIES COMMISSION STATE OF HAWAII TO THE HOUSE COMMITTEE ON FINANCE

March 3, 2015 1:30 p.m.

MEASURE: H.B. No. 484, H.D.2 TITLE: Relating to Energy

Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

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.

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 maximize the use of cost-effective renewable resources and achieve an appropriate cost and benefit balance for ratepayers participating in a community-based renewable energy tariff. Further, the Commission notes that the discretion to revise and modify 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.

Please see the following attached PUC proposed draft which will give the PUC the flexibility to act quickly and appropriately in establishing a community-based renewable energy tariff.

Thank you for the opportunity to testify on this measure.

H.B. NO. ⁴⁸⁴ H.D. 3 PROPOSED

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.

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 generation because of their location, building type, access to 12 the electric utility grid, or other impediments. The community-13 based renewable energy program seeks to rectify this inequity by 14 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.

5 The legislature finds that it is in the public interest to 6 promote broader participation in self-generation by Hawaii 7 residents and businesses through the development of community-8 based renewable energy facilities in which participants are 9 entitled to generate electricity and receive credit for that 10 electricity on their utility bills.

11 Community-based renewable energy creates new construction 12 jobs, stimulates the economy, reduces emissions of greenhouse 13 gases, promotes energy independence, and assists in meeting the 14 State's clean energy goals. Further, community-based renewable 15 energy enables residents and businesses to save money on their 16 electricity bills, thereby providing additional funds for other 17 purchasing, investment, or other economic activity.

18 While the concept of wheeling electricity over utility 19 infrastructure has been the subject of discussion for years, the 20 community-based renewable energy program contemplated in this



Act should not be construed as wheeling because the tariff or
 tariffs established by the commission will address the utility
 costs related to transmission and distribution infrastructure
 and grid operations.

5 The purpose of this Act is to establish the Hawaii 6 community-based renewable energy program to make the benefits of 7 renewable energy generation more accessible to a greater number 8 of Hawaii residents.

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

12 "§269-**Community-based renewable energy tariffs.** (a) 13 Upon application by an electric utility or another party, or upon its own motion, the public utilities commission shall 14 15 establish a community-based renewable energy tariff or tariffs. (b) As used in this section, "community-based renewable 16 energy tariff" means a tariff approved by the commission that: 17 (1) Allows an electric utility customer to obtain an 18 interest in a portion or portions of an eligible renewable 19



PROPOSED

1	energy project that is providing electricity to the electric			
2	<u>utility;</u>			
3	(2) Allows the electric utility to implement a billing			
4	arrangement to compensate those customers who have such an			
5	interest for the electricity provided to the electric utility;			
6	and			
7	(3) Addresses potential cross-subsidy or shifting of costs			
8	and benefits to achieve an appropriate cost and benefit balance			
9	for ratepayers participating in a community-based renewable			
10	energy tariff and ratepayers not participating in a community-			
11	based renewable energy tariff; and			
12	(4) To the extent possible, standardizes the related			
13	interconnection processes.			
14	SECTION 3. New statutory material is underscored.			
15	SECTION 4. This Act shall take effect on July 1, 2112.			

10 59 °

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt

Statement of LUIS P. SALAVERIA Director Department of Business, Economic Development, and Tourism before the HOUSE COMMITTEE ON FINANCE

> Tuesday, March 3, 2015 1:30 p.m. State Capitol, Conference Room 308

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

Chair Luke, Vice Chair Nishimoto, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) supports the intent of HB 484, HD 2, which creates a process by which the Public Utilities Commission (PUC) could establish a community-based renewable energy tariff or tariffs upon application by an electric utility or another party, or by its own motion.

DBEDT supports the purpose of this legislation and offers comments geared to keep this measure moving forward. Further, DBEDT views the concept of community renewables as a potentially attractive and viable 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 participate in the tariff and receive credit for the energy provided to the grid, renewable energy projects can be sited in optimal locations, creating an efficient mechanism for broadening and deepening the benefits of clean energy to Hawaii's residents.

