NEIL ABERCROMBIE
GOVERNOR

SHAN TSUTSUI
LT. GOVERNOR

FREDERICK D. PABLO
DIRECTOR OF TAXATION

JOSHUA WISCH
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF TAXATION
P.O. BOX 259
HONOLULU, HAWAII 96809
PHONE NO: (808) 587-1530
FAX NO: (808) 587-1584

To: The Honorable Chris Lee, Chair
and Members of the House Committee on Energy & Environmental Protection

Date: Tuesday, February 5, 2013
Time: 10:00 a.m.
Place: Conference Room 325, State Capitol

From: Frederick D. Pablo, Director
Department of Taxation

Re: H.B. 497 Relating to Renewable Energy

The Department of Taxation (Department) appreciates the intent of H.B. 497, but prefers H.B. 967. The Department offers the following summary and comments for your consideration.

This bill amends Hawaii Revised Statutes (HRS) section 235-12.5 by:

Providing a renewable energy tax credit for non-utility scale solar systems at a rate of 35% prior to the 2014 tax year, 30% during the 2014 tax year, 25% during the 2015 tax year, and 20% during and after the 2016 tax year. A fixed percentage, rather than a sliding scale, will be substantially easier for the Department to administer. The Department notes that the declining rates for each year will create an unnecessary rush for systems to be installed and placed in service at the end of each year. This rush will cause compliance and enforcement issues for the Department, because taxpayers have an incentive to claim the credit in the earlier year. In addition, the Department does not believe that the declining rates are necessary if the credit rate is set reasonably, because the actual credit amount will increase and decrease with changes in the price of the equipment and installation.

On a technical note, the Department suggests that the references to the tax years be changed, because taxpayers may operate on a different taxable year. Once possible way to fix this would be to change the language to "For systems placed in service on or before December 31, 2013: thirty-five per cent".

Providing a production credit at 11.5 cents per kilowatt hour generated during the first 10 years of the system's operation for utility scale solar systems. Systems with contracts that have been approved by the Public Utilities Commission (PUC) prior to the end of the 2014 tax year may elect to claim the credit as it existed on the date that the contract was submitted to the PUC. The Department notes that the federal production credit only provides 2.2 cents per kilowatt hour produced and sold. This bill provides for a production credit that is more than five times the amount of the federal credit and allows for the claiming of tax credit for

electricity that is simply generated, but not sold. The Department suggests that the language of this provision be changed from "generated" to "produced and sold".

The Department is strongly opposed to the grandfathering aspect of this provision. This provision presents substantial compliance and enforcement problems for the Department due to the lack of clarity prior to the issuance of the administrative rules.

Providing that the taxpayers claiming the utility-scale solar production credit must have a Hawaii licensed electrical engineer certify the system's electricity production. The Department notes that this certification does not preclude a taxpayer or a taxpayer's employee from certifying the production themselves. Generally, for compliance and audit purposes, this type of documentation would be deemed to be a self-serving document and would not be considered adequate substantiation.

Allowing for full refundability of the tax credit for non-utility scale solar systems installed during or after the 2017 taxable year.

Thank you for the opportunity to provide comments.

Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the House Committee on Energy and Environmental Protection
February 5, 2013, 10:00 AM, Conference Room 325
HB 497: RELATING TO RENEWABLE ENERGY

Aloha Chair Lee, Vice-Chair Thielen, and members of the House Committee on Energy and Environmental Protection,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify **in strong support of HB 497**, which calls for a gradual ramp down of residential PV from 35% to 20%, holds SHW steady at 35%, with no sunset, and no discount on the refundable credit for non-utility scale PV after 2017. HSEA is a non-profit trade organization that has advocated for both solar hot water and photovoltaics since 1977, with an emphasis on residential distributed generation (DG) and commercial SHW and PV. We currently represent 71 companies, and our members include installers, contractors, manufacturers, distributers, the utility, and others. With 35 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Solar is Key to our Green Energy Future

The importance of this legislation cannot be overstated. Hawaii is dangerously dependent upon imported fossil fuels, and the cost and uncertainty of fossil fuels will only increase. Recent reports have indicated that oil may reach $180/barrel by 2020, and scientists have found that climate change has exacerbated global warming more than they believed, with recent studies showing that the Antarctic is warming at three times the predicted rate. Transforming our electrical grid to a green energy infrastructure will bring both added security and stability to our state's economy, and also contribute to an overall reduction of greenhouse gasses for everyone.

Four bills currently before the committee

EEP currently has four bills before it that seek to create a new tax credit framework that will be fair and clear and serve to support Hawaii's clean energy goals. Each bill has merit in its own regard, and to make the discussion more streamlined, I've compared each bill under the two key areas of ramp down, and sunset, with additional comments on unique features of each bill in the summary.

1. Ramp Down

HSEA does not currently support a ramp down of the renewable energy tax credit. Now is not the time to slow the speed and scale of installations, especially given the urgency of our clean energy goals, and the specter of losing the 30% federal credit in 2016. In addition, although HSEA supports all solar installations from DG to utility scale, we believe that DG is vital to

Hawaii's green energy infrastructure. DG has several advantages over utility scale installations. First, the installation is not delayed by years of permitting and financial issues, and once installed the utility customer gets an immediate savings—a true power to the people. In addition, because of the relatively small scale of DG projects, grid saturation is rarely an issue, and transmission loss never is. DG in aggregate has made substantial contributions to our overall energy goals, and it should be seen as a vital part of our energy mix.

