# SB 1198

RELATING TO RENEWABLE ENERGY TECHNOLOGIES INCOME TAX CREDIT.
Clarifies the renewable energy technologies income tax credit.

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

# DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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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 1198**

**RELATING TO RENEWABLE ENERGY TECHNOLOGIES INCOME TAX CREDIT.**

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

The Department of Business, Economic Development & Tourism (DBEDT) supports SB 1198 to create an appropriate legislative solution regarding the renewable energy income tax credit 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 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 1198.

NEIL ABERCROMBIE
GOVERNOR

SHAN TSUTSUI
LT. GOVERNOR

FREDERICK D. PABLO
DIRECTOR OF TAXATION

JOSHUA WISCH
DEPUTY DIRECTOR

STATE OF HAWAII
**DEPARTMENT OF TAXATION**
P.O. BOX 259
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PHONE NO: (808) 587-1530
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To: The Honorable Mike Gabbard, Chair
and Members of the Senate Committee on Energy and Environment

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

From: Frederick D. Pablo, Director
Department of Taxation

Re: S.B. 1198 Relating to Renewable Energy Technologies Income Tax Credit

The Department of Taxation (Department) strongly supports S.B. 1198 and provides the following summary and comments for your consideration.

H.B. 967 amends Hawaii Revised Statutes (HRS) section 235-12.5 by:

- **Removes the caps for solar and wind energy properties and changes the rate to 15%.** By lowering the rate and removing the caps, the calculation of the credit will become simple and effective. Currently, the statute sets forth caps of different amounts depending on the application of the system. The "per system" language has made administration of the credit difficult; however, the Department was able to resolve the issue of when a taxpayer could claim more than one credit through the issuance of administrative rules.

  A fixed percentage, rather than sliding scale, will be substantially easier for the Department to administer. It has been the Department's experience that taxpayers are unclear which taxable year they may properly claim the tax credit. If a sliding scale for the tax credit amount is adopted, the Department anticipates that many taxpayers will file erroneous refund claims.

- **Requires that the depreciation and cost basis of the renewable energy property be reduced by fifty percent of the credit amount claimed.** The Department believes that this provision is necessary because without it taxpayers are receiving double tax benefits through the tax credit and depreciation deduction for the same expenditure.

- **Eliminates option to claim refundable tax credits, except for certain taxpayers.** The primary beneficiaries of refundable tax credits are taxpayers who have little or no Hawaii income tax liabilities, such as nonresidents and Hawaii taxpayers with Hawaii income tax exempt income.

- **Sunsets the tax credit at the same time as the federal tax credit.** The Department recommends sunsetting the tax credit at the same time as the federal tax credit. Establishing a sunset date will create certainty for taxpayers.

Thank you for the opportunity to provide comments.

ulupono INITIATIVE

Email: communications@uluponoinitiative.com

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

**Ulupono Initiative Opposes SB 1198, Relating to Renewable Energy**

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

My name is Kyle Datta, General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally grown food, increase renewable energy, and reduce/recycle waste.

Ulupono **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt HB 756.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawai'i on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is, at best, pennywise, but is just as surely pound-foolish.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt HB 756 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

Sincerely,

Kyle Datta
General Partner

LIFE OF THE LAND
76 North King Street, Suite 203
Honolulu, Hawai`i 96817
Phone: 533-3454; E: henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY AND ENVIRONMENT
Senator Mike Gabbard, Chair
Senator Russell E. Ruderman, Vice Chair

DATE: Tuesday, February 5, 2013
TIME: 2:45 p.m.
PLACE: Conference Room 225

| | | |
|---|---|---|
| SB 1198 | RELATING TO RENEWABLE ENERGY TECHNOLOGIES INCOME TAX CREDIT. | **SUPPORT WITH AMENDMENTS** |

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

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai`i's own energy, environmental and community action group advocating for the people and `aina for over four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Hawai`i's peak demand occurs between 6-8 p.m.

The highest peak occurs between August and December.

Reducing demand during the day (noon to 3 p.m.) does not alleviate the need for evening peak power.

Thus installing only photovoltaic panels means the utility must continue to use all of its generators for the evening peak. In addition, baseload (continuous) generators may need to be converted to less efficient peaking generators and may need more frequent maintenance.

The tax credit should be offered only to those who are able to also reduce the evening peak.

Thus the tax credit should only be given to those who have solar water heaters or are co-installing solar water heaters. It should only be given to those who have converted their existing energy load to Energy Star Appliances and CFLs.

The most efficient way of dealing with these issues is to require an energy audit before installing renewable energy systems.

Companies which install photovoltaic systems should file a yearly form with DBEDT identifying how many systems they installed during the year, how many of those installations were accompanied by an energy audit, whether the customer had already installed energy efficiency devices or were in the process of doing so, and the average efficiency rating of the photovoltaic panels.

