SB 623

RELATING TO RENEWABLE ENERGY. Establishes tax credits for solar energy property, wind energy property, competitive bid solar energy property, and competitive bid wind energy property. Requires the department of taxation and department of business, economic development, and tourism to report tax credits claimed under section 235-12.5, Hawaii Revised Statutes.

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
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To: The Honorable Mike Gabbard, Chair
and Members of the Senate Committee on Energy and Environment

Date: Tuesday, February 5, 2013
Time: 2:45 p.m.
Place: Conference Room 225, State Capitol

From: Frederick D. Pablo, Director
Department of Taxation

Re: S.B. 623 Relating to Renewable Energy

The Department of Taxation (Department) appreciates the intent of S.B. 623, but prefers S.B. 1198 and provides the following summary and comments for your consideration.

Section 1 of S.B. 623 amends Hawaii Revised Statutes (HRS) section 235-12.5 by:

- Providing a renewable energy tax credit for solar and wind energy property that is used primarily to generate electricity at a rate of 20% with a cap of $500,000, provided that the property is placed in service on or before December 31, 2020. It appears that this provision applies to residential and commercial applications (not part of a larger competitive bid solar energy property) of the credit. Since the cap is not defined, the Department will not be able to enforce the cap in its current form.

- Providing a production credit for competitively bid solar energy property at 4 cents per kilowatt hour produced and either sold or used to displace electricity from the electric utility during the first 10 years of the systems operation for ordinary utility scale solar facilities, provided that the property is placed in service on or before December 31, 2020. There is no provision allowing for a production credit for non-competitively bid utility scale solar property.

- Allowing full refundability of the production credit without the current 30% reduction.

- Allowing taxpayers who install the solar energy properties between January 1, 2013 and December 31to claim the credit applying the administrative rules in claiming the credit. This Department opposes this provision as it causes an administrative burden where taxpayers are applying different sets of rules in order to claim the credit. The Department believes that whenever possible, tax law be applied uniformly to all taxpayers similarly situated.

- Allowing independent power producers not currently regulated by the Public Utilities Commission that have by December 31, 2012, entered into an agreement for the sale of electrical energy from non-residential non-utility scale solar energy property with a public sector agency pursuant to a public solicitation and procurement process shall be allowed to elect to receive tax credits for energy properties placed into service prior to January 1, 2014, on the same basis as if the energy property had been placed into service prior to January 1, 2013. The Department is opposed to the grandfathering aspect of this provision due to the difficulty in compliance and enforcement of the credit prior to the issuance of the administrative rules.

- Disallowing the claiming of the credit by any governmental agency, entities exempt under section 501(c) of the Internal Revenue Code, and qualified issuers under Internal Revenue Code section 54(j)(4).

- Allowing the credit to be claimed by associations of owners provided that the credit is claimed for property placed in service and located on the common areas.

- Requiring the Department together with the Department of Business, Economic Development, and Tourism to compile and submit a detailed report to the legislature 20 days before the convening of each regular session. The Department notes that this type of detailed reporting is difficult with the current computer system and that it currently does not do any type of economic benefit analysis as required by this

Thank you for the opportunity to provide comments.

ulupono INITIATIVE

Email: communications@uluponoinitiative.com

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 5, 2013 — 2:45 p.m. — Room 225

Ulupono Initiative Supports SB 623, Relating to Renewable Energy

Chair Gabbard, Vice Chair Ruderman, 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 SB 623, 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 SB 11 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, SB 11 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, SB 11 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although SB 623 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, SB 11 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, SB 11 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 SB 11 to reform the RETITC rather than SB 623. 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

Sierra Club
Hawai'i Chapter
PO Box 2577, Honolulu, HI 96803
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MĀLAMA I KA HONUA

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5, 2013, 2:45 P.M.
(Testimony is 1 page long)

TESTIMONY IN OPPOSITION TO SB 623

Aloha Chair Gabbard and Members of the Committee:

The Sierra Club of Hawai'i, with over 10,000 members and supporters, ***opposes*** SB 623. This measure drops the tax credit immediately to 20% of the cost of installation and imposes caps on the amount of tax credit available.