PV v. SHW

Another important distinction in the ramp down question is the difference between PV and SHW, and the unique advantages of SHW. Because SHW does not produce electricity, it does not add to the load on the grid, and unlike a PV system, hot water stored in SHW can be used during the evening peak after the sun's gone down. The cost for SHW has not come down, so the same logic for a ramp down does not apply to SHW. SHW is seen as an efficiency measure, and the state should continue to support such a cost-effective and efficient technology.

Key ramp down questions

Despite the fact that a ramp down of the credit will slow the speed and scale of installation of the most grass roots energy you can find, HSEA understands that the politics of the tax credits demand a reduction. The question is then: how much and how fast?

HB 967: HB drops the tax credit to an immediate 15%. This drop would add about $7,000 to an average sized system for the homeowner, putting it out of reach for most families. In 1985 when President Regan eliminated the solar tax credit for solar hot water, it increased the cost of a system by about $1,500. As a result of this drop, Hawaii saw solar hot water installations plummet by 93%. We believe that a similar abrupt and radical drop proposed by HB 967 will severely slow both PV and SHW installations.

HB 1408: ramp down from 30 to 20% for PV. 35% for SHW. A gradual ramp down for PV keeps it affordable, and allows industry to adjust. SHW at 35% reflects rising price and need for ongoing incentive.

HB 756: gradual ramp down to 10% for both PV and SHW. Ramp down to 10% would add about $9,000 to PV system, which doesn't include the amount lost from the expired federal tax credit. Would severely impact both SHW and PV, and push the market almost exclusively to leases. Would also greatly favor utility scale installations, at the expense of DG.

HB 497: gradual ramp down from 35% to 20% for PV. Holds steady at 35% for SHW. Supports sustained PV and SHW DG installation, and gives the signal that residential and commercial non-utility scale solar continues to be a vital part of our clean energy infrastructure.

2. Sunset Date

HSEA supports a review date rather than a sunset date. We believe that a sunset date creates an artificial deadline for business that impedes development and assumes that incentives will no

longer be necessary even though Hawaii is long from energy independence and costs may have increased.

HB 967: Sunsets December 31, 2016, the same deadline as the federal tax credit. Unless Hawaii has reached it clean energy goals by 2016 and we no longer depend upon imported fossil fuels, it makes no sense to end incentives for clean energy in 2016.

HB 1408: Sunsets January 1, 2019. Rather than sunset tax incentives, HSEA supports a review date to accommodate changes in the market and our clean energy goals. Once a credit reaches sunset, it is very difficult to revive it.

HB 756: Sunsets PV ITC 12-31-2018, utility scale solar 12-31-19, with no sunset for wind. Again, sunset implies the incentive is no longer needed. SHW and PV DG provide instant savings and little grid imposition. HSEA favors a review date.

HB 497: No sunset date. Supports clean energy incentives for Hawaii until the legislature decides they are no longer necessary.

3. Refundable Credit

HSEA strongly supports the continued refundable credit. We estimate that more than half of the current PV installations depend upon the refundable credit. Customers include those who can't afford solar but qualify for a lease, schools that enter into third party PPAs, and commercial and utility scale projects. Restricting or eliminating the refundable credit would severely limit solar installations

Summary

HSEA **strongly supports HB 497** because the gradual ramp down to 20% for non-utility scale PV, and 35% incentive for SHW keeps solar affordable for residential and commercial utility customers and provides a predictable business environment for the solar industry. HB 497 also provides a reasonable PTC for utility scale PV, and has the added benefit of removing the discount from the refundable credit for non-utility scale PV after 2017, which may offset the loss of the federal credit.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association

Distributed Energy Partners
Performance in Power

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 – 10 a.m. – Room 325

Testimony Supporting the Intent of HB 497 Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

Distributed Energy Partners is a Hawaii based, owned, and operated firm specializing in the development of commercial-scale distributed renewable energy projects, which include solar, wind, and emerging technologies.

Distributed Energy Partners **supports the intent** of HB 497, which is to reform the Renewable Energy Technologies Income Tax Credit ("RETITC") while maintaining the viability of all sectors of the solar industry. We share this goal. However, we are concerned that HB 497 does not sufficiently reduce the incentive level of the RETITC. This means that under HB 497, the RETITC could continue to have a larger than desirable impact on the state's general fund.

Specifically, HB 497 maintains a relatively high investment tax credit incentive level and provides for full refundability of the credit (without the current 30% discount level) after 2016. It also creates a permanent production tax credit that could eventually become costly to the State.

While HB 497 would clearly benefit the industry in the short term, we are concerned that the impact on the RETITC going forward would lead the legislature to again seek reforms of the RETITC in the next few years. This would ultimately harm both the industry and the State.

By contrast, HB 756 would enact responsible reforms of the RETITC that would reduce the impact on the general funds while still allow the industry to remain viable and maximizing renewable energy installation in the state.

