LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt
Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE
ON
WAYS AND MEANS
Thursday, February 21, 2008
9:30 a.m.
State Capitol, Conference Room 211

in consideration of
SB2623
RELATING TO RENEWABLE ENERGY TECHNOLOGIES.

Chair Baker, Vice Chair Tsutsui, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports SB2623. We defer to the Department of Taxation on tax implications.

SB2623 replaces the term "photovoltaic system" with "solar electric energy system" so that solar thermal systems which produce electricity (as opposed to simply heating water) would be eligible for the same income tax credit as photovoltaic systems.

Solar thermal electric systems are in the same general cost range as photovoltaic systems, and the end product is also electricity. The proposed change would allow a solar thermal electric system to displace a similar sized photovoltaic system, so the estimated revenue impact is zero.

We also do not anticipate any revenue impact from the proposed change in the definition of "Solar Thermal Energy System" to "include solar water heating, solar air conditioning, solar space heating, solar drying, and solar process heat systems." The proposed change is adding detail but not changing what is commonly understood to be included under the meaning of "solar thermal."

The use of solar energy to meet our energy needs is consistent with State energy objectives.

Thank you for the opportunity to offer these comments.

COLLEGE OF SOCIAL SCIENCES

HAWAII ENERGY POLICY FORUM

UNIVERSITY OF HAWAI'I AT MĀNOA

Testimony of
Warren Bollmeier
Co-Chair – Renewable Energy Working Group
Hawai'i Energy Policy Forum

Senate Committee on Ways and Means
Thursday, February 21, 2008
9:30 a.m.
Conference Room 211

IN SUPPORT OF SB 2623 - Relating to Renewable Energy Technologies

I am Warren Bollmeier, Co-Chair of the Renewable Energy Working Group of the Hawaii Energy Policy Forum ("Forum"). The Forum is comprised of 45 representatives from the electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. We have been meeting since 2002 and have adopted a common vision and mission, and a comprehensive "10 Point Action Plan," which serves as a framework and guide for meeting our preferred energy vision and goals. The Forum supports the passage of SB 2623 as it helps achieve the goal of Point One - expand renewable energy opportunities.

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. The Forum 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.

This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies or organization

2424 Maile Way • Saunders Hall 723 • Honolulu, HI 96822 • Telephone (808) 956-4237 • Fax (808) 956-6870

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L E G I S L A T I V E

TAXBILLSERVICE

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

SUBJECT: INCOME, Renewable energy technology systems

BILL NUMBER: SB 2623; HB 2005 (Identical)

1/31 EPC 2/12 EDT 1/24 EEP

INTRODUCED BY: SB by Menor, Inouye, Sakamoto, Trimble, 7 Democrats & 1 Republican; HB by Morita and Carroll

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.

EFFECTIVE DATE: Tax years beginning after December 31, 2007

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 1/22/08

Hawaii Solar Energy Association
Serving Hawaii Since 1977

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATON
IN REGARD TO S.B. 2623
RELATING TO RENEABLE ENERGY TECHNOLOGIES
BEFORE THE
SENATE COMMITTEE ON WAYS AND MEANS
ON
THURSDAY, FEBRUARY 20, 2008

Chair Baker, Vice-Chair Tsutsui and members of the committee, my name is Richard Reed and I represent the Hawaii Solar Energy Assn. (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 (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.

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.

P.O. Box 37070 Honolulu, Hawaii 96837
SOLAR HOTLINE (808)521-9085

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

SENATE COMMITTEE ON WAYS & MEANS

TESTIMONY REGARDING DECISION MAKING AGENDA FOR FEBRUARY 21, 2008

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)
DATE: FEBRUARY 21, 2008
TIME: 9:30AM
ROOM: 211

Contained in this testimony are the Department of Taxation's (Department) comments on the Senate Committee on Ways & Means' decision-making agenda for February 21, 2008. Because each measure is before the Committee for decision-making only, the Department's comments are in summary fashion for your convenience—

I. SB 2829, SD 1, RELATING TO TAXATION (SSTP)

This bill provides implementing legislation for the Streamlined Sales & Use Tax Agreement (SSUTA).

