

SB 11

RELATING TO RENEWABLE ENERGY.

Defines solar energy property and wind energy property and classifies utility scale solar energy facility, competitively-big utility scale solar energy facility, and ordinary utility scale solar energy facility. Establishes a method for calculating tax credits for solar or wind energy property. Requires department of business, economic development, and tourism to monitor and report tax credits claimed under section 235-12.5, Hawaii Revised Statutes.



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

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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

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

Statement of
RICHARD C. LIM
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

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

in consideration of
SB 11
RELATING TO RENEWABLE ENERGY.

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

The Department of Business, Economic Development & Tourism (DBEDT) supports SB 11 to create an appropriate legislative solution regarding the renewable energy income tax credit to provide a predictable investment stimulus for renewable energy deployment in a manner the State can afford. Continuing to support clean energy development is critical to Hawaii's economy: a prime example is that in 2012, 26% of all construction-related spending was attributed to the solar industry; in a time of declining construction spending, solar construction has helped provide welcomed relief to Hawaii's construction industry.

DBEDT recognizes that the framework and mechanisms proposed in SB 11 will bring clarity and ease of administration of the credit and reducing the level of incentive in a predictable and transparent manner will provide support for continued clean energy development. We respectfully defer to the Department of Finance on the budgetary impacts of this proposal.

DBEDT supports efforts by all stakeholders to forge a transparent and predictable long-term solution to ensure passage of an essential and coordinated solution during this Legislative Session.

Thank you for the opportunity to offer testimony in support of SB 11.

NEIL ABERCROMBIE
GOVERNOR

SHAN TSUTSUI
LT. GOVERNOR



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

FREDERICK D. PABLO
DIRECTOR OF TAXATION

JOSHUA WISCH
DEPUTY DIRECTOR

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. 11 Relating to Renewable Energy

The Department of Taxation (Department) appreciates the intent of S.B. 11, but prefers S.B. 1198 and provides the following summary and comments for your consideration.

Section 2 of S.B. 11 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 30% for solar property placed in service between July 1, 2013 and December 31, 2014, 25% between January 1, 2015 and December 31, 2015, 20% between January 1, 2016 and December 31, 2016, 15% between January 1, 2017 and December 31, 2017, and 10% thereafter.

A fixed percentage, rather than 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.

- Providing a renewable energy credit for wind energy property at a rate of 20%.
- Providing a production credit at 11.5 cents per kilowatt hour produced during the first 10 years of the systems operation for ordinary utility scale solar facilities. For competitively-bid utility scale solar energy facilities, the production credit is 5.75 cents per kilowatt hour. 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 which is more than five times the amount of the federal credit and allows for the claiming

of the for electricity and is simply generated as it does not require that the electricity be sold. The Department suggests that the language of this provision be changed from "produced" to "produced and sold. The Department defers to the Public Utilities Commission on whether the production credit amount should be reduced by fifty percent where the solar installation is competitively-bid.

- Providing a production credit for non-utility scale solar energy property at the rate of 11.5 cents provided that the credit is not claimed under subsection (a)(1). The Department has some concerns about this production credit because it may be difficult to administer and enforce and because this provision may encourage the inefficient overbuilding of systems that would not benefit the State.
- 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.
- Disallowing credit refundability without reduction for taxpayers with Hawaii adjusted gross incomes of less than \$20,000 for single filers and \$40,000 for joint filers.
- Requiring the Department to compile and submit a detailed report to the legislature by December 31 each year. The Department notes that this type of detailed reporting is difficult with the current computer system. In order to meet this requirement, it is likely that the Department will need to require mandatory electronic filing of the information by each taxpayer claiming the credit.
- 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.

Thank you for the opportunity to provide comments.



Email: communications@uluponoinitiative.com

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

Ulupono Initiative Strongly Supports SB 11, 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.

The Ulupono Initiative strongly supports SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the State and makes it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawai'i meet its ambitious renewable energy goals while retaining construction sector employment.

Ulupono believes SB 11 is the right approach for the following reasons:

- Easy to Administer. 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 also are drawn directly from the law's 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.
- Predictable Rampdown. SB 11 ramps the tax credit down evenly and predictably until the investment tax credit levels off at 10 percent in 2018 and the production tax credit sunsets in 2019. This gradual and measured approach will minimize shocks to Hawai'i'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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

Kyle Datta
General Partner



Testimony of Cindy McMillan
The Pacific Resource Partnership

Senate Committee on Energy and Environment
Senator Mike Gabbard, Chair
Senator Russell Ruderman, Vice Chair

SB 11 – Relating to Renewable Energy
Tuesday, February 5, 2013
2:45 pm
Conference Room 225

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

The Pacific Resource Partnership (PRP) is a labor-management consortium representing over 240 signatory contractors and the Hawaii Regional Council of Carpenters.

PRP **strongly supports** SB 11, Relating to Renewable Energy. This bill defines solar energy property and wind energy property and classifies utility scale solar energy facility, competitively-big utility scale solar energy facility, and ordinary utility scale solar energy facility. It establishes a method for calculating tax credits for solar or wind energy property and it requires department of business, economic development, and tourism to monitor and report tax credits claimed under section 235-12.5, Hawaii Revised Statutes.

Hawaii has an aggressive goal of meeting 70% of our energy needs by 2030 through energy efficiency and renewable energy. The solar industry has been an important component in moving us in the right direction, and the solar tax credit has been a significant factor in establishing this industry in Hawaii.

Over the years, the industry has matured, and this bill considers how best to go forward. SB 11 is easy to administer, provides a predictable ramp down, maximizes installation of renewable energy, and reduces costs to the state.

