

TESTIMONY OF RANDY IWASE  
CHAIR, PUBLIC UTILITIES COMMISSION  
STATE OF HAWAII  
TO THE  
HOUSE COMMITTEE ON  
CONSUMER PROTECTION AND COMMERCE

FEBRUARY 18, 2015  
3:00 p.m.

**MEASURE:** H.B. No. 484  
**TITLE:** Relating to Energy

Chair McKelvey, Vice Chair Woodson, 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 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 program should be left to the Commission so that appropriate adjustments can be made to ensure that the program remains in the public interest.

Thank you for the opportunity to testify on this measure.



**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  
**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE**

Wednesday, February 18, 2015  
3:00 p.m.  
State Capitol, Conference Room 325

in consideration of  
**HB 484, HD1**  
**RELATING TO ENERGY.**

Chair McKelvey, Vice Chair Woodson, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) respectfully offers comments on HB 484, HD1, which orders the implementation of a community renewables program.

DBEDT supports the purpose of the legislation and offers comments geared to keep this measure moving forward. DBEDT believes that a community renewable program could be a valuable tool in achieving Hawaii's renewable goals and expanding access to many who have been unable to install or benefit from renewable energy installations.

Notably, California has passed community renewable legislation, SB 43, and the California Public Utilities Commission has recently issued a long awaited final decision on California's investor owned utilities, SDG&E, PG&E and SCE applications to implement a community renewable program.

A key component of the California legislative approach is the requirement for "customer indifference" that provides fair value to participating community solar customers and mitigates

cost shifts to non-participating customers.<sup>1</sup> To this end, we are pleased to see that the legislature is moving towards this concept by ensuring 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” (page 3, lines 17-20).

To ensure the portfolio of resources that serve Hawaii is optimized to achieve renewable goals at lowest cost, we recommend specifying an initial program size in order to provide the opportunity for the program to be demonstrated and reviewed prior to expansion. This would help ensure the program design results in the procurement of the lowest cost resources to achieve the states renewable goals.

Community solar would benefit from a consistent program framework to be established by the Commission. As the investor owned utilities will implement the tariff, they would appropriately bring project proposals before the Commission for their consideration and/or modification. However, this would not dictate the structure of the contract between a third party provider and customers. In addition the program should allow for customers to have the choice to participate directly through the utility or third party developers.

Another notable consideration is that the Commission should be directed to put consumer protections in place. As the number of options available to customers from third parties grow, consumer protections will become increasingly important as third parties generally do not face the same scrutiny from regulators as the utilities.

Finally, consideration should be given to the characterization of a customer’s participation with third parties as an investment.<sup>2</sup> There are any number of contractual arrangements that third parties may enter into with customers. However, characterizing those arrangements in statute as “investments” could create a risk that such a program would have to be registered as a security and comply with securities law.

Thank you for the opportunity to offer these comments regarding HB 484, HD1.

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<sup>1</sup> California SB 43 section (p) *The commission shall ensure that charges and credits associated with a participating utility’s green tariff shared renewables program are set in a manner that ensures nonparticipant ratepayer indifference for the remaining bundled service, direct access, and community choice aggregation customers and ensures that no costs are shifted from participating customers to nonparticipating ratepayers.*

<sup>2</sup> HB 484 HD1 Page 4 line 19



**HB484 HD1  
RELATING TO ENERGY**

House Committee on Consumer Protection & Commerce

February 18, 2015

3:00 p.m.

Room 325

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on HB484 HD1, 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 HD1 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 sustainability as 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).

Therefore, OHA urges the Committee to **PASS** HB484 HD1. Mahalo for the opportunity to testify on this measure.



**LATE**

DAVID Y. IGE  
GOVERNOR

SHAN S. TSUTSUI  
LT. GOVERNOR

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TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

THE TWENTY-EIGHTH LEGISLATURE  
REGULAR SESSION OF 2015

WEDNESDAY, FEBRUARY 18, 2015  
3:00 p.m.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF  
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER  
AFFAIRS, TO THE HONORABLE ANGUS L.K. McKELVEY, CHAIR,  
AND MEMBERS OF THE COMMITTEE

HOUSE BILL NO. 484, H.D. 1 – 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.



HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMUNITY DEVELOPMENT

February 18, 2015, 3 P.M., Room 325

(Testimony is 7 pages long)

**LATE**

**TESTIMONY IN STRONG SUPPORT OF HB 484 HD1, PROPOSED AMENDMENT**

Aloha Chair McKelvey, Vice-Chair Woodson, and members of the Committee:

The Blue Planet Foundation strongly supports HB 484, establishing 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 boosts private investment in our green energy infrastructure while it maximizes the flexibility of our clean energy solutions. In doing so, it benefits 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, avoiding a lengthy, resource-intensive, and sometimes contentious regulatory process. 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, we suggest one key amendment. House Draft 1 inserted a prohibition on “cross-subsidies” for community renewables program. For many reasons, this language is misguided and would unintentionally create bad policy. For example, it may prohibit the creation of any community renewables program aimed specifically at low-income ratepayers.**

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

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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**

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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

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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. Hawaii 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, and access for all consumers.<sup>1</sup>

The myth of a 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 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.

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<sup>1</sup> 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.

