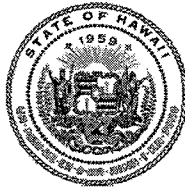


LINDA LINGLE  
GOVERNOR

JAMES R. AIONA, JR.  
LT. GOVERNOR



KURT KAWAFUCHI  
DIRECTOR OF TAXATION

SANDRA L. YAHIRO  
DEPUTY DIRECTOR

STATE OF HAWAII  
DEPARTMENT OF TAXATION  
P.O. BOX 259  
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## SENATE COMMITTEE ON ECONOMIC DEVELOPMENT & TAXATION

### TESTIMONY REGARDING HB 2005 HD 1 SD 1 RELATING TO RENEWABLE ENERGY TECHNOLOGIES

**TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)**

**DATE: MARCH 18, 2008**

**TIME: 1:15PM**

**ROOM: 224**

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This bill would replace the photovoltaic energy system category of § 235-12.5, HRS with a newly defined category of solar electric energy systems.

The House Committee on Finance amended this measure to allow for the transfer or sale of the tax credit.

The House of Representatives passed this measure on third reading.

The Senate Committee on Energy & Environment defected the measure's effective date.

The Department of Taxation **opposes the current draft** of this legislation; however **supports redefining the renewable energy systems** provided by this section of Chapter 235, HRS.

#### **I. NEW PROPOSED DEFINITION OF SOLAR ELECTRIC SYSTEMS.**

The Department **does not like this additional definition** and prefers that a definition in this credit focus on what is put into a machine rather than an approach based upon what the machine creates. **In short, the Department prefers defining the technology based upon inputs; not outputs.** As the law is currently drafted, renewable energy technologies are defined based upon the type of renewable resource that enters a system (*e.g.*, wind, sun, light). This legislation would amend the law to add an additional credit component for what is created (*e.g.*, solar water heating, solar air conditioning, solar space heating, solar drying, and solar process heat system).

## **II. THE DEPARTMENT OPPOSES THE AMENDMENT TO ALLOW TRANSFER OF CREDIT.**

The Department is strongly opposed to any provision that allows Hawaii tax credits to be sold, assigned, or transferred. Allowing taxpayers to market or sell their tax credits is fundamentally poor tax policy. Selling tax credits can be subject to abuse and suspect motivation by parties involved.

The Department's fundamental and primary concerns regarding credit transfers are the following:

- The transferability rewards a separate taxpayer unrelated to the taxpayer that generated the credit, which is fundamentally poor tax policy for encouraging behavior and directly rewarding that behavior;
- Transferability will create great hardships for those that claim the credit when another taxpayer's activity generates the credit when the latter taxpayer is audited. For example, if taxpayer A's activity generates the credit and transfers the credit to taxpayer B, and subsequently taxpayer A's activities are audited; the Department will be forced to track down B, advise them that the credit is being rejected, and taxpayer B will now have a deficiency with the Department due to A's actions. This will cause contract and warranty disputes between taxpayers.
- The Department is not setup to regulate credit transfers. Will the Department be required to establish a "Bureau of Credit Conveyances" in order to track transfers? If this is the case, resources will have to be dedicated to this.
- And, abuse relating tax credit transfer prices will be problematic. The State will be out a \$1 when taxpayers will be transferring this \$1 for pennies.

Other testimony has suggested that Act 221 credits are "sellable." This is an inaccurate statement. Act 221 credits are not sellable. What are considered sellable are partnership interests in a qualified high technology business that generates a credit. A person buys an interest in a business and not a tax credit. A suggestion that credits are sellable is incorrect and transactions characterized as sales of credits only are potentially subject to audit by the Department.

## **III. SUGGESTED AMENDMENTS TO CLARIFY THE CREDIT BASED UPON TECHNOLOGY DEVELOPMENTS.**

The Department understands that this legislation is based primarily upon technological developments in renewable energy systems that produce electricity from sunlight and an attempt to reconcile the different credit caps and amounts for the varying technologies. **The Department supports redefining the technologies for purposes of this credit.** The Department suggests the Committee consider making the following amendments to the measure as an SD 1 to clarify the application of the renewable energy technologies tax credit to conform to current and future uses of sunlight and other renewable sources.