February 5, 2013

Testimony Supporting SB 11 – Relating to Renewable Energy

Page 2

PRP's support for SB 11 is based on these and several other factors. The solar industry is an increasingly important part of Hawaii's construction industry. That translates into jobs – jobs for contractors and jobs for carpenters. When our contractors and members are working, their discretionary spending increases, contributing to economic activity at the community level.

In addition, solar projects help our working families afford a critical piece of infrastructure that will help them save money on their energy bills. Hawaii's solar tax credits — coupled with new third party-owned PV programs — have enabled a broadening range of Oahu homeowners to escape the burden of high energy costs and benefit from a clean energy solution.

PRP believes SB 11 will allow men and women working to install the infrastructure projects to earn a living in ways that contribute substantially to preserving our environmental quality and making better use of our natural resources.

We respectfully ask for your support on SB11. Thank you for the opportunity to share our views on this important initiative with you.



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803

808.538.6616 hawaii.chapter@sierraclub.org

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5, 2013, 2:45 P.M.

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 11

Aloha Chair Gabbard and Members of the Committee:

The Sierra Club of Hawai'i, with over 10,000 members and supporters, *supports* SB 11. This measure would advance the State's clean energy efforts setting up a long-term plan for our renewable energy tax credit to slowly wean down over time.

This measure, however, smartly sets up a schedule to wean down the tax credit over time and as the solar industry becomes more and more able to compete with oil on a cost basis. It maintains an important policy tool intended to encourage investment in clean energy, reduce Hawai'i's dependence on unstable foreign oil, and improve Hawai'i's environment.

Our renewable energy tax credit is an important investment for the state. Hawai'i depends on imported oil for nearly 90% of its energy needs. This dependence results in the outflow of the State's financial resources and creates a tenuous reliance on an unsustainable and unstable resource. Moreover, with the increased certainty of climate change as a result of fossil fuel usage and the emerging treaties on greenhouse gas emissions, as well as the global depletion of natural resources, encouragement of renewable energy sources is timely and strategic.

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. This measure shows that commitment, but also sets up a long-term path for the solar industry to eventually compete without government assistance.

Mahalo for the opportunity to testify.



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 11: 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 **partial support of SB 11**, which proposes to amend the renewable energy tax credit by gradually reducing the PV and SHW credit to 10%, and instituting a sunset date in 2018 for PV ITC, and 2019 for utility scale. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on residential distributed generation (DG) and commercial for both solar hot water (SHW) and photovoltaics (PV). We currently represent 71 companies, and our members include installers, contractors, manufacturers, distributors, 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.

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 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 1198: Sunsets December 31, 2016, the same deadline as the federal tax credit. Unless Hawaii has reached its 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.

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.

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 **supports SB 11 in part**. The gradual ramp down supports a more stable transition, but ramping down to 10% is too far, and would severely limit utility customer's access to renewables. The ramp down is also not justified for SHW, and would impede the installation of this efficiency technology. HSEA would amend the sunset dates to review dates, since it is unlikely that Hawaii will have reached its clean energy goals by 2018 and 2019 respectively. However, SB 11 supports a robust utility scale PTC, and has an interesting proposal of allowing residential customers to take the PTC as well. SB 11 also mandates that DBEDT report on tax credit information annually.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association

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 11

INTRODUCED BY: Gabbard

BRIEF SUMMARY: Amends HRS section 235-12.5 to provide that the tax credit for each: (1) solar electricity generating system that is not a utility scale solar electricity generating system placed in service shall be - 30% of the basis of the solar energy property placed in service between July 1, 2013 and December 31, 2014; 25% of the basis of the solar energy property placed in service between January 1, 2015 and December 31, 2015; 20% of the basis of the solar energy property placed in service between January 1, 2016 and December 31, 2016; 15% of the basis of the solar energy property placed in service between January 1, 2017 and December 31, 2017; and 10% of the basis of the solar energy property placed in service on or after January 1, 2018; (2) wind energy property - 20% of the basis of wind energy property placed in service on or after July 1, 2013; (3) for a utility scale solar energy facility - 11.5 cents per kilowatt hour for ordinary utility scale solar energy facilities placed in service between July 1, 2013 and December 31, 2019; and 5.75 cents per kilowatt hour for competitively-bid utility scale solar energy facilities placed in service between July 1, 2013 and December 31, 2019; and (4) for solar energy property for which no credit is claimed - 11.5 cents per kilowatt hour for energy property placed in service between July 1, 2013 and December 31, 2019. The existing dollar limitation that may be claimed for renewable energy technology systems is repealed.

Defines “competitively-bid utility scale solar energy facility” as a utility scale solar energy facility that is installed and placed in service pursuant to a competitive bidding process, required by the public utilities commission (PUC), and conducted by or on behalf of an electric utility regulated by the PUC. Defines “ordinary utility scale solar energy facility” as a utility scale solar energy facility that is not installed and placed in service pursuant to a competitive bidding process conducted by or on behalf of an electric utility regulated by the PUC. Defines “utility scale solar energy facility” as any solar energy property that is: (1) designed, installed, and placed into service to produce electricity; and (2) interconnected to a utility grid at sub-transmission or transmission voltage. Defines “solar energy property” as equipment that uses solar energy to generate electricity, to heat or cool or provide hot water for use in a structure, or to provide solar process heat, the construction, reconstruction, or erection of which is completed by the taxpayer or acquired by the taxpayer if the original use of such property commences with the taxpayer. “Wind energy property” means equipment that uses wind energy to generate electricity, the construction, reconstruction, or erection of which is completed by the taxpayer or acquired by the taxpayer if the original use of such property commences with the taxpayer, and that is not interconnected to a utility grid at sub-transmission or transmission voltage.