Distributed Energy Partners therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Sincerely,

Joshua Powell
Principal & RME

1600 Kapiolani Blvd., Suite 1700, Honolulu, Hawaii 96814

TO: House Committee on Energy and Environmental Protection
Honorable Representative Chris Lee, Chair
Honorable Representative Cynthia Thielen, Vice Chair

RE: Testimony Supporting Intent of HB 497 Relating To Renewable Energy.

Testimony is 2 pages long.

HEARING: Tuesday, February 5, 10:00 a.m.

Mr. Chairman and members of the Committee:

Kairos Energy Capital supports the intent of HB497, but urges the Committee to pass out HB756 instead, as a better crafted measure to address all issues facing the Hawai`i tax credit.

Kairos Energy Capital is a Hawai'i merchant bank that focuses entirely on providing and arranging funding for renewable energy projects. We have become one of the leading experts in Hawai'i in solar project financing.

Because our business is about financing renewable energy systems, I will focus my testimony today on the interaction between Hawai`i's renewable energy technology investment tax credit (the "Hawai`i Tax Credit") and the capital markets that make Hawai`i's renewable energy initiatives possible.

While we share the goal of HB497 to support renewable energy investment in Hawai`i, we are concerned that HB 497 does not sufficiently reduce the incentive level of the RETITC. This means that under HB 497, the RETITC could continue to have a larger than desirable impact on the state's general fund.

Specifically, HB 497 maintains a relatively high investment tax credit incentive level and provides for full refundability of the credit (without the current 30% discount level) after 2016. It also creates a permanent production tax credit that could eventually become costly to the State, and provides a greater level of incentive that we believe necessary to sustain capital market investment into Hawai`i energy projects.

While HB 497 would clearly benefit the industry in the short term, we are concerned that the impact on the RETITC going forward would lead the legislature to again seek reforms of the RETITC in the next few years. This would ultimately harm both the industry and the State.

By contrast, HB 756 would enact responsible reforms of the RETITC that would reduce the impact on the general funds while still allow the industry to remain viable and maximizing renewable energy installation in the state.

Kairos Energy Capital therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Thank you for the opportunity to submit this testimony, and please feel free to contact me if I can be of further assistance.

Larry Gilbert
Managing Partner
Kairos Energy Capital LLC
55 Merchant Street, Suite 1560
Honolulu, HI 96813
Tel 808 457-1600
Email: LGilbert@kairosenergycapital.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 – 10 a.m. – Room 325

Testimony Supporting the Intent of HB 497 Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

RevoluSun is a locally-owned solar company that works in the residential, commercial, and utility-scale sectors of the photovoltaic solar industry in Hawaii.

RevoluSun **supports the intent** of HB 497, which is to reform the Renewable Energy Technologies Income Tax Credit ("RETITC") while maintaining the viability of all sectors of the solar industry. We share this goal. However, we are concerned that HB 497 does not sufficiently reduce the incentive level of the RETITC. This means that under HB 497, the RETITC could continue to have a larger than desirable impact on the state's general fund.

Specifically, HB 497 maintains a relatively high investment tax credit incentive level and provides for full refundability of the credit (without the current 30% discount level) after 2016. It also creates a permanent production tax credit that could eventually become costly to the State.

While HB 497 would clearly benefit the industry in the short term, we are concerned that the impact on the RETITC going forward would lead the legislature to again seek reforms of the RETITC in the next few years. This would ultimately harm both the industry and the State.

By contrast, HB 756 would enact responsible reforms of the RETITC that would reduce the impact on the general funds while still allow the industry to remain viable and maximizing renewable energy installation in the state.

RevoluSun therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel

808.748.8888 Office | 808.532.4402 Fax | 1600 Kapiolani Blvd, Suite 1700 Honolulu, HI 96814
RevoluSun.com | Lic. # ABC 30244

SUNPOWER

TESTIMONY IN **Support of the Intent of** HB497
To: House Committee on Energy and Environmental Protection
Hearing on February 5, 2013 at 10.00 a.m. in Room 325
Aloha Chair Lee, Vice Chair Thielen and members of the Committee:

Introduction: My name is Riley Saito Senior Manager, Hawaii Projects, for SunPower Systems Corporation. SunPower has been a dedicated supporter and active participant of renewable energy initiatives in Hawaii for more than 15 years, in Hawaii. This participation includes: being a Member (charter) of Hawaii Energy Policy Forum; Hawaii Clean Energy Initiative-Steering Committee and Energy Generation Working Group; and participant in various energy related Public Utilities Commission dockets.

SunPower **supports the intent** of HB 497, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the State. **However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry**.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

Second, HB 756 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Also, HB 756 provides a more balanced approach that makes cuts to—but ultimately preserves—all sectors of the industry. By preserving the viability of all segments of Hawai'i's solar industry, HB 756 will lead to a higher level of renewable energy installation at a lower cost to the State. In doing so, it will maximize the use of State tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

SunPower therefore **recommends that you pass HB 756 to reform the RETITC rather than HB 497.** Thank you for the opportunity to provide this testimony.