DBEDT's annual filing should include the names of companies that either overly focus on photovoltaic panels to the exclusion of energy efficiency or those that install photovoltaic panel systems with very lower efficiency ratings.

SB 1198 excludes batteries from the tax credit. This is a mistake since batteries are needed to reduce peak demand. We should be encouraging and rewarding those who are able to reduce peak demand

Finally, the percentage allowed for ta credits should not be greater for large central station power facilities which require large transmission and grid upgrades, and should not be lower for those who install on houses connected to the distribution system.

If anything we should favor dispersed and distributed systems over centralized generation.

Mahalo

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 OPPOSITION TO SB 1198

Aloha Chair Gabbard and Members of the Committee:

The Sierra Club of Hawai'i, with over 10,000 members and supporters, respectfully ***opposes*** SB 1198. This measure would significantly reduce investment in renewable energy by, among other things, eliminating the ability to refund the credit and stimulate private capitol investment in Hawaii. This measure is a pennywise, pound-foolish step backward in the State's clean energy efforts.

Specifically, the Sierra Club is concerned this measure would (1) decimate utility scale investments, (2) be too abrupt of a change to the residential market, and (3) eliminate the availability of leasing programs, which provide clean energy for people who cannot afford the upfront costs of solar.

A tax credit for renewable energy devices is an important policy tool to encourage investment in clean energy, reducing Hawai'i's dependence on unstable foreign oil and improving Hawai'i's environment. Any proposed change must be measured and avoid large-scale disruption to the industry.

Hawai'i's renewable energy tax credits have proven incredibly successful in helping to promote the use of solar and other renewable energies in the state. The number of photovoltaic systems installed in Hawai'i has consistently increased each year -- one of the few growth industries in an otherwise economically depressed time period. ***In fact, the State indicates that over 25% of the construction jobs last year arose out of the solar industry.*** Let's not lose this green job-creator during a period of economic uncertainty.

Mahalo for the opportunity to testify.

L E G I S L A T I V E

# TAXBILLSERVICE

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

SUBJECT: INCOME, Clarify renewable energy technology tax credit

BILL NUMBER: SB 1198; HB 967 (Identical)

INTRODUCED BY: SB by Kim by request; HB by Souki by request

BRIEF SUMMARY: Amends HRS section 235-12.5 to provide that: (1) solar energy property used primarily to heat water for household use shall be 15% of the qualified renewable energy technology expenditure; or (2) all other solar energy property shall be 15% of the qualified renewable energy technology expenditure; or (3) wind energy property shall be 15% of the qualified renewable energy technology expenditure; provided that multiple owners of renewable energy technology property shall be entitled to a single tax credit with credit apportioned between the owners in proportion to their contribution to the qualified renewable energy technology property.

Repeals the section capping the amount of the tax credit for renewable energy technology systems installed in the state.

Defines "qualified renewable energy technology expenditure" as costs related to the renewable energy technology property, including accessories and installation, excluding the cost of consumer incentive premiums unrelated to the operation of the renewable energy technology property and all costs associated with the storage of the electricity produced by the renewable energy technology property. Costs for installation or labor must be properly allocable to the onsite preparation, assembly, or original installation of a renewable energy technology property. Any costs incurred for the repair, construction, or reconstruction of a structure in conjunction with the installation and placing in service of renewable energy technology property shall not constitute a part of the qualified renewable energy technology expenditure.

Repeals the provision allowing a taxpayer to reduce the amount of eligible credit by 30% if the reduced amount exceeds the amount of income tax payment due from the taxpayer, and any excess credit shall be refunded to the taxpayer.

If a credit is determined and claimed under this section, with respect to any renewable energy technology property installed and placed in service, the depreciation basis and cost basis of such property shall be reduced by 50% of the amount of credit so determined.

Renewable energy technologies income tax credit provisions shall be applicable to those properties installed and placed in service on or before December 31, 2016.

EFFECTIVE DATE: Tax years beginning after December 31, 2013

STAFF COMMENTS: This is an administration measure submitted by the department of taxation TAX-18(13). It appears that this measure is proposed to clarify the state's renewable energy technologies income tax credit since its current interpretation has allowed the credits to be "overly" generous and has allowed multiple credits to be claimed for a single installation.

In addition, this measure proposes to reduce the amount of the various renewable energy technologies income tax credits and repeals the limitation on the dollar amount of the credits that may be claimed. This measure also reduces the income tax credit for solar energy property which is used to heat water or generate electricity from 35% to 15% and reduces the income tax credit for wind energy devices from 20% to 15%. While it appears that the intent of the measure is to reduce the revenue loss due to the misinterpretation of the income tax credit provisions, this measure repeals the limitation on the amount of credits that may be claimed for each type of system.