The basis of the solar or wind energy property shall include all costs related to the solar or wind energy property, including accessories and installation, but shall not include the cost of consumer incentive premiums unrelated to the operation of the property or offered with the sale of the property. Stipulates that the basis used for claiming the credit shall be consistent with the basis used by the taxpayer for

SB 11 - Continued

claiming the federal energy credit described in IRC section 48 or the qualified solar electric property expenditure used by the taxpayer in claiming the federal residential energy property credit described in IRC section 25D; provided that for the purposes of calculating the credit allowed under this chapter, the basis of the solar or wind energy property shall not be reduced by the amount of any federal tax credits or other subsidized energy financing received by the taxpayer. The number of kilowatt hours produced by solar energy property shall be determined by a metering system installed on the property which allows the taxpayer to determine the amount of solar energy production accurate to within two percent of actual system output.

Repeals the provisions making the credit refundable for taxpayers exempt from state income taxation or taxpayers with adjusted gross incomes of \$20,000 or less or under \$40,000 for taxpayers filing jointly.

Requires the department of business, economic development, and tourism (DBEDT) to collect data regarding tax credits claimed under this section and report to the legislature by December 31 annually for the preceding tax year of the dollar amount of the tax credits claimed for: (1) solar energy facilities; (2) utility scale solar energy facilities; (3) competitively bid utility scale solar energy facilities; (4) ordinary utility scale solar energy facilities; (5) wind energy property; (6) the total dollar amount of tax credits claimed under this section; and (7) the dollar amount of tax credits taken as refundable tax credits for each of the reporting categories.

Allows an individual or corporate taxpayer not currently regulated by the PUC that entered into an agreement by December 31, 2012 for the sale of electrical energy from non-residential, non-utility scale solar energy property with a public sector agency 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.

Taxpayers may claim credits under this section as they existed on January 1, 2013 for renewable energy technology systems as that term is defined in this section as it existed on January 1, 2013, which were installed and placed in service prior to July 1, 2013.

Requires DBEDT to conduct a study in the 2017 calendar year to determine: (1) the extent to which renewable energy technology income tax credits have benefitted the state by advancing the state's renewable energy goals, reducing the energy costs of homeowners and business owners, and generating economic growth; (2) the net cost to the state of the renewable energy technology income tax credits; (3) the extent to which the state will be able to achieve its renewable energy goals without further modification to the existing renewable energy technology income tax credit; and (4) whether the renewable energy technologies income tax credit should be extended, eliminated, or revised for tax years beginning January 1, 2020. DBEDT shall submit a report of its findings to the legislature no later than 20 days prior to the convening of the regular session of 2018.

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 credit from 35% to 30% that may be claimed for solar energy property between July 1, 2013 to December 31, 2014; 25% between January 1, 2015 and December 31, 2015; 20% between January 1, 2016 and December 31, 2016, 15% between January 1, 2017 and December 31, 2017; and 10% on January 1, 2018 and thereafter. The measure also establishes tax credits of 11.5 cents per kilowatt hour for ordinary utility scale solar energy facilities placed in service between July 1, 2013 and December 31, 2019 and 5.75 cents for competitively-bid utility scale solar energy facilities placed in service between July 1, 2013 and December 31, 2019. While it appears that this measure is proposing to reduce the outflow of tax credits due to the misinterpretation of the existing tax credit provisions, the proposed measure repeals the caps on the amount of tax credits that may be claimed.

Although this slow weaning of the taxpaying public from its dependence on the tax incentives may sound like a great idea, it ignores the phenomenon that occurred this past years 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.

While the measure also expands the renewable energy technologies income tax credits to include utility scale solar energy facilities, it acknowledges the high cost of renewable energy technologies.

The measure would also grant a tax credit of 11.5 cents per kilowatt hour produced from a utility scale solar energy system. This provision would grant a tax incentive based solely on the fact that alternate energy has been generated and then award the owner of that facility a credit even though the owners of the facility may be consuming the energy generated. If the intent is to mimic the federal treatment of such energy, then the credit should be based on the number of kilowatt hours **produced and sold** (instead of placed in service) as the intent is to subsidize the cost of the energy when purchased by a third party who may have the choice of purchasing that energy from a fossil fuel-based generator. It should also be noted that if it is the intent to mirror the federal treatment the size of the credit proposed is more than five times the amount granted under the federal laws where tax rates are higher.

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

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.

SB11

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
Henry Curtis	Life of the Land	Support	Yes

Comments: Photovoltaic systems reduce day-time load, energy efficiency reduces peak load, and hence can reduce the number of generators a utility needs. Therefore, solar tax credits should only be allowed where customer has or installing energy star appliances, CFL and solar water heaters.



2/5/2013

Senate Committee on Energy & Environment

ENE

2:45 p.m.

SB 11

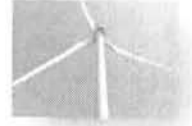
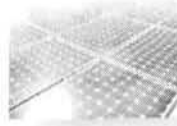
TESTIMONY IN SUPPORT

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

Hawaii PV Coalition **strongly supports** SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETTIC") that reduce the credit's cost to the state and make it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawaii meet its ambitious renewable energy goals while retaining construction sector employment.