While we appreciate the intent of placing a total "cap" on the amount of tax credit that could be collected per installation, we have concerns about how this would be applied. The cap on commercial scale and some utility scale PV is probably too low and could result in a drastic slow down of installations.

We are also concerned about the drastic reduction in the amount of solar tax credit available to customers. This sudden drop may create an unnecessary freeze in the market, rather than building upon Hawaii's current success.

Hawai'i has been a leader in the inevitable renewable energy revolution—but continued success will take a continued commitment from the public policy makers. We appreciate the effort to hear this bill and advance a comprehensive solution.

Mahalo for the opportunity to testify.

Recycled Content **Robert D. Harris, Director**

L E G I S L A T I V E

TAXBILLSERVICE

126 Queen Street, Suite 304 **TAX FOUNDATION OF HAWAII** Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Renewable energy technology tax credit

BILL NUMBER: SB 623

INTRODUCED BY: Gabbard

BRIEF SUMMARY: Amends HRS section 235-12.5 to establish a tax credit for a solar energy property that is used to generate electricity that is not part of a larger competitive bid solar energy property of 20% of the basis or $500,000, whichever is less, provided that the solar energy property is placed in service on or before December 31, 2020. Establishes a tax credit for a competitive bid solar energy property that is used to generate electricity at 4 cents per kilowatt-hour produced and either sold or used to displace electricity from the electric utility for the first 120 months of operations; applicable to properties placed in service before December 31, 2020. If a solar energy property is placed in service on or before December 31, 2020, the taxpayer may continue to collect tax credits earned on kilowatt-hours produced and sold for the first 120 months of operation.

Repeals the existing limitations of the dollar amount of tax credits that may be claimed under HRS section 235-12.5(b).

Defines "basis" as costs related to the energy property including accessories and installation, but excludes the cost of consumer incentive premiums unrelated to the operation of the energy property or offered with the sale of the energy property and costs for which another credit is claimed under the state income tax law. Any cost of repair, construction, or reconstruction of a structure in conjunction with the installation and placing in service of solar or wind energy property shall not constitute a part of the basis for the purpose of this section. That basis shall not be reduced by the amount of any federal tax credit or other federally subsidized energy financing received by the taxpayer. Defines "competitive bid solar energy property" and "competitive bid wind energy property" for purposes of the measure.

In the case of a competitive bid solar energy property, tax credits in excess of the taxpayer's liability due shall be refunded to the taxpayer provided such amounts are over $1.

In the case of solar energy properties placed in service after December 31, 2012, and before January 1, 2014, a taxpayer may elect tax credits under this section or under the department's temporary administrative rules that became effective on January 1, 2013.

In lieu of the income tax credits, a taxpayer not currently regulated by the public utilities commission that had by December 31, 2012, entered into an agreement for the sale of electrical energy from non-residential, non-utility-scale solar energy property with a public sector agency pursuant to a public solicitation and procurement process shall be allowed to elect to receive tax credits for energy properties placed into service prior to January 1, 2014, on the same basis as if the energy property had been placed into service prior to January 1, 2013.

Delineates entities and organizations that are eligible to claim the renewable energy technologies tax credit.

Directs the department of taxation and the department of business, economic development and tourism (DBEDT) to issue a joint report to the legislature annually on the number of systems that qualified for a tax credit for a calendar year, the total cost of the credit to the state during the taxable year including the type of tax credit (investment or production), refundablility type and the estimated economic benefit that may be attributable to the credits.