## **IV. REVENUE IMPACT**

H.B. 2005 H.D. 1 as drafted results in the following revenue loss:

- FY2009 (loss): \$315,000
- FY2010 (loss): \$2.3 million
- FY2011 (loss): \$1.3 million
- FY2012 and annually thereafter (loss): \$2.3 million

The Department's proposed SD 1 results in the following revenue loss:

- Annual loss of \$500,000 beginning in FY2010.

*Due to change in solar qualifications (both drafts):*

The change in solar qualifications would allow certain types of solar devices to qualify for the \$500,000 credit where originally they would only qualify for the \$250,000 solar thermal credit. It is estimated that at most, 2 of these (commercial) systems will be built per year.

*For transferability of credit (HD.1 as drafted only):*

The transferability of the credit is functionally equivalent to making the credit refundable. Average tax liabilities for different AGI brackets were estimated, and using the 2005 participation rates for the renewable energy credit, the amount of "carry-over" credit was estimated. From this, it was assumed that all of the carry-over credit would become sold/repurchased, and thus be applied to someone else's tax liability and result in revenue loss.

The impact due to future commercial projects was calculated from a list of planned and/or proposed projects, with estimated or known completion dates. It was assumed that these projects would be eligible for the maximum credit of \$500,000. It is also assumed that these projects will have little to no tax liability (as any income will most likely be offset by depreciation), thus the transferability of the credit will result in a cost equal to the full eligible credit amount. Thus the revenue loss from commercial properties in a year is equal to \$500,000 multiplied by the number of new facilities built.

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## PROPOSED SD 2 AMENDMENTS

SECTION 1. Section 235-12.5, Hawaii Revised Statutes, is amended as follows:

**"§235-12.5 Renewable energy technologies; income tax credit.** (a) When the requirements of subsection (c) are met, each individual or corporate taxpayer that files an individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for every eligible renewable energy technology system that is installed and placed in service in the [State] state by a taxpayer during the taxable year. This credit shall be available for systems installed and placed in service in the [State] state after June 30, 2003. The tax credit may be claimed as follows:

(1) [Solar thermal] For each solar energy system[s], thirty-five percent of the actual cost or the cap amount determined in subsection (b), whichever is less; and for:

(A) Single family residential property: thirty-five per cent of the actual cost or

- ~~(\$2,250, whichever is less;~~
  - (B) ~~Multi-family residential property: thirty five per cent of the actual cost or \$350 per unit, whichever is less; and~~
  - (C) ~~Commercial property: thirty five per cent of the actual cost or \$250,000, whichever is less;~~
- (2) ~~[Wind-powered] For each wind-powered energy system[s], twenty percent of the actual cost or the cap amount determine in subsection (b), whichever is less. for:~~
- (A) ~~Single family residential property: twenty per cent of the actual cost or \$1,500] the cap amount determined in subsection (g), whichever is less;~~
  - (B) ~~Multi-family residential property: twenty per cent of the actual cost or \$200 per unit, whichever is less; and~~
  - (C) ~~Commercial property: twenty per cent of the actual cost or \$500,000, whichever is less; and~~
- (3) ~~[Photovoltaic] Solar electric energy systems for:~~
- (A) ~~Single family residential property: thirty five per cent of the actual cost or \$5,000, whichever is less;~~
  - (B) ~~Multi-family residential property: thirty five per cent of the actual cost or \$350 per unit, whichever is less; and~~
  - (C) ~~Commercial property: thirty five per cent of the actual cost or \$500,000, whichever is less;]~~

~~provided that multiple owners of a single system shall be entitled to a single tax credit; and provided further that the tax credit shall be apportioned between the owners in proportion to their contribution to the cost of the system.~~

