

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 HOUSE COMMITTEES ON HUMAN SERVICES AND HOUSING AND ENERGY AND ENVIRONMENTAL PROTECTION Thursday, March 13, 2008 11:00 a.m. State Capitol, Conference Room 329

in consideration of SB 644 SD3 RELATING TO ENERGY RESOURCES.

Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll, and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) offers these comments. SB644,SD3, would require solar water heaters on new residential homes, condominiums, and townhouses and would increase the maximum tax credit allowed from \$2,250 to \$3,250 for single-family residential property and from \$350 to \$450 per unit for multifamily residential property. Exemptions are allowed and installation standards are identified.

This mandatory provision would support the energy objectives of the state by requiring the use of solar energy for water heating. The Committees are cautioned, however: if solar is mandated, homeowners will not be able to receive rebates under the electric utility rebate program, since regulatory requirements state that utility customers who are required to install energy efficiency devices are precluded from taking advantage of incentive measures provided under demand side management programs.

Should the committees opt to proceed with this bill, we recommend that the new provisions for mandatory installation be dealt with in an entirely new subsection to ensure clarity of start dates for the new mandates and dollar amounts allowed for the mandatory provisions. The bill also directs DBEDT to adopt rules regarding the mandatory provisions, we recommend that this requirement be deleted and that third party certification be adopted to ensure quality installations.

We defer to the Department of Taxation on the tax impact of this bill.

Thank you for the opportunity to offer these comments.

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

JOINT HOUSE COMMITTEE ON HUMAN SERVICES & HOUSING AND ENERGY & ENVIRONMENTAL PROTECTION

TESTIMONY REGARDING SB 644 SD 3 RELATING TO ENERGY RESOURCES

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)DATE:MARCH 13, 2008TIME:11:00AMROOM:329

This bill proposes to require the installation of solar water heating devices in all new residential construction and to increase the renewable energy income tax credit limits applicable to solar thermal energy systems installed and placed in service for either single family or multi-family residential properties.

The Senate Committee on Energy & Environment amended the bill to eliminate the sunset of the solar thermal energy tax credit. The Committee also amended the bill to allow retrofitting and new construction to claim the credit. The increases in credit remain unchanged.

The Senate Committee on Economic Development & Taxation amended the purpose section of this bill and added a defective effective date.

The Senate Committee on Ways & Means amended the bill by expanding the credits to homes built before January 1, 2009; requiring the solar devices to be installed after January 1, 2009; increasing the credit amounts; and defecting the effective date.

The Senate passed this measure on third reading.

The Department of Taxation (Department) offers comments.

This bill would not affect the renewable energy income tax credit limits applicable to windpowered energy systems or photovoltaic energy systems. This bill requires that the construction of every new residential single-family residence, condominium, and townhouse include the installation of a solar energy device to heat water beginning January 1, 2009. Department of Taxation Testimony SB 644 SD 3 March 13, 2008 Page 2 of 3

THE DEPARTMENT SUPPORTS RENEWABLE ENERGY EFFORTS—The Department supports the goal of reducing the State's dependence on imported oil and requiring the installation of solar thermal water heaters on any new residential construction as a step in the right direction. This bill, as amended requires that solar water heating devices be installed on new construction after January 1, 2009. In addition, this bill increases the credit for those homes constructed prior to January 1, 2009.

CLARIFICATION NEEDED—Currently, the bill as drafted may lead to confusion amongst taxpayers. The Senate Ways & Means Committee's report on this bill suggests that the credit will not be available to homes constructed after January 1, 2009. However, the bill as written suggests that only the increase in credit is unavailable to homes constructed after January 1, 2009 and that the old credit amount would remain to be claimed. This provision should be clarified.

The Department suggests that the bill be clarified to either allow the credit for homes built after January 1, 2009 at the lower rate; or expressly eliminate homes built after January 1, 2009 from claiming the credit altogether. If the latter were the goal, the following language would be instructive:

"Single-family residential property: thirty-five per cent of the actual cost or \$2,250, whichever is less; provided that beginning July 1, 2007, the limit shall be raised to \$3,250 and the tax credit under this section shall only apply to residences originally constructed prior to January 1, 2009;"

Again, the bill as written could be read such that the proviso applies only to the limit and not to the credit claim itself.

POSSIBLE UNINTENDED IMPACT FOR CERTAIN HOMES—The Department further points out a disparity of treatment between single-family residential property and multifamily residential property with a small number of units that exists not only for the installation of a solar thermal energy systems, but for all of the qualified energy systems. According to a strict interpretation of the statutory language, a solar thermal energy system installed on a townhouse consisting of only two undetached residences would only generate a \$900 credit, as opposed to the \$3,250 credit generated by the same system being installed for a single-family detached residence. Again, according to a strict interpretation of the statute, this credit disparity would exist even if the solar energy system were installed to service only one of the townhouse residences because the system would have been installed on a "multi-family residential property". This bill may provide an opportunity to clarify when a property is to be considered a multi-family residential property.

NEED TO CONSIDER AMENDING DATES—The Department points out that this legislation is a carry over measure from the 2007 legislative session. As a result, the dates in the bill correspond to the legislative intent at that time. If the dates are not amended to the current year, including tax years, the bill could have the impact of providing a retroactive tax credit. A retroactive credit would allow taxpayers to amend returns to claim the higher amount. This could increase the administrative costs to the Department in resources.

REVENUE IMPACT—If the proposal were to take into effect immediately, there would be

Department of Taxation Testimony SB 644 SD 3 March 13, 2008 Page 3 of 3

a revenue loss of \$375,000 in FY2009 (for people amending their return for construction between July 1 2007 and Dec 31, 2007). For FY2010 and annually thereafter, revenue will decrease by \$750,000.



HOUSE COMMITTEES ON

HUMAN SERVICES AND HOUSING AND ENERGY AND ENVIRONMENTAL PROTECTION

SENATE BILL 644 SD 3

BY

STEVEN GOLDEN

THURSDAY, MARCH 13, 2008

Chairs Shimabukuro and Morita and members of the Committees:

I am Steve Golden, Vice President of External Affairs for The Gas Company. Thank you for this new opportunity to provide testimony on Senate Bill 644 SD 3, relating to energy resources.

