

**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
ECONOMIC DEVELOPMENT & BUSINESS CONCERNS
AND
LABOR & PUBLIC EMPLOYMENT
Tuesday, March 18, 2008
8:45 a.m.
State Capitol, Conference Room 325

in consideration of
SB 644 HD1
RELATING TO ENERGY RESOURCES.

Chairs Yamashita and Sonson, Vice Chairs Wakai and Nakasone, and Members of the Committees.

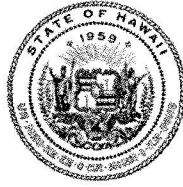
The Department of Business, Economic Development, and Tourism (DBEDT) supports SB644, HD1, which requires solar water heaters on new, single-family, residential construction beginning January 1, 2010. Exemptions would be allowed. This bill also addresses the need for licensed installers, as well as written attestations by licensed professionals with regard to county building code requirements and solar system sizing. This bill also restricts renewable energy income tax credits to solar thermal energy systems installed in single-family dwellings constructed prior to January 1, 2010.

This mandatory provision would support the energy objectives of the state by requiring the use of solar energy for water heating. The present combination of state tax credits, utility rebates, and renewable energy support have made Hawaii a leader in the use of solar energy. We support this measure but convey the need to provide continued consumer confidence in terms of quality installations and proper sizing. 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

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HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

TESTIMONY REGARDING SB 644 SD 3 HD 1 RELATING TO ENERGY RESOURCES

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

DATE: MARCH 18, 2008

TIME: 8:45AM

ROOM: 325

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 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 House Committees on Human Services & Housing and Energy & Environmental Protection amended the tax component of this measure by precluding the tax credit from applying to new homes constructed after January 1, 2010.

The Department of Taxation (Department) **offers comments.**

This bill would not affect the renewable energy income tax credit limits applicable to wind-powered energy systems or photovoltaic energy systems. This bill requires that the construction of every new residential single-family residence include the installation of a solar energy device to heat

water beginning January 1, 2010.

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, 2010.

TECHNICAL CONCERNS CORRECTED—The Department appreciates the prior committee's consideration of its technical concerns with this measure. Many of the Department's comments have been added to the current version of this measure.

REVENUE IMPACT—This legislation will result in a revenue loss of \$750,000 in FY2011 and annually thereafter.

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SUBJECT: INCOME, Energy conservation tax credits

BILL NUMBER: SB 644, HD-1

INTRODUCED BY: House Committees on Human Services and Housing and Energy and Environmental Protection

BRIEF SUMMARY: Amends HRS section 235-12.5 to provide that the tax credit for solar thermal energy systems shall only be applicable to residences originally constructed prior to January 1, 2010 beginning January 1, 2010.

Adds a new section to HRS chapter 196 to require solar thermal energy devices are to be installed on every new residential single-family residence, unless: (1) installation is impracticable due to poor solar resource; (2) installation is cost prohibitive; or (3) a substitute renewable energy device is installed, beginning with construction for which permits are issued after January 1, 2010.

EFFECTIVE DATE: Upon approval

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 system of credits was replaced a few years ago with tax credits focused solely on sources of energy that are renewable and not partially dependent on fossil fuel as are heat pumps and ice storage systems.

While some may consider incentives necessary to encourage the use of energy conservation devices, it should be noted that the high cost of these systems limits the benefit to those who have the initial capital to make the purchase. Recent interest in alternate energy is being driven by the high cost of fossil fuel used to generate energy and not by the credits. While the credits, state and federal, help ease the cost, it is the economic forces of the market that are driving consumers to explore alternate energy sources.

If it is the intent of the legislature to encourage a greater use of alternate energy devices and make a sincere effort to extend the opportunities to those at the lower end of the income scale, consideration should be given to a program of low-interest loans available to all income levels. One such program initiated by Act 240, SLH 2006, would allow consumers to pay-as-you-go, paying for these devices through the avoided costs of purchasing traditional energy resources. The Public Utilities Commission has been charged with implementing this pilot project.

This measure would require the installation of solar energy devices in new residential single family construction beginning on January 1, 2010 unless such installation is impractical. This mandate will merely add to the up-front cost of new residential dwellings, making the purchase for first time home buyers even more of a challenge. Mandates beyond health and safety issues are unacceptable in a free market economy.

Digested 3/17/08



**The Chamber of
Commerce of Hawaii**

Since 1850

**Testimony to the House Committee on Economic Development & Business Concerns
Tuesday, March 18, 2008 at 8:45 a.m.
Conference Room 325, State Capitol**

RE: SENATE BILL NO. 644, SD3, HD1 RELATING TO ENERGY RESOURCES

Chair Yamashita, Vice Chair Wakai, and Members of the Committee:

My name is Christine H. Camp, Chair of The Chamber of Commerce of Hawaii, Land Use and Transportation Committee. The Chamber strongly opposes S.B. No. 644 SD 3, HD 1.

The Chamber is the largest business organization in Hawaii, representing 1100 businesses. Approximately 80% of our members are small businesses with less than 20 employees. The organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The purpose of this Act is to:

1. Require the installation of solar energy or comparable renewable energy devices for heating water in all new residential construction; and
2. Expands the existing income tax credit for solar thermal energy systems installed in homes originally constructed prior to January 1, 2010.

The bill proposes to amend Chapter 196 HRS and require the Department of Business, Economic Development and Tourism to oversee a "mandatory solar water heater" program for all new residential construction. In addition, tax credits will be increase to encourage all existing residents to install solar water heating devices.

This bill was submitted during the 2007 Legislative Session and has been revived based on crude oil prices exceeding \$100 per barrel. Based on this increase, the legislature now believes that it is the appropriate time to shift the burden of the state's energy policy from state funded incentives to mandates on all new residential construction. While we agree that the rising price of fossil fuels will cause all of us to reconsider how we all use our limited resources, we question why government intervention is needed in this particular case. Mandating solar water heaters in all new construction seems to imply that new home buyers lack the ability to make this choice in light of the raising price of fossil fuels.