~~In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every eligible renewable energy technology system that is installed and placed in service in the [State] state by the entity. The cost upon which the tax credit is computed shall be determined at the entity level. Distribution and share of credit shall be determined pursuant to section 235-110.7(a).~~

~~(b) The amount of credit allowed for each eligible renewable energy technology system shall not exceed the applicable cap amount, which is determined as follows:~~

- (1) ~~If the primary purpose of the solar energy system is to use energy from the sun to heat water for household use, then the cap amounts shall be:~~
  - (A) ~~\$2,250 per system for single-family residential property;~~
  - (B) ~~\$350 per unit per system for multi-family residential property; and~~
  - (C) ~~\$250,000 per system for commercial property.~~
- (2) ~~For all other solar energy systems, the cap amounts shall be:~~
  - (A) ~~\$5,000 per system for single-family residential property;~~
  - (B) ~~\$350 per unit per system for multi-family residential property; and~~
  - (C) ~~\$500,000 per system for commercial property.~~
- (3) ~~For all wind-power energy systems, the cap amounts that apply shall be:~~
  - (A) ~~\$1,500 per system for single-family residential property;~~
  - (B) ~~\$200 per unit per system for multi-family residential property; and~~
  - (C) ~~\$500,000 per system for commercial property.~~

~~For purposes of this section, "household use" means any use that heated water is commonly put to in a residential setting, and includes any commercial application of those uses.~~

~~(c) Multiple owners of a single system shall be entitled to a single tax credit and the tax credit shall be apportioned between the owners in proportion to their contribution to the cost of the system.~~

~~In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every eligible renewable energy technology system that is installed and placed in service in the state by the~~

entity. The cost upon which the tax credit is computed shall be determined at the entity level. Distribution and share of credit shall be determined pursuant to section 235-110.7(a).

~~[(b)]~~ (d) For the purposes of this section:

"Actual cost" means costs related to the renewable energy technology systems under subsection (a), including accessories and installation, but not including the cost of consumer incentive premiums unrelated to the operation of the system or offered with the sale of the system and costs for which another credit is claimed under this chapter.

"Renewable energy technology system" means a new system that captures and converts a renewable source of energy, such as wind [~~heat (solar thermal), or light (photovoltaic) from the sun~~] or energy from the sun, into:

- (1) A usable source of thermal or mechanical energy;
- (2) Electricity; or
- (3) Fuel.

~~"Solar electric energy systems" include solar thermal electric and photovoltaic systems.~~

"Solar or wind energy system" means any identifiable facility, equipment, apparatus, or the like that converts [~~insolation~~] energy from the sun or wind energy to useful thermal or electrical energy for heating, cooling, or reducing the use of other types of energy that are dependent upon fossil fuel for their generation.

~~"Solar thermal energy systems" include solar water heating, solar air conditioning, solar space heating, solar drying, and solar process heat systems.~~

~~[(e)]~~ (e) For taxable years beginning after December 31, 2005, the dollar amount of any utility rebate shall be deducted from the cost of the qualifying system and its installation before applying the state tax credit.

~~[(d)]~~ (f) The director of taxation shall prepare any forms that may be necessary to claim a tax credit under this section, including forms identifying the technology type of each tax credit claimed under this section, whether for solar thermal, photovoltaic from the sun, or wind. The director may also require the taxpayer to furnish reasonable information to ascertain the validity of the claim for credit made under this section and may adopt rules necessary to effectuate the purposes of this section pursuant to chapter 91.

~~[(e)]~~ (g) If the tax credit under this section exceeds the taxpayer's income tax liability, the excess of the credit over liability may be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted. All claims for the tax credit under this section, including amended claims, shall be filed on or before the end of the twelfth month following the close of the taxable year for which the credit may be claimed. Failure to comply with this subsection shall constitute a waiver of the right to claim the credit.