This bill requires that solar water heating or a comparable renewable energy device be installed in the construction of all new single family residences, condominiums, and townhouses, unless installation is impracticable due to building design or location, or installation is cost-prohibitive, as determined by the county building code authority, upon application for an exemption.

The Gas Company strongly **opposes** the passage of this bill as currently drafted, because it would unfairly restrict our company's ability to compete for water heating load in the new residential housing market.

Over the last several years, The Gas Company has actively supported the extension of the tax credits for solar water heating even though solar water heating directly competes with our business. We supported this incentive because we recognize that tax credits provide a positive market signal for buyers to choose to install state-of-the-art technologies and diversify the State's energy base. During the 2006 legislative session the state tax credit for solar systems was made permanent. In addition to the tax credit offered by the State, there is also a federal tax credit for solar systems.

The 1998 Legislature (Act 163) required the creation of a task force within DBED&T "to explore the most cost effective means of supporting increased energy efficiency and sustainability." The merits of incentives rather than mandates were also reviewed by the State's Energy-Efficiency Policy Task Force, which spent two years evaluating various approaches to encourage greater energy efficiency. Members on the Task Force included representatives of the State and federal governments, renewable energy advocates, the solar industry, and the electric and gas utilities. I served on the Task Force, which submitted a report to the Legislature that found tax credits to be the most efficient and effective means of encouraging energy efficiency.

The residential segment of The Gas Company's statewide business represents approximately 90% of our current customer base of 67,000 customers. Builders, construction contractors, and ultimately home owners would have to undergo a costly and time-consuming process for seeking an exemption before they could choose gas for water heating. Often it is not economic to hook up a residence to The Gas Company's underground utility system to provide gas for cooking and/or clothes drying unless the customer also chooses gas for water heating.

Gas is recognized worldwide as a clean and efficient energy source. Our existing Oahu gas manufacturing plant utilizes a by-product of the crude oil refining process. If this by-product were not used to make gas for water heating and other uses, it would likely be exported out of the State. Therefore, reducing the consumption of gas manufactured in Hawaii will not result in a corresponding reduction in the amount of crude oil imported into the State. The use of gas also helps to diversify our energy resources and reduces our reliance on electricity.

The Gas Company advocates giving homeowners and builders the information with which to make an intelligent **choice** among a variety of high-efficiency residential water technologies and heaters. Last year the U.S. EPA's ENERGY STAR® program began to develop criteria for highly efficient residential water heaters. See

http://www.energystar.gov/ia/partners/prod_development/new_specs/downloads/ water_heaters/WaterHeaterSecondDraftCriteriaAnalysis.pdf.

These criteria are expected to be finalized by the end of 2008. Significantly, among the technologies expected to qualify for ENERGY STAR® classification are high performance solar water heaters, gas storage water heaters, and whole-home gas tankless water heaters. Once in place the ENERGY STAR® ratings will provide developers and homeowners with another valuable tool to use to make a meaningful, energy efficient choice for their home water heating.

We respectfully request that this bill be held in committee and that homeowners and contractors continue to be allowed to make their own informed decision on which energy source will best meet their water heating needs.

Thank you for allowing The Gas Company to present these comments.

-----Original Message-----From: randy ching [mailto:oahurandy@yahoo.com] Sent: Wednesday, March 12, 2008 12:56 PM To: HSHtestimony Subject: HSH/EEP: in support of SB644 SD3

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

The Sierra Club, Oahu Group supports SB 644 SD3 which would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Even though the cost of a house would increase slightly with the passage of this bill, the howeowner would recoup the cost over the life of the home from savings on electricity. The homeowner would even come out a little ahead with the state tax credit.

There is opposition to this bill from the HSEA, among others, because the builders would install the water heaters and local solar installers would lose that business. Amending this bill to mandate installation by local companies would give local companies business.

Every house, townhouse and apartment in Hawaii should have solar water heaters. It makes sense, given that we receive so much solar power. Please pass SB644 SD3. Mahalo.

Sincerely,

Randy Ching Sierra Club, Oahu Group chair oahurandy@yahoo.com



The REALTOR® Building 1136 12th Avenue, Suite 220 Honolulu, Hawaii 96816 Phone: (808) 733-7060 Fax: (808) 737-4977 Neighbor Islands: (888) 737-9070 Email: har@hawaiirealtors.com

March 12, 2008

The Honorable Maile S. L. Shimabukuro, Chair House Committee on Human Services & Housing The Honorable Hermina M. Morita, Chair House Committee on Energy & Environmental Protection State Capitol, Room 325 Honolulu, Hawaii 96813

RE: S.B. 644, SD3 - Relating to Energy Resources Hearing Date: Thursday, March 13, 2008 @ 11:00 am, Room 329

Dear Chair Shimabukuro, Chair Morita, and Members of the House Committee on Human Services & Housing and Energy & Environmental Protection:

On behalf of our 10,000 members in Hawaii, the Hawaii Association of REALTORS® (HAR) submits comments on S.B. 644, SD3.

There are many opportunities to include improved energy management in the planning and building of our communities. One useful way to think about energy and development is in terms of "where" and "how" we build – "where" involving location issues and "how" concerning the elements of design.

One of the biggest problems plaguing our state right now is the lack of housing – its affordability and inventory. We believe it is not the right time to pass S.B. 644, SD3, which will essentially drive up the cost for developers, passing it to the consumer.

We believe the State should continue to provide an incentive and education based program. The rebate program currently in place has made solar more attractive for consumers who want to retrofit their homes, with many paying only about a third of the cost system.

Mahalo for this opportunity to submit testimony.

From: Craig [mailto:cwatase@hawaii.rr.com] Sent: Wednesday, March 12, 2008 2:15 PM To: HSHtestimony Subject: sb644 sd3

This is a bad bill. Solar should be an option. If you are going to mandate it, don't just pick on new homes. Would you require every existing home in Hawaii to put on solar? Why not? That is exactly why it should be an incentive driven option.

Craig Y. Watase President Mark Development, Inc. 3165 Waialae Avenue Honolulu, HI 96816

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Testimony Before the House Committees On Human Services & Housing and Energy & Environmental Protection

March 13, 2008

S.B. 644 SD3 RELATING TO ENERGY RESOURCES

By: Alan Hee Energy Services Department Hawaiian Electric Company, Inc.