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 provide a cross-subsidy 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 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 appropriately address potential cross-subsidy or shifting of costs and benefits between participants and non-participants. 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.*

- **HECO’s proposed changes eliminate the deadline for implementing a program.** We cannot overstate the urgency of implementing a Community Renewables program to provide fair and open access to renewable energy. HECO proposes a bill with no timeline. Consumers do not deserve to wait any longer. *The existing draft is preferable because it establishes a deadline of January 1, 2016 to implement a Community Renewables tariff that is accessible to all consumers and developers. This will allow at least a year before the potential expiration of federal tax credits that can make these projects even more cost-effective for Hawaii consumers. Consumers cannot afford to wait a year or longer for this program to be implemented.*
- **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, while still requiring that large projects (greater than 1 MW) will be subject to individualized PUC approval. 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.<sup>2</sup>

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<sup>2</sup> 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 Hawaii.

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?***

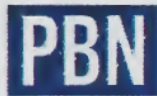
A: Yes, as of November 2010, utilities, public utility commissions, and communities in California, Florida, Arizona, Utah, Colorado, Washington, Vermont, Massachusetts, Maryland, and Maine had all taken steps to adopt innovative community renewables programs. According a report by the U.S. Dep’t of Energy 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 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.



**LATE**

**Testimony of Hawai'i Green Growth In Support of HB484 SD1  
Relating to Energy  
House Committee on Consumer Protection & Commerce  
18 February 2015, 3:00pm, Room 325**

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

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*Hawai'i Green Growth is a voluntary partnership of more than 70 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.*

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Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

**Hawai'i Green Growth (HGG) supports SB1050 & HB484 HD1** 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. This specific language has consensus from HGG Working Group members Hawai'i State Energy Office, Blue Planet Foundation, and Hawaiian Electric Company.

HB484 HD1 is a clean energy priority that will help advance action on the *Aloha+ Challenge: A Culture of Sustainability – He Nohona 'Ae'oa*, 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>



**LATE**

Email: [communications@ulupono.com](mailto:communications@ulupono.com)

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE  
Wednesday, February 18, 2015 — 3:00 p.m. — Room 325

**Ulupono Initiative Strongly Supports HB 484 HD 1, Relating to Energy**

Dear Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

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 1**, which establishes a community-based renewable energy program, because it aligns with our goal of producing more clean, renewable energy in Hawai'i.

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

*Investing in a Sustainable Hawai'i*





renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay  
Managing Partner



Testimony before the House Committee on Consumer Protection and Commerce  
February 18, 2015, 3:00 pm  
Conference Room 325  
H.B. 484 HD1 – Relating to Energy

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

*Chair McKelvey, Vice Chair Woodson, 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**<sup>i</sup>. However we have **concerns about the language proposed in HB 484 HD 1**. We have **included edits for consideration** into HB 484 HD 2.

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.<sup>ii</sup>

#### 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 support 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.<sup>iii</sup>



The Companies suggest the following edits for consideration in HB 484 HD2 (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 1-6:** Language being proposed provides clarity that these community-based renewable energy projects are subject to the "community-based renewable energy tariff" approved by the commission. Suggested removal of language because there are established policies addressing interconnection of generating resources established by the PUC (e.g. Rule 14H and others). Persons or entities should be following these policies. **Suggested language is inserted in bold and removal of language is strikethrough.**  
 Any person or entity may propose, own, or operate a community-based renewable energy project; ~~provided that a project equal to or less than one megawatt in size shall be pursuant to the "community-based renewable energy tariff", and any to the interconnection processes approved by the commission. and a project greater than one megawatt in size shall be subject to the commission's review and approval.~~
- **Page 4 lines 11-13:** There are established policies addressing interconnection of generating resources established by the PUC (e.g. Rule 14H and others). Persons or entities should be following these policies. **Suggested strike of language.**  
~~(e) Community-based renewable energy tariffs and related interconnection processes shall, to the extent possible, be standardized.~~
- **Page 4 lines 18-21:** 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.<sup>iv</sup> **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 renewable energy project that is providing electricity to the electric utility; and**
- **Page 5 lines 1-4:** The bill's 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 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 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.”** ~~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.”~~

Thank you for the opportunity to testify.

<sup>i</sup> <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.

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

<sup>iii</sup> <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).

<sup>iv</sup> §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

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# 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 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

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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

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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.

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1        (c) Any person or entity may propose, own, or operate a  
2 community-based renewable energy project; ~~provided that a~~  
3 ~~project equal to or less than one megawatt in size shall be~~  
4 ~~subject pursuant to the "community-based renewable energy~~  
5 ~~tariff", and any to the interconnection processes approved by~~  
6 ~~the commission and a project greater than one megawatt in size~~  
7 ~~shall be subject to the commission's review and approval.~~

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

12        ~~(e) Community-based renewable energy tariffs and related~~  
13 ~~interconnection processes shall, to the extent possible, be~~  
14 ~~standardized.~~

15        (f) Nothing in this section shall be construed to permit  
16 wheeling.

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

19        (1) Allows ~~all the~~ electric utility to procure the most  
20 ~~cost effective renewable energy to benefit all~~  
21 ~~customers regardless of their participation in the~~



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

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

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

18 ""Wheeling"" means the ~~transmission of electricity over~~  
19 ~~transmission or distribution lines by an entity that does not~~  
20 ~~directly own or use the electricity being transmitted and~~  
21 ~~without any compensation to the electric utility for the cost of~~

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1 transmission and distribution." the process of transmitting  
2 electric power, which the utility has not produced or purchased,  
3 from a seller's point of generation across a utility owned  
4 transmission and distribution system to a wholesale purchaser or  
5 the seller's retail customer; or the simultaneous purchase and  
6 sale or exchange of electric power without the physical movement  
7 of the electric power over a transmission or distribution  
8 system."

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10 SECTION 4. New statutory material is underscored.

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