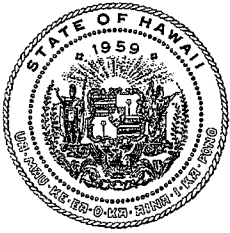
~~[(f)]~~ (h) By or before December, 2005, to the extent feasible, using existing resources to assist the energy-efficiency policy review and evaluation, the department shall assist with data collection on the following:

- (1) The number of renewable energy technology systems that have qualified for a tax credit during the past year by:
  - (A) Technology type (solar thermal, ~~solar thermal electric~~, photovoltaic from the sun, sun and wind); and
  - (B) Taxpayer type (corporate and individual); and
- (2) The total cost of the tax credit to the [State] state during the past year by:
  - (A) Technology type; and
  - (B) Taxpayer type.

~~(g) A taxpayer who installs and places in service an eligible renewable energy technology~~

Department of Taxation Testimony  
HB 2005 HD 1 SD 1  
March 18, 2008  
Page 6 of 6

~~system in the state for which a tax credit under this section may be claimed may transfer the tax credit in exchange for a cash payment equal to the present value of the tax credit."~~



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

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Statement of  
**THEODORE E. LIU**  
**Director**

Department of Business, Economic Development, and Tourism  
before the

**SENATE COMMITTEE ON  
ECONOMIC DEVELOPMENT AND TAXATION**

Tuesday, March 18, 2008

1:15 p.m.

State Capitol, Conference Room 224

in consideration of

**HB2005 SD1**

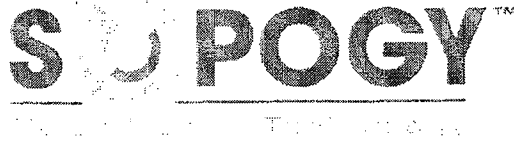
**RELATING TO RENEWABLE ENERGY TECHNOLOGIES.**

Chair Fukunaga, Vice Chair Espero, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports of HB2005, HD2, which revises the current definitions of solar systems to include new technologies being developed.

We defer to the Department of Taxation on tax implications, and concur with their recommended revisions.

Thank you for the opportunity to offer these comments.



To: Senator Carol Fukunaga, Chair  
Economic Development and Taxation Committee

From: Sopogy Inc.

Date: March 17, 2008

Subject: Support for HB 2005 – Relating to Renewable Energy Technologies

Chair Fukunaga, Vice-Chair Espero, and Members of the Committees:

Sopogy, Inc. (Sopogy) is a solar power technology company based in Hawaii. Our purpose is to bring renewable solar energy technologies to Hawaii and its people for the betterment of our environment, independence from volatile imported fossil fuels, and energy stability.

Sopogy has developed a concentrating solar panel that enables the production of electricity, air conditioning, and/or process heat using the sun’s power. Our technology is not categorized as Photovoltaic but as Solar Thermal and/or Concentrating Solar Power (CSP). Understanding, therefore, that solar generated electricity can come from a broader range of technologies than just photovoltaic (PV), Sopogy supports this bill’s original language that would broaden the investment tax credit to all solar electric technologies.

With respect to the Department of Taxation’s request to eliminate Section G, **Sopogy strongly rejects the proposed elimination** since this would adversely affect efforts to develop all renewable energy projects within the State of Hawaii. Transferability of tax credits enables projects to more fully utilize the benefit afforded by the State to incentivize renewable energy initiatives. Moreover, transferability simplifies investment structuring, and thus attractiveness, by allowing the tax credits to be shared between both Hawaii and mainland investors with Federal and State tax liability. Similar to the transferability of tax credits under QHTB (Act 221), Section G will allow mainland investment in Hawaii’s renewable energy projects and spur growth in Hawaii’s renewable industry.

With the ITC equally applied to solar thermal electric and photovoltaics, and with the inclusion of Section G, Sopogy supports the adoption of renewable energy and energy efficiency measures to reduce the state’s dependence on oil, reduce greenhouse gas emissions, and provide energy price stability to Hawaii’s consumers.

Thank you for this opportunity to testify.