The Department takes **no position on the merits of the SSUTA** and stands on its prior testimony submitted to the Committee on Economic Development & Taxation. However, the Department **opposes the redirection** of general excise tax receipts from the general fund to a special fund. The Department points out the following comments:

Delayed Effective Date—The delayed effective date of the bill is appreciated, but the delay may not be long enough to allow these changes to be fully integrated into the computer systems of the Department. A longer delayed effective date would give time for practitioners and businesses to adjust to these changes. Given the challenges the Department would face integrating such large, wholesale changes into its operations, longer than two years may be more realistic of a time frame. The delayed effective date would also provide time to obtain approval from the National SSTP Governing Board to assure that Hawaii's amendments conform to the SSUTA. This is very important since Hawaii's general excise tax is not a sales tax.

Frequent Changes to the SSUTA Will Require Legislative Action—The legislature needs to be aware that the SSUTA is not a static document. It has undergone substantial and frequent changes since it was adopted on November 12, 2002. It has been amended 11 times.[1] Each change requires member States to possibly amend its law in order to remain in conformity with the SSUTA.

Revenue Impact—The bill would increase revenues by about $10 million annually. However, joining the SSUTA would entail start-up costs and annual recurring costs. The Department is presently re-examining SSTP implementation costs. The expansion of the GET exemption for blind, deaf, and disabled taxpayers would cost about $500,000 annually.

II. SB 2838, SD 1, RELATING TO TAXATION (ELECTRONIC REFUND DEPOSIT)

This legislation requires the Department to implement necessary procedures to allow e-filing taxpayers to request a direct deposit of refunds to up to three accounts. The Department has **concerns** with this legislation and provides the following comments—

Bill Must Allow Deposit Only Into Certain Accounts—The Department requests that the bill be amended to allow an electronic deposit into only those bank accounts that receive an electronic refund request at the federal level. The amendments made to this measure based upon comments by the Department rely heavily upon federal electronic tax information. If a taxpayer is allowed to insert different accounts than those provided to the IRS, this legislation could have a much greater impact on Department resources and could cost much more to implement.

Appropriation—An appropriation to finance the computer and form costs associated with this measure is necessary. At this time, the Department requests an appropriation in the amount of $89,000 to carry out the purposes of this proposal.

III. SB 2819, SD 1, RELATING TO INTRA-COUNTY FERRY SERVICE (Fuel Tax Exemption)

This legislation exempts sales of fuel to an intra-county ferry service from the fuel tax. The Department takes **no position** on this legislation and offers the following comment for technical correctness

Inappropriate Statutory Placement— The current mechanics of this bill are counterintuitive and it does not make sense to include an exemption section within the assessment section of the license tax. The Department still believes that an exemption for an intra-county ferry service should be included within the current exemption section provided at HRS § 243-7.

Revenue Estimate—The Department's updated revenue estimate provided to the Committee on Economic Development & Taxation was not incorporated into its committee report, which was cited as $13,500. This legislation will result in no impact to general fund. Highway fund annual revenue will be decreased by $21,200, starting FY2009.

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[1] November 19, 2003, November 16, 2004, April 16, 2005, October 1, 2005, January 13, 2006, April 18, 2006, August 30, 2006, December 14, 2006, June 23, 2007, September 20, 2007, and December 12, 2007

IV. SB 2816, SD 1, RELATING TO TAXATION (Foreign Trade Zone Exemption)

This legislation exempts fuel purchased from a Foreign Trade Zone by a common carrier that flies interisland from the general excise and use taxes.

The Department takes **no position** on this measure and offers one comment—

Definition of "Interstate Air Transportation"—For consistency throughout the proposal, this term should be defined as: **"Interstate air transportation" includes the transportation of passengers or property by aircraft between two points in the State."**

Revenue Impact— It is the Department's position that this legislation will result in a revenue loss of approximately:

- $5.1 million loss, FY2009.
- $5.3 million loss, FY2010.
- $5.5 million loss, FY2011.

110 million gallons of fuel was sold on Oahu in FY2007. From previous estimates, it was found that approximately 55% of this was of non-exempt fuel. GE revenue from fuel was calculated to be (110 million gallons) * (55% non-exempt) * ($2.00 / gallon) * (4.00% excise tax rate) = $4.8 million. This was inflated for the relevant fiscal years.