While the measure replaces the term "system" with "property" it is questionable whether the proposed measure will stop the outflow of revenue due to the misinterpretation of the income tax credit provisions for the various renewable energy technology systems.

Although environmentalists, alternate energy advocates and solar companies may rail against the idea of reducing the amount of the state subsidy, it should be noted that no one has done a careful analysis of the effect of the credit on shelf price of the product. Have solar installers inflated the cost of their installations to accommodate the credit as part of the selling tools they employ in selling the product? While moving Hawaii off of its dependence on fossil fuels is a worthy cause, the cost savings realized should be more of a motivation to make the switch than an overly generous tax incentive paid for by all other taxpayers. To the degree that the tax incentive is a subsidy for the property owner, observers should also recognize that it is a subsidy that benefits the solar installer. Thus, companies who install these devices argue that the incentive helps to create jobs, it comes at the expense of all other taxpayers who cannot avail themselves of this particular purchase but must continue to pay taxes to keep government's doors open.

Digested 2/4/13

**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 1198: RELATING TO RENEWABLE ENERGY TECHOLOGIES INCOME TAX CREDIT

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 opposition to SB 1198**, which proposes to amend the renewable energy tax credit by reducing the credit to 15% and instituting a sunset date in 2016. HSEA is a non-profit trade organization that has advocated for both solar hot water and photovoltaics since 1977, with an emphasis on residential distributed generation (DG) and commercial SHW and PV. We currently represent 71 companies, and our members include installers, contractors, manufacturers, distributers, the utility, and others. With 35 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

<u>Solar is Key to our Green Energy Future</u>
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.

<u>Three bills currently before the committee</u>
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. <u>Ramp Down</u>

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

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

PV v. SHW

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

Key ramp down questions

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

SB 11: gradual ramp down to 10% for both PV and SHW. Ramp down to 10% would add about $9,000 to PV system, which doesn't include the amount lost from the expired federal tax credit. Would severely impact both SHW and PV, and push the market almost exclusively to leases. Would also greatly favor utility scale installations, at the expense of DG.

SB 623: Instant drop to 20% for PV. Holds steady at 35% for SHW. Would add on about $5,200 to the average sized PV system, which would put PV out of reach for many families. Also, abrupt changes have had the impact in the past of causing sudden down-turns in installations. In 1985 when President Regan eliminated the solar tax credit for solar hot water, it increased the cost of a system by about $1,500. As a result of this drop, Hawaii saw solar hot water installations plummet by 93%.

SB 1198: SB 1198 drops the tax credit to an immediate 15%. This drop would add about $7,000 to an average sized system for the homeowner, putting it out of reach for most families. In 1985 when President Regan eliminated the solar tax credit for solar hot water, it increased the cost of a system by about $1,500. As a result of this drop, Hawaii saw solar hot water installations plummet by 93%. We believe that a similar abrupt and radical drop proposed by SB 1198 will severely reduce both PV and SHW installations.

1. Sunset Date

HSEA supports a review date rather than a sunset date. We believe that a sunset date creates an artificial deadline for business that impedes development and assumes that incentives will no longer be necessary even though Hawaii is long from energy independence and costs will probably increase.

SB 11: Sunsets PV ITC 12-31-2018, utility scale solar 12-31-19, with no sunset for wind. Again, sunset implies the incentive is no longer needed. SHW and PV DG provide instant savings and little grid imposition. HSEA favors a review date.

SB 623: Sunsets December 31, 2020 for PV DG, and no sunset for SHW. Sunset of December 31, 2020 for competitively bid solar, but PTC may extend beyond the sunset date. Rather than sunset tax incentives, HSEA supports a review date to accommodate changes in the market and our clean energy goals. Once a credit reaches sunset, it is very difficult to revive it.

SB 1198: Sunsets December 31, 2016, the same deadline as the federal tax credit. Unless Hawaii has reached it clean energy goals by 2016 and we no longer depend upon imported fossil fuels, it makes no sense to end incentives for clean energy in 2016.

2. Refundable Credit

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

Summary

Although SB 1198 provides some tax incentive, HSEA **opposes SB 1198** because the ramp down is too abrupt and the sunset date would end the incentive just as Hawaii is losing the federal credit, effectively putting an end to every kind of solar installation from PV to SHW, and from residential , commercial, and utility scale. SB 1198 also has no refundable credit, which would severely impede leases and third party PPAs, which provide a substantial portion of both residential and commercial solar installations. SB 1198 essentially shuts down the solar industry in Hawaii.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association

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| **2/5/2013** | **Senate Committee on Energy & Environment** | **ENE** |
| **2:45 p.m.** | | **SB 1198** |