We defer to the PUC on the regulatory and administrative requirements of the bill.

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

LUIS P. SALAVERIA DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR

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



DAVID Y. IGE GOVERNOR

SHAN S. TSUTSUI LT. GOVERNOR STATE OF HAWAII OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

> 335 MERCHANT STREET, ROOM 310 P.O. Box 541 HONOLULU, HAWAII 96809 Phone Number: 586-2850 Fax Number: 586-2856 www.hawaii.gov/dcca

CATHERINE P. AWAKUNI COLÓN DIRECTOR

JO ANN M. UCHIDA TAKEUCHI DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON FINANCE

THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2015

TUESDAY, MARCH 3, 2015 1:30 p.m.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, TO THE HONORABLE SYLVIA LUKE, CHAIR, AND MEMBERS OF THE COMMITTEE

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

House Bill No. 484, H.D. 2 House Committee on Finance Tuesday, March 3, 2015, 1:30 p.m. Page 2

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 Before the House Committee on Finance

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

> Tuesday, March 3, 2015, 1:30 p.m. Conference Room #308

House Bill No. 484 HD2 – Relating to Energy

To the Honorable Sylvia Luke, Chair; Scott Y. Nishimoto, Vice-Chair, and Members of the Committee:

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.

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

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KIUC is an equal opportunity provider and employer.

Testimony HB 484, HD2 Page 2

this tariff. To impose a deadline and prescriptive details could have unintended consequences on KIUC's efforts.

Thank you for your consideration.



Tuesday, March 3, 2015

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

Aloha, Chair Luke, Vice Chair Nishimoto, and Members of the House Committee on Finance,

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



Hawaii Solar Energy Association

Serving Hawaii Since 1977

Before House Committee on Finance Tuesday, March 3, 2015, 1:30 p.m., room 308 HB 484 HD 2: Relating to Energy

Aloha Chair Luke, Vice Chair Nishimoto, and members of the Committee,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in <u>support</u> with one suggested amendment for HB 484 HD 2 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 would allow the utility or any third party to propose, own, or operate a community based project

HB 484 also 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.

Interconnection procedures stay in place and systems above 1 MW subject to PUC approval

HB 484 also expressly states that interconnection procedures would stay in place and that any projects above 1 MW would only be built subject to PUC approval. This ensures that community solar projects would not be afforded interconnection protocol different from other renewable energy projects currently waiting in queue. Getting a project interconnected is no easy task, and it is important to ensure that a fair interconnection process stays in place. HSEA would also like to see that community solar projects are developed such that site selection does not subsequently preclude roof top customers from installing systems whenever possible.

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

HSEA is concerned over the language that has been included in the bill regarding "cross-subsidy" (§ 269-(b)). 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. The public benefit fee which appears on all bills pays for a variety of efficiency measures including energy efficient lighting, appliances, solar hot water, chillers for apartments-all of which are "subsidized" by each rate payer, even though the improvement goes to directly benefit one particular customer. The green energy market securitization program (GEMS) is also paid for by each ratepayer although the program is designed to make renewable energy available for the "hard to reach" customer. 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, 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.

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



Testimony of Hawai'i Green Growth In Support of HB484 HD2 Relating to Energy House Committee on Finance 3 March 2015, 1:30pm, Room 308

Audrey Newman Hawai'i Green Growth P.O. Box 535 Hoʻolehua, 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 Chair Luke, Vice Chair Nishimoto, 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'oia*, 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,

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



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE Tuesday, March 3, 2015 — 1:30 p.m. — Room 308

Ulupono Initiative <u>Strongly Supports</u> HB 484 HD 2 <u>with an Amendment</u>, Relating to Energy

Dear Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'ibased 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 missionfocused impact can work hand in hand.

Ulupono <u>strongly supports</u> 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 by all customers, not just some. When the utility builds the project, it is the shareholders who benefit at the ratepayer expense.