Power | Process Heat | Air Conditioning





TESTIMONY OF SUNEDISON, LLC IN REGARD TO HB2005 HD1 SD1,  
RENEWABLE ENERGY TECHNOLOGIES TAX CREDIT BEFORE THE  
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TAXATION  
TUESDAY, MARCH 18, 2008

Chair Fukunaga, Vice-Chair Espero and Members of the Committee.

SunEdison is a developer of large solar photovoltaic (PV) systems with seven offices in five states and an international presence. We simplify the installation of solar electric resources so that the benefits of solar energy, particularly the reduction in oil-fired grid-supplied electricity, can be realized in Hawaii. SunEdison develops PV systems at the lowest possible cost and, as a result, has been the fastest growing solar developer in the nation. We believe that Hawaii's dependence on oil and the resultant high electricity prices create an excellent opportunity for solar resources. Our commitment to Hawaii includes involvement in PUC proceedings, the legislative process and the acquisition of a local solar company. Our projects employ many people, create economic benefits for the host customer and local community, and save all utility ratepayers money.

SunEdison supports HB2005 HD1 SD1. Broadening access to the tax credit will enhance its usability and help diversify Hawaii's energy markets reducing our dependence on imported oil.

Oil imports in 2006 totaled \$3.4 billion at a time when oil prices were in the \$60-\$70/bbl range. Recent prices have exceeded \$110/bbl. Over \$2 million is spent daily on Oahu for imported fossil fuels to generate electricity. We have to begin to turn this around – oil prices are not coming down.

Hawaii originally passed its renewable energy technologies tax credit in 2003 (SB855) providing an incentive to install renewables such as solar to reduce dependency on imported oil, which was running about \$30/bbl at the time. Indeed, Brian T. Taniguchi, Chair, Committee on Ways and Means, noted in his committee's report:

*Your Committee finds that supporting alternate energy systems is critical to reducing the State's dependency on imported oil. This dependency not only sends capital resources out-of-state, but also creates a tenuous reliance on an unsustainable and unstable resource.*

Since then however, the tax credit has been little used by solar developers. For 2005, the most current year for which data is available, the average credit amount per taxpayer was about \$1,000. While 185 residential installations are helpful, the impact on reducing dependency on foreign oil would be much greater with larger systems. Yet, despite



increasing the commercial tax credit cap from \$250,000 to \$500,000 in 2006, there are precious few commercial systems being installed.

There are a number of reasons for this (including net metering limitations and utility-unique interconnection standards), however tax credit usability is a major problem. Structuring effective projects for tax credit allocation within a partnership is a complex and cumbersome process resulting in higher costs. Transferability will reduce these complications allowing more competition within the industry, reducing installation costs, and allowing local businesses and non-profits to reduce their power load.

Hawaii tax equity investors have many other investment options that are not tied to project performance risk. For example, the QHTB (Act 221) tax credit is fully transferable, offers a typical market return of 2 for 1 (i.e. \$2 in tax credits for a \$1 dollar investment), and does not have project risk. We can most efficiently match investors with projects if we can transfer the Renewable Energy Tax Credit. Moreover, transferability will allow solar developers to compete for investors with projects that use the much more versatile QHTB (Act 221).

Transferability will enable the solar industry to achieve efficiencies and truly enable Hawaii to become a market where solar development can occur on a significant scale.

The Department of Taxation has legitimate concerns about the administration of such transferability. To address DOT's concerns more directly, we would be amenable to additions to the bill which would (1) require a certificate to follow the owner of the tax credit, (2) indemnify the certificate holder if the property was sold within the first 5 years such that the owner would be responsible for paying any HI REITC recapture penalty, and (3) limiting the transfer of the credit to a single transfer.

**HB2005 HD1 SD1 provides the necessary transferability in paragraph (g) of Section 1, and we urge the committee to retain this sentence in its current form, or modify it consistent with the above discussion.**

In 2006, Hawaii exported only \$16.3 billion in goods and services, including visitor spending, while importing approximately \$24 billion. Let's keep Hawaii dollars in Hawaii and spend fewer dollars on oil. We would like to thank the Committee for the opportunity to submit testimony and for the Committee's consideration.