**TESTIMONY IN OPPOSITION**

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

Hawaii PV Coalition **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt SB 11.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawai'i on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is, at best, pennywise, but is just as surely pound-foolish.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

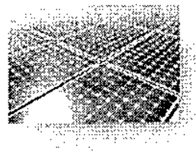
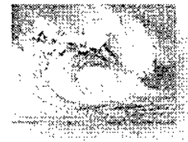
Mark Duda
President, Hawaii PV Coalition

PO Box 81501 | Haiku, HI 96708 | 808 579.8288 | 808 575 9878 (f) | info@hawaiipvcoalition.org | hawaiipvcoalition.org

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

PO Box 81501 Haiku, HI 96708 | 808.579.8288 808 575 9878 (f) info@hawaiipvcoalition.org | hawaiipvcoalition.org

blue planet FOUNDATION


**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT**
February 5, 2013, 2:45 P.M.
Room 225
**(Testimony is 2 pages long)**

**TESTIMONY IN OPPOSITION TO SB 1198**

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

The Blue Planet Foundation opposes SB 1198, a measure which makes dramatic changes to Hawaii's highly successful clean energy tax credit incentive. Passing this measure will significantly reduce the incentive to invest in renewable energy, likely damage to the solar and wind industries in Hawaii, and deliver a major setback to the state's clean energy efforts.

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.

While Blue Planet greatly appreciates the need to chart a sensible and sustainable way forward for Hawaii's clean energy tax credits, SB 1198 cuts credits in a way that would be pennywise and pound foolish. Reducing the credit to 15% across the board, eliminating the refundability of the credit, and sunsetting the credit altogether in 2016 would severely impact Hawaii's solar industry, the jobs it supports, and the ability for residents and businesses to participate in Hawaii's clean energy future.

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 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 hold SB 1198.

Thank you for this opportunity to testify.

February 1, 2013

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

**RE: Senate Bill 1198 – Renewable Energy Technologies Income Tax Credit – Oppose**

Dear Chairman Gabbard:

Mainstream Energy Corp. strongly opposes Senate Bill 1198, which dramatically reduces and then sunsets the Renewable Energy Technologies Income Tax Credit (RETITC).

Mainstream Energy Corp. is the parent company of REC Solar, a national installer of grid-tied residential, commercial, government, and utility solar, 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.

The RETITC has been hugely successful in promoting solar and wind energy adoption and helped put Hawaii on a path towards energy independence. Additionally, the RETITC has created thousands of jobs in fields including construction, engineering, sales, and finance.

Senate Bill 1198 cuts the RETITC from 35% to 15% beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, the bill removes existing provisions that allow taxpayers to voluntarily reduce the level of the credit by 30% in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors. We urge the Legislature to take a more responsible approach to reforming the RETITC.

Should Senate Bill 1198 be enacted, the residential solar sector will be hard-hit by reduced affordability for system purchasers and the likely end of solar leasing. This will have a particularly dramatic impact on low- and middle-income homeowners, which can often afford a leased system but not a purchased one. Commercial solar, both utility-scale and rooftop projects, will be damaged by the end of the current refundability provisions as the RETITC often has little impact on the taxes that most businesses actually pay.

The impact of cutting the RETITC in such a dramatic fashion will be a near-complete elimination of Hawaii's solar industry. Such a policy is at best penny-wise and pound-foolish.

For these reasons, Mainstream Energy Corp., REC Solar, and AEE Solar strongly oppose Senate Bill 1198. Instead, we ask the committee to adopt Senate Bill 11 as a responsible way to reduce RETITC incentive levels (and costs) over time while maintaining the state's commitment to a clean energy future. Thank you for the opportunity to provide this testimony.

Sincerely,

Benjamin Higgins

Benjamin L. Higgins
Director of Government Affairs

SunEdison®

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

# TESTIMONY IN OPPOSITION TO SB 1198 RELATING TO RENEWABLE ENERGY

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

Chair Gabbard and Members of the Committee:

SunEdison strongly opposes SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC").

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.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawaii on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35% to 15% beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes will decimate the solar market in Hawaii.

Eliminating the current refundability provision would halt investment and job creation in the commercial and utility scale solar sectors in Hawaii, which rely on this key provision. The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawaii. Such a policy is, at best, penny-wise, but is just as surely pound-foolish.

SunEdison
simplifying solar

For these reasons, we strongly oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the state's commitment to a clean energy future for Hawaii. Thank you for the opportunity to provide this testimony.

Sincerely,

Curtis Seymour
Director of Government Affairs
SunEdison

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

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

**TESTIMONY IN OPPOSITION TO**

**SB 1198 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 opposes SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC").

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.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawaii on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35% to 15% beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

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

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is, at best, penny-wise, but is just as surely pound-foolish in terms of bringing in investment, employing Hawaiian citizens, and providing benefits to Hawaiian electricity customers.