Requires DBEDT to commence a study by July 1, 2016 on the costs incurred and benefits generated by the renewable energy technologies tax credits as well as the extent to which the tax credits under this section have helped the state to achieve its energy goals. Permits DBEDT to consult with the department of taxation and industry trade groups and other stakeholders. DBEDT shall issue a report to the legislature by December 31, 2017 and include recommendations on whether the various tax credits should be revised, eliminated or extended beyond 2020 or allowed to expire at the end of 2020.

EFFECTIVE DATE: Tax years beginning after December 31, 2012

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 the credit from 35% to 20% for solar energy property used to generate electricity and is not part of a competitive bid solar energy property. The measure also establishes a tax credit for a competitive bid solar energy property that is used to generate electricity of 4 cents per kilowatt hour produced for the first 120 months of operation. 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, the proposed measure also expands the renewable energy technologies income tax credit to include competitive bid solar energy properties and by doing so further acknowledges the high cost of renewable energy technologies.

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 that 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.

The extensive reporting requirements regarding the amounts of tax credit claimed for each type of solar energy facilities, as well as the study of the effectiveness of the renewable energy tax income tax credits, should have been done when the credits were adopted.

Digested 2/4/13

HAWAII PV COALITION
KA LĀ I KA MAULIOLA

2/5/2013	**Senate Committee on Energy & Environment**	**ENE**
2:45 p.m.		**SB 623**

TESTIMONY SUPPORTING THE INTENT

Dear Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

Hawaii PV Coalition **supports the intent** of SB 623, 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 SB 11 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, SB 11 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, SB 11 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although SB 623 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, SB 11 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, SB 11 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.

Hawaii PV Coalition therefore recommends that you pass SB 11 to reform the RETITC rather than SB 623. 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

Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the Senate Committee on Energy and Environment
February 5, 2013, 2:45 PM, Conference Room 225
SB 623: RELATING TO RENEWABLE ENERGY

Aloha Chair Gabbard, Vice-Chair Ruderman, and members of the Senate Committee on Energy and Environment,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify **in support of SB 623**, which calls for a 20% credit residential PV with a sunset date December 31, 2020, holds SHW steady at 35%, with no sunset, and no discount on the refundable credit for competitively bid utility scale PV. 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.

Three 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?

SB 11: 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.

SB 623: Instant drop to 20% for PV. Holds steady at 35% for SHW. Would add on about $5,200 to the average sized PV system, which would put PV out of reach for many families. Also, abrupt changes have had the impact in the past of causing sudden down-turns in installations. 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%.

SB 1198: SB 1198 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 SB 1198 will severely reduce both PV and SHW installations.

1. 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 will probably increase.

SB 11: 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.

SB 623: Sunsets December 31, 2020 for PV DG, and no sunset for SHW. Sunset of December 31, 2020 for competitively bid solar, but PTC may extend beyond the sunset date. 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.

SB 1198: 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.

2. 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 **supports SB 623** because the ITC of 20% for non-utility scale PV, and 35% incentive for SHW keeps solar affordable for residential and commercial utility customers, although HSEA contends that the instant cut to 20% will slow the speed and scale of installations of residential and commercial PV, and that a gradual drop to 20% instead would not shut out utility customers and provide a more sustainable business environment. SB 623 also sunsets PV and wind in 2020, extending beyond the expiration of the federal tax credit. Also, SB 623 removes the discount from the refundable credit for competitively bid PV. SB 623 also requires DBEDT to study the efficacy of the renewable energy tax credits no later than December 31, 2017. It is unclear what the impact of the introduction of a metric for the competitively bid process will be.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association

Sunrun Inc. | 1.855.4SUNRUN | sunrunhome.com

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

TESTIMONY SUPPORTING THE INTENT OF SB 623

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

Tuesday, February 5, 2013; Senate Conference Room 225

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

Sunrun **supports the intent** of SB 623, 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 SB 11 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, SB 11 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, SB 11 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although SB 623 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, SB 11 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, SB 11 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.

Sunrun therefore recommends that you pass SB 11 to reform the RETITC rather than SB 623. Thank you for the opportunity to provide this testimony.