If the concern is truly to conserve energy and reduce our dependency on fossil fuels providing true transportation alternatives which currently uses 63% of our imported oil compared to 30% used for electricity may provide for more immediate and long-term benefits. Perhaps the legislature should consider leading by example in providing safe and convenient alternatives to driving, such as a dedicated and separated bike route from west to east Oahu to reduce our dependency on imported oil rather than simply

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The Chamber of Commerce of Hawaii Testimony on SB 644, SD3, HD1
March 18, 2008

mandating the installation of solar water heaters. If all new home buyers will be shouldering the state's energy policy in being required to purchase a solar water heater with their new home, how are our tax dollars being spent to reduce our dependency on imported oil?

We believe that choices, not mandates should be the role of government especially when the government intervention goes beyond its basic role of providing for our public health, safety or welfare. The choice of a hot water heating system should be governed by market incentives rather than regulation. Compliance with these types of regulations will increase the cost of the homes in Hawaii. Philosophically, this is the classic "Carrot versus the Stick" approach to influence peoples' behavior. We prefer the "carrot" approach and would recommend that you consider increasing the incentives for both new and existing homes to use more energy efficient home hot water heating systems, rather than require compliance through legislation.

In addition, many projects have inclusionary zoning provisions that require a certain number of units be constructed at certain income levels based on HUD guidelines developed for Hawaii. Some consideration should be given as the additional cost of a solar or comparable renewable energy devices for heating water will need to be reflected in the cost of the house.

Finally, the bill does not discuss on how the State DBEDT will implement and more importantly enforce this mandate. Some consideration should be given the staffing and resources required to monitor and enforce this program, including some type of process to adjudicate situations where there is non-compliance.

Thank you for this opportunity to express our views.



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March 18, 2008

The Honorable Kyle T. Yamashita, Chair
House Committee on Economic Development &
Business Concerns
State Capitol, Room 325
Honolulu, Hawaii 96813

RE: S.B. 644, SD3, HD1 - Relating to Energy Resources
Hearing Date: Tuesday, March 18, 2008 @ 8:45 a.m., Room 325

On behalf of our 10,000 members in Hawaii, the Hawaii Association of REALTORS® (HAR) **submits comments** on S.B. 644, SD3, HD1.

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, HD1, 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 system cost.

Mahalo for this opportunity to submit testimony.



HOUSE COMMITTEE ON
ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

SENATE BILL 644 SD 3 HD 1

BY
STEVEN GOLDEN

THURSDAY, MARCH 18, 2008

Chair Yamashita and members of the Committee:

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 HD 1, relating to energy resources.

This bill requires that solar water heating be installed in the construction of all new single family residences, unless installation is impracticable due to poor solar resource, installation is cost-prohibitive or a substitute renewable energy device is installed. The bill, however, is unclear on the process homeowners would need to follow to seek an exemption if they plan to build in an area with a poor solar resource.

The Gas Company strongly **opposes** the passage of this bill which 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 state 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.

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 State's Energy-Efficiency Policy Task Force spent two years evaluating various approaches to encourage greater energy efficiency including the merits of incentives and mandates. 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. The Task Force concluded that tax credits were the most efficient and effective means of encouraging energy efficiency. This bill, however, proposes to eliminate tax credits for new homes.

The residential segment of The Gas Company's statewide business represents approximately 90% of our current customer base of 67,000 customers. 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.

The use of gas also helps to diversify our energy resources and reduces our reliance on electricity. Gas is also 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, as there is limited practical use for it in 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 Gas Company advocates giving homeowners and developers 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. With the ENERGY STAR® ratings, developers and homeowners will have the information with which to make a meaningful choice for home water heating.

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

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

**Testimony Before the House Committee
On
Economic Development & Business Concerns**

March 18, 2008, 8:45 am

S.B. 644 SD3 HD1 RELATING TO ENERGY RESOURCES

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

Chair Yamashita, Vice Chair Wakai and members of the Committee:

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 the use of solar energy and supports S.B. 644 SD3 HD1.

The amendments proposed in HD1 address some of our comments made on S.B.644 SD3 :

1. A licensed installer, architect, or engineer must attest that the installed solar water heating system is suitably sized for the number of people expected to occupy the home, and
2. The licensed installer must also comply with all manufacturer and industry standards. This will help standardize installation quality, however further detail is needed to insure high quality.

We request that this committee consider further amendments to include language specifying what the installation standards will be for quality control purposes or how the installation standards would be developed. For example, it would be beneficial for the solar industry to work with the counties to develop required installation procedures, standards, and specifications, including an approved products list. It would also be beneficial if the Legislature were to appropriate funds for the on-going development of these requirements. These requirements are necessary in order to provide quality systems that will deliver the full benefits of solar water heating to consumers.

Thank you for this opportunity to testify.



HOUSE OF REPRESENTATIVES
REGULAR SESSION OF 2008

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS
REP. KYLE YAMASHITA, CHAIR
REP. GLENN WAKAI, VICE CHAIR

COMMITTEE ON LABOR & PUBLIC EMPLOYMENT
REP. ALEX SONSON, CHAIR
REP BOB NAKASONE, VICE CHAIR

RE: SB644 SD3, HD1 RELATING TO ENERGY RESOURCES

ON BEHALF OF R&R SOLAR SUPPLY, I SUBMIT ATTACHED TESTIMONY FOR THE ABOVE REFERENCED BILL.

Chair Yamashita, Chair Sonson, Vice Chairs and Committee Members,

My name is Rolf Christ.

For over 20 years I have been testifying on behalf of the Hawaii Solar Association on energy matters. Today I will testify on behalf of the business I own here in Hawaii.

Outside of the solar industry it is a little known secret that we have manufactured flat plate solar collectors here in Hawaii for over 25 years. Since our founding, this has amounted to over 30,000 solar collectors produced, all installed here in the State of Hawaii. Recent federal survey data shows that we manufactured 8% of the total collectors produced in the U.S. in year 2006 alone. In addition to those figures we have bought and sold thousands more solar collectors manufactured on the mainland.

Most of our product is sold to plumbing and solar contractors, who in turn offer our products to home owners. In most cases homeowners are offered products from 2 or more contractors with differing product quality, sizing, labor and product warranties. Competition is fierce and inferior products and "fly by night" contractors are singled out and do not prevail in the market place. Also, standards developed by Hawaiian Electric Company, with input from the plumbing and solar industries, have kept the quality of our solar systems above most of the rest of the nation. I brought with me examples of solar collectors from both ends of the cost spectrum. For a home owner with rebates and tax credits available, it is an easy decision to choose a longer lasting, more efficient product, even if it is more expensive. For a builder or developer who has no

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interest in the effectiveness or longevity of the product after the house is sold, it might be as easy a choice to pick a cheaper product, that unfortunately produces less hot water, won't last as long or has a shorter warranty.

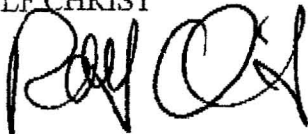
We also find it is difficult to properly size a system without knowing the needs of the family using it.

Right now, all utility rate payers and all taxpayers are financially supporting the purchase of solar hot water systems by paying for rebate and credits to distribute the impact of the purchase price. Rate payers benefit by deferring the construction of a power plant. The State of Hawaii and its residents benefit economically, their dollars staying and circulating within Hawaii instead of leaving the state for the purchase of oil. Because of this, systems are very affordable and market penetration in Hawaii is second to none in the nation.

Mandating systems will raise the net cost of a solar hot water system to the homeowner by eliminating various incentives available to the people of Hawaii, and inevitably adding a builders mark-up, an additional system cost avoided by direct sales between contractors and homeowners.

Alternatives to mandating solar systems could be mandating solar piping in all new houses and providing water heater closets big enough for solar tanks would have a more positive impact, or mandating builders to offer solar systems as an option on all new construction. 50 % of owner-occupied homes in Hawaii already have solar systems installed, a percentage that increases every year. High oil prices are incentive enough for citizens, and a major driver to increase market penetration without a mandate. Hawaii's solar market is already a showcase for the nation thanks to the foresight of the proactive legislative body here in our state. Please don't try to fix something that isn't broken.

ROLF CHRIST



PRESIDENT



Sierra Club Hawai'i Chapter

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HOUSE COMMITTEE ON COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

March 18th, 2008, 8:45 A.M.

(Testimony is 4 pages long)

TESTIMONY IN SUPPORT OF SB 644 SD3, SUGGESTED AMENDMENTS

Chair Yamashita and members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, strongly supports SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. We greatly appreciate the amendments made by the previous chairs to address some of the concerns raised by industry groups and we offer a few additional amendments to clarify the implementation of this policy at the end of our testimony. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. A solar water heater on each and every new home is absolutely essential to achieve our state's energy and greenhouse gas targets.

Solar hot water should be a basic amenity in any new home in Hawai'i, just like indoor plumbing and electricity. Yet the majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 HD1 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. The following sections focus on the need for Senate Bill 644 SD3 HD1.

A full tank of gas lands on your roof every day

Hawai'i is blessed with substantial solar resource. The most populated parts of the state receive between 450 and 500 calories of solar radiation per square centimeter every day¹. To put into perspective, an average rooftop space of 1100 square feet receives the energy equivalent of approximately 15 gallons of gasoline daily. We are the Saudi Arabia of sun. While some parts of Hawai'i receive less (some parts of Puna, for instance), there is still ample sun to keep water hot. This measure would put that hot energy to work, reducing fossil fuel use and the cost of living.

A solar water system is the most basic renewable energy device to harness the clean energy from the sun. The technology is mature, tested, and works. In fact, the Romans used solar energy to heat the water flowing to baths in aqueducts.

¹ State of Hawai'i (2003). Hawaii Statewide GIS Program Solar Radiation Maps.

We must act today to stabilize carbon emissions

An overwhelming sense of urgency compels action on this and other substantial energy measures before the legislature. Given the rapid acceleration of climate destabilization, scientists are recently calling for near-zero carbon emissions within a matter of decades². Solar water heating forms the foundation of reducing residential carbon emissions. Additionally, the cost of living has increased in Hawai'i due to the escalation of the global oil price. Since this measure was considered last year at this time, the price of oil has DOUBLED³. With 60,000 new homes planned for O'ahu alone over the next 20 years⁴, this measure is critically needed to ensure that we build them energy-smart and minimize the need for additional electricity demand.

New homes, of course, are only part of the picture—hundreds of thousands of existing housing units in Hawai'i need to be retrofit with solar water heaters as well. This measure wisely increases the current solar tax credit to increase the adoption of solar thermal for existing homes.

Israel, Spain, and others mandate solar

While bold, this measure is not without precedent. Israel has mandated that all new homes in the country come equipped with solar water heaters and now they are standard on some 95% of homes. Since January, 2007, Spain has required solar water heaters on all new residential construction⁵. Here in Hawai'i, the Navy has been building all of its new residential units with solar thermal. In fact, the Army and Air Force are starting to build solar photovoltaic into some of its new residential units. This is construction performed by private contractors—the same type of contractors who would install solar for new civilian residential units. While passage of SB 644 SD3 HD1 would make Hawai'i the first state in the nation with such a requirement, solar mandates have been successfully used elsewhere to decrease energy costs and reduce fossil fuel use.

Some 80% of Hawai'i homes lack solar, and the majority of new homes are built with electric hot water heaters installed

While Hawai'i leads the nation in the percentage of installed residential solar water heaters, some 80% of homes still lack this basic amenity. That means hundreds of thousands of housing units in Hawai'i rely on fossil fuel to keep their showers hot. Some local builders are starting to offer solar water heating as an option for new home buyers, but the majority of new homes built in Hawai'i do not use solar. Even with the established solar industry in Hawai'i and ample incentives, the most new homes are not converting to solar. A quick scan of Google Earth verifies this fact—particularly for developments in the fast-growing (and hot) Ewa and Kapolei regions of O'ahu. Considering that we are adding around 5,000 new homes in Hawai'i annually, this measure would go a long way to reduce fossil fuel use and greenhouse gas emission.

² Matthews, H. D., and K. Caldeira (2008), Stabilizing climate requires near-zero emissions, *Geophysical Research Letters*, 35, L04705, 27 February 2008.

³ U.S. Energy Information Administration (2008), Short-Term Energy Outlook, 11 March 2008.

⁴ Gomes, Andrew(2006), 60,000 new homes planned for O'ahu, *Honolulu Advertiser*, 19 September 2006.

⁵ International Renewable Energy Alliance, <http://www.ren-alliance.org>, accessed 12 March 2008.

A solar mandate will dramatically reduce greenhouse gas emissions

Solar water heating is the single best “clean” energy alternative for residences in Hawai‘i. A typical family home with solar water heating avoids over 2.5 tons of carbon dioxide from being emitted annually (about 3000 kilowatt-hours avoided). If approximately 5000 new homes are built annually and only 25% eventually have water heaters installed, then a solar mandate would prevent nearly 10,000 tons of greenhouse gases additionally from being emitted every year and over 3 million tons after 25 years.

A solar mandate could add \$690 million to our state over 25 years

A residential solar requirement would keep money circulating in the state economy. Oil is expensive and getting more expensive. In the time since this identical measure was heard by these two committees, the price of petroleum has essentially doubled. Hawai‘i now spends nearly \$5 billion annually to import petroleum (approximately 47,000,000 barrels annually⁶). If a solar mandate for new residential units were to pass, we could save millions of dollars annually on oil imports. Consider the previous estimate of 5000 new homes added per year. If the average solar home displaces the need for roughly 5 barrels of oil (comparable to 2.5 tons of CO₂) and oil stays at \$100 per barrel (it is currently trading at \$110), then this measure would keep \$1.9 million in the state’s economy additionally every year (again, considering only the 75% of homes that would not install solar independent of this mandate). Over 25 years (assuming the price of oil *doesn’t* increase), that would amount to a collective savings of \$690 million (compared with status quo 25% solar adoption rate).

What’s more, the energy from the sun is stored in the form of hot water, offsetting the electrical system peak that occurs in the evening. This helps offset the need for expensive new power plants—another societal benefit from increased residential solar energy use.

Solar built into the house upfront makes living more affordable

With average household use, most solar water heaters will pay for themselves in energy savings between 3 and 7 years. When systems are built into a home during construction—and when many systems are installed simultaneously in a larger subdivision and economies of scale are realized—solar water heaters are less expensive than an electric heater retrofit. When rolled into a 30-year mortgage, homeowners with solar will start saving money on day one. Even with other financing schemes, solar is a no-brainer investment that brings down the monthly cost of living. If current trends continue, the cost of residential electricity will continue to grow, making electric water heating even more expensive—and solar water heating more of a “no-brainer.” Owners have to sacrifice very little to obtain the exact same “service” as they would receive with conventional water heating.

The cost of living is a top-of-mind issue for many in Hawai‘i. Senate Bill 644 SD3 HD1 makes new home ownership more affordable by reducing the monthly utility burden.

⁶ State of Hawai‘i (2007). Department of Business, Economic Development, and Tourism, Data Book 2006.

The right policy will preserve the robust solar industry in Hawai'i while expanding the benefits of solar to new customers

The solar industry has legitimate concerns about the potential effects of a mandate on the quality of solar installations. They have long memories and remember the unscrupulous fly-by-night installers who were simply taking advantage of the 50% tax credits offered at the time. These poor installations soured some people on the use of solar and did damage to the reputation of the solar industry—damage that lasts today when some cite concerns about leaking roofs or make ridiculous claims about solar energy's effectiveness.

These concerns are not insurmountable. Senate Bill 644 SD3 HD1 wisely requires that the solar devices "be installed by a licensed installer in compliance with all manufacturer and industry standards" for quality assurance. A licensed engineer or architect should also be required for approval to ensure some sort of accountability. By requiring a licensed engineer or contractor, the individual's name, reputation, and license are on the line.

SUGGESTED AMENDMENTS

The Sierra Club respectfully asks that SB 644 SD3 HD1 be amended in the following ways:

Page 5, line 19: specify "building" permits (or other type of permit) to remove any ambiguity of when this policy starts.

§196- Solar thermal device required for new single-family residential construction. (a) Beginning with construction for which **building** permits are issued after January 1, 2010, a solar thermal device shall be installed as the primary water heating system in the construction of every new residential detached single-family residence unless...

Page 5, line 20 though page 6, line 13: clarify that in the case where solar installation is impracticable or cost prohibitive, an architect or engineer makes such a certification to the county building code authority. Also define "cost prohibitive" in some meaningful way.

...a solar thermal device shall be installed as the primary water heating system in the construction of every new residential detached single-family residence unless **an architect or engineer licensed under chapter 464 certify to the county building code authority that:**

- (1) Installation is impracticable due to poor solar resource;
- (2) Installation is cost prohibitive, **requiring an effective installation cost of more than \$0.30 per kilowatt-hour when calculated over ten years of average use;** or
- (3) A substitute renewable energy device **will be [is]** installed; provided that if a substitute device is installed, the device shall be the most practical, energy-efficient device available. [~~as determined by an architect or engineer licensed under chapter 464, and the architect or engineer attests in writing that a solar thermal device cannot be installed for the reasons stated in paragraphs (1) or (2), and submits the written attestation on behalf of the building permit holder to the county building code authority.~~]

Thank you for the opportunity to testify.



Conservation Council for Hawai'i

Testimony Presented to the House Committee on Economic Development and Business

Hearing: Tuesday, March 18, 2008
8:45 am
Room 325

Re: Support for SB 644 SD 3 HD 1 Relating to Energy Resources

Aloha. The Conservation Council for Hawai'i supports SB 644 SD 3 HD 1, 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 homeowners will thank you for the cost savings.

Global 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,

Marjorie Ziegler



Working Today for the Nature of Tomorrow!

Telephone/Fax 808.593.0255 • email: info@conservehi.org • web: www@conservehi.org

P.O. Box 2923 • Honolulu, HI 96802 • Office: 250 Ward Ave., Suite 212 • Honolulu, HI 96814

Hawai'i Affiliate of the National Wildlife Federation

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

BIA-HAWAII**BUILDING INDUSTRY ASSOCIATION**

Committee on Economic Development and Business Concerns

March 18, 2008

8:45 a.m.

Conference Room 325

The Honorable Representatives Kyle Yamashita Chair and Members
Committee on Economic Development and Business Concerns
State House of Representatives, Room 325
Honolulu, Hawaii 96813

Dear Chair Yamashita and Members:

Subject: House Bill No. SB 644 SD 3, HD 1 Relating to Energy Resources

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 strongly opposes S.B. No. 644 SD 3, HD 1.

The purpose of this Act is to:

1. Require the installation of solar energy or comparable renewable energy devices for heating water in all new residential construction; and
2. Expands the existing income tax credit for solar thermal energy systems installed in homes originally constructed prior to January 1, 2010.

The bill proposes to amend Chapter 196 HRS and require the Department of Business, Economic Development and Tourism to oversee a "mandatory solar water heater" program for all new residential construction. In addition, tax credits will be increase to encourage all existing residents to install solar water heating devices.

This bill was submitted during the 2007 Legislative Session and has been revived based on crude oil prices exceeding \$100 per barrel. Based on this increase, the legislature now believes that it is the appropriate time to shift the burden of the state's energy policy from state funded incentives to mandates on all new residential construction. While we agree that the rising price of fossil fuels will cause all of us to reconsider how we all use our limited resources, we question why government intervention is needed in this particular case. Mandating solar water heaters in all new construction seems to imply that new home buyers lack the ability to make this choice in light of the raising price of fossil fuels.

If the concern is truly to conserve energy and reduce our dependency on fossil fuels providing true transportation alternatives which currently uses 63% of our imported oil compared to 30% used for electricity may provide for more immediate and long-term benefits. Perhaps the legislature should consider leading by example in providing safe and convenient alternatives to

driving, such as a dedicated and separated bike route from west to east Oahu to reduce our dependency on imported oil rather than simply mandating the installation of solar water heaters. If all new home buyers will be shouldering the state's energy policy in being required to purchase a solar water heater with their new home, how are our tax dollars being spent to reduce our dependency on imported oil?

We believe that the choices, not mandates should be the role of government especially when the government intervention goes beyond its basic role of providing for our public health, safety or welfare. The choice of a hot water heating system should be governed by market incentives rather than regulation. Compliance with these types of regulations will increase the cost of the homes in Hawaii. Philosophically, this is the classic "Carrot versus the Stick" approach to influence peoples' behavior. We prefer the "carrot" approach and would recommend that you consider increasing the incentives for both new and existing homes to use more energy efficient home hot water heating systems, rather than require compliance through legislation.

In addition, many projects have inclusionary zoning provisions that require a certain number of units be constructed at certain income levels based on HUD guidelines developed for Hawaii. Some consideration should be given as the additional cost of a solar or comparable renewable energy devices for heating water will need to be reflected in the cost of the house.

Finally, the bill does not discuss how the State DBEDT will implement and more importantly enforce this mandate. Some consideration should be given the staffing and resources required to monitor and enforce this program, including some type of process to adjudicate situations where there is non-compliance.

Thank you for this opportunity to express our views.

Karen I. Nakamura

HAWAII RENEWABLE ENERGY ALLIANCE

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

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Secretary/Treasurer
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Directors

Warren S. Bollmeier II
WSB-Hawaii

John Crouch
PowerLight Corporation

Cully Judd
Inter Island Solar Supply

Herbert M. (Monty) Richards
Kahua Ranch Ltd.

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT AND BUSINESS CONCERNS

SB 644 SD3 HD1, RELATING TO ENERGY RESOURCES

March 18, 2008

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

The purpose of SB 644 SD3 HD1 is to: (1) require the installation of solar thermal or comparable renewable energy devices to heat water in single-family residences constructed after 1/1/2010; and (2) restrict renewable energy income tax credit for solar thermal energy systems installed and placed in service in single-family residential properties to those constructed prior to 1/1/2010.

HREA **supports the intent of this bill**, which is to increase the number of solar thermal energy systems in Hawaii. However, we have a number of business concerns about the bill as drafted, and offer the following comments for the committee's consideration:

- (1) What would be mandated? If there is to be a mandate, it should be only for **solar thermal energy systems**, and **NOT** include **comparable renewable energy devices**. The proposed definition of the latter in Section 2 is problematic and unworkable;
- (2) What's new in HD1? HD1 makes it clear that the intent is for Hawaii's homebuilders to include the cost of solar thermal energy systems in the cost of the home and the homeowner's mortgage. We agree the economic argument for this approach is persuasive, assuming that quality solar systems are designed, installed and maintained;
- (3) What is the crux of this bill? It appears that the primary implementation responsibility for solar systems will shift to the **homebuilder**, rather than the utility. This **could** make sense, as the utility, will no longer be in this business as of Dec. 31, 2008. However, the bill assumes implicitly that the **homebuilder will be responsible** for ensuring that the solar systems will be designed, installed and maintained according to existing or future utility standards, or possibly county standards. We are not sure that the homebuilder, which could be the homeowner, **would be willing to assume this responsibility**; and
- (4) Quality Control. Given that solar systems standards are a living creature, we have grave concerns regarding the proposed approach. If the committee intends to pass out this measure, we recommend that a government agency be assigned **caretaker responsibility** for the solar standards, including working closely with the homebuilders. Two possible candidates, assuming provision of funding, would be the Public Benefits Fund administrator or DBEDT.

Thank you for this opportunity to testify.

wakai1-Karen

From: Paul Campbell [campbellcenter@hawaiiintel.net]
Sent: Sunday, March 16, 2008 7:29 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Aloha Maua.

I write as Chair of Sierra Club Hawai'i, representing over 1,000 members on Moku O Keawe, in strong support of SB 644 SD3 HD1. This legislation is a major step in the direction of sustainability for Hawai'i nei!

Mahalo nui loa,
Pau Campbell, Chair
Moky Loa Group
Sierra Club Hawai'i

wakai1-Karen

From: randy ching [oahurandy@yahoo.com]
Sent: Saturday, March 15, 2008 9:06 AM
To: EDBtestimony
Subject: In support of SB644 SD3 HD1 - relating to energy resources

House Economic Development and Business Committee
Rep Kyle Yamashita, chair
Rep Glenn Wakai, vice chair

In support of SB644 SD3 HD1 - relating to energy resources

Hearing on Tuesday, March 18
8:45 a.m. in conference room 325

Aloha Chair Yamashita, Vice Chair Wakai, and members of the committee,

The Sierra Club, Oahu Group supports SB 644 SD3 HD1 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 homeowner 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.

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 HD1.

Mahalo.

Sincerely,

Randy Ching

Sierra Club, Oahu Group
chair

oahurandy@yahoo.com

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wakai1-Karen

From: Barbara Polk [ednbarb8@earthlink.net]
Sent: Sunday, March 16, 2008 6:13 PM
To: EDBtestimony
Subject: SB 644 testimony for March 18

The following testimony is for the Tuesday, March 18, 8:45am hearing on SB644 SD 3, HD 1 by the House Committee on Economic Development and Business Concerns.

TO: Rep. Kyle T. Yamashita, Chair, Rep. Glen Wakai, Vice-Chair
Members of the House Committee on Economic Development and Business Concerns

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

SUBJECT: SUPPORT FOR SB 644 SD 3 HD 1 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 important step toward making Hawaii energy independent.

wakai1-Karen

From: *Scott Werny* [clearwater@hawaii.rr.com]
Sent: Monday, March 17, 2008 7:19 AM
To: EDBtestimony
Subject: Testimony in support of SB644

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Tuesday, March 18th, 8:45am

Testimony in Support of SB 644 SD3 HD1

Aloha Chair Yamashita and honorable Committee members,

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step towards Hawai'i's energy independence, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i.

Hawai'i is gifted with abundant energy from the sun and I believe we should be doing everything we can to use this energy to reduce our use of oil. I also believe that stronger tax credit incentives will help drive more solar water heater usage in existing homes.

Although environmentally friendly solar water heaters save homeowners money, most homes in Hawai'i use electricity, which is generated by fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters despite the ease of installing them when the house is under construction. SB 644 SD3 is a common sense policy to require that developers have the long term interest of new home buyers in mind.

Let's act now and lead by example for the rest of the nation.

Mahalo,
Scott Werny
(808) 391-4488
Co-chair Surfrider Foundation Oahu Chapter

The Surfrider Foundation O'ahu Chapter is a non-profit grassroots organization run solely by volunteers with more than 500 members on O'ahu. In its 12th year of activism, the O'ahu Chapter works to improve ocean water and beach quality, to keep and open access to the ocean for all to enjoy, and to assure that development on our island is responsible by having minimal impact on our coastal environment. The chapter is one of 80 Surfrider Foundation chapters worldwide with over 50,000 members. For more information go to: www.surfrider.org/oahu or www.myspace.com/oahusurfriderchapter or call 531-SURF.

wakai1-Karen

From: yamashita1-lan
Sent: Monday, March 17, 2008 12:12 PM
To: wakai1-Karen
Subject: FW: HICA Opposition to SB644,HD1

-----Original Message-----

From: Earl Yempuku [mailto:honualandscaping@yahoo.com]
Sent: Monday, March 17, 2008 10:57 AM
To: Rep. Kyle Yamashita
Cc: government@bia-hawaii.com
Subject: HICA Opposition to SB644,HD1

Honorable Representative Kyle Yamashita,

My name is Earl Yempuku and I am the Legislative Committee Chairman for the Hawaii Island Contractor's Association. Our group is made up of approximately 150 individuals and companies involved in the construction industry, ranging from licensed contractors, suppliers and financial institutions.

We have been following the debate on SB644,HD1 "Relating to Energy Resources" mainly through our association with the BIA organization of which we are a member.

While laudable in intent, we would like to go on record as OPPOSING SB644,HD1 in its current form. The arguments presented in the testimony of Ron Richmond of the HSEA on March 14, 2008 were persuasive enough to warrant our position.

Thank you for the opportunity to voice our concerns.

Sincerely,

Earl Yempuku
Chairman, HICA Legislative Committee

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wakai1-Karen

From: Alan Ewell [ewell@hawaii.rr.com]
Sent: Monday, March 17, 2008 9:36 AM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the EDB Committee:

I strongly support SB 644 SD3 HD1, mandating that all new homes are equipped with solar water heaters, where practical. This measure is a critical step in securing Hawaii's energy future. It will reduce our contribution to global climate change, and improve the affordability of housing in Hawai'i.

Although environmentally-friendly solar water heaters can save homeowners \$600 per year on Oahu (and over \$1000 on Kauai), the vast majority of existing homes in Hawai'i still use fossil fuels to heat their water. Owners of these homes should be encouraged to add solar water heaters by extending existing rebates and tax credits.

Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction, and the fact that their cost can be included in the mortgage for less than the price of the electricity they replace.

SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. Please make sure that it is enacted this session.

Aloha,

Alan Ewell

Co-chair, Committee on the Environment

Honolulu Chapter American Institute of Architects

4176 Round Top Drive
Honolulu, Hawaii 96822
808-945-3853 voice
808-944-8177 fax

wakai1-Karen

From: L. CURTIS [me2me2lc@aol.com]
Sent: Sunday, March 16, 2008 5:42 PM
To: EDBtestimony
Subject: SB-644

I have had solar water heating since the first time I bought a home. It should be required. We waste constantly and it must end here and now, not 10 years from now or next year. At this moment, we are wasting natural resources, stop being wasteful. This also applies to voting for building the "ZERO-EMISSIONS WASTE MANAGEMENT/RECYCLING PAPER MILL" which would recycle our garbage with zero emissions. The waste water from our sanitation can be reused in this factory (60%) which will be cleaned and not dumped into the ocean against EPA standards. The cost of the mill would run between 40 to 60 million, less than the cost of building the secondary waste water process. We could build two factories, get rid of garbage, make stronger concrete, pet products, paper products all from garbage that we have to pay someone to remove and dispose of. They would just take it for free. I am appalled that Dr. Eric Takemura and Frank Doyle actually asked them "What are you going to pay us for our garbage?" That's the response from the head of Waste Management!!!! This info will definitely be advertised to advise the people how well we manage our waste.

LAURA CURTIS

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wakai1-Karen

From: Dacaccia@aol.com
Sent: Sunday, March 16, 2008 6:33 PM
To: EDBtestimony
Subject: Testimony on sb644

Solar hot water is a natural for Hawaii. There are a lot of solar water heaters on the Mainland but they are not as desirable as ones in Hawaii. They need complicated protection from freezing, they don't get much sunlight in the winter and they have much cheaper electricity, but still they are being installed there. The rate of return for installing solar water heaters is much greater in Hawaii. With all the talk of energy independence for Hawaii, this is really a no-brainer. Of course the electric company is against it. They sell a lot of electricity to heat water with. They apparently have no interest in energy independence for us. But hopefully the legislature does have our best interest at heart.

David Caccia
Honokaa, HI 96727

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3/17/2008

wakai1-Karen

From: Bob Sumpf [BSumpf@hawaii.rr.com]
Sent: Sunday, March 16, 2008 2:22 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Please pass this bill. If for no other reason, it is the right thing to do. Knock down all the objections and just do it. Long term it will pay huge dividend.

Aloha, Bob

Robert D. Sumpf
1516 Kalaniiki Street
Honolulu, Hawaii 96821

(808) 393-8277 cell
bsumpf@hawaii.rr.com

wakai1-Karen

From: Denise Antolini [antolini@hawaii.rr.com]
Sent: Sunday, March 16, 2008 1:43 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Dear Chair Yamashita, Vice Chair Wakai, and Members -

I strongly support SB644.

If Hawaii is serious about increasing alternative energy options and decreasing dependence on imported fossil fuels, **widespread residential solar hot water is an obvious solution.**

This bill takes an approach that is cost-effective ("pennies on the dollar") to homeowners and the public through a up-front mandate on new housing.

This committee should be very skeptical of any claims that "we are already doing enough" with solar HW - the statistics on the amount of solar hot water installations in Hawaii appear to be highly misleading because they likely include military housing (which has wisely been doing mandatory installs for years).

Even a casual observer of Oahu's neighborhoods can see that the actual percentage of houses -- old and new -- with solar HW is pitifully small.

Making sure that existing housing continues to have an incentive to install solar HW through tax credits is essential.

Equally important is ensuring that all new housing that *can* have solar HW *does* have it, from the get-go, with no fuss to the new owners and not as a more-expensive retrofit.

Our family installed solar HW about a year ago - with no inconvenience to us, and a little up front investment, the cost savings have been substantial, shaving a large percentage off of our electricity bill.

Moreover, having solar HW in place and working well on a widespread basis has a spillover education effect - it shows our neighbors and our children that solar power is a viable energy future for Hawaii.

Mahalo,

Denise Antolini
Pupukea resident

wakai1-Karen

From: Mary Ikagawa [mikagawa@hawaii.edu]
Sent: Saturday, March 15, 2008 1:03 PM
To: EDBtestimony
Subject: Testimony in support of SB644

TO: SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND BUSINESS CONCERNS

FROM: Mary Ikagawa, Kailua, Oahu

IN SUPPORT OF Senate Bill 644, House Draft 2 – RELATING TO ENERGY
RESOURCES

Scheduled for Tuesday March 18, 2008 8:45 P.M. in Conference Room 325

Aloha Senator Fukunaga and members of the Committee,

Solar is the energy of the future that is available now. Incorporating solar into new construction is a common sense step that requires a little push to overcome the inertia of doing things the same old inefficient way. Delaying this step slows our progress toward overcoming global warming and oil dependence. Please support SB 644.

wakai1-Karen

From: Jeffnakayama@aol.com
Sent: Saturday, March 15, 2008 2:41 PM
To: EDBtestimony
Cc: Lara Nitta
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Sincerely,

Jeffery C. Nakayama
940 Punahou St., Apt #7
Honolulu, HI 96826
jeffnakayama@aol.com

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3/17/2008

wakai1-Karen

From: par038@hawaii.rr.com
Sent: Saturday, March 15, 2008 3:25 PM
To: EDBtestimony
Subject: Testimony in Support of SB 644 SD3 HD1

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS Tuesday, March 18th, 8:45am
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters. To help reduce dependence on oil and reduce impact on environment please vote for this.

Sincerely,
Art Parker
600 Queen St, apt 1805
Honolulu, HI 96813

wakai1-Karen

From: Leslie Roach-Laing [lrl@hawaiiintel.net]

Sent: Saturday, March 15, 2008 3:54 PM

To: EDBtestimony

Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

I am writing to express my strong support for SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. I believe this to be a critical step in securing Hawaii's energy future. We must reduce our dependence on fossil fuels and achieve energy self sufficiency through the use of clean energy systems. In addition to increasing Hawaii's security we would positively reduce our contribution to global warming.

SB 644 SD3 is a common-sense policy to require that developers have in mind the long-term interest of new home buyers. This measure would show that the government of Hawaii is a committed leader in the switch to clean energy.

I also believe that the solar tax credit should remain in place as an incentive for owners of existing homes to change over from an electric water heater to a solar water heater system. The tax credit could apply to homes built prior to a specified date.

Sincerely,

Leslie Roach-Laing
917 Maluniu Avenue
Kailua, Hawaii 96734
lrl@hawaiiintel.net
cell 808 284 2210

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3/17/2008

wakai1-Karen

From: Peter G. Medwick [medwickp001@hawaii.rr.com]
Sent: Saturday, March 15, 2008 6:08 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Aloha, Prior to having lived in Hawaii for 21 years I went to college in the Sierras where we built our own solar panels. Matter of fact we built the entire school from military surplus.

Our systems were integrated into the existing electrical panel and our electrical expense plummeted. When he was alive Mr. Lear (Lear Jet) based in Reno was so impressed he worked with our College to include steam production, innovative wood stoves etc.

So why here in sunny Hawaii do we need to burn oil?? Ther is plenty of sunshine, wind power and even water.

Here on Maui we have wind turbines that could store energy. Which is one of the problems. Simply by using some of the excess wind power to suck up water to tanks on the hill and when the wind slows we let the water go. The water then creates more electricity using turbines similar to dams.

There are hundreds of ways to create safe clean energy. This is where our future lies not in burning and polluting renewable resources.

There is no one single answer we must integrate all forms of renewable energy. We could keep our people here in good jobs overseeing and designing such systems.

This is also a very important security matter. We wouldn't put all our troops in one place would we? Same with our nest eggs of energy spread it around so we don't get caught short.

I would love to help more but the medical systems here are so bad I must leave to o bad no one had any foresight there either. Good luck thanks for the fish.

Semper Fidelis, Peter Medwick

wakai1-Karen

From: ALANAisforLOVERS@aol.com
Sent: Saturday, March 15, 2008 6:20 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee,
I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in pushing Hawaii towards a *true* sustainable future. This would also lower the cost of living in Hawaii because the use of solar water heating dramatically lowers electrical bills. Surprisingly, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. And it is also to require that the state keep the long-term interest of the land and community itself in mind. I plan on installing solar water heating in my own home in the near future, and hopefully in the next few years I will be able to make my home completely solar powered. I feel that everyone would give a sigh of relief to know that their homes came with something as convenient and important as a solar water heater. Thank you.

Sincerely,
Alana Bryant

2746 Kahawai Street, Honolulu, HI 96822

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wakai1-Karen

From: Bill Godby [wgodby@hawaii.rr.com]
Sent: Saturday, March 15, 2008 6:35 PM
To: EDBtestimony
Subject: Testimony in support of SB644

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS Tuesday, March 18th, 8:45am
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. Clearly this is an opportunity for us to make a significant step forward in reducing our dependency on fossil fuel in addition to taking advantage of a resource that we are fortunate to have plenty of. It is essential for our state to begin to move in the direction of energy independence and self-sufficiency. This bill is clearly a step forward in the right direction.

Mahalo,
William C. Godby
1742 Haleloke St.
Hilo, Hawaii 96720

wakai1-Karen

From: Eloise Engman [pualeafarm@hawaiiantel.net]
Sent: Saturday, March 15, 2008 7:27 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Sincerely,

**Eloise Engman
22 Auoli Drive
Makawao, Hawaii
572-5831**

wakai1-Karen

From: Beryl Blaich [blaich@aloha.net]
Sent: Saturday, March 15, 2008 7:33 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Dear Chairman Yamashita and Vice Chairman Wakai,

As homeowners who chose solar water twenty eight years ago and have not had needed to service our unit, we strongly urge support of SB 644.

There are so many things which government mandates for the collective good: vehicle registration and insurance, tb tests before your work in many industries, immunizations before starting school leap to mind. We all know the benefits of these "routine" required expenditures which are investments for the public good. Frankly if they were not required we all know that many people would elect to forego them, taking a risk (and maybe putting others at risk) because there are always other things on which to spend money.

It is clear that all of us, everyone on the planet is at risk from global warming - particularly we islanders who are economically dependent upon the attraction of our coastlines. Oil dependency sends the United States into deficits and, most tragically, into costly military action. Oil dependency deletes our personal earnings. In Hawaii, not having solar water heating is actually wasteful: money is spent for hot water that could be spent and invested countless other ways.

Therefore, although it will initially add a cost to new homes, home owners will recoup these costs and collectively we will benefit from this responsible preventative action. I support a limited period of tax rebates to continue to give incentives solar heating installations. And this bill can be repealed when oil and coal no longer provide most of our power generation.

Thank you for your work,
With aloha,
Beryl blaich
PO Box 1434
Kilauea, HI 96754

wakai1-Karen

From: Glenys Spitze [GMGlenys@webtv.net]
Sent: Saturday, March 15, 2008 7:57 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Attachments: signature



signature.htm (485
B)

Many years ago when visiting Japan, I was impressed with the solar panels on most homes & buildings even in the countryside. Solar power is long overdue in all of the US Let Hi lead the way with SB644 Thank you for your attention. G,Spitze

Frank O. Hay

TESTIMONY regarding Senate Bill 644 – Relating to Energy Resources, before the Hawaii State House Committee on Economic Development and Business Concerns, Representative Kyle T. Yamashita, Chair, and Representative Glenn Wakai, Vice-Chair, Meeting at Honolulu, Oahu, Hawaii on 18 March 2008, 2.45 pm in House Conference Room 644

Ladies and Gentlemen,

I strongly