

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

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

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

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

Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the
**HOUSE COMMITTEE ON
ENERGY AND ENVIRONMENTAL PROTECTION**
Thursday, January 24, 2008
8:30 AM
State Capitol, Conference Room 312

in consideration of
HB 2005
RELATING TO RENEWABLE ENERGY TECHNOLOGIES.

Chair Morita, Vice Chair Carroll, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports HB2005. We defer to the Department of Taxation on tax implications.

HB 2005 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.

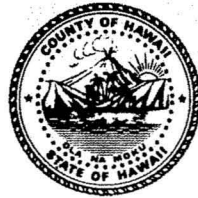
BOB JACOBSON

Councilmember

Chair, Environmental Management Committee

Vice-Chair, Finance Committee

Vice-President Hawai'i State Association of Counties



333 Kīlauea Avenue, Second Floor
Ben Franklin Building, Hilo, Hawai'i 96720

Mailing Address: 25 Aupuni Street, Suite 200

Phone: (808) 961-8263

Fax: (808) 961-8912

E-Mail: bjacobson@co.hawaii.hi.us

HAWAI'I COUNTY COUNCIL

County of Hawai'i

January 22, 2008

Rep. Hermina M. Morita, Chair

Rep. Mele Carroll, Vice Chair

And Members

Committee on Energy & Environmental Protection

Hearing Scheduled for Thursday, January 24, 2008, 8:30 AM

Conference Room 312

State Capitol

415 South Beretania Street

Honolulu, HI

Re: HB 2005 RELATING TO RENEWABLE ENERGY TECHNOLOGIES

I wholeheartedly support HB 2005. I believe that the expansion of the renewable energy technologies tax credit to include solar electric energy systems is necessary.

I urge you to pass HB 2005.

Aloha,

Bob Jacobson



**To: Representative Hermina M. Morita, Chair
Committee on Energy & Environmental Protection**

From: Sopogy Inc.

Date: January 24, 2008

Subject: Support for HB 2005 Relating to Renewable Energy Technologies

Chair Morita, Vice-Chair Carroll and Members of the Committees:

Sopogy, Inc. is a renewable technology company based in Hawaii. We are a spin-off of Hawaii's own Energy Industries and its clean technology incubator "Energy Laboratories." 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 language that would broaden the investment tax credit to all solar electric technologies.

In general, Sopogy, Inc. supports the adoption of renewable energy and energy efficiency measures that lessen 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.

TAXBILLSERVICE

536 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel.

SUBJECT: INCOME, Renewable energy technology systems

BILL NUMBER: HB 2005

INTRODUCED 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;

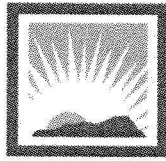
HB 2005 - Continued

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, 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 alternate 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 do not 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 ASSOCIATION
IN REGARD TO H.B. 2005
RELATING TO RENEWABLE ENERGY TECHNOLOGIES
BEFORE THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
ON
THURSDAY, JANUARY 24, 2008

Chair Morita, Vice-Chair Carroll, my name is Richard Reed and I represent the Hawaii Solar Energy Assn. (HSEA). HSEA supports the proposed definitional change to HRS 235-12.5.

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.

HAWAII RENEWABLE ENERGY ALLIANCE

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

Officers

President
Warren S. Bollmeier II

Vice-President
John Crouch

Directors

Warren S. Bollmeier II
WSB-Hawaii

Cully Judd
Inter Island Solar Supply

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

HB 2005, RELATING TO RENEWABLE ENERGY TECHNOLOGIES

January 24, 2007

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 HB 2005 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.



COLLEGE OF SOCIAL SCIENCES
HAWAII ENERGY POLICY FORUM
UNIVERSITY OF HAWAI'I AT MĀNOA

Hawai'i Energy Policy Forum

Mr. Robbie Alm, HECO
Ms. Amy Asselbayer, Ofc of US Rep.
Neil Abercrombie
Ms. Catherine Awakuni, Div. of
Consumer Advocacy
Mr. Warren Bollmeier
Hi Renewable Energy Alliance
Mr. Carlito Caliboso, PUC (Observer)
Mr. Albert Chee, Chevron
Mr. Kyle Datta, U.S. Biofuels
Sen. Kalani English, Hi State Senate
Mr. Mitch Ewan, UH HNEI
Mr. Carl Freedman
Haiku Design and Analysis
Mr. Mark Glick, OHA
Mr. Steve Golden, The Gas Company
Dr. Michael Hammett, RCUH
Ms. Paula Helfrich, EDAH
Mr. Shad Kane, Ahahui Sivila
Hawaii o Kapolei
Mr. William Kaneko, HI Institute for
Public Affairs
Mr. Maurice Kaya, DBEDT
Mr. Darren Kimura, Energy Industries
Holdings
Mr. Mike Kitamura, Ofc of US Sen.
Daniel K. Akaka
Mr. Kal Kobayashi, Maui County
Mr. Laurence Lau, DOH
Ms. Yvonne Lau, Ofc of US Rep.
Mazie Hirono
Mr. Allyn Lee, C&C of HNL
Mr. Aaron Leong, Ofc of US Senator
Daniel K. Inouye
Dr. Stephen Meder, AIA-Honolulu
Sen. Ron Menor, Hi State Senate
Mr. Jeff Mikulina, Sierra Club
Dr. Bruce Miller, UH Ofc of
Sustainability
Dr. Sharon Miyashiro, Social
Sciences Public Policy Ctr.
Rep. Hermina Morita, HI State
House of Representatives
Mr. Tim O'Connell, USDA/Rural
Development
Mr. Richard Paglinawan
Pa Ku'i A Lua
Ms. Melissa Pavlicek, Western States
Petroleum Assn
Mr. Randy Perreira, HI State AFL-CIO
Mr. Rick Reed, Inter-Island
Solar Supply
Dr. Rick Rocheleau, UH HNEI
Mr. Peter Rosegg, HECO
Mr. Steven Rymsha, KIUC
Mr. Riley Saito, PowerLight Corp.
Mr. Glenn Sato, Kauai County OED
Mr. Bill Short, BIA of Hawaii
Mr. Ray Starling, HI Energy Grp
Mr. Lance Tanaka, Tesoro HI Corp
Dr. Don Thomas, UH Center for the
Study of Active Volcanoes
Mr. Murray Towill, Hawai'i
Hotel Assn
Ms. Joan White, Hon Community
Action Program

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

House Committee on Energy & Environmental Protection
Thursday, January 24, 2008
8:30 a.m.
Conference Room 312

IN SUPPORT OF H.B. 2005 - 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 46 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 HB 2005 as it helps achieve the goal of Point One - expand renewable energy opportunities.

The purpose of HB 2005 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