Chairs Shimabukuro & Morita, and Members of the Committees:

My name is Alan Hee, and I represent Hawaiian Electric Company (HECO), Hawaii Electric Light Company (HELCO) and Maui Electric Company (MECO).

Hawaiian Electric Company supports increased use of renewable energy in Hawaii and recognizes that mandating solar water heating for new residential construction is a policy decision. Therefore, HECO has the following comments on SB 644 SD 3.

1. A mandate would effectively eliminate the \$1000 utility rebate and 35% state tax credit for solar water heating systems installed in residential new construction. This would increase the price of a new solar water heating system to a new homeowner by \$2,600¹.

2. Requiring county building code authorities to determine allowed exemptions to the mandate presents challenges. These agencies will need to adopt criteria for exemptions and these criteria may not be consistent with the State's intentions.

3. The bill requires installation to be in accordance with HECO's 100-point inspection, but does not fund the necessary training, staffing, and implementation nor does it identify the entity that will perform the inspection. Under a mandate, HECO's rebate program and quality assurance program for new construction will no longer apply.

4. Solar may not be cost effective for smaller families who buy new homes.

5. Small solar contractors may be frozen out of the new housing developments as developers look for least expensive installations through economies of scale.

In conclusion, although the current incentive structure using utility rebates and tax incentives is helping to increase the penetration of solar water heating, HECO recognizes that mandating solar water heating in new construction is a policy decision.

Thank you for this opportunity to testify.

¹ Based on an average system price of \$5,600.



Building Industry Association Committees on Human Services & Housing and Energy and Environmental Protection March 13, 2008 11 a.m. Conference Room 329

RE: SB 644, SD3 "Relating to Energy Resources"

Chairs Shimabukuro and Morita and Members of the Committees on Human Services & Housing and Energy & Environmental Protection:

I am Karen Nakamura, Chief Executive Officer of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

BIA-Hawaii supports the use of solar water heating systems and also in consumer choice based on market incentives rather than a mandate requiring the installation of solar water hearing systems in all new residential developments. The customer should have the option to select a solar water heating system or a comparable renewable energy device if it makes economic sense. It is our understanding that developers are building houses to be "solar available," leaving the actual choice of using a solar water heating system to the individual owner.

Mandatory installation of solar water heating systems in new residential developments would increase the cost of homes and make them less affordable. It is our understanding that if solar water heating systems are required in new residential construction, HECO could not offer rebates to the customer. BIA-Hawaii has asked our members who already install solar water heaters in the developments to communicate with you as to why they are doing so without any mandates in force.

BIA-Hawaii strongly opposes SB 644, SD3 because we believe consumer choice based on market incentives is a preferable method of selecting a water heating system.

Thank you for the opportunity to share our views with you.

Karen J. Nakamur



Hawaii Solar Energy Association Serving Hawaii Since 1977

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATON IN REGARD TO SB 644, SD 3, RELATING TO ENERGY RESOURCES BEFORE THE JOINT HOUSE COMMITEES ON HUMAN SERVICES & HOUSING AND ENERGY & ENVIRONMENTAL PROTECTION ON MONDAY, MARCH 13, 2008

Chairs Shimabukuro and Morita, Vice-Chairs Rhoads and Carroll, and members of the committees, my name is Ron Richmond and I represent the Hawaii Solar Energy Association, Inc. (HSEA).

HSEA supports the intent of SB 644, SD 3 to increase the number of new homes that include solar water heating systems. HSEA, however, **opposes** the bill as drafted because of the numerous deficiencies and lack of specificity that exist in the bill. The most obvious problems are as follows:

1) The bill mandates solar water heating or a "comparable renewable energy device". The later device(s) is undefined. This term is too ambiguous and may provide an unintended loophole.

2) The bill makes no attempt to establish minimum system sizing guidelines, i.e. it is silent on what a solar water heating system is or shall be for purposes of the mandate. For example, will every new home have the same size system regardless of family size, number of bedrooms, location, or orientation? If not, what qualified third party entity or agency will determine the proper system size based on the relevant variables?

3) There are no guidelines or quality standards for system components and materials. What qualified entity or agency will establish standards for product durability and reliability? Who will ensure that builders adhere to these standards? Who will pay for these services? Where is the provision for the funds?

4) The bill states that the installation "shall be in accordance with Hawaiian Electric Company's 100-point installation inspection". What qualified third-party entity or agency will make these inspections? Who will fund them on an annual basis? Who will train them?

5) The bill allows broad and vague exclusions for installations that are "impracticable" or "cost prohibitive" "as determined by the county building code authority". Have the counties been consulted on this unfunded mandate. What qualifications does the building department staff have to make informed determinations on what constitutes "impracticable" or "cost prohibitive"?

6) SB 644, SD 3 appears to eliminate tax credits for **all** residential and multi-family solar water heating system installations on January 1, 2009.

By page and line, the deficiencies and problem areas are as follows:

Page 2, line 4-5. What is a comparable renewable energy device? If the goal is to mandate solar water heating it should be left at that. Alternatives without definitions provide loopholes for mischief.

Page 2, line 9: Amends Section HRS §196 to require solar water heating on every new residential single-family residence, condominium and townhouse. Because of their design, size, occupancy levels and height, HSEA believes the inclusion of condominiums is impractical.

Page 2, lines 10 - 12: The builder is exempt from the mandate if the installation is "impracticable" or "cost prohibitive". These exclusions are broad and vague. If the goal is to mandate solar water heating then do so with defined exclusions or exemptions. Appropriate sizing criteria for all geographical areas already have been developed by the electric utility companies. Determining what is "cost prohibitive" is extremely subjective and therefore, more difficult to define.

Page 2, lines 13-16: Requiring the "homeowner" to submit a letter of exemption by a licensed architect or engineer may be practical for custom built homes but it is impractical for buyers of production homes to avail themselves of this provision when the builder is required to install solar.