For these reasons, we strongly oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the state's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

Sincerely,

Virinder Singh

Director—Regulatory & Legislative Affairs sunrun

Sunrun Inc. | 1.855.4SUNRUN | sunrunhome.com

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

**TESTIMONY IN OPPOSITION TO SB 1198 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:

Thank you for the opportunity to provide this testimony in strong opposition to SB 1198.

With more than 30,000 residential customers nationwide, Sunrun is the leading residential solar leasing company. Since 2010, Sunrun has partnered with 7 local solar installers to allow more than 2,000 Hawaiian households to adopt home solar. Solar leasing makes clean energy available to homeowners with little or no money down. Under our solar lease, Sunrun, not the homeowner, pays the upfront costs of buying and installing solar. The homeowner pays only for the electricity they generate on their own roof. Thus families can use their disposable income in other ways to support Hawaii's economy.

Solar deployment in Hawaii has been driven by the Renewable Energy Technologies Income Tax Credit (RETITC), a successful legislative initiative that has helped put Hawaii on a path towards energy independence, reducing the export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants. Act 154 (2009) allowed the solar leasing model to take root in Hawaii by permitting the RETITC to be treated as refundable at a 30% reduced rate.

Sunrun strongly opposes SB 1198, because it would repeal this critical refundability provision. SB 1198 would significantly disrupt the market by effectively eliminating the lease option for homeowners, which account for approximately 50% of the residential market. Should SB 1198 become law, only those who are able to invest tens of thousands of dollars will have the option of going solar. Companies like Sunrun, who have collectively invested over $100M in Hawaii's clean energy economy, will be forced to divert future investment to other markets.

Sunrun does not oppose all changes to the RETITC. Rather than the dramatic elimination of refundability proposed in SB 1198, we urge the legislature to reform the RETITC by adopting SB 11. This alternative would reduce the RETITC incentive level over time, while preserving the role of solar leases in making solar an accessible choice for Hawaiians without high up front costs. We look forward to continuing to work with the committee, and we thank you for your time and attention to these matters.

Sincerely,

*Bryan S. Miller*

SolarCity

**TESTIMONY SUPPORTING THE INTENT OF SB 1198**

*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 comment on SB 1198, which balances Hawaii's pursuit of a clean energy future with the cost of the Renewable Energy Technologies Income Tax Credit (RETITC). We ask that SB 1198 be amended by setting the credit at 25 percent and that the option to take a reduced credit as a refund be reinstated.

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 the intent of SB 1198 because it follows the framework of the federal renewable energy tax credit which eliminates multiple credit abuse and reduces the cost to the state. However, we believe that cutting the current 35 percent credit to 15 percent credit is too drastic a reduction that will result in fewer clean energy systems being deployed and a loss of solar industry jobs. Instead, the credit should be reduced to 25 percent. Doing so would provide consumers a credit of approximately $5,000 for an average residential PV system.

3055 Clearview Way San Mateo, CA 94402 T (650) 638-1028 (888) SOL-CITY F (650) 638-1029 SOLARCITY.COM

We also believe that the "refundability" option, which allows consumers to take a reduced credit as a refund, a central part of Hawaii's RETITC, should be retained. Without the refundability option, investment in Hawaii's clean energy initiative will be decimated and customers will lose an important option.

Thank you for this opportunity to comment on SB 1198. We request that it be amended as noted above.

Mahalo,

Jon Yoshimura
Director of Government Affairs, Hawaii

The power behind the panel

SENATE COMMITTEE ON ENERGY & ENVIRONMENT

**TESTIMONY IN OPPOSITION TO**
**SB 1198 RELATING TO RENEWABLE ENERGY**

Testimony of
Delette Olberg, Trina Solar
Tuesday, February 5, 2013
Senate Conference Room 225

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

Trina Solar strongly opposes SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC").

RETITC has been a key driver incenting commercial, utility scale and residential solar development in Hawaii and has significantly expanded renewable energy deployment in the state. SB 1198 will not only reverse this trend, but will decimate most solar market sectors and have a devastating impact on Hawaii's solar industry.

Trina Solar believes the more prudent approach is to maintain the refundability provisions in RETITC and to gradually reduce the tax credit over time.

RETITC has created thousands of jobs for Hawaii workers, including electricians, panel installers, sales and marketing professionals, engineers and accountants, among others. These and future similar jobs are at risk if SB 1198 is enacted.

We urge you to continue to preserve and protect Hawaii's commitment to renewable energy by voting no on SB 1198. Thank you for your consideration of our testimony.

Sincerely,

Delette Olberg
U.S. Director, Public Affairs
Trina Solar

Trina Solar
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REVOLUSUN
cleaner. smarter. solar.