Keith Cronin,  
President, SunEdison Hawaii

Rick Gilliam  
Managing Director, Western States Policy



**Hawaii Solar Energy Association**  
*Serving Hawaii Since 1977*

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO H.B. 2005, H.D. 1, S.D. 1  
RELATING TO RENEWABLE ENERGY TECHNOLOGIES  
BEFORE THE  
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT & TAXATION  
ON  
TUESDAY, MARCH 18, 2008

Chair Fukunaga, Vice-Chair Espero and members of the committee, my name is Rick Reed and I represent the Hawaii Solar Energy Assn (HSEA) The HSEA is a professional trade association established in 1977, and affiliated with the Solar Energy Industries Association (SEIA) in Washington, D.C. HSEA represents manufacturers, distributors, contractors, financiers, and utility companies active in the solar energy industry in Hawaii. We strongly support the passage of H.B. 2005, H.D. 1, S.D. 1.

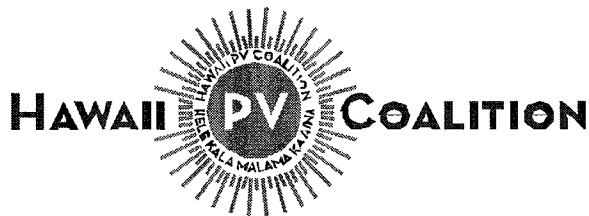
The realm of solar energy includes both heat (solar thermal) and light (solar electricity). Solar thermal energy is particularly versatile in that it can be used to provide air conditioning, to heat water and air, or to generate electricity. High temperature solar thermal steam generators, often referred to generically as concentrating solar power (CSP) technologies, are capable of generating enormous amount of electricity.

H.B. 2005 provides a definitional change (line 15) that acknowledges that both PV and solar thermal systems are capable of generating electricity. The bill deletes the reference to “photovoltaic energy systems” and replaces it with “solar electric energy systems”, which is more accurate and clarifies the range of solar technologies capable of generating power.

H.B. 2005 also provides a definition for qualifying “solar thermal energy systems” – that Do Not generate electricity – to include solar water heating, solar air conditioning, solar space heating, solar drying, and solar process heat systems.

These changes provide clarity to the law and make this statute more consistent with the real world technical applications for solar energy.

Thank you for the opportunity to testify.



TESTIMONY OF THE HAWAII PV COALITION AND THE SOLAR ALLIANCE  
IN REGARD  
HB 2005 HD 1 SD 1 RELATING TO RENEWABLE ENERGY TECHNOLOGIES  
BEFORE THE  
BEFORE THE SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND  
TAXATION  
ON  
TUESDAY, MARCH 18, 2008 AT 1:15PM

Chair Fukunaga, Vice-Chair Espero and Members of the Committee.

The Hawaii PV Coalition is a non-profit organization that represents installers, suppliers, manufacturers and customers of solar electric systems in the state of Hawaii.<sup>1</sup> The Solar Alliance is a state-focused alliance of solar manufacturers, integrators and financiers dedicated to accelerating the promise of photovoltaic (PV) energy in the United States.<sup>2</sup>

The Hawaii PV Coalition and the Solar Alliance supports HB 2005 HD 1 SD 1. We believe broadening the access to the tax credit by both expanding the definition and providing for transferring of the tax credit will help diversify Hawaii's energy markets and reduce Hawaii's dependence on imported energy.

The State of Oregon has a simple pass-through/transfer provision (similar to the one requested above) that has been helpful in expanding their solar program. In this system a project owner may transfer a tax credit to a partner in return for a lump-sum cash payment (the net present value of the tax credit) upon completion of the project. This system allows non-profit organizations, schools, governmental agencies, tribes, other public entities and businesses with and without tax liability to use the tax credit by transferring their tax credit for an eligible project to a partner with a tax liability.<sup>3</sup> The language currently in this legislation was copied from the Oregon legislation.