Sincerely,

Bryan S. Miller

SUNPOWER

TESTIMONY on SB 623
To: Senate Committee on Energy and Environment
Hearing on February 5, 2013 at 2:45 p.m. Room 225

Aloha Chair Gabbard, Vice Chair Ruderman 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 for Hawaii for more than 15 years. This participation includes: being a Member (charter) of Hawaii Energy Policy Forum; Hawaii Clean Energy Initiative-Steering Committee and Energy Generation Working Group; and participating in various energy related Public Utilities Commission dockets.

SunPower supports the intent of SB 623, but believes that SB11 provides a better solution.

SB 11 is the right approach for the following reasons:

- DOTAX/DEBEDT Administration simplified SB 11 follows the basic framework of federal law, and allows federal guidance to be applied to Hawai'i's credit, which is consistent with the State's general tax policy. The terms used in SB 11 captures the language in place with federal investment tax credit and production tax credit counterparts. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit.

- Scheduled Ramp down. SB 11 ramps the tax credit down evenly and predictably until the investment tax credit levels off at 10% in 2018 and the production tax credit sunsets in 2019. This gradual and measured approach will minimize shocks to Hawaii's renewable energy industry and allow it to adjust to lower incentive levels. This allows the deployment of solar energy systems to continue at lower costs as both prices and incentive levels steadily decline. A more severe and immediate reduction in the level of the credit would likely cause the industry to contract, leading to layoffs, unemployment, and the flight of capital.

- Maximizes Installation of Renewable Energy. By preserving the viability of all segments of Hawai'i's solar industry—residential, commercial, and utility-scale. SB 11 allow PV renewable energy installations at a reduced cost to the state. This will maximize the use of state tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

- Reduces Impact to State. By creating a production tax credit for utility scale projects (which is optional for other projects) the State will be able to spread out its costs for these larger projects over a ten-year period. This will avoid a spike in tax credit expenditures over the next few years when these utility-scale projects come on line.

For these reasons, although we support the intent of SB623, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i.

Mahalo for the opportunity to testify.

Riley Saito
Senior Manager, Hawaii Projects
SunPower Systems, Corporation

REVOLUSUN
cleaner. smarter. solar.

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 5, 2013 — 2:45 p.m. — Room 225

Testimony Supporting the Intent of SB 623, Relating to Renewable Energy

Chair Gabbard, Vice Chair Ruderman, 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 SB 623, 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 SB 11 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, SB 11 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, SB 11 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although SB 623 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, SB 11 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, SB 11 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.

RevoluSun therefore recommends that you pass SB 11 to reform the RETITC rather than SB 623. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel

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RevoluSun.com | Lic. # ABC 30244

KAIROS ENERGY CAPITAL

TO: Senate Committee on Energy and the Environment
Honorable Senator Mike Gabbard, Chair
Honorable Senator Russell Ruderman, Vice Chair

RE: Testimony Supporting Intent of SB623 Relating To Renewable Energy.

Testimony is 2 pages long.

HEARING: Tuesday, February 5, 2:45 p.m.

Kairos Energy Capital supports the intent of SB623, but urges the Committee to pass out SB11 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.

1. <u>The Hawai`i Tax Credit Currently Brings $3 of Other People's Money for Every Dollar of State Investment</u>: According to data from the Department of Taxation, DBEDT and county building permit offices, the actual rate at which the Hawai`i Tax Credit is claimed is about 23% of the system value, rather than the "nominal" rate of 35% in the statute. A great deal of this is due to taxpayers claiming the refund at a 30% discount – i.e. 24.5% of the system value – and some amount of unclaimed credits, defective applications and the like. The rest of the money – 77% of the cost of every installation – comes from a combination of Federal money in the form of the Federal tax credit, and private funds.

This "leverage" is very valuable, not only for the State's renewable energy objectives, but also for the capital markets.