Hawaii PV Coalition believes SB 11 is the right approach for the following reasons:

- Follows Federal Law. SB 11 follows the basic framework of federal law, adopts terms that are used in the federal investment tax credit and production tax credits, and explicitly incorporates federal guidance from those laws to be applied to Hawai'i's credit. Following federal law is consistent with the State's general tax policy. This approach will also remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. It will also lead to greater transparency and accessibility for investors. While some of the other measures under consideration adopt some of the federal definitions, SB 11 follows the federal law approach most consistently and thoroughly.
- Maximizes Installation of Renewable Energy. By preserving the viability of all segments of Hawaii's solar industry—residential, commercial, and utility-scale—SB 11 will lead to a high level of renewable energy installation at a relatively low 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. Specifically Hawaii PV Coalition predicts that if SB 11 is passed, the Hawai'i credit would generate the installation of three times more solar PV between 2013 and 2020 than would be installed during that time if the existing tax credit structure and crippling new Department of Taxation rules are not reformed by the legislature.
- Reduces Costs to State. At the same time that it maximizes renewable energy installation, SB 11 also significantly reduces the tax credit's impact on the general fund. Specifically, 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. Hawaii PV Coalition estimates that the general fund impact of



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5, 2013, 2:45 P.M.

Room 225

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 11

Chair Gabbard, Vice-Chair Rudeman, and members of the Committee:

The Blue Planet Foundation supports SB 11, a measure which makes reasonable and prudent amendments to Hawaii's highly successful clean energy tax credit incentive.

Solar energy is currently a bright spot in Hawaii's progress toward energy independence, and the solar tax credit has been extremely effective at making Hawai'i a leader in solar installations—creating local jobs and providing steady revenue from its business creation. Moreover, the installation of solar water heaters, photovoltaic systems, and wind systems helps to plug the leak of billions of dollars out of the islands' economy. Further, investments in this technology—and the companies and jobs that provide it—pays dividends back to the state in the form of income tax, general excise tax, and outside investment—among other forms.

Senate Bill 11 contains a number of elements which make it an attractive policy, for the state economy, the solar sector, and for achievement of Hawaii's aggressive clean energy goals. First, the measure follows the framework and definitions of the federal tax credit law, making it easier for the state to administer. Second, the proposed policy ratchets down the state renewable energy tax credit in a fair and predictable manner, reducing job-jeopardizing volatility in the solar sector. Third, the measure provides for a reasonable incentive for all segments of Hawaii's solar industry: residential, commercial, and utility-scale. Finally, the production tax credit approach in SB 11 (for utility scale projects, as well as an option for smaller projects) encourages the most efficient renewable energy installations while spreading out the cost of the credit over a 10-year period.

Blue Planet has released a report in January, 2013, detailing the economic impacts of Hawai'i's renewable energy tax credit. The analysis, conducted by former University of Hawai'i economist Dr. Thomas Loudat is updated from last spring, peer-reviewed, and includes demographic

info@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • blueplanetfoundation.org

information from building permits for O'ahu photovoltaic installations over the past 12 years. (Dr. Loudat's earlier analysis of renewable energy tax credits was presented in a report to the state legislature in 2002.)

The findings show that the existing tax incentive yields a clear, significant net fiscal benefit to the state. Every commercial PV tax credit dollar invested yields \$7.15 that stays in Hawai'i and \$55.03 in additional sales, which generates \$2.67 in new tax revenue. For a typical 118 kW commercial PV installation, the state gains 2.7 local jobs each year over the 30-year lifetime of the system.

According to the state Department of Business, Economic Development, and Tourism (DBEDT), solar accounts for 15% of all construction expenditures in Hawai'i. The solar industry employs more than 2,000 people locally.

Any stimulation in solar installations also brings federal dollars (from the 30% federal renewable energy tax credit) into our local economy. These dollars have a full multiplier effect equivalent to tourist dollars coming to Hawai'i.

Blue Planet's analysis shows that the use of solar is increasing more rapidly in less wealthy neighborhoods. An examination of O'ahu residential PV permits from the past decade indicates that while overall number of installations are located in zip codes that have higher median incomes, the rate at which PV installations occurred in 2012 versus 2002-2011 was significantly higher in lower median income areas. For example, Wai'anae (with a median household income of \$55,836) saw a 300% increase in PV permits in 2012 compared with the previous decade combined (173 total permits between 2002 and 2011; 521 permits in 2012 alone). Hawai'i's solar tax credit—coupled with new third party-owned PV programs—have enabled a broadening range of O'ahu homeowners to escape the burden of high energy costs and benefit from a clean energy solution.

Hawai'i's renewable energy tax credit is a catalyst in driving positive economic growth through solar. When we shift our energy dollars away from foreign oil and to local clean energy sources, those dollars circulate in Hawai'i's economy to the benefit of everyone. Ultimately, the tax credit is a smart investment in a better, cleaner tomorrow, a future we value beyond dollars and cents.

Please forward SB 11.

Thank you for this opportunity to testify.



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

RE: Testimony Supporting SB11 Relating To Renewable Energy.

Testimony is 3 pages long.
HEARING: Tuesday, February 5, 2:45 p.m.

Mr. Chairman and members of the Committee:

I appreciate this committee's consideration of SB11, and welcome this opportunity submit testimony in strong support of the measure.

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. The Hawai'i Tax Credit Brings \$3 of Other People's Money for Every Dollar of State Investment: 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. Some Level of Incentive Remains Necessary, Because Hawai'i is Not Yet at "Grid Parity." The "holy grail" of renewable energy is to achieve unsubsidized "grid parity" – a total cost of installation and operation at which the facility can produce energy as cheaply as the competing utility sources, without incentive or subsidy. Despite some much-publicized comments by mainland media that Hawai'i renewable energy installations are already at "grid parity," the fact is that we are not quite there yet. The mainland analyses use installation costs and other costs that simply are not the reality in Hawai'i, at least not yet.