V. SB 3149, SD 2, RELATING TO HIGHWAYS (Requires GET Deposit)

This legislation, among other things, requires a deposit of general excise tax revenues generated from the manufacture and sale of fuels to be deposited to the highway fund. The Department has **strong concerns** with this legislation.

GET Redirect—The Department is always cautious about policy that redirects general excise tax revenue away from the general fund and into specific special funds. The Department is concerned because the general excise tax represents over one-half of the State's overall operating revenue stream. The Department strongly prefers that a direct appropriation be the means for funding this program so that the amount may be budgeted and prioritized just as any other program.

Administrative Issues—The Department also points out that tracking the specific fuel revenues as contemplated by this measure is likely unworkable. The Department does not track the gross proceeds of sales of fuel to the extent requested in this measure. The Department would need an appropriation for computer and form enhancements, as well as additional time, in order to capture the data requested in this measure.

Revenue Estimate—This legislation will result in the following general fund losses:

- **FY2009 (loss): $36.8 million**
- **FY2010 (loss): $78.0 million**

- **FY2011 (loss): $79.1 million**

The taxable gallonage from fiscal year 2007 was used to derive the excise tax receipts derived from the selling of these fuels. Note that gasoline was mostly subject to the GE exemption for alcohol-based fuels, and that oil and gas refining has a special GE exemption for multiple refineries in multi-step refining processes. The revenue impact of each fuel was calculated by:

(Gallons sold in FY07) * [(Avg retail price) * (Retail GE {4% or 0%}) + (Avg wholesale price) * (Wholesale GE)]. The impacts of the individual fuels were summed to get the total revenue impact.

For FY 2010 / FY 2011, the repeal of the GE exemption for ethanol-blended fuels was added to the total.

VI. SB 2455, SD 1, RELATING TO RENEWABLE ENERGY TECHNOLOGIES (Extends Credit to Hydrogen)

This legislation extends the current Renewable Energy Technologies Income Tax Credit to include hydrogen energy systems. The Department has **no additional comments** on this measure.

This bill's revenue estimate is estimated to be minimal. There is no marketed product known that would provide power via hydrogen for residential or commercial use. This leaves commercial R&D as the only probable user of the credit. However previous department rulings regarding this credit dictate that "all additions adding to an existing system shall be treated as one installation" (TIR 07-02). This minimizes the impact due to the $35,000 limit. With the further consideration that the device must be powered by a renewable energy source, the number of adopters would probably be very low, if any.

VII. SB 2623, RELATING TO RENEWABLE ENERGY TECHNOLOGIES (Extends Credit to Solar)

This legislation amends the current Renewable Energy Technologies Income Tax Credit, by adding a new definition for "solar electric energy 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.

Based upon the Department's estimates, this legislation will not have an impact on the general fund.

VIII. SB 2764, SD 2, RELATING TO ETHANOL FACILITY TAX CREDIT (Removes Caps)

This legislation provides the Ethanol Facilities Tax Credit to large and small refineries for the first 15 million gallons of ethanol produced and eliminates certain caps. The Department of Taxation (Department) takes **no position** on this legislation.

This legislation will currently result in an indeterminate revenue estimate because the credit caps are blank. The amount of revenue loss is dependent upon the change in the annual credit limit. This is currently unspecified.

IX. SB 2986 SD 1, RELATING TO REFUNDABLE RENEWABLE ENERGY TAX CREDIT (Makes Renewable Energy Technologies Tax Credit Refundable)

This measure amends the Renewable Energy Technologies Income Tax Credit by allowing the credit to be refundable for those that have little Hawaii taxable income. The Department of Taxation (Department) **strongly supports** this Lingle-Aiona Administration measure as a policy to encourage additional investment in renewable energy technologies.

Annual revenue loss is estimated to be $41,000, starting in fiscal year 2009.

X. SB 3215, SD 2, RELATING TO BIODIESEL (Biodiesel Production Incentives)

This legislation, among other things, provides tax incentives for biodiesel production facilities. The Department of Taxation (Department) provides **comments** on this legislation.

Income Tax Exemption—The Department notes that the income tax exemption is vague. It is unclear whether the tax exemption applies to 100% of income derived from the processing of oil seed produced in the State or to 100% of all income from any facility that processes any amount of oil seed produced in the State.

Revenue Impact—Due to the blanks, this bill will result in an indeterminate revenue loss.