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

**Testimony in Opposition to SB 1198, Relating to Renewable Energy**

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

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 **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt SB 11.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawai'i on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is, at best, pennywise, but is just as surely pound-foolish.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel

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

KAIROS ENERGY CAPITAL

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

RE: Testimony Opposing SB1198 Relating To Renewable Energy.

Testimony is 2 pages long.

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

Mr. Chairman and members of the Committee:

Kairos Energy Capital STRONGLY OPPOSES SB1198, and welcomes this opportunity submit testimony on 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 Currently 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. SB1198 Would Be Extremely Disruptive to Hawai`i's Renewable Energy Efforts: SB1198 drastically reduces the level of the Hawai`i incentive, from 35% to 15%, and completely removes one of its most essential features, the ability to claim a cash refund.

While the proposed effective date of January 1 2014 provides some advance warning, a great deal of the harm has already been done by promulgation of the Department of Taxation's Temporary Administrative Rule 18-235-12.5-01T *et seq.* in November 2012. This rule effectively reduced the residential incentive by 30-50%, and the commercial and utility incentive by 50-95%, with essentially no notice. This rule would remain in effect through 2013, and when combined with the very low incentive rate and absence of cash refund in SB1198, the effect would be to cause a great deal of capital to flee the Hawai`i energy market for other, more suitable and stable pastures.

3. 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.

   The incentive level proposed by SB1198 is insufficient to make investment in Hawai`i energy projects attractive to capital in today's economics.

For all of these reasons, Kairos Energy Capital STRONGLY OPPOSES SB1198 and urges this Committee to kill it.

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
201 Merchant Street, Suite 2225
Honolulu, HI 96813
Tel 808 457-1600
Email: LGilbert@kairosenergycapital.com

SUNPOWER

TESTIMONY IN **Opposes** SB 1198
To: Senate Committee on Energy and Environment
Hearing on February 5, 2013 at 2:45 p.m. Room 225

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

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

SunPower **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt SB 11.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawai'i on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is lack the sensitivity to the long term energy security for the State and economic benefits SB 11 can provide.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i.

Mahalo for the opportunity to testify.

Riley Saito

Riley Saito
Senior Manager, Hawaii Projects
SunPower Systems, Corporation

firstwind

CLEAN ENERGY. MADE HERE.

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

REGARDING S.B. 1198, RELATING TO RENEWABLE ENERGY TECHNOLOGIS INCOME TAX CREDIT

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

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

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

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

While Hawai'i has made great strides in utilizing renewable resources for its electricity needs in the past decade, much more needs to be done to decrease Hawai'i's reliance on fossil fuels. Renewable Energy tax credits have a significant economic impact on each project. While First Wind supports the concept of tax credits for residential, commercial and feed-in-tariff solar projects, we are not taking a position on how the credits for those projects should be structured. Our interests are in the area of solar tax credits for utility-scale projects. First Wind supports efforts to establish a consistent tax credit structure that ensures a level playing field for all utility-scale project developers. 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, SB1198 eliminates the refundable option, creating an uneven playing field among utility scale solar projects and will discourage investment and competition and may ultimately increase the rates paid by consumers for renewable energy and slow progress toward fulfilling Hawai'i's clean energy goals.

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

We ask that the Committee consider alternative language that would allow for a refundable option for utility-scale projects. 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.

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

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

**Testimony in Opposition to SB 1198, Relating to Renewable Energy**

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

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 **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt SB 11.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawaiʻi on a path towards energy independence, thereby reducing export of Hawaiʻi dollars out of the state. The RETITC has also created thousands of jobs for Hawaiʻi workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawaiʻi. Such a policy is, at best, pennywise, but is just as surely pound-foolish.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

Sincerely,

Joshua Powell

Principal & RME

sunetric

**Senate Committee on Energy & Environment**
Testimony in opposition to Senate Bill 1198

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

Chair Gabbard, Vice Chair Ruderman, and members of the committee:

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

Sunetric **opposes** Senate Bill 1198, which clarifies the renewable energy technologies income tax credit.

SB 1198 calls for a drastic reduction in the State of Hawaii solar tax credit to 15 percent beginning immediately, which will strand a number of large-scale projects that have long development cycles that can bleed into 2014. These projects also have complicated financing structures that need far more time to rework than what would be allowed.

In addition, the bill would allow for tax credits to sunset by Dec. 31, 2016, an unacceptable outcome, as Hawaii is already behind in reaching its self-mandated goal of 40 percent energy independence by 2030. Cost continues to be a high barrier of entry for many local customers, and we are certain it will remain in 2016 without the incentives.