In order for a typical Hawai'i PV system to be at "grid parity" with current HECO rates on Oahu, our calculations indicate that it would have to be constructed for a total cost

of less than \$2.28 per watt – which is at least 50% below the current best pricing available from the most efficient contractors in Hawai'i. Residential systems in Hawai'i are currently selling for \$4.50 to \$5.00 per watt, and even the most cost-efficient systems—those built at utility scale—struggle to get to the low \$3/watt range.

In order to attract private capital—whether it is investors funding commercial and utility scale systems or homeowners borrowing on their home equity lines to put PV on their houses—the economics must be favorable compared to the alternatives, and Hawai'i PV economics are not there yet without some level of incentive.

3. Message of the Capital Markets: Predictability is Good, Disruption and Sudden Change is Bad: The Hawaii renewable energy tax credit was a means for the State to partner with private capital by incentivizing homeowners, businesses and investors to put money into renewable energy projects which would otherwise be unprofitable or marginally profitable by providing them with tax relief. When there is a threat that the rules of that relationship between the State's incentive and private capital's investment may suddenly change, the private capital instantly freezes until the threat is resolved one way or the other.

The effect of that capital freezing is that the projects – from individual homeowners considering solar hot water heaters to huge solar farms – are stopped in their tracks. And once stopped, some of the projects will never be restarted. And with upcoming projects stopped, solar companies – which have been one of the few bright spots in a construction industry mired in the recession – must begin laying off workers and cutting costs.

4. SB11 Provides a Good Balance Between Predictability, Incentive Levels and State Investment: This bill offers a number of features that make it the best alternative of the several bills on the Hawai'i Tax Credit now pending before the Legislature:

- a. Predictable Rampdown Structure: By phasing the credit down from its previous 35% to 30% and eventually 10%, the markets can plan and adapt, and the need for the Legislature to revisit the credit every year will be removed.
- b. Familiar "Follow-the-Federal" Rules: The rules governing interpretation of the Federal energy tax credit have evolved over decades and are very well known and understood in the capital markets. By removing unwieldy and Hawai'i-specific provisions like the awkward and controversial "per system" cap structure and replacing it with simple, well-understood and manageable rules, the markets will find it easier to continue funding in Hawai'i.
- c. Protection of Existing Investments: By including provisions to protect investments already made in pending utility scale and public sector projects, SB11 helps provide reassurance to the capital markets that investments made in reliance on Hawai'i's promises will be respected.

d. Production Tax Credit for Larger Projects is a Brilliant Solution to Reduce State Costs Without Slowing Investment: By spreading the incentive over 10 years, the State's cost and budget impact is drastically reduced, while still allowing appeal to capital markets which have been long familiar with the production tax credit in the context of Federal support for wind projects.

For all of these reasons, Kairos Energy Capital supports SB11 and urges this Committee to pass it out as written.

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



February 1, 2013

The Honorable Mike Gabbard, Chairman
Senate Committee on Energy & Environment
Hawaii State Capitol, Room 201
Honolulu, HI 96813

RE: Senate Bill 11 – Solar Energy Property; Tax Credit – Support

Dear Chairman Gabbard:

Mainstream Energy Corp. strongly supports your Senate Bill 11, which makes needed reforms to the current Renewable Energy Technologies Income Tax Credit (RETITC). This bill reduces the credit's cost to the state, while allowing Hawaii to meet its ambitious renewable energy goals and maintaining a viable solar industry in the state.

Mainstream Energy Corp. is the parent company of REC Solar, a national installer of grid-tied residential, commercial, government, and utility solar installations, and AEE Solar, one of the country's largest distributors of renewable energy equipment. Our companies have a presence in all major solar markets and employ more than 800 people nationwide. We have installed more than seven megawatts of commercial systems in Hawaii – for schools, public buildings, retailers, and utilities – and have more than sixteen megawatts under construction. Changes to the current RETITC structure will have a major impact on these and future projects.


Senate Bill 11 is the right approach for the following reasons:

- **Easy Administration.** Senate Bill 11 follows the basic framework of federal law and allows federal guidance to be applied to Hawaii's credit. The terms used in the bill are drawn directly from the federal investment tax credit and production tax credit statutes. This removes ambiguities in existing law and makes administration easier for the Department of Taxation.
- **Predictable Rampdown.** Senate Bill 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 systems to continue at lower costs as both prices and incentive levels steadily decline. A more severe and immediate reduction in the credit would cause industry contraction, leading to layoffs, unemployment, and the flight of capital.
- **Maximizes Installation of Renewable Energy.** By preserving the viability of all segments of Hawaii's solar industry – residential, commercial, and utility – Senate Bill 11 will lead to a high level of renewable energy installation at a relatively low cost to the state. This will maximize the use of state tax dollars and keep Hawaii on the path to achieving its ambitious clean energy goals.

- Reduces Costs to State. By creating a production tax credit for utility-scale projects (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 a number of these utility-scale projects come online.

Again, Mainstream Energy Corp., REC Solar, and AEE Solar strongly support Senate Bill 11, and we appreciate your leadership in renewable energy issues. We look forward to working with you to enable the passage of this important legislation. Thank you for the opportunity to provide this testimony.

Sincerely,



Benjamin L. Higgins
Director of Government Affairs



EDF Renewable Energy
517 SW 4th, Ste 300
Portland, OR 97204
T: 503.219.3166

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

TESTIMONY IN SUPPORT OF

SB 11 RELATING TO RENEWABLE ENERGY

Testimony of

Mr. Virinder Singh

Tuesday, February 5, 2013

Senate Conference Room 225

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

EDF Renewable Energy (EDF RE) strongly supports SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the State and makes it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawai'i meet its ambitious renewable energy goals while retaining construction sector employment.