We strongly support Hawaii putting in place a similar provision that will likely increase the rate Hawaii uses renewable energy instead of importing fuels. We understand the Department of Taxation (DOT) is concerned that "[s]elling the tax credits can be subject

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<sup>1</sup> The Hawaii PV Coalition, <http://www.hawaiipvcoalition.org/>

<sup>2</sup> The Solar Alliance, <http://solaralliance.org/>

<sup>3</sup> DSIRE Incentives by State Incentives in Oregon, [http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=OR03F&state=OR&CurrentPageID=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=OR03F&state=OR&CurrentPageID=1)

to abuse and suspect motivation by parties involves.” (Dept. of Taxation testimony on March 11 before Senate Committee on Energy and Environment). Currently one can allocate the tax credit within partnership deals. These partnerships can be created in several layers and can create a complex structure. These partnerships can be even less transparent than a straight transfer and subject to an even greater level of abuse and suspect motivation by parties involves.

The goal of the solar community, as well as that of the DOT we believe, is for Renewable Energy Tax Credit (RETC) investors to be vested in the long-term success of HI solar installations.

The solar community understands that DOT would like to be able to track the transactions with minimum administrative costs so that they can assure that the use of the tax credit is legitimate. We support DOT’s goal here as well. We believe that we can address these concerns with fairly simple solutions. Limiting the transfer to the credit to a single transfer, providing for indemnification, and requiring the taxpayer claiming the credit to attach a project certificate to their tax return would provide a significant level of traceability and tractability. With this system there would be no need to follow the allocations through multiple tiers of partnerships in certain cases, which the DOT has remarked about in the Act 221 context. This can be accomplished by inserting the following language “(1) require owner of the tax credit to file a certificate letter with their tax returns stating the details of the project, (2) indemnify the certificate holder if the property was sold within the first 5 years such that the owner would be responsible for paying any HI REITC recapture penalty, and (3) limiting the transfer of the credit to a single transfer.”

Currently, the banks in Hawaii are limiting going forward on solar projects,<sup>4</sup> which is going to significantly slow the growth of renewable energy in Hawaii. Increased financing of renewable energy projects is greatly needed now. This provision would facilitate the expansion of renewable energy financing, which would in turn reduce fuel imports and promote job growth in Hawaii. We look to your leadership to help accomplish this.

We would like to thank the Committee for the opportunity to submit testimony and for the Committee’s consideration.

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<sup>4</sup> Under Hawaiian bank charter law, a Hawaiian bank is prohibited from selling power. In Hawaii, Bank of Hawaii (“BOH”) and First Hawaiian Bank (“FHB”) have historically been active in tax-oriented financing transactions. As of the beginning of 2008, BOH and FHB have shifted to a position of not being willing to finance Solar PPA deals at all with any company for the foreseeable future.

# TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

**SUBJECT:** INCOME, Renewable energy technology systems

**BILL NUMBER:** HB 2005, SD-1

**INTRODUCED BY:** Senate Committee on Energy and Environment

**BRIEF SUMMARY:** Amends HRS section 235-12.5 to replace the term “photovoltaic” with “solar electric.” Adds a definition of “solar electric energy systems” to include solar thermal electric and photovoltaic systems. Also adds a definition of “solar thermal energy systems” to include solar water heating, solar air conditioning, solar space heating, solar drying, and solar process heat systems.

The taxpayer eligible for the credit may transfer the credit in exchange for a cash payment equal to the present value of the tax credit.

**EFFECTIVE DATE:** July 1, 2050

**STAFF COMMENTS:** Hawaii’s income tax credit for alternate energy devices was established by the 1976 legislature originally for solar energy systems and was later expanded to include wind energy devices, heat pumps, ice storage systems, and photovoltaic systems. This measure proposes to further expand the state energy tax credits to include solar air conditioning, solar space heating, solar drying, and solar process heat systems.