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

Sincerely,

Alexander Tiller, CEO
Sunetric

INTER-ISLAND SOLAR SUPPLY

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

**February 5, 2013 (10:00 AM)**

**Testimony Before the Senate Committee on Energy and Environment**
**on**
**SB 1198 RELATING TO RENEWABLE ENERGY TECHNOLOGIES INCOME TAX CREDIT**

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 <u>strongly opposes</u> SB 1198 because it proposes to drastically reduce the RETITC and place a sunset date on this important statute that has yet to benefit many Hawaii residents and businesses.

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.

Reduction of these important incentives to the extent proposed would drastically reduce the momentum we now experience. Hawaii's renewable energy industry has responded to taxpayer demand for solar and wind energy systems by creating jobs, expanding existing businesses, and investing in new businesses. Placing a sunset date on the RETITC would create a chilling effect within our industry. Businesses would no longer be able to conduct long term business planning and would be reluctant to reinvest in their businesses because of the uncertainty created by a sunset date.

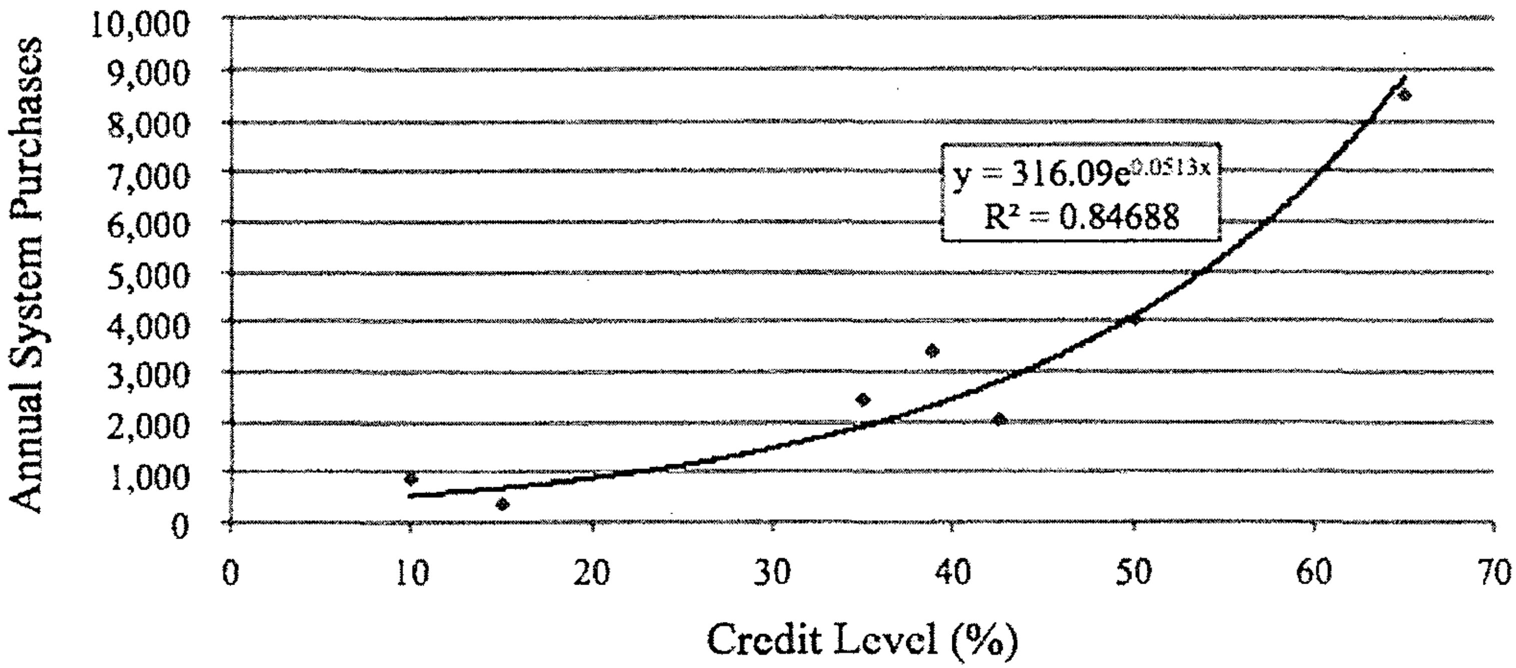
The justification for this bill focuses on primarily two gross misconceptions, i.e. ineffective caps and an unsustainable fiscal scenario. Tax credit caps became blurred when DoTax issued Tax Information Releases that liberalized how many tax credits could be claimed for the same technology in the same tax year. Prior to this there was never any issue with the caps so the "problem" is not with the statute and could be remedied administratively.

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

For the reasons stated, I respectfully requested that this Committee hold SB 1198.

Thank you for the opportunity to testify on this measure.

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




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

RISINGSUN SOLAR ELECTRIC

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

**Testimony in Opposition to SB 1198, Relating to Renewable Energy**

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

Rising Sun Solar **opposes** SB 1198, which will dramatically reduce and then sunset the Renewable Energy Technologies Income Tax Credit ("RETITC"). Instead we ask that the committee adopt SB 11.