EDF RE has brought on-line two commercial-scale rooftop photovoltaic (PV) projects in Hawai'i—a 255 kW-dc project in Honolulu and a 332 kW-dc project in Ewa Beach—and is constructing a 298 kW-dc project in Hilo. All projects rely on local labor and will provide cost benefits to the host business. We are ready to invest more capital in the state but the risks posed by potential state legislation regarding the RETITC makes such investment uncertain at a time of impressive cost reductions in solar products and of strong customer and labor interest in building up Hawai'i's increasingly strong solar industry.

EDF RE believes SB 11 is the right approach for the following reasons:

- Easy to Administer. 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 also are drawn directly from the law's 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.
- Predictable Rampdown. 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 Hawai'i'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.



EDF Renewable Energy
517 SW 4th, Ste 300
Portland, OR 97204
T: 503.219.3166

- 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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

A handwritten signature in black ink, appearing to read "Virinder Singh".

Virinder Singh

Director—Regulatory & Legislative Affairs



TESTIMONY IN SUPPORT OF SB 11

To: Honorable Mike Gabbard, Chair, Senate Committee on Energy and Environment

From: SolarCity

Hearing on Feb. 5, 2013, at 2:45 p.m., Room 225

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

Thank you for the opportunity to provide testimony in strong support of SB 11, which balances Hawaii's pursuit of a clean energy future with the cost of the Renewable Energy Technologies Income Tax Credit (RETITC).

SolarCity provides clean energy to homeowners, businesses, not-for-profit organizations, and government entities, primarily via photovoltaic systems. SolarCity serves Hawai'i from its operations center in Mililani, which employs 70 local residents. The company's local customers and partners in Hawai'i include the Hawai'i Department of Transportation, the Maui Arts & Cultural Center, KIUC, the Ulupono Initiative, the University of Hawai'i, and the U.S. Military.

SolarCity supports SB 11 because it follows the framework of the federal renewable energy tax credit which eliminates multiple credit abuse and reduces the cost to the state. SB 11 will continue to promote the goals of the RETITC including job creation and energy independence.

We support SB 11 and request that it pass as drafted. Thank you for this opportunity to testify in support of SB 11.

Mahalo,

Jon Yoshimura
Director of Government Affairs, Hawaii



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

**TESTIMONY IN SUPPORT OF
SB 11 RELATING TO RENEWABLE ENERGY**

Testimony of
SunEdison
Tuesday, February 5, 2013
Senate Conference Room 225

Chair Gabbard and Members of the Committee:

SunEdison strongly supports SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the state and make it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawaii meet its ambitious renewable energy goals while retaining construction sector employment.

SunEdison is one of the largest solar PV energy service providers in the United States. In Hawaii, SunEdison has been active in developing and operating commercial and utility-scale solar PV systems since 2006.

SunEdison believes SB 11 is the right approach for the following reasons:

- Reduces Costs 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.
- Easy to Administer. SB 11 follows the basic framework of federal law, and allows federal guidance to be applied to Hawaii's credit, which is consistent with the state's general tax policy. The terms used in SB 11 also are drawn directly from the law's 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.
- Predictable Rampdown. 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 Hawaii's solar industry—residential, commercial, and utility-scale— SB 11 will lead to a high level of renewable energy installation at a relatively low 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.

For these reasons, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Seymour", is written above the typed name.

Curtis Seymour
Director of Government Affairs
SunEdison



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

TESTIMONY IN SUPPORT OF SB 11 RELATING TO RENEWABLE ENERGY

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 strongly supports SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the state and make it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawaii meet its ambitious renewable energy goals while retaining construction sector employment.

Sunrun believes SB 11 is the right approach for the following reasons:

- **Easy to Administer.** 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 also are drawn directly from the law's 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.
- **Predictable Rampdown.** 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 Hawai'i'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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

Bryan S. Miller



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

Tuesday, February 5, 2013 — 2:45 p.m. — Room 225

Testimony in Support of SB 11, 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 **strongly supports** SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the State and makes it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawai'i meet its ambitious renewable energy goals while retaining construction sector employment.

RevoluSun believes SB 11 is the right approach for the following reasons:

- Easy to Administer. 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 also are drawn directly from the law's 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.
- Predictable Rampdown. 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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

Tuesday, February 5, 2013 — 2:45 p.m. — Room 225

Testimony in Support of SB 11, Relating to Renewable Energy

Chair Gabbard, Vice Chair Ruderman, 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 **strongly supports** SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit (“RETITC”) that reduce the credit’s cost to the State and makes it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawai’i meet its ambitious renewable energy goals while retaining construction sector employment.

Distributed Energy Partners believes SB 11 is the right approach for the following reasons:

- Easy to Administer. 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 also are drawn directly from the law’s 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.
- Predictable Rampdown. 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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

Joshua Powell

Principal & RME

SUNPOWER

TESTIMONY IN SUPPORT SB11,

To: COMMITTEE ON ENERGY and ENVIRONMENT

Hearing on February 5, 2013 at 2:45 p.m. Room 225

Aloha Chair Gabbard, Vice Chair Russell 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 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.

Mahalo in advance, for accepting **testimony in Support to SB11**. I vigorously support SB 11 because it will: (i) make reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that will reduce the financial impact to the State; (ii) allows the Department of Taxation to administer the statute with clear guidance; (iii) provide transparency to the public; (iv) maintain the viability of the solar industry; (v) allow the solar industry to continue to assist the State's economy by providing the majority of jobs in the construction industry; and (vi) continue to help Hawaii meet its renewable energy goals. In short, SB11 provides a win/win 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 allows 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.