While some may consider an incentive necessary to encourage the use of energy conservation devices, it should be noted that the high cost of these energy systems limits the benefit to those who have the initial capital to make the purchase. If the combined incentives of federal and state income tax credits during the early 1980’s equal to 50% were not able to encourage more than those who did install alternate energy devices during the period when the federal credits were in effect, it is questionable whether the state tax credits along with the federal energy tax credits (30%), will encourage many more taxpayers to install such devices.

If it is the intent of the legislature to encourage a greater use of renewable energy systems by extending the existing energy tax credits to include solar thermal energy systems, as an alternative, consideration should be given to a program of low-interest loans available to all income levels as is being proposed in HB 2101. 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 projects would be granted a double subsidy by the taxpayers of the state.

Low-interest loans, which 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 for those taxpayers who more than likely can afford to make the conversion. A program of low or no-interest loans would do much more to increase the acquisition of these devices. Persons of all income levels could borrow the funds, make the acquisition, and repay the state program in

an amount equal to the avoided costs that their utility bills would now reflect. While this recommendation has fallen on deaf ears in the past, the above-mentioned proposal would help put such devices within the reach of more people. The credit, on the other hand, merely becomes a windfall for those who are able to come up with the up-front costs for such devices. This leaves the poor and lower-middle income families still dependent on fossil fuel energy.

While this proposal focuses on newer alternate energy technologies which are far more expensive to acquire, it underscores the above point that the credit benefits only those who have the means to install such devices. If lawmakers truly want to provide a financial incentive for taxpayers to make the switch to using these alternative energy devices while taking advantage of the credit, then a program of no-interest, or low-interest loans would be far more effective. The state could provide the capital to acquire these devices, and the taxpayer could receive a discount of 30% provided by the federal tax credit. The amount of the state loan could then be amortized by the energy savings realized by the taxpayer.

Merely providing federal and state tax credits ignores the reality of living in Hawaii, that is, most families don't have the resources to make such a large capital outlay while struggling to put food on the table.

Digested 3/17/08

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## TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TAXATION HB 2005 HD1 SD1, RELATING TO RENEWABLE ENERGY TECHNOLOGIES

March 18, 2008

Chair Fukunaga, Vice-Chair Espero and members of the Committee I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is a nonprofit corporation in Hawaii, established in 1995 by a group of individuals and organizations concerned about the energy future of Hawaii. HREA's mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of HREA's goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purpose of HB 2005 HD1 SD1 is to expand the renewable energy technologies tax credit to include solar electric energy systems. Specifically, the section on "Photovoltaic energy systems" is amended to read "Solar electric energy systems." Solar electric systems are defined as "solar thermal electric and photovoltaic systems." The term "solar thermal systems" is also defined. A new provision also permits selling of the tax credits to other entities.

**HREA supports the original HB 2005 bill** as it clearly distinguishes the two types of solar systems (solar thermal and solar electric), which are subject to different Renewable Energy Technology Income Tax Credit ("RETITC") treatments. This bill clarifies the definition of solar systems that are being installed in or being considered for Hawaii by industry - solar thermal and solar electric. Solar thermal systems include the solar water heating systems, typically with flat-plate collectors, that we see now on at least 25% of our single-family homes in Hawaii, or other thermal systems that produce process heat, space heating or cooling. Solar electric systems include photovoltaics and solar thermal electric systems ("STE") that generate electricity from the sun. STEs use technologies, such as parabolic dish troughs, first to heat water or a working fluid to higher temperatures and produce steam in order to generate electricity. Simply stated, solar thermal systems produce hot water, heat or cooling as an output, while solar electric systems generate electricity.

**However, HREA cannot support the current bill (SD1),** unless paragraph (g) – the last paragraph in Section 1 of the bill – is removed. Par. (g) would permit the selling of tax credits to other entities, which could be non-Hawaii state taxpayers. This provision is an egregious rendering of the intent of our RETITC and should not be allowed. **Please remove this section from the bill.**

Thank you for this opportunity to testify.