2. <u>SB623 Continues Some of the Least Attractive Features of the Hawai`i Tax Credit</u>: While SB623 does provide for continued investment by the State in our renewable energy goals, it preserves the "per system" cap structure that has been controversial and complex to administer. SB11, on the other hand, adopts the well-tested Federal structure of a simple, and progressively reduced, percentage of cost method.

3. SB623 Is Highly Adverse to Commercial and Smaller Utility Scale Installations: By continuing the "per system" cap and maintaining the commercial/utility cap at $500,000, SB623 would codify the worst elements of the Department of Taxation's Temporary Administrative Rule 18-235-12.5-01T et seq. promulgated in November 2012 (the "DoTax Rule"). This rule effectively reduced the residential incentive by 30-50%, and the commercial and utility incentive by 50-95%, with essentially no notice. This rule would remain in effect under SB623, and the effect would be to cause a great deal of capital to flee the Hawai`i energy market for other, more suitable and stable pastures.

4. Retroactive Effect Would Penalize Reliance on Existing Rules: SB623 has a proposed effective date that would apply to all projects placed in service from January 2013. The DoTax Rule has already created chaos in the capital markets for energy projects due to the very short advance notice and radical departure from previous guidance. As markets have begun to adapt to doing limited activity under the DoTax Rule, the threat that SB623's retroactive effective date would undermine even those efforts and will chill project activity as long as this bill is pending with this effective date. While we would prefer that the Committee not pass out SB623 at all, at the very least it should be amended to have an effective date of January 2014 and to specifically provide that projects commenced in reliance on the DoTax Rule would be "grandfathered".

5. The Reduction of the Incentive from 35% to 20% Is Too Much, Too Soon, Too Drastic: Unlike SB11 and SB12, which step the incentive level down gradually, SB623 would reduce the incentive drastically in one step, from its current 35% to 20%, and then maintain it flat. Combined with its proposed retroactive effect, this would have a very destabilizing effect on the market and the rate of adoption of renewable energy.

For all of these reasons, while Kairos Energy Capital supports the intent of SB623, we urge this Committee to pass SB11 instead.

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
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February 5, 2013
2:45 PM

HOUSE
COMMITTEE ON ENERGY AND ENVIRONMENT

Cyd Shizuru
Energy Industries
Solar Project
Developer

SB 623

TESTIMONY IN OPPOSITION

Aloha Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

ENERGY INDUSTRIES is a Hawaii based company that designs and installs solar PV systems for residential and commercial clients. Our company employs 95 employees located on Oahu and Maui. We are grateful to the Legislature for the support we have received in the past and we 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.

That being said, ENERGY INDUSTRIES opposes SB263. While we are aware that this bill seeks to address concerns among public officials and some members of the public regarding the use of the Renewable Energy Technologies Income Tax Credit, the solar industry has grown up around the current system, as implemented in various forms of guidance provided by the Department of Taxation. For the commercial and residential customer, the change envisioned by SB263 is too abrupt and will disrupt the market to a significant degree. In the commercial market, the change will undermine projects that have been in development for years and that have financing assumptions based on project specific letter rulings.

As a result of these potential challenges posed by the measure to our residential and commercial customers, and to our own businesses, we respectfully ask that the Legislature consider other ways to implement the changes it sees as necessary. The instant drop to 20% is too sudden. For a PV system costing $40K, the current tax credit at 35% is $14K. With an abrupt reduction to 20%, the tax credit would be $8K, which is an instant $5K increase to the cost of the system. For a typical NEM commercial system at $450K, the sudden reduction from 35% to 20% would severely impact the returns and discourage the commercial client with the $67,500 loss in investment tax credits.

This legislative session, I support a gradual ramp down of tax credits over a few years, at a maximum of 3% to 5% reduction per year.

ENERGY INDUSTRIES is available and will be supportive of any and all efforts designed to work to a mutually agreeable solution.

Thank you for the opportunity to testify on this measure.