The RETITC has been a successful legislative initiative that has increased the adoption of solar and wind energy technologies and helped put Hawai'i on a path towards energy independence, thereby reducing export of Hawai'i dollars out of the state. The RETITC has also created thousands of jobs for Hawai'i workers, from electricians and panel installers, to sales and marketing professionals, to engineers and accountants.

In order to preserve these benefits, we urge the Legislature to take a more responsible approach to reforming the RETITC. SB 1198 cuts the credit from 35 percent to 15 percent beginning at the end of this year, and sunsets the credit altogether in 2016. In addition, SB 1198 removes the existing RETITC provisions that allow taxpayers to voluntarily reduce the level of the credit by 30 percent in exchange for receiving the credit as a refund. Collectively, these changes decimate most market sectors.

The residential sector will be hit by reduced affordability for system purchasers as well by the effective end of solar leasing. The end of leasing will particularly affect lower income homeowners, who can often afford a leased system but not a purchased one. Commercial sectors, both utility scale and rooftop projects, will be damaged by the end of the current refundability provisions because the RETITC credit has little impact on the taxes that most businesses actually pay.

Overall, the impact of cutting the RETITC this dramatically will be a near-complete elimination of the solar industry in Hawai'i. Such a policy is, at best, pennywise, but is just as surely pound-foolish.

For these reasons, we oppose SB 1198. Instead, we ask the committee to adopt SB 11 as a responsible way to reduce the RETITC incentive levels over time while maintaining the State's commitment to a clean energy future for Hawai'i. Thank you for the opportunity to provide this testimony.

Sincerely,

Summer Starr
Legislative Liaison

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**SB1198**
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 |
|---|---|---|---|
| Robert Petricci | Individual | Comments Only | No |

Comments: Feb 5, 2013 2:30pm RE: HB967 Comment ony Aloha Chairman Gabbard and committee members. I strongly support tax credits for photovoltaic and water heating solar systems. I am very concerned however that although we have seen some progress in the solar expansion in Hawaii. The tax credits for "home owners" in HB 967 are far to low to effectively inspire the kind of move to these technologies that would realistically be required if we want to reduce our electric rates and move to sustainable energy independence in the accelerated manner that would benefit both our economy, and environment. I have lived off grid on solar for many years. Living in a community of thousands of off grid homes, has given me a good deal of experience and perspective. Living, working, and interacting with an independent off grid model community has given me first hand knowledge of the challenges, obstacles, and solutions of what we need as homeowners, small businesses, and farmers that are on solar and energy independent right now. If the goal is as it should be, to move large segments of the population to sustainable energy independence, I can tell you the upfront cost are the biggest challenge and obstacle. I have talked to hundreds of people in our community about this. Assisting individual property owners through better tax credits and low interest loan programs, is the common denominator that comes to the top of these conversations. What we need if we want to meet the states energy independence goals is to help homeowners now. Being that the utilities are struggling with both rates and accepting distributed solar energy, I believe the best thing for consumers and our economy is to help home owners move to independent solar systems both photovoltaic, and to heat water. The utilities have an problem that is getting worse. The distribution system is outdated, inefficient, and it is very expensive. The way we distribute power has to change and the utilities are stuck with an obsolete system that is very quickly becoming no longer economically viable At least 50% of what ratepayers are charged in Hawaii for electricity is for distribution. Around the world people are solving that problem with distributed power. Produce the power where you need it. Eliminate the grid and associated cost. The state IMO if it wants reduced electric rates that will benefit our businesses, residents, and economy, should to accelerate distributed solar power, not put the brakes on it. If the utilities can not keep up that should be their problem. Our community proves we really do not need them anyway in many areas already. We have whole communities right now that can serve as models or incubators on how to retract the grid from areas with less density in particular. We need to seriously look at how we begin to retract the outdated expensive grid system now. The future is "micro grids" and stand alone systems. That is inevitable due to the high cost of the current distribution model. Our whole community functions fine without any distribution system. This reduces the price of our power to below what grid customers pay right now. Let us show you how to to do this around the state. Thank you for allowing me to be heard and considering what I said. Robert Petricci President Puna Pono Alliance

**SB1198**
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: Comments: Report Title: Renewable Energy Technologies Income Tax Credit Description: Clarifies the renewable energy technologies income Tax credit for the following: solar energy, wind energy, and solid oxide fuel cell technology

**SB1198**
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 | Oppose | No |

Comments: Dear Chair Gabbard and Members of the Committee, I respectfully oppose SB 1198, as I believe the sharp decrease in tax credits will be detrimental to Hawaii's goal of increasing installation of renewable energy systems. Thank you.