Riley Saito

Riley Saito
Senior Manager, Hawaii Projects
SunPower Systems, Corporation



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

REGARDING S.B. 11, RELATING TO RENEWABLE ENERGY

BEFORE THE
HAWAII STATE LEGISLATURE
HAWAII 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. We do not support a tiered system for utility-scale solar projects, but instead believe the tax credit should be the same regardless of whether a project is competitively bid or the result of bilateral negotiations, and regardless of whether a project has state tax liability or not. If a project does not have sufficient tax liability to use the credit in any given year, the credit should be fully refundable without being discounted. As currently drafted, SB11 creates 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 Hawai'i's clean energy goals.

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.



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

RE: Testimony Supporting SB11 Relating To Renewable Energy.

Testimony is 3 pages long.
HEARING: Tuesday, February 5, 2:45 p.m.

Mr. Chairman and members of the Committee:

I appreciate this committee's consideration of SB11, and welcome this opportunity submit testimony in strong support of the measure.

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. The Hawai'i Tax Credit Brings \$3 of Other People's Money for Every Dollar of State Investment: 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. Some Level of Incentive Remains Necessary, Because Hawai'i is Not Yet at "Grid Parity." The "holy grail" of renewable energy is to achieve unsubsidized "grid parity" – a total cost of installation and operation at which the facility can produce energy as cheaply as the competing utility sources, without incentive or subsidy. Despite some much-publicized comments by mainland media that Hawai'i renewable energy installations are already at "grid parity," the fact is that we are not quite there yet. The mainland analyses use installation costs and other costs that simply are not the reality in Hawai'i, at least not yet.

In order for a typical Hawai'i PV system to be at "grid parity" with current HECO rates on Oahu, our calculations indicate that it would have to be constructed for a total cost

of less than \$2.28 per watt – which is at least 50% below the current best pricing available from the most efficient contractors in Hawai'i. Residential systems in Hawai'i are currently selling for \$4.50 to \$5.00 per watt, and even the most cost-efficient systems—those built at utility scale—struggle to get to the low \$3/watt range.

In order to attract private capital—whether it is investors funding commercial and utility scale systems or homeowners borrowing on their home equity lines to put PV on their houses—the economics must be favorable compared to the alternatives, and Hawai'i PV economics are not there yet without some level of incentive.

3. Message of the Capital Markets: Predictability is Good, Disruption and Sudden Change is Bad: The Hawaii renewable energy tax credit was a means for the State to partner with private capital by incentivizing homeowners, businesses and investors to put money into renewable energy projects which would otherwise be unprofitable or marginally profitable by providing them with tax relief. When there is a threat that the rules of that relationship between the State's incentive and private capital's investment may suddenly change, the private capital instantly freezes until the threat is resolved one way or the other.

The effect of that capital freezing is that the projects – from individual homeowners considering solar hot water heaters to huge solar farms – are stopped in their tracks. And once stopped, some of the projects will never be restarted. And with upcoming projects stopped, solar companies – which have been one of the few bright spots in a construction industry mired in the recession – must begin laying off workers and cutting costs.

4. SB11 Provides a Good Balance Between Predictability, Incentive Levels and State Investment: This bill offers a number of features that make it the best alternative of the several bills on the Hawai'i Tax Credit now pending before the Legislature:

- a. Predictable Rampdown Structure: By phasing the credit down from its previous 35% to 30% and eventually 10%, the markets can plan and adapt, and the need for the Legislature to revisit the credit every year will be removed.
- b. Familiar "Follow-the-Federal" Rules: The rules governing interpretation of the Federal energy tax credit have evolved over decades and are very well known and understood in the capital markets. By removing unwieldy and Hawai'i-specific provisions like the awkward and controversial "per system" cap structure and replacing it with simple, well-understood and manageable rules, the markets will find it easier to continue funding in Hawai'i.
- c. Protection of Existing Investments: By including provisions to protect investments already made in pending utility scale and public sector projects, SB11 helps provide reassurance to the capital markets that investments made in reliance on Hawai'i's promises will be respected.

d. Production Tax Credit for Larger Projects is a Brilliant Solution to Reduce State Costs Without Slowing Investment: By spreading the incentive over 10 years, the State's cost and budget impact is drastically reduced, while still allowing appeal to capital markets which have been long familiar with the production tax credit in the context of Federal support for wind projects.

For all of these reasons, Kairos Energy Capital supports SB11 and urges this Committee to pass it out as written.

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



INTER-ISLAND SOLAR SUPPLY



761 Ahua St., Honolulu, HI 96819
73-5569 Kauhola St., Kailua-Kona, HI 96740
400 Ala Makani St., Unit 103, Kahului, HI 96732

OAHU
BIG ISLAND
MAUI

Phone (808) 523-0711 Fax 536-5586
Phone (808) 329-7890 Fax 329-5753
Phone (808) 871-1030 Fax 873-7825

February 5, 2013 (2:45 PM)

Testimony Before the Senate Committee on Energy and Environment
on
S.B. 11 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 11, is concerned about other provisions and supports one provision. A position summary follows:

- Deletion of reference to 235-12.5 in 196-6.5 & deletion of reduction of tax credit when substitute renewable energy is used to comply with 196-6.5: **opposed** because the solar water heating systems are "mandated" and, for the most part, delivery to most energy at the least cost.
- Solar credit ramp down: **opposed** to ramp down timing & level – applies to SHW & PV
- Solar credit cap elimination: **opposed** because creates opportunity for abuse
- Ordinary utility scale solar production credit: **strongly opposed** 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)
- Required metering for production credit: **concerned** because does not specify DC or AC output
- AOA eligibility for credit: **concerned** about conflicts of law – AOA are usually non-profit
- Requires DBEDT to collect data: **concerned** 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 spends 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 11 for the reasons stated above.