Riley Saito

Riley Saito
Senior Manager, Hawaii Projects
SunPower Systems, Corporation

Sunrun Inc. I 1.855.4SUNRUN I sunrunhome.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TESTIMONY SUPPORTING THE INTENT OF HB 497

Testimony of Bryan Miller, Vice President, Public Policy & Power Markets, Sunrun

Tuesday, February 5, 2013; House Conference Room 325

Chair Lee, Vice Chair Thielen, and Members of the Committee:

Sunrun **supports the intent** of HB 497, which is to reform the Renewable Energy Technologies Income Tax Credit ("RETITC") while maintaining the viability of all sectors of the solar industry. We share this goal. However, we are concerned that HB 497 does not sufficiently reduce the incentive level of the RETITC. This means that under HB 497, the RETITC could continue to have a larger than desirable impact on the state's general fund.

Specifically, HB 497 maintains a relatively high investment tax credit incentive level and provides for full refundability of the credit (without the current 30% discount level) after 2016. It also creates a permanent production tax credit that could eventually become costly to the State.

While HB 497 would clearly benefit the industry in the short term, we are concerned that the impact on the RETITC going forward would lead the legislature to again seek reforms of the RETITC in the next few years. This would ultimately harm both the industry and the State.

By contrast, HB 756 would enact responsible reforms of the RETITC that would reduce the impact on the general funds while still allow the industry to remain viable and maximizing renewable energy installation in the state.

Sunrun therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Sincerely,

Bryan S. Miller

Email: communications@uluponoinitiative.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 — 10 a.m. — Room 325

Ulupono Initiative Supports HB 497, Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

My name is Kyle Datta, General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm 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 renewable energy, and reduce/recycle waste.

Ulupono **supports the intent** of HB 497, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

Second, HB 756 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although HB 497 will preserve the residential market and the competitively bid utility scale market, its per-credit cap for commercial systems and non-competitively bid utility-scale projects would be devastating to those sectors of the industry. By contrast, HB 756 provides a more balanced approach that makes cuts to—but ultimately preserves—all sectors of the industry. By preserving the viability of all segments of Hawai'i's solar industry, HB 756 will lead to a higher level of renewable energy installation while still reducing the credit's cost to the state. In doing so, it will maximize the use of state tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

Ulupono therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Sincerely,

Kyle Datta
General Partner

Pacific Guardian Center, Mauka Tower
737 Bishop Street, Suite 2350, Honolulu, HI 96813

808 544 8960 o | 808 544 8961 f
www.uluponoinitiative.com

SUBJECT: INCOME, Renewable energy technology tax credit

BILL NUMBER: HB 497

INTRODUCED BY: Wooley, C. Lee and 2 Democrats

BRIEF SUMMARY: Amends HRS section 235-12.5 to provide that the tax credit for a solar electricity generating system that is not a utility scale solar electricity generating system placed in service prior to the 2014 tax year shall be 35% of the actual cost; for the 2014 tax year, 30% of the actual cost; for the 2015 tax year, 25% of the actual cost; and for the 2016 tax year, 20% of the actual cost.

For each utility scale solar electricity generating system installed after the 2013 tax year the credit shall be 11.5 cents per kilowatt hour generated during the first 120 months of the system's operation provided that projects with contracts approved by the public utilities commission (PUC) prior to the end of the 2014 tax year shall have the option of using the tax credit as it existed on the date that the contract was submitted to the PUC.

For each solar energy system that uses energy from the sun to heat water for household use, the tax credit shall be 35% of the actual cost or $2,500 per system for a single-family residential property; $1,000 per system for a multi-family residential property and $250,000 per system for commercial property, whichever is less and provided the taxpayer has not claimed the tax credit for the same system.

Defines "solar energy generating system" as any system that uses the sun's energy to produce electricity either directly, as is the case with photovoltaics, or indirectly, as is the case with concentrating solar power technologies.

Defines "utility scale solar electricity generating system" as any solar electricity generating system that is interconnected to a utility grid at sub-transmission or transmission voltage. Requires taxpayers claiming the credit for utility scale solar electricity generating systems in any tax year to document each system's production for that tax year with a separate notarized letter from an electrical engineer licensed in Hawaii attesting to the number of kilowatt hours produced by the system in that tax year.

EFFECTIVE DATE: July 1, 2013; applicable to tax years beginning after December 31, 2013

STAFF COMMENTS: The existing renewable energy technologies income tax credit is 35% for solar energy systems or 20% for wind energy systems with dollar limits on the amount of credit that may be claimed depending on whether the system is used to heat water or generate electricity and whether the system is installed on a single or multi-family residential property or commercial property.

This measure would reduce the amount of credit for solar electricity generating systems that are not utility scale systems from 35% to 30% for systems placed in service for the 2014 tax year; 25% for the 2015 tax year; 20% for the 2016 tax year and thereafter. Although this slow weaning of the taxpaying

public from its dependence on the tax incentive may sound like a great idea, it ignores the phenomenon that occurred this past year when taxpayers were given notice that there would be new rules for the ball game beginning with the first of the year. Instead, consideration should be given to setting the tax incentive rate at a more modest level and then warning taxpayers that it will disappear in three or five years. This will help to even out the demand for installations as taxpayers assess the cost benefit of installing such devices.