Sincerely,

Cyd Shizuru
Solar Project Developer
ENERGY INDUSTRIES
(808) 284-8981
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firstwind.
CLEAN ENERGY. MADE HERE.

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

REGARDING S.B. 623, RELATING TO RENEWABLE ENERGY

BEFORE THE
HAWAI'I STATE LEGISLATURE
HAWAI'I STATE SENATE
COMMITTEE ON ENERGY AND ENVIRONMENT

TUESDAY, FEBRUARY 5, 2013
CONFERENCE ROOM 225
2:45 PM

Aloha Chairman Gabbard and Distinguished Members of the Committee on Energy and Environment. 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 Hawai'i since 2006 and to date has invested nearly $600 million in Hawai'i. 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 O'ahu. First Wind currently employs 25 people in Hawai'i with plans to add 5 more in the near term. We are also involved with several utility-scale solar projects in Hawai'i. We are firmly committed to helping to improve Hawai'i'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 Hawai'i has made great strides in utilizing renewable resources for its electricity needs in the past decade, much more needs to be done to decrease Hawai'i'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. In order to provide a level playing field, with respect to SB 623, First Wind respectfully asks that the Committee consider the following changes:

1) Including bilaterally negotiated utility-scale solar projects in Section 1(a)(3).
2) Extending the in service date for the determination letters in Section 1(m) to July 1, 2015 as HECO has already indicated that they cannot meet the December 31, 2013 date due to the time required to complete their interconnection upgrades.

We look forward to continuing to work with you and our colleagues in the renewable energy industry to refine this measure as it moves through the legislative process.

810 Richards St., SUITE 650 | Honolulu, HI 96813 | 808 695.3300 | WWW.FIRSTWIND.COM

sunetric

Senate Committee on Energy & Environment
Testimony in support to Senate Bill 623

Testimony of Alex Tiller, Sunetric CEO
Tuesday, Feb. 5th, 2:45 p.m.

Chair Gabbard, Vice Chair Ruderman, 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** Senate Bill 623, which establishes tax credits for solar energy property, wind energy property, competitive bid solar energy property, and competitive bid wind energy property. It also requires the State Department of Taxation (DoTax) and Department of Business, Economic Development and Tourism (DBEDT) to report these credits.

Sunetric supports a gradual ramp down of tax credits, as it allows the industry to plan long term ahead of the anticipated drop. Furthermore, Sunetric supports annual reports to the Legislature by DoTax and DBEDT on the credits' impact on the economy, including boost, net flow of money into or out of the State, and general excise and income tax revenue generated. It's always been our position that the State's leaders must have accurate, dynamic economic statistics and information before making any decision on the solar tax credits and its effect on the local economy.

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

Sincerely,

Alexander Tiller, CEO
Sunetric

INTER-ISLAND SOLAR SUPPLY

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73-5569 Kauhola St., Kailua-Kona, HI 96740 | BIG ISLAND | Phone (808) 329-7890 Fax 329-5753
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February 5, 2013 (2:45 PM)
Testimony Before the Senate Committee on Energy and Environment
on
S.B. 623 RELATING TO RENEWABLE ENERGY

Chair Gabbard, Vice Chair Ruderman, 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 overall opposes SB 623, has some recommended changes, supports some provisions, and is concerned about one provisions. A position summary follows:

- Solar water heating caps: **recommends** cap increases to $2,500 for SFD & $1,000/unit for MFD
- Non-competitive bid solar electric: **opposes** reduction in credit level
- Competitive bid solar electric: **strongly opposes** because this category would receive $4-$7 million in credits over 10 years while non-competitively bid are capped at $500,000 (see attached Comparison of Non-Utility & Utility Scale PV Credits)
- Solar credit cap elimination for solar electric: **opposes** because creates opportunity for abuse
- Reduction in credit for substitute renewable energy for "mandated" solar water heating deleted: **strongly opposes** because "mandate" substitution should not be fully rewarded
- Exclusion of system related structural costs: **opposes** because such costs are directly related to the project
- Metering for production credit: **recommends** requirement but should specify DC or AC output
- AOAO eligibility for credit: **concerned** about conflicts of law – AOAO are usually non-profit
- Requires DBEDT & DoTax joint reporting: **strongly supports** that DoTax which has the data is not mentioned
- Requires DBEDT to conduct a study in 2017: **strongly support** to understand effects of tax credit

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 request that this Committee hold SB 623 for the reasons stated above.

Thank you for the opportunity to testify on this measure.

Comparison of Non-Utility & Utility Scale PV Credits
at $0.04/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	$0.040	Annual Production	1,460,000 kWh_{AC}[1]
PV Cap	$500,000	Production Credit Period	10 yrs

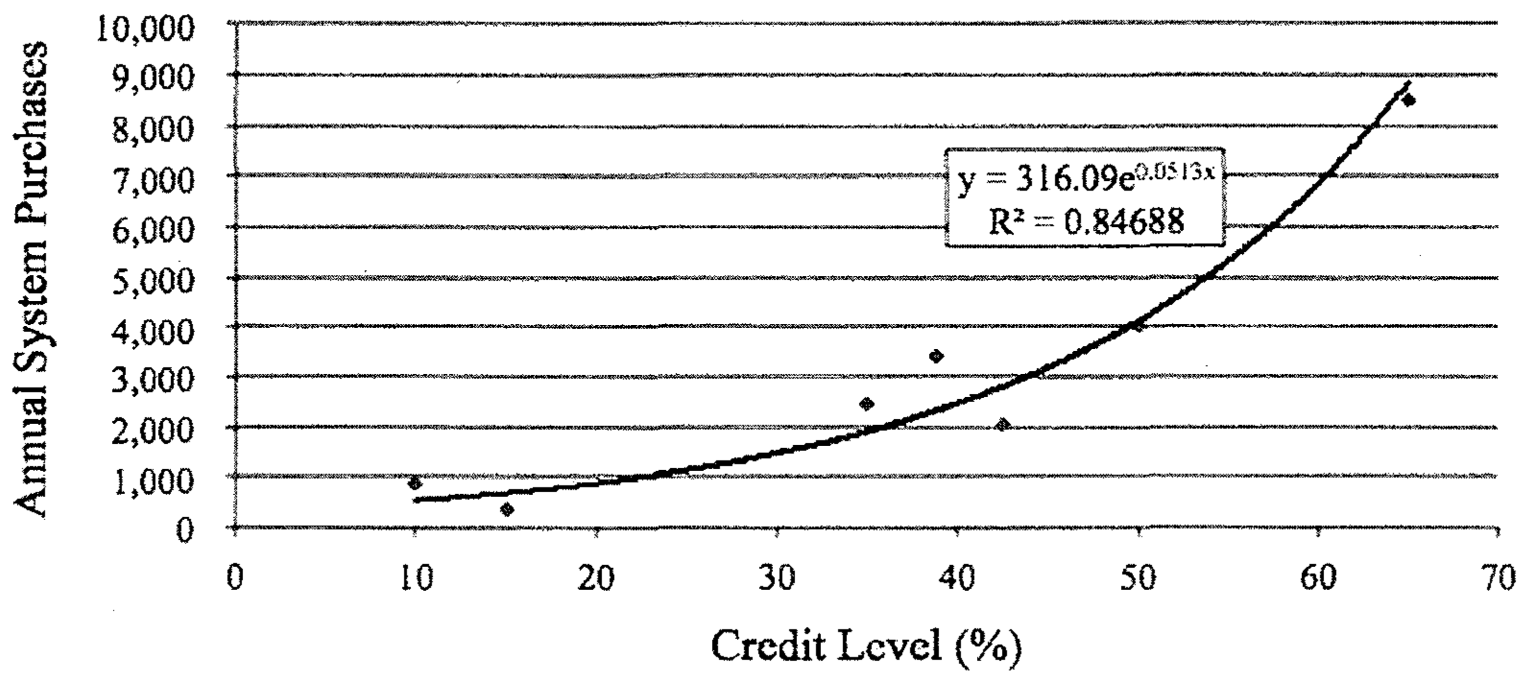
Comparative Analysis

		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 $0.040	Refundable $0.028	Non-Refundable $0.040	Refundable $0.03
< 2014[2]	35%	$500,000	$350,000	$500,000	$350,000	$500,000	$500,000
	Eff. Rate	13%	8.8%	13%	8.8%	13%	8.8%
2015	30%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2016	25%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2017	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2018	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2019	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2020	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2021	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2022	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2023	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	8.8%	18.3%	12.8%	14.6%	10.2%
2024	20%	$500,000	$350,000	$730,000	$511,000	$584,000	$408,800
	Eff. Rate	13%	12.5%	18.3%	12.8%	14.6%	10.2%
Total		$500,000	$350,000	$7,300,000	$5,110,000	$5,840,000	$4,088,000

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

RISINGSUN SOLAR ELECTRIC

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 5, 2013 — 2:45 p.m. — Room 225

Testimony in Opposition to SB 1198, Relating to Renewable Energy

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

Rising Sun Solar **supports the intent** of SB 623, 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 SB 11 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, SB 11 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, SB 11 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although SB 623 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, SB 11 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, SB 11 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.

Rising Sun therefore recommends that you pass SB 11 to reform the RETITC rather than SB 623. Thank you for the opportunity to provide this testimony.

Sincerely,

Summer Starr
Legislative Liaison

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www.risingsunsolar.com

SB623
Submitted on: 2/3/2013
Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Wendell Lum	Individual	Oppose	Yes

SB623
Submitted on: 2/4/2013
Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Anna Kelly	Individual	Oppose	Yes

Comments:
Committee,

The bills under discussion today could have detrimental effects on not only the solar energy industry here in Hawaii, but also on Hawaii's long term sustainability and clean energy goals. The extreme physical isolation of the islands makes us very susceptible to rising oil prices and should make energy independence a high priority goal. In supporting this goal we must promote the development of industries like solar, and incentivize consumers to think long-term by making these technologies comparatively affordable and attainable.

The current solar tax credit system has been largely successful, allowing many Hawaii residents to invest in sustainable solutions for their energy needs. The tax credits have been under scrutiny due to the $174 million figure that was established as the "cost" of the credits on the state. However, this cost completely disregards numerous benefits to the state and its people. The recent Blue Planet study details the economic benefits of Hawaii's choice to promote local energy development. In addition to benefits such as local job creation and additional local sales, each dollar invested by the state into the PV tax credit program has generated an additional $2.67 for the state through additional tax revenue. This alone can validate the position to maintain the credit system at its current level of 35%. The state is making a good investment, and seeing quick returns. If the tax credits must be lowered, it must be handled with care. The industry is still young, and while PV module costs have steadily declined, there is no certainty that this will continue. A credit ramp down, if politically necessary, should happen slowly. However, I urge you to look past your political terms to see the long term benefits and consequences, environmentally and economically, of these decisions.

A decision to make drastic cuts in the credits could cost Hawaii jobs and money, as well as creating unnecessary obstacles in moving towards our sustainability goals and energy independence. Moving forward, we have to look logically at what is working in the current system and what is not, to develop solutions to the problems while still promoting the many benefits that have come out of the current policy. Adjust the credit cap based off data collected from HECO on average system size, and tweak the technical language that has led to multiple credits per technology, but please don't fix what is not broken. Continue to support the solar tax credit system.

Thank you for your time and commitment,

Anna Kelly

SB623
Submitted on: 2/5/2013
Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Warren F. Wegesend, Jr.		Support	No