Thank you for the opportunity to testify on this measure.

**Comparison of Non-Utility & Utility Scale PV Credits
at \$0.08/kWh**

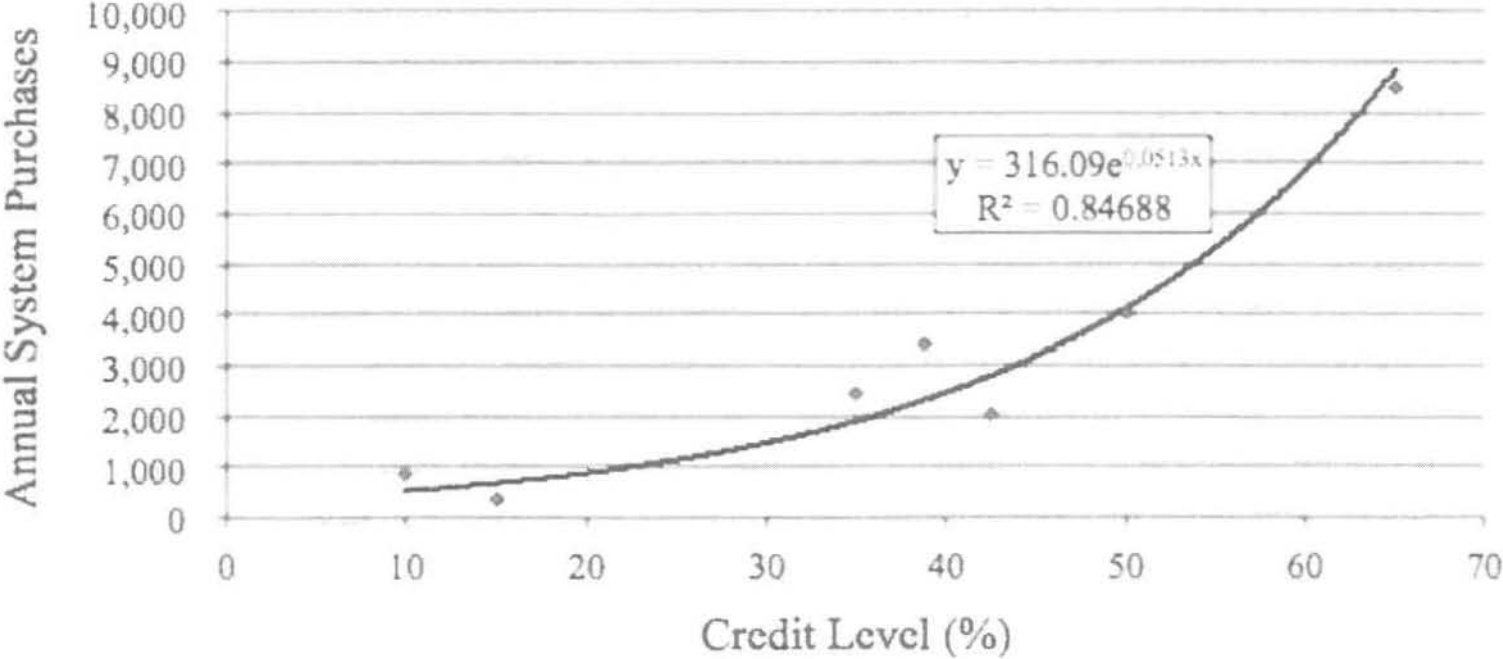
Project Example			
System Size (kW)	1,000	Peak sun-hrs/day	5
Installed Cost/kW	\$4,000	Days/yr	365
Installed Cost	\$4,000,000	Annual Production	1,825,000 kWh _{DC}
Production Credit	\$0.115	Annual Production	1,460,000 kWh _{AC} ¹
PV Cap	\$0	Production Credit Period	10 yrs

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



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

Testimony in Support of SB 11, Relating to Renewable Energy

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

Rising Sun Solar **strongly supports** SB 11, which will make much needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") that reduce the credit's cost to the State and makes it easier for the Department of Taxation to administer and for the public to understand, while maintaining the viability of the solar industry. In doing so, SB 11 allows solar energy to continue helping Hawai'i meet its ambitious renewable energy goals while retaining construction sector employment.

Rising Sun believes SB 11 is the right approach for the following reasons:

- Easy to Administer. 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 also are drawn directly from the law's 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.
- Predictable Rampdown. 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 will lead to a high level of renewable energy installation at a relatively low 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 Costs 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, we support SB 11 and urge you to pass it as drafted. Thank you for the opportunity to provide this testimony.

Sincerely,

Summer Starr
Legislative Liaison

810 Kokomo Road Ste 160 Haiku HI 96708

P 808 579 8287, F 808 575 9878

www.risingsunsolar.com

SB11

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

Comments: Report Title: Renewable Energy; Solar Energy property; Wind Energy Property, Solid Oxide Fuel Cell Property; Tax Credit Description: Defines solar energy property, wind energy property and solid oxide fuel cell technology. Establishes a method for calculating tax credits for solar, wind, and solid oxide fuel cell technology.

SB11

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
Janice Marsters	Individual	Support	No

Comments: Dear Chair Gabbard and Members of the Committee, I strongly support SB 11. It is clear that tax credits have been a valuable incentive in achieving Hawaii's goal of increasing installation of renewable energy systems. This bill allows for a smart gradual reduction of tax credits, and also allows for analysis and reporting of the economic effects. Thank you.