Investing in a Sustainable Hawai'i



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 Utility 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



Testimony before the House Committee on Finance March 3, 2015, 1:30 pm Conference Room 325 H.B. 484 HD 2 – Relating to Energy

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

Chair Luke, Vice Chair Nishimoto, and House Members of the Committee:

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 HD 3.

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:

- <u>Access</u>: 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.
- <u>Fairness to ALL customers</u>: 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 HD3 (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**.

(e) 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 <u>http://www.energy.gov/eere/sunshot/solar-market-pathways</u>. 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} <u>http://www.hawaiianelectric.com/heco/_hidden_Hidden/CorpComm/Hawaiian-Electric-sends-six-more-Oahu-solar-contracts-to-Public-</u> 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 nondiscriminatory 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

H.B. NO. 484

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:

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 increasing 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

improperly oriented roofs, and other groups who are unable to 1 2 access the benefits of onsite clean energy generation. The legislature finds that it is in the public interest to 3 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

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

electricity bills, thereby providing additional funds for other

14

costs related to transmission and distribution infrastructure
 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. (b) In establishing the community-based renewable energy 16 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.

1	(c) Any person or entity may propose, own, or operate a				
2	community-based renewable energy project pursuant to the				
3	<pre>"community-based renewable energy tariff", subject to the</pre>				
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.				

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	<u>""Wheeling" means the transmission of electricity over</u>				
21	transmission or distribution lines by an entity that does not				

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.



TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON FINANCE

HB 484 HD2, RELATING TO ENERGY

March 3, 2015

Chair Luke, Vice-Chair Nishimoto and members of the Committee, 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 PUC to establish community-based renewable energy tariff or tariffs to take effect by 1/1/16, to allow more utility customers to participate in renewable energy production and use; and (ii) prohibit cost-shifting to non-participants.

HREA **supports** this measure with the following comments and recommendations, including deletion of a section as discussed below.

- 1) <u>Clean Energy Goals</u>. This measure supports our clean energy goals. Such systems will provide an option to customers who are not able to install renewable systems on their property via a net metering or other agreement, and lack adequate renewable resources or space on their property.
- <u>Role of the Utility</u>. Given the PUC's IRP Inclinations and its denial of HECO's application for 15 MW PV facility at its Kahe power plant site, we do not believe it is appropriate for the electric utility to develop and implement its own community-based renewable energy projects. References:
 - a) "Commission's Inclinations on the Future of Hawaii's Electric Utilities -Aligning the Utility Business Model with Customer Interests and Public Policy Goals, Exhibit A to PUC Order No. 32052 in its Integrated Resource Planning Docket No. 2012-0036, filed on April 28, 2014; and
 - b) Commission's Decision and Order 32437, dated November 4, 2014, in its Docket No. 2013-0360, pages 1-2, and 66-67.
- 3) <u>Recommendations</u>: Please pass out this measure deleting section (c) (p.4, l: 4-7).

Mahalo for this opportunity to testify.

Directors

Jody Allione Project Development Consultant

Joe Boivin Hawaii Gas

Kelly King Pacific Biodiesel

Warren S. Bollmeier II WSB-Hawaii





HOUSE COMMITTEE ON FINANCE

March 3, 2015, 1:30 P.M., Room 308 (Testimony is 7 pages long)

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2 PROPOSED AMENDMENT

Aloha Chair Luke, Vice-Chair Nishimoto, and members of the Committee:

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.

HB 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 used 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 <u>fair</u> <u>access</u> 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 utilitycentric 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 <u>and</u> 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 companion bill 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 "crosssubsidies" because it may be desirable to create programs that provide a "crosssubsidy" for low-income ratepayers. The cross-subsidy language inserted into companion bill HB 484 HD1 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 <u>and</u> benefits to participants <u>and</u> non-participants are evaluated:

(b) In establishing the community-based renewable energy tariff or tariffs, the commission shall ensure that there shall be no crosssubsidy 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.

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, <u>http://www.nrel.gov/docs/fy11osti/49930.pdf.</u>

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.