Page 2, lines 17 – 18: Requires that the installation conform to HECO's "100-point installation inspection". Inspections are somewhat meaningless without reference to prescriptive sizing guidelines, written standards and specifications, and approved materials. In short, you need all of these elements to provide quality assurance. In 2006, the budget for the HECO, MECO and HELCO residential new construction (RNC) solar water heating programs was approximately \$1,290,000 and employed 5.5 full time staff. Who will assume all of the functions outlined above going forward? Who will fund, train, and administer these programs? What are the positions of the various counties on this unfunded mandate? It is one thing to legislate inspections; it is another thing entirely to provide the **annual** funding and training necessary to conduct a thorough and comprehensive quality assurance program in a professional manner.

Page 2, lines 19 - 20: A "comparable quality assurance standard" may be used in lieu of HECO's 100-point installation inspection. The HECO companies' solar water heating programs are the most successful of their type in the United States, partly because of the intense emphasis on quality assurance throughout the entire process of designing, sizing, installing, and inspecting each system. There is no "comparable" standard that is appropriate for Hawaii. This language should be deleted.

Page 3, lines 16-22 and page 4, lines 3-6: The bill purpose claims to expand the existing income tax credits for solar water heating. It does not. The bill simply raises the cap from \$2,250 to \$3,250 until January. 1, 2009. The 2006 Hawaii State Legislature raised

the cap from \$1,750 to the present \$2,250. There is no rationale for raising it further at this point in time. In addition, the bill, as written, eliminates the tax credits not only for all new homes but also for **ALL** existing homes. HSEA believes that HRS §235-12.5 must be rewritten to make clear that the proposed changes pertain only to the mandated new construction installations. The same holds for the changes to the section on multi-family residential property.

A final note of context: It is our judgment that the passage of this well intended bill will do more harm than good for the following reasons. It will

- Jeopardize the quality of the systems installed (currently the best in the nation)
- Negate the efforts of builders currently offering or planning to offer solar
- Most importantly, from an equity perspective, substantially increase the cost of the system to the homebuyer by eliminating the rebate and State tax credit.

Consider the following example of what happens to system cost once solar is mandated.

	Current		Proposed	
Gross System Cost	\$5,000		\$5,000	
Utility Rebate	-\$1,000	20%	<u>\$0</u>	0%
Adjusted System Cost	\$4,000		\$5,000	
State Tax Credit (35%)	-\$1,400	28%	\$0	0%
Fed. Tax Credit (30%)	<u>-\$1,200</u>	24%	<u>-\$1,500</u>	30%
Net System Cost to Homebuyer	\$1,400	28%	\$3,500	70%
Increased to Homebuyer	\$2,100			

The future of solar water heating in Hawaii is in a state of flux. Countervailing forces are currently at work. The positive forces are excellent incentive programs with utility rebates and tax credits. These incentives have motivated most builders now to offer solar water heating systems as a standard feature or as an option. The Tax Department recently clarified that builders of production homes who offer solar as a standard are eligible for the tax credit. HSEA believes this clarification will attract more builders to offer solar as a standard feature. The potentially negative forces at work are the impending transition of the rebate programs to a yet-to-be-selected non-utility administrator beginning in 2009. In addition, the federal residential tax credit is scheduled to expire at the end of this year. Both of these forces are introducing uncertainty into the marketplace.

Hawaii currently enjoys the most vibrant and successful solar water heating market in the nation. Please do not introduce another uncertainty by mandating solar on new homes without fully addressing the concerns expressed in this testimony in order to avoid unintended negative consequences.

Unless the joint committees are committed to amending SB 644, SD 3 and redressing these numerous deficiencies and problems, HSEA recommends that the bill be held.

We thank the committees for the opportunity to present these comments.

From: Michael M. Kliks, PhD [mailto:mmkliks@hawaii.rr.com] Sent: Wednesday, March 12, 2008 12:26 PM To: HSHtestimony Subject: Strong Support for SB644 SD3: Solar Water Heating bill

CTS Foundation

"Research and Education for Ecology & Health Worldwide" 3081 G. Paty Drive, Honolulu, HI, 96822; Tel: (808) 988-7203 FAX:(808)988-5161; email: <u>mmkliks@hawaii.r.com</u>

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This bill is a straightforward, fair and cost effective means of providing a brighter future for our diversified energy portfolio . . .it is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Michael M. Kliks, PhD, President

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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy

SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

Life of the Land is Hawai'i's own environmental and community action group advocating for the people and the 'aina since 1970. Our mission is to preserve and protect the life of the land through sustainable land use and energy policies and by promoting open government through research, education, advocacy, and litigation.

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Mahalo,

Henry Curtis Executive Director



Face 586- 6189

Conservation Council for Hawai'i

Testimony Presented to the House Committee on Human Services & Housing and House Committee on Energy and Environmental Protection

Hearing: Thursday March 13, 2008 11 am Room 329

Re: Support for SB 644 SD 3 Relating to Energy Resources

Aloha. The Conservation Council for Hawai'l supports SB 644 SD 3, which would require solar energy or equivalent systems for heating water in newly constructed residential properties. This bill will allow us to reduce our dependence on fossil fuels and global warming pollution, and Hawai'i home owners will thank you for the cost savings.

Clobal warming and climate change pose ecosystem-level threats to native birds and their habitat from sea level to Hawaiian cloud forests. The low-lying basalt islands and coral atolls of the Northwestern Hawaiian Islands-provide habitat for 90 percent of Hawai'i's seabird populations. Approximately 14 million seabirds live there, including 5.4 million breeding pairs of 18 species. The disappearance of Whale Skate Island is one of the more dramatic examples of global warming impacts to Hawai'i's native birds at sea level. The Island was a few acres in size, and covered with vegetation, nesting seabirds, endangered Hawaiian monk seals and threatened green sea turtles. Whale Skate Island no longer exists as a result of erosion and rising sea level. Global warming, coral bleaching, and drought resulting from El Niño events, affect ocean productivity and food availability for seabirds.

Studies indicate that global warming may also allow mosquitoes to breed year-round at higher elevations than they do now, eliminating suitable habitat for native upland birds. Mosquitoes are the vector for *Plasmodium relictum*, a pathogen that transmits avian malaria to native forest birds. Mosquitoes also transmit avian pox directly to native forest birds. Modeling of climate change on the islands of Kaua'i, Maui, and Hawai'i indicates that, as temperatures rise by just a few degrees, suitable forest bird habitat will be lost as the mosquito zone shifts upwards. Birds occupying high-elevation forests currently free of diseases will become infected as temperatures rise. Scientists also predict that the "species temperature tolerance zones" for native and introduced species will likely be shifted upward in elevation. Plants and animals may have to relocate upslope, and native cloud forests may be reduced in size.

Global warming and climate change may also cause changes in frequency and intensity of windstorms, drought, and fire, which may favor invasive plant species over native ones.

Please pass this bill out of committee. Mahalo nui loa for the opportunity to testify.

sincerely, an Mariorie Ziegler

me

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Hawai'i Affiliate of the National Wildlife Federation

Preskient: Julie Leisions * Vice-President: Nelson Ho * Secretary/Treasurer: Kim Ramos * Directors; Fred Knaus, Ph.D. * Douglas Lamerson, George Robertson * Claire Shimabukuro * Helene Takemoto * Mashuri Waite * Executive Director: Marjorie Ziegler



Committees on Human Services & Housing and Energy and Environmental Protection March 13, 2008 11 a.m. Conference Room 329

RE: SB 644, SD3 "Relating to Energy Resources"

Chairs Shimabukuro and Morita and Members of the Committees on Human Services & Housing and Energy & Environmental Protection:

I am Michael Brant, Vice President – Engineering for Gentry Homes, Ltd. Gentry Homes has been building homes for Hawaii's residents for the past 40 years. For the past three years we have installed solar water heating systems as a standard feature in all of the homes we construct and sell. We have been able to do this because the cost of these systems are mitigated by a HECO rebate and by state tax credits. We believe if these systems are mandated, the rebate and tax credits would no longer be available and the full cost of the system will then be passed onto the consumer.

Gentry Homes opposes SB 644, SD3 as we believe mandating these systems will increase the cost of homes to Hawaii's residents.

Thank you for the opportunity to share our views with you.

Respectfully Submitted,

lichaeld. Bram, P. E. Vice President - Engineering

560 hr Mimitz Hwy, Hendlulo, Hawali 96817 PO Box 295, Honoluki, Hawali 96809 (808) 599-5558

From: Barbara Polk [mailto:ednbarb8@earthlink.net] Sent: Wednesday, March 12, 2008 4:01 PM To: HSHtestimony Subject: Testimony on SB 644 SD3

This testimony is for the 11am Human Services and Housing and Energy and Environmental Protection hearings.

TO: Chair Maile Shimabukuro, Vice-Chair Karl Rhoads, Committee on Human Services and Housing Chair Hermina Morita, Vice-Chair Mele Carroll, Committee on Energy and Environmental Protection Members of the two committees

FROM: Barbara Polk, Legislative Chair Americans for Democratic Action, Hawaii Chapter

SUBJECT: SUPPORT FOR SB 644 SD 3 RELATING TO RENEWABLE ENERGY

Americans for Democratic Action, Hawaii Chapter, urges your support for SB 644 SD 3. Conservation of energy and alternative energy sources are critical to our island State. At present, new homes are built without solar water heaters, despite our nearly constant sunshine and the fact that heating hot water constitutes one of the major demands for electricity in Hawaii homes.

Requiring all new homes to have solar water heaters would be an inportant step toward making Hawaii energy independent.

Lance W. Holter P.O. Box 790656 Paia, Maui, Hi 96779 Tele 808-579-9442 Fax 579-8180 Email holter@maui.net

Aloha,

161 6000

586-6401, 586-6501

HSHtestimony@Capitol.hawaii.gov

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

I am a licensed Hawaii Building Contractor, Plumbing Contractor and have two homes. One home has solar hot water and my electric bill there is \$162.31 the other home doesn't have solar and the electric bill is \$311.66. Solar hot water makes economic sense, provides employment, reduces dependence upon fossil fuels and is the right thing to do.

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be

stopped. Lance Holter

Chairman Maui Democatic Party Chairman Hawaii Sierra Club, Maui Group Tele 808-579-9442 -----Original Message-----From: Zoe M Norcross [mailto:norcross@hawaii.edu] Sent: Wednesday, March 12, 2008 10:49 AM To: HSHtestimony Subject: Testimony: SB644 SD3 Relating to Renewable Energy SUPPORT

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

My husband and I are on a single income. When we built our small house, the architect talked us out of solar because he said it wasn't sunny enough where we live. So we installed a gas heater and spent a lot of money heating water for the next year or so. Being very concerned about our wasteful use of nonrenewable resources, however, we installed a solar water heater one and a half years ago and since then there have only been about 5 days when the water was not "hot" and we needed the backup electrical switch. And we even live in "rainy" Haiku on Maui! We were able to take advantage of all the programs in place to help out those who are lower income with getting solar hot water.

The fact that it only takes a few years to make back the money a solar water heater costs, alone, should be a no-brainer for supporting this bill. Solar water heaters save their owners money!! But the fact that it can tremendously reduce Hawaii's wasteful consumption of fossil fuels, is thousands of times more important to me than just saving money. It is your duty to help us take every measure we can to reduce our damage to our fragile planet and reduce our dangerous reliance on fossil fuels. Please support this bill.

Sincerely, Zoe Norcross-Nu'u 2415 Nehe Place Haiku, HI, 96708 norcross@hawaii.edu 808-572-9055 From: Lei Kihoi-Dunne [mailto:ponoau@msn.com] Sent: Wednesday, March 12, 2008 12:26 PM To: HSHtestimony Subject: Support SB644 SD3

Aloha Chairs Shimabukuro & Morita:

The purpose of this letter is to express my support of the above Renewable Energy Support Bill which requires that all new homes install a solar water heater. Both my husband and I recently installed a Solar Water Heater. We find it incredible in terms of saving energy, and reducing our costs of heating water.

Thus, we both strongly support passage of the above Bill. Our unlimited sun, and climate, is conducive to requiring that all new homes include a Solar Water Heater. This will help not only our Hawaii citizens, but will have a world-wide global positive effect on the environment.

With Aloha, Lei Kihoi and John E. Dunne.

From: Maury King [mailto:maury@mauryonmaui.com] Sent: Wednesday, March 12, 2008 12:49 PM To: HSHtestimony Subject: Solar hot water no brainer

Please vote for legislation making solar hot water heaters mandatory on all new construction.

It sure seems to me that as our state talks about sustainability we aren't really walking it like we talk it. Right now on Maui we are a couple of months away from 'capping out' on allowable net metering & we are stumbling towards raising it from ½ percent to a full one percent. One percent is still way too little & if they don't enact this quickly, solar companies will be driven out of business as soon as the cap is reached. That really shows how uninterested we are in renewable energy around here. it's shameful. The current wind farm on Maui wants to expand, but MECO says they would rather wait for a new wind farm from Shell that would be years away. Why aren't they excited about having 2 wind farms & begging people to come to them with more ideas about wind/solar/waves etc? We actually need to build out a grid of renewable energy or get out in front of it & be heroes for making our state a shining (pun intended) example to others. What is holding us back from this great opportunity? Even if you don't believe in global warming, nobody doubts that we are running out of oil & are going to have to pay considerably more for it. If we had led the way years ago, we'd be feeling pretty smug right now about how we were 'beating' the high cost of oil.

I wonder if there is a conspiracy on the part of the current energy suppliers to drag this out as long as possible so they can keep reaping profits from the old system before they are forced to get on the bandwagon of renewable.

I respectfully submit that every legislator should be jumping up & down to support anything that has to do with renewable energy & weaning us off oil. Business as usual won't solve what is going to become a worsening problem as oil prices increase. If we don't move forward, we might be back ordered for years on getting turbines, etc while the rest of the planet snaps them up.

We need a paradigm shift in our thinking about this & anyone that doesn't envision our whole state dotted with wind farms, solar farms, solar power & hot water on every possible rooftop, wave machines, etc doesn't really understand where this needs to head.

Everett Dowling has brought a wonderful 'Focus Green' lecture series 2 Maui for 2 years now. The speakers the last 2 weeks have raved about the incredible opportunity there is – at least on Maui – for us to become energy independent. These are smart people that work with environmental issues all the time. They see the golden opportunity. Why don't we?

Please, I beg of you, vote for anything that has been sensibly thought out that helps get us off oil (& palm oil from Asia isn't the answer).

Thanks for listening & for the hard work that you do.

Maury King 3500 A Kehala Dr. Kihei, HI 96753

808-874-5955

From: patricia blair [mailto:cris6369@yahoo.com] Sent: Wednesday, March 12, 2008 12:42 PM To: HSHtestimony Subject: Testimony

Committee on Human Sevices and Housing: Chair Rep. Shimabukuro and VChair Rep Karl Rhoads. Committee on ENergy And Environmental PRotection, Chair Rep. Morita & V. Chair Rep. Mele Carroll. SB644 SD3 requires solar water heaters for all newly constructed residential properties. I believe that the Hawaii Legislature most quickly approve and pass this bill to be immediately put into affect for the benefit of Hawaii's Sustainability. Thank you very much. Pat Blair, Kailua, Hi. 261-8499

From: Bob Babson [mailto:babsonb001@hawaii.rr.com]
Sent: Wednesday, March 12, 2008 2:14 PM
To: HSHtestimony
Subject: Testimony SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha,

Please pass this incredibly important bill. Solar hot water reduces the electrical bill by 33% in most homes and significantly reduces the importation of fossil fuel. Mahalo, Bob Babson 3371 Keha Drive Kihei, HI 96753 808 874-1166 From: gse [mailto:gse@hawaii.rr.com] Sent: Wednesday, March 12, 2008 2:27 PM To: HSHtestimony Subject: SB644 SD3

I am a huge supporter of solar and would strongly support passage of this bill. We just bought a new home that came without solar. That simply makes no sense when we are the most oil dependent state in the union. Please require that all new homes come with solar hot water. aloha,

Gary & Pam Elster 145 N. Kihei Rd Kihei, HI 96753 From: Judy Edwards [mailto:bodhi@maui.net] Sent: Wednesday, March 12, 2008 3:02 PM To: HSHtestimony Subject: Testimony

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Judy Edwards Maui, Hawaii ----Original Message----From: Scott Crawford [mailto:scott@aloha.net] Sent: Wednesday, March 12, 2008 10:50 AM To: HSHtestimony Subject: Testimony: SB644 SD3 Relating to Renewable Energy SUPPORT

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a very important bill that I strong urge you to pass.

Solar water heaters are the single most simple, easy and cost-effective means to decrease the use of fossil fuels in Hawaii.

Requiring that solar water heaters be installed on new buildings at the time of construction will ensure that this technology is implemented in both the most comprehensive and most efficient way possible, rather than spending great effort to convince a relatively small percentage of homeowers to install solar water heaters as a retrofit their homes after they are already built.

Please support SB 644 SD3.

Mahalo for your consideration,

Scott Crawford PO Box 645 Hana, HI 96713 808-248-8808 -----Original Message-----From: Una Greenaway [mailto:una@hawaii.rr.com] Sent: Wednesday, March 12, 2008 10:59 AM To: HSHtestimony Subject: SB644 SD3 SUPPORT

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

Please pass this very important bill, that will seriously reduce the amount of fossil fuels being used in our state. We are currently looking at implementing the 2050 sustainability plan, and this is an easy first step toward enegy independence.

We currently have a solar water heater on our home, and realize how much easier it would have been if the unit were included in the initial price of my home and my mortgage.

Mahalo Una Greenaway Kona From: Lawrence Souza [mailto:lawene38@hotmail.com] Sent: Wednesday, March 12, 2008 3:06 PM To: HSHtestimony Subject: Testimony

Hello,

My name is Lawrence Souza and I want legislation passed for new homes to be required to have solar water heating units. This will reduce the load on our electric utility and promote renewable energy and thusly reduce our dependence on C02 producing fossil fuels, foreign and domestic!

Lawrence Souza, Jr. 59-013 Huelo St. Haleiwa, Hl. 96712 #638-9518 Cell# 226-8120 -----Original Message-----From: Lynn Hodgson [mailto:hodgson@hawaii.edu] Sent: Wednesday, March 12, 2008 2:40 PM To: HSHtestimony Subject: SB 655 SD3 hearing.

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Aloha, Committee Members,

I've just been informed that tomorrow your committee will be discussing the bill to require solar water heaters for all new residential construction. Not sure why it is limited to residential construction -- but we'll take what we can get. I think this is a "no brainer" for Hawaii, and that there is not good excuse for developers not to do this. They make plenty of money off of today's housing prices, and this will offset by a tiny amount our near total dependence on the "outside" for our energy needs. It is just so wasteful to use fossil fuels for electricity to heat water, when the technology for the solar water heaters is so good, and the price has gotten much more reasonable.

Thanks for your consideration,

Lynn M. Hodgson Univ. Hawai'i - West O'ahu Professor of Natural Sciences From: Respiratory & Environmental Disabilities Assoc of HI [mailto:redahi@hawaii.rr.com]
Sent: Wednesday, March 12, 2008 11:26 AM
To: HSHtestimony
Subject: SB644 SD3 March 13, 2008 Rm329 11AM

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped. Once a home is built and people move into them they baulk at the prospect of having to incur additional expenses. Even if the owners would like a solar water heater, it is usually placed on a "to do, later" list and is sometimes *never* done. This bill is sensible and necessary. Please do all possible to pass.

Thank you for your time,

Bobby McClintock, Honolulu, HI

From: Aaron [mailto:kuau77@gmail.com] Sent: Wednesday, March 12, 2008 11:26 AM To: HSHtestimony Subject: Testimony

Please pass the Solar Water Heating bill and also the bill that allows residents to dry their clothes on a clothesline. Hawaii has an opportunity to show the world what should and can be done to reduce needless energy consumption. It is reprehensible to waste the precious resource of sunshine with which Hawaii has been blessed.

Mahalo, Aaron Singer Paia, Maui From: Scott Wilson [mailto:scottrw@hawaiiantel.net]
Sent: Wednesday, March 12, 2008 11:50 AM
To: HSHtestimony
Subject: Residential solar water heating

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

We should ensure that all new home construction in Hawaii utilizes this renewable, clean, "green" energy source!

Aloha,

Scott R. Wilson

3524 Woodlawn Drive

Honolulu

988-1876

----Original Message----From: Art Mori [mailto:amori@netserver05.chaminade.edu] Sent: Wednesday, March 12, 2008 11:54 AM To: HSHtestimony Subject: Solar Water Heating Bill

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

This really is a no-brainer. How much can this possibly add to the price of a new home - a few thousand dollars added to hundreds of thousands?

Do provide that the solar units are quality products.

Mahalo,

Art Mori 373-4386 571 Hao St. Honolulu, HI 96821 From: bonnie bonse [mailto:bcbonse@yahoo.com] Sent: Wednesday, March 12, 2008 12:13 PM To: HSHtestimony Subject: Support for SB 644 Renewable Energy

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels. Most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems.

This practice is wasteful, particularly at this point in history, when thorough and prompt action is needed in order to reduce the use of electricity, fuels, etc, and to preserve life itself on this planet.

Hawai'i can make a difference! SB 644 SD3 would require solar water heaters for all newly constructed residential properties. Please support this bill.

Thank you for the opportunity to share my thoughts on this important issue.

Bonnie Bonse 182 S. Makaleha Pl Makawao, HI 96768 808-572-1865 -----Original Message-----From: Brian Shiro [mailto:brian.shiro@gmail.com] Sent: Wednesday, March 12, 2008 12:37 PM To: HSHtestimony Subject: Testimony on SB644 SD3 Relating to Renewable Energy

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Sincerely,

Brian Shiro 91-1031 Kaimalie St Apt 4R3 Ewa Beach, HI 96706 From: Olwen Huxley [mailto:olwen.huxley@gmail.com] Sent: Wednesday, March 12, 2008 3:09 PM To: HSHtestimony Subject: Supporting the Solar Water Heaters Bill

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Dear Committee Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees:

I am writing to enthusiastically support SB 644 SD3, which would require solar water

heaters for all new residential construction.

Solar water heaters are the least expensive, least complicated, and most common sense way to meaningfully reduce Hawaii's dependence on oil. Electricity is the least efficient way to heat water

especially when we have abundant sunlight that will do it for us for free.

This bill provides the necessary financial incentives to ease its adoption and enforcement, yet provides the flexibility to allow people to opt out should the requirement not make sense in a

particular instance.

Oil hit \$110 a barrel today. Although it won't necessarily stay that high all the time, the people of Hawaii have better things to spend their money on than hot water made from electricity that is made from

oil.

Sincerely,

Olwen Huxley 152 A N. Kalaheo Ave. Kailua, HI 96734 From: Bartlett, Randy [mailto:rbartlett@mlpmaui.com]
Sent: Wednesday, March 12, 2008 3:54 PM
To: HSHtestimony
Cc: Henry Curtis
Subject: Testimony Supporting SB644 SD3 Relating to Renewable Energy

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Mahalo nui loa no kou k•kua, e malama pono i ka `aina!

Randy Bartlett POB 11197 Lahaina, Hawai'i 96761 rtb@hawaii.rr.com From: Dayle Bethel [mailto:dbethel@hawaiiantel.net]
Sent: Wednesday, March 12, 2008 4:30 PM
To: HSHtestimony
Subject: SB644 SD3 Relating to Renewable Energy

March 12, 2008

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329 SB644 SD3 Relating to Renewable Energy **SUPPORT**

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

My name is Dayle Bethel, a resident of Makiki in Honolulu. I write in strong support of SB644 SD3, requiring solar water heaters for all newly constructed residential properties. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels. It seems to me that it is just common sense to take this step.

Dayle Bethel 1441 Victoria Street, #402 Honolulu, Hawaii 96822 808-523-2906 dbethel@hawaiiantel.net From: Marcia Kemble [mailto:mkemble@hawaii.rr.com] Sent: Wednesday, March 12, 2008 4:55 PM To: HSHtestimony Subject: Testimony in favor of SB644 SD3

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

I am writing to urge you to support SB 644 SD3, which would require solar water heaters for all newly constructed residential properties.

We desperately need to curtail energy consumption and use of fossil fuels, at both the local and national level. Solar water heaters are one of the best ways for households to reduce energy usage, especially here in Hawaii where we get so much sunshine.

Global warming -- and the ever-escalating fossil fuel usage that contributes to it -- is, in my opinion, the most serious issue we face as a society. If we blow it on bringing down use of fossil fuels and the greenhouse gases they create, we are putting all future generations and the future sustainability of our very planet at serious risk. This legislation must be passed as a responsible, common-sense measure to combat global warming.

Sincerely,

Marcia Kemble 2055 Makiki St. Honolulu, HI 96822 (h) 941-6453 From: Elizabeth Dunne [mailto:elizabethdunne@hotmail.com]
Sent: Wednesday, March 12, 2008 5:00 PM
To: HSHtestimony
Subject: Testimony in support of SB 644

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

I strongly support SB 644 SD3 which would require solar water heaters for all newly constructed residential properties. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Passage of this bill is a basic and essential step toward saving electricity and curbing our carbon emissions.

Sincerely,

Elizabeth M. Dunne Honolulu, Hawaii 96815 elizabethdunne@hotmail.com -----Original Message-----From: Diana Bethel [mailto:dianabethel@hawaiiantel.net] Sent: Wednesday, March 12, 2008 5:11 PM To: HSHtestimony Subject: SB644 SD3 Relating to Renewable Energy

March 12, 2008

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329 SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

Thank you for this opportunity to express my strong support for SB644 SD3, requiring solar water heaters for all newly constructed residential properties.

Solar water heaters take advantage of free energy--the sun. They are simple, easy, and cost-effective. This is an important step to take to reduce our dependence on imported oil. I would like to see a real commitment, not just lip service, to sustainable alternative energy solutions. Thank you. From: Alan Murakami [mailto:almurak67@gmail.com]
Sent: Wednesday, March 12, 2008 5:19 PM
To: HSHtestimony
Cc: Jeff Mikulina; Henry Curtis
Subject: Mandatory solar water heating on new construction

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

Testimony of Alan T. Murakami

RE: SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

I **support** SB 644 SD3. It would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels. There should be no excuse for Hawai`i to require solar heating, when the consequences of not doing so are so apparent. We import 90% of our energy resources; that figure hasn't changed for decades. How long are we going to waste the resources of the sunniest state in the nation? This should be a no brainer.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped if we are to be responsible stewards for the world's climate and oceans. Besides, we have a self interest as an island state with already limited land that could be eaten up by higher sea levels within our lifetime, if not our children's.

If the Solar Energy Assn is fearful of losing its niche, either provide for them somehow so its members get a piece of the action or make it get out of the way. We need a Manhattan project to get off oil and boost our renewable resources in a big way. No time for impacts on business to get in the way of a truly global solution to our problems. Honorable Representative Maile S.L. Shimabukuro, Committee on Human Services & Housing, Chair

Honorable Representative Karl Rhoades, Committee on Human Services & Housing, Vice Chair

RE: SB 644, SD3 - relating to Renewable Energy to heat water heaters For new Residential projects - Strongly in Support

Good Morning Chair Shimabukuro, Vice Chair Rhoades and Committee Members:

I am Daisy Murai, a resident of Kapahulu and a member of the General Public. SB 644, SD3 is an excellent and ideal Bill to pass, as the consumption of Electricity throughout the State of Hawaii increases with the resurgence of many Residential and Commercial projects being built on the major islands of Hawaii. SB 644, SD3 – relating to requiring either solar power or other renewable energy source to power the water heaters in the NEWLY Constructed Residential projects (single family dwelling or multi family dwellings) would be a great start for the consumer to save financially in their monthly electric bill and also to save the Environment by burning less fossil fuel needed to generate electricity. The island of Oahu has been experiencing several power surges and black-outs lately, thus converting to solar power to heat the water heaters is a great way to conserve energy – as Hawaii has sunny weather almost 365 days a year.

Thank you for the opportunity to speak and I STRONGLY SUPPORT SB 644. SD3.

Daisy Murai 3039 Kaunaoa Street Honolulu, HI 96815 March 12, 2008 Date: March 13, 2008 (Thursday) Time: 11:00 am Conference Room 329 FAX: 586-6189 From: Dacaccia@aol.com [mailto:Dacaccia@aol.com] Sent: Wednesday, March 12, 2008 8:28 PM To: HSHtestimony Subject: Testimony

In much of the Mainland, where temperatures go below freezing, solar water heaters are complicated. You must run antifreeze through the collector, and then run that through a heat exchanger to get hot water. In spite of that there are a lot of solar heaters there. But a solar water heater is simple in Hawaii. There is no excuse not to use the sun to heat our domestic water here, especially since we have electricity that is 3 or 4 times as expensive as on the mainland. And did I mention that we have more sunlight than much of the Mainland?

David Caccia pob 1788 Honokaa, HI 96727

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From: Denise Snyder [mailto:scott101@hawaii.rr.com] Sent: Wednesday, March 12, 2008 7:04 PM To: HSHtestimony Subject: Testimony

Please support the solar water heater bills.

Denise Snyder scott101@hawaii.rr.com 4952 Mana Place, 96816 From: rowena masutani [mailto:leilanirowena@yahoo.com] Sent: Wednesday, March 12, 2008 8:54 PM To: HSHtestimony Subject: SB644

COMMITTEE ON HUMAN SERVICES & HOUSING Chair: Rep. Maile S. L. Shimabukuro Vice Chair: Rep. Karl Rhoads

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Chair: Rep. Hermina M. Morita Vice Chair: Rep. Mele Carroll

Date: Thursday, March 13, 2008 Time: 11:00 a.m. Room: 329

SB644 SD3 Relating to Renewable Energy SUPPORT

Aloha Chairs Shimabukuro and Morita, Vice Chairs Rhoads and Carroll and Members of the Committees,

SB 644 SD3 would require solar water heaters for all newly constructed residential properties. This is a critical bill that needs to be passed. Solar water heaters are the simplest, easiest and most cost-effective way to decrease the use of fossil fuels.

Currently most new homes are built without solar water heaters, and the members of the Hawaii Solar Energy Association are then able to convince a small percentage of these new homeowners to install solar water heater systems. This results in most new homes going bare and requiring unneeded electrical energy. This wasteful practice must be stopped.

Sincerely,

Rowena Batungbacal