This measure extends the renewable energy technology tax credit utility scale solar electricity generating systems installed after the 2013 tax year. It would grant a tax credit equal to 11.5 cents per kilowatt generated - which, by the way, is more than five times the amount of the credit granted by the federal government for a similar facility. Further, the credit is for the generation of energy and not necessarily for the sale of that energy to someone who has to make a choice between clean energy and fossil fuel generated energy. Instead of just limiting the credit to the production of energy, it should be applied to producing and selling that energy. The whole point of the tax incentive is to subsidize the per unit of energy when sold so that the consumer will not have to weigh the cost difference as the subsidy is to help equalize the cost per unit of energy.

While it appears that this measure is proposed to reduce the outflow of tax credits due to the misinterpretation of the existing tax credit provisions, it is questionable why the proposed measure expands the renewable energy technologies income tax credits to include utility scale solar energy facilities.

While some may consider an incentive necessary to encourage the use of alternate energy devices, it should be noted that the high cost of these energy systems limits the benefits to those who have the initial capital to make the purchase. If it is the intent of the legislature to encourage a greater use of renewable energy systems by increasing and expanding the existing system of energy tax credits, as an alternative, consideration should be given to a program of low-interest loans. However, if the taxpayer avails himself of the loan program, the renewable energy credit should not be granted for projects utilizing the loan program as the project would be granted a double subsidy by the taxpayers of the state. Such low-interest loans, that can be repaid with energy savings, would have a much more broad-based application than a credit which amounts to nothing more than a "free monetary handout" or subsidy by state government. A program of low or no-interest loans would do much more to increase the acquisition of these devices.

Instead of providing tax incentives for the purchase of existing technology, lawmakers may want to take advantage of Hawaii's natural environment which lends itself to all sorts of possibilities to explore and develop more efficient means of harnessing the natural resources that pervade the Islands, from wind to sun to geothermal to hydrogen from Hawaii's vast resources, all of which could be further developed with the assistance and cooperation of government in Hawaii.

Finally, the current statute providing these tax incentives for renewable energy technologies reflects the lack of due diligence and good hard research on the part of lawmakers. Apparently the caps imposed on the tax incentive for the solar electric generating systems are far from being realistic. For example, the $5,000 cap for residential installations translates into about $15,000 of "actual cost." Anything greater than that amount would exceed the cap of the 35% tax credit. On the commercial side, the half million-dollar cap may be insufficient for a commercial building to generate a net-zero status that would avoid a

stand-by charge by the local electric company. Those stand-by charges have been reported to sometimes exceed the bills had the building owner not installed such solar electric generating systems. Thus, the law, as currently written, does not take into account these resulting contradictions.

While this and other measures demand serious consideration in order to stem the abuse of the current tax credit provisions, lawmakers and staff need to spend time during the interim researching and honing the tax incentive to be a more reasonable incentive that is forged in a good understanding of the developing technology. What is currently on the books reflects a technology long deemed archaic and, therefore, the tax incentive is less than efficient.

Digested 2/4/13

firstwind
CLEAN ENERGY. MADE HERE.

TESTIMONY IN SUPPORT
KELLY O'BRIEN, VICE-PRESIDENT FOR DEVELOPMENT
FIRST WIND

REGARDING H.B. 497, RELATING TO RENEWABLE ENERGY

BEFORE THE
HAWAIʻI STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TUESDAY, FEBRUARY 5, 2013
CONFERENCE ROOM 325
10:00 AM

Aloha Chairman Lee and Distinguished Members of the Committee on Energy and Environmental Protection. My name is Kelly O'Brien and I am the Vice-President for Development for First Wind.

First Wind has been developing and operating utility scale wind energy projects in Hawaiʻi since 2006 and to date has invested nearly $600 million in Hawaiʻi. We own and operate Kaheawa Wind Power I & II on Maui (51 MW) and Kahuku Wind Power (30 MW) and Kawailoa Wind Power (69 MW) on Oʻahu. First Wind currently employs 25 people in Hawaiʻi with plans to add 5 more in the near term. We are also involved with several utility-scale solar projects in Hawaiʻi. We are firmly committed to helping to improve Hawaiʻi's energy security by decreasing its reliance on fossil fuels for its energy needs. We have a demonstrated record in establishing long-term dialogues and partnerships with the communities we join and we are proud of our accomplishments in establishing successful Habitat Conservation Plans for our projects which ensure a "net benefit" to native wildlife that could be affected by our projects.

While Hawaiʻi has made great strides in utilizing renewable resources for its electricity needs in the past decade, much more needs to be done to decrease Hawaiʻi's reliance on fossil fuels. Renewable Energy tax credits have a significant economic impact on each project. While First Wind supports the concept of tax credits for residential, commercial and feed-in-tariff solar projects, we are not taking a position on how the credits for those projects should be structured. Our interests are in the area of solar tax credits for utility-scale projects. First Wind supports efforts to establish a consistent tax credit structure that ensures a level playing field for all utility-scale project developers. We support HB497 with regard to the proposed production tax credit; however, we ask that the Committee consider including language allowing the credit to be refundable without being discounted for utility-scale solar projects that do not have sufficient tax liability to utilize the credit. As currently drafted, HB497 discounts the refundable option, creating an uneven playing field among utility-scale solar projects and will discourage investment and competition and may ultimately increase the rates paid by consumers for renewable energy and slow progress toward fulfilling Hawaiʻi's clean energy goals.

