

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  
HONOLULU, HAWAII 96809

PHONE NO: (808) 587-1510  
FAX NO: (808) 587-1560

## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

### TESTIMONY REGARDING SB 2623 RELATING TO RENEWABLE ENERGY TECHNOLOGIES

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

**DATE: MARCH 13, 2008**

**TIME: 9:00AM**

**ROOM: 312**

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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 Senate passed this measure unamended.

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. POTENTIAL SUGGESTION TO AMEND TO ALLOW TRANSFER OF CREDIT.**

This bill's companion measure, HB 2005, was amended by the House Finance Committee to allow transfer of the tax credit amongst taxpayers that could utilize the credit to offset tax liability. In an effort to bring this issue to the Committee's attention, this issue is mentioned in the event the matter arises in committee. 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.

In the Committee considering this bill's companion, it was 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 HD 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**

If this measure is amended to provide for transferring tax credits, it will have the following revenue impact:

- 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 HD 1 results in the following revenue loss:

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

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## PROPOSED HD 1 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 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."~~



**THE UNIVERSITY OF HAWAII ENVIRONMENTAL CENTER IS  
PLEASED TO SUBMIT THIS TESTIMONY IN ACCORDANCE  
WITH ACT 132 OF 1970 WHICH CREATED THE CENTER.  
AUTHORS ARE MEMBERS OF THE UNIVERSITY COMMUNITY.**

RL: 2183

SB 2623  
RELATING TO RENEWABLE ENERGY TECHNOLOGIES

House Committee on Energy and Environmental Protection

Public Hearing – March 13, 2008  
9:00 a.m., State Capitol, Conference Room 312

By

James Moncur, Water Resources Research Center and Department of Economics  
Peter Rappa, Environmental Center

SB 2623 expands the renewable energy technologies tax credit to include solar electric energy systems. Our statement on this measure does not represent an institutional position of the University of Hawaii.

The intent of this measure is to expand the renewable energy technologies income tax credit to cover additional technologies that have been developed since this legislation was first adopted. Tax credits are one way to encourage the use of energy saving devices. Technologies like solar electric energy systems not only save on energy costs but also help to reduce the production of greenhouse gases; a commitment the state has agreed to.

We would like to see stronger language application regarding the monitoring of results--how many credits, of what type, and to whom they were granted to help determine the broader implication of the program to the state and to assess the benefits thereof. If these types of tax incentives prove successful, they should be extended to other areas. If, however, the results are less than desirable then we should go back to the drawing board.

Thank you for the opportunity to comment on this bill.





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

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO S.B. 2623  
RELATING TO RENEWABLE ENERGY TECHNOLOGIES  
BEFORE THE  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
ON  
THURSDAY, MARCH 13, 2008

Chair Morita, Vice-Chair Carroll and members of the committee, my name is Ron Richmond and I represent the Hawaii Solar Energy Association (HSEA). HSEA is a professional trade association established in 1977 and affiliated with the Solar Energy Industries Association (SEIA). HSEA represents manufacturers, distributors, contractors, financial entities and utility companies active in the solar energy industry. We strongly support the passage of S.B. 2623.

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.

S.B. 2623 provides a definitional change 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.

S.B. 2623 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.



## **HAWAII RENEWABLE ENERGY ALLIANCE**

46-040 Konane Place #3816, Kaneohe, HI 96744 – Telephone/FAX: 247-7753 – Email: [wsb@lava.net](mailto:wsb@lava.net)

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Cully Judd  
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John Crouch  
Sunpower

Herbert M. (Monty) Richards  
Kahua Ranch Ltd.

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

#### **SB 2623, RELATING TO RENEWABLE ENERGY TECHNOLOGIES**

March 13, 2008

Chair Morita, Vice-Chair Carroll 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 SB 2623 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.

HREA supports this 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 is particularly important as there are more types of solar systems that are being installed in or being considered for Hawaii.

Solar thermal systems include the solar water heating (flat-plate collectors) that we see now on at least 25% of our single-family homes in Hawaii. While the flat-plate collectors are used to heat our water, solar thermal electric systems use technologies, such as parabolic dish troughs, to heat water or a working fluid to higher temperatures in order to generate electricity. A utility scale parabolic dish trough system is currently under development in Hawaii.

Thank you for this opportunity to testify.