Pacific Business News

January 17, 2014

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 fastestgrowing 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 winwin-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 highrise residents, home renters or other reasons," he said. "The model should also offer potential lowercost 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.

finance1-Kim

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 28, 2015 4:13 PM
To:	FINTestimony
Cc:	anthony_orozco@yahoo.com
Subject:	Submitted testimony for HB484 on Mar 3, 2015 13:30PM

<u>HB484</u>

Submitted on: 2/28/2015 Testimony for FIN on Mar 3, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Anthony Orozco	Individual	Oppose	No

Comments: I want my electric bill to be less, not more.

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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finance1-Kim

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 02, 2015 10:38 AM
To:	FINTestimony
Cc:	lcaldwell12@live.com
Subject:	*Submitted testimony for HB484 on Mar 3, 2015 13:30PM*

<u>HB484</u>

Submitted on: 3/2/2015 Testimony for FIN on Mar 3, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Larry Caldwell	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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March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

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Tatyana E. Cerullo

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Sincerely, Roy Skaggs

March 3, 2015, 1:30 P.M. Room 308

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Sincerely,

--

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

March 3, 2015, 1:30 P.M. Room 308

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Sincerely, Rene' Julian

March 3, 2015, 1:30 P.M. Room 308

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Sincerely, Reggie Salvador

March 3, 2015, 1:30 P.M. Room 308

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Best regards,

Miles Yoshimoto Project Developer

March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

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Sincerely,

Mattson C. Davis

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

"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

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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.

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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!

March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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~

March 3, 2015, 1:30 P.M. Room 308

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Sincerely,

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

March 3, 2015, 1:30 P.M. Room 308

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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

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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 it 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 Kawananakoa

March 3, 2015, 1:30 P.M. Room 308

TESTIMONY IN STRONG SUPPORT OF HB 484 HD2

Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

March 3, 2015, 1:30 P.M. Room 308

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Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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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

March 3, 2015, 1:30 P.M. Room 308

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Aloha Chair Luke, Vice Chair Nishimoto and Members of the Finance Committee:

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

March 3, 2015, 1:30 P.M. Room 308

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Sincerely, Clare Loprinzi

March 3, 2015, 1:30 P.M. Room 308

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Sincerely,

Ari Matsumura





Testimony prepared by Clean Energy Collective for the House Committee Finance hearing on Tuesday, March 3rd, 2015

HB 484 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 House Committee on Finance today regarding HB 484.

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 HB 484 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) Remove the 1 MW limit for standard interconnection process in Sec 2 (b). Instead, CEC recommends simply setting the maximum project size at 5 MW with all projects subject to the interconnection processes approved by the commission. As written, the current legislation adds an unnecessary extra step in the approval process for projects larger than 1 MW, which will slow down deployment of community-based renewables and potentially even prevent the development of projects up to 5 MW in size, hindering the ability for customers to get higher economic benefits out of the program.
- 2) 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' Virtual Net Metering Law 220CMR18 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.

3) CEC recommends that the Hawaii PUC refer to successful community renewable energy programs when implementing HB 484. Many of the details of the communitybased renewable energy programs enabled by HB 484 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 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.

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,

Tom Hunt VP of Corporate Development Clean Energy Collective

finance8-Melanie

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 02, 2015 7:37 PM
To:	FINTestimony
Cc:	scotchglenn@gmail.com
Subject:	Submitted testimony for HB484 on Mar 3, 2015 13:30PM



<u>HB484</u>

Submitted on: 3/2/2015 Testimony for FIN on Mar 3, 2015 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Scott Glenn	Individual	Support	No

Comments: I support the intent of this bill promoting community-based 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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HB484 HD2 RELATING TO ENERGY House Committee on Finance

March 3, 2015 1:30 p.m. Room 308

The Office of Hawaiian Affairs (OHA) offers the following <u>COMMENTS</u> 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.

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. 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.

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 'ōlelo noeau: "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.