Directors

Jody Allione
AES-Solar

Joe Boivin
The Gas Company

Kelly King
Pacific Biodiesel

Warren S. Bollmeier II
WSB-Hawaii

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE
HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

HB 497, RELATING TO RENEWABLE ENERGY

February 5, 2013

Chair Lee, Vice-Chair Thielen, 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 497 are to: (i) amend the tax credit for solar energy systems, (ii) define certain types of solar energy systems and the tax credits applicable to each, (iii) become effective July 1, 2013; applicable to taxable years after December 31, 2013.

HREA **does not support this measure** for the following reasons:

1) Discussion during Senator Gabbard's Working Group ("GWG"). The discussion (during the four meetings of the GWG during the interim) centered on developing an appropriate and reasonable modification of the RETITC to close loopholes, and reduce the fiscal impact to the state while allowing industry to continue to thrive and grow in order to meet consumer demand and support our clean energy goals.

2) Assessment of this Measure. We believe this measure does NOT represent a "good take" on the tax treatments discussed in the GWG, given that:

   a) Project CAPs on the Investment Tax Credit ("ITC") for residential solar projects will not provide the level of incentive that will allow industry to continue to thrive and grow. Note: we believe the proposed CAPs in HB 1408 are reasonable and appropriate.

   b) Production Tax Credits ("PTCs") utility-scale wind and solar projects: PTCs are not proposed for wind, and the project CAP of $500K for commercial wind will dampen demand. The PTC of 11.5 cents/kWh for utility-scale PV is the same as proposed in HB 756, which will create a higher fiscal impact than the 8 cents/kWH proposal in HB 1408.

   c) No project CAPs on the Utility-Scale PTCs for solar projects. Since we believe it will be easier to project the number of future utility-scale projects, compared to residential systems, this is a subject of CAPS vs NO CAPS is worth further discussion. Specifically, is this treatment better than the proposed aggregate CAPs in HB 1408 which believe is reasonable and appropriate?

3) Recommendations. We recommend that the committee **defer** this measure and **consider HB 1408 as the vehicle** for continuing the RETITC discussion.

Mahalo for this opportunity to testify.

House Committee on Energy & Environmental Protection
Testimony in support to House Bill 497

Testimony of Alex Tiller, Sunetric CEO
Tuesday, Feb. 5th, 10: a.m.

Chair Lee, Vice Chair Thielen, and members of the committee:

Sunetric is a Hawaii based company that designs and installs solar systems for residential and commercial clients. Our company has 150 employees located on Oahu, Maui and Hawaii Island, although we do solar work on all of Hawaii's islands. We are grateful to the Legislature for the support that we've received in the past and look forward to a continued productive relationship in which our industry works to achieve the state's energy and economic security goals, while also providing meaningful work for ourselves and our employees.

Sunetric **supports** House Bill 497, which amends the current law for solar tax credits.

HB 497 calls for a gradual ramp down of tax incentives by 5 percent each year, starting with 35 percent in 2013, and stopping at 20 percent in 2017 with no sunset. The ramp down is a reasonable schedule that gives solar companies enough time to plan for projects, as many have long development cycles and complicated financing structures that require long-term planning.

At the same time, the tax credit for solar energy systems will continue to serve its original purpose as a policy tool to encourage and incentivize investment in clean energy.

Thank you for the opportunity to submit testimony on this measure.

Sincerely,

Alexander Tiller, CEO
Sunetric

2/5/2013	**House Committee on Energy & Environmental Protection**	**EEP**
10:00 a.m.		**HB 497**

TESTIMONY SUPPORTING THE INTENT

Dear Chair Lee, Vice Chair Thielen, and Members of the Committee:

Hawaii PV Coalition **supports the intent** of HB 497, which is to reform the Renewable Energy Technologies Income Tax Credit ("RETITC") while maintaining the viability of all sectors of the solar industry. We share this goal. However, we are concerned that HB 497 does not sufficiently reduce the incentive level of the RETITC. This means that under HB 497, the RETITC could continue to have a larger than desirable impact on the state's general fund.

Specifically, HB 497 maintains a relatively high investment tax credit incentive level and provides for full refundability of the credit (without the current 30% discount level) after 2016. It also creates a permanent production tax credit that could eventually become costly to the State.

While HB 497 would clearly benefit the industry in the short term, we are concerned that the impact on the RETITC going forward would lead the legislature to again seek reforms of the RETITC in the next few years. This would ultimately harm both the industry and the State.

By contrast, HB 756 would enact responsible reforms of the RETITC that would reduce the impact on the general funds while still allow the industry to remain viable and maximizing renewable energy installation in the state.

Hawaii PV Coalition therefore recommends that you pass HB 756 to reform the RETITC rather than HB 497. Thank you for the opportunity to provide this testimony.

Mark Duda
President, Hawaii PV Coalition

The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.

PO Box 81501 | Haiku, HI 96708 | 808.579.8288 | 808.575.9878 (f) | info@hawaiipvcoalition.org | hawaiipvcoalition.org

INTER-ISLAND SOLAR SUPPLY

761 Ahua St., Honolulu, HI 96819 **OAHU** Phone (808) 523-0711 Fax 536-5586
73-5569 Kauhola St., Kailua-Kona, HI 96740 **BIG ISLAND** Phone (808) 329-7890 Fax 329-5753
400 Ala Makani St., Unit 103, Kahului, HI 96732 **MAUI** Phone (808) 871-1030 Fax 873-7825

February 5, 2013 (10:00 AM)

Testimony Before the House Committee on Energy and Environmental Protection
on
H.B. 497 RELATING TO RENEWABLE ENERGY

Chair Lee, Vice Chair Thielen, Members of the Committee,

Good morning and thank you for hearing this and related bills on Hawaii's renewable energy technologies income tax credit (RETITC).

My name is Ron Richmond. I am the manager of business development for Inter-Island Solar Supply, a local wholesale/distributor of solar and related products founded in 1975 with branches on the islands of Oahu, Hawaii and Maui.

Inter-Island Solar Supply supports most of the provisions of HB 497, opposes other provisions and recommends some provisions. A position summary follows:

- Non-utility scale solar credit ramp down: **opposed** to ramp down which is unnecessary & unwise
- Non-utility scale solar credit cap elimination: **opposes** because creates opportunity for abuse
- Utility scale solar production credit: **strongly opposes** because this category would receive $11-$20 million in credits over 10 years while non-utility scale projects would receive only $1.2 million to $400,000 (see attached Comparison of Non-Utility & Utility Scale PV Credits)
- Solar water heating credit level: **strongly supports** continued 35% level
- Solar water heating credit cap: **strongly supports** caps at proposed levels
- Applicable date: **strongly supports** to allow orderly transition
- Require DoTax to collect date: **highly recommends** to understand effects of tax credit
- Require DBEDT to conduct a study in 2017: **highly recommends** to understand effects of tax credit
- Add caps to credits: **highly recommends** the caps for solar electric generating systems

The State has embarked on the ambitious goal of reducing our dependency on fossil fuel generated electricity by 70% by 2030. Hawaii's taxpayers have responded in unprecedented ways to the generous incentives for renewable energy systems. We, as a community, are well on our way to achieve this statutory goal but we have a long way to go.

The perception of an unsustainable fiscal scenario attributable to the RETITC has been promulgated by the administration. Surprisingly, the administration has focused only on the cost of the tax credit and ignored the benefits. Basic accounting principles require counting both income and expenses to determine the net benefit or costs of an activity. Absent a complete accounting the administration has created a fiscal crisis that simple does not exist as a result of the RETITC. Fortunately, Blue Planet Foundation recognized the importance of a **full accounting** and commissioned the update of "The Economic and Fiscal Effects of Hawaii's Solar Tax Credit", a peer reviewed rigorous analysis that shows for every dollar the State expends on the credit it receives substantially more than in taxes over the life of the solar system. The attached **Figure 1** extracted from the report illustrates the relationship between tax credit level and number of systems installed. A full copy of the report is available upon request.

For the reasons stated, I respectfully requested that this Committee to amend HB 497 by adopting the recommended changes.

Thank you for the opportunity to testify on this measure.

Comparison of Non-Utility & Utility Scale PV Credits

at $0.08/kWh

Project Example			
System Size (kW)	1,000	**Peak sun-hrs/day**	5
Installed Cost/kW	$4,000	**Days/yr**	365
Installed Cost	$4,000,000	**Annual Production**	1,825,000 kWh_{DC}
Production Credit	**$0.115**	**Annual Production**	1,460,000 kWh_{AC}[1]
PV Cap	$0	**Production Credit Period**	10 yrs

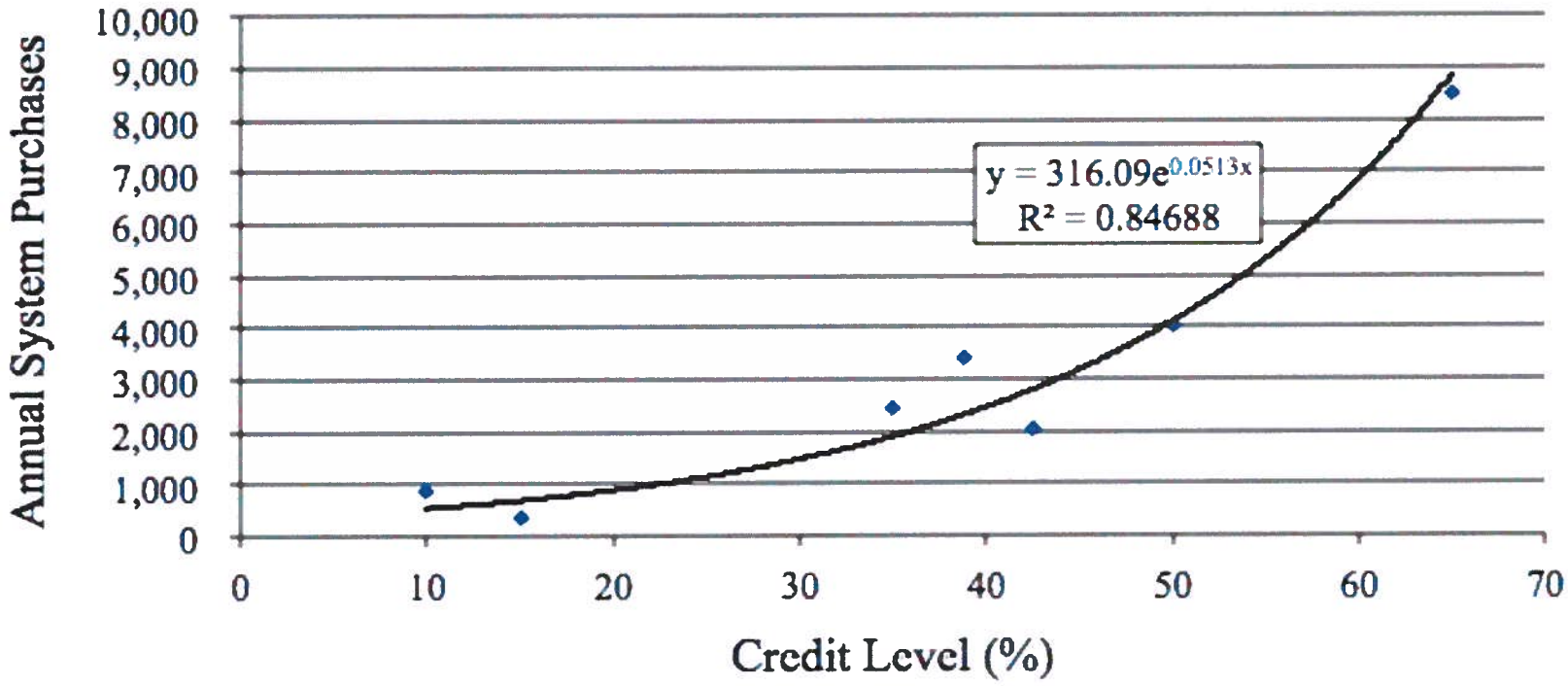
Comparative Analysis

		Non-Utility Scale PV		Utility Scale PV 10 yr. Production Credit (kWhDC)[3]		Utility Scale PV 10 yr. Production Credit (kWhAC)[3]	
Year	**Rate**	**Non-Refundable Amount**	**Refundable Amount**	**Non-Refundable $0.115**	**Refundable $0.081**	**Non-Refundable $0.115**	**Refundable $0.08**
< 2014[2]	30%	$1,200,000	$840,000	$1,200,000	$840,000	$1,200,000	$1,200,000
	Eff. Rate	30%	21.0%	30%	21.0%	30%	21.0%
2015	25%	$1,000,000	$700,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	25%	17.5%	52.5%	36.7%	42.0%	29.4%
2016	20%	$800,000	$560,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	20%	14.0%	52.5%	36.7%	42.0%	29.4%
2017	15%	$600,000	$420,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	15%	10.5%	52.5%	36.7%	42.0%	29.4%
2018	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2019	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2020	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2021	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2022	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2023	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	7.0%	52.5%	36.7%	42.0%	29.4%
2024	10%	$400,000	$280,000	$2,098,750	$1,469,125	$1,679,000	$1,175,300
	Eff. Rate	10%	10.0%	52.5%	36.7%	42.0%	29.4%
Total		**$400,000**	**$280,000**	**$20,987,500**	**$14,691,250**	**$16,790,000**	**$11,753,000**

Notes

1. Based on an 80% DC to AC derate factor.
2. Assumes utility scale systems installed before 2014 are not eligible for the production credit.
3. Proposed does not specify whether the production credit is based on DC or AC kilowatt-hour produced.

Figure 1. Solar Hot Water Systems Installed as a Function of Total Credit Level



Source: The Economic and Fiscal Effects of Hawai'i's Solar Tax Credit. Figure 1, page 7. Prepared by Thomas A. Loudat, Ph.D. for Blue Planet Foundation. January, 2013

thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Saturday, February 02, 2013 12:27 PM
To: EEPtestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB497 on Feb 5, 2013 10:00AM*

HB497
Submitted on: 2/2/2013
Testimony for EEP on Feb 5, 2013 10:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Oppose	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 04, 2013 3:03 AM
To: EEPtestimony
Cc: nimo1767@gmail.com
Subject: Submitted testimony for HB497 on Feb 5, 2013 10:00AM

HB497
Submitted on: 2/4/2013
Testimony for EEP on Feb 5, 2013 10:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Petricci	Individual	Support	No

Comments: Feb 5, 2013 10:00 AM RE: HB497 Position Support Aloha Chairman Lee and committee members I strongly support generous tax credits for photovoltaic and solar water heating systems. We have seen great solar expansion in Hawaii at least partially related to the existing state tax incentives, it would be a mistake IMO to reduce these incentives at a time when we see strong interest in solar energy by home owners. The state should continue helping home owners make the switch to distributed solar energy. It's working solar installations are increasing. We are beginning to see the desired results. We should try to build on that, we still have a long way to go, we should build on what is working. The tax credits for "home owners" in particular are necessary, have effectively inspired the kind of move to these technologies needed to accelerated energy independence, stimulate our economy, and protect our environment. If the goal is to move large segments of the population to sustainable energy independence, HB497 will help. Assisting individual property owners through tax credits and low interest loan programs, will accelerate energy independence for Hawaii. Please support HB497 and generous tax credits for home owners. Thank you Robert Petricci President Puna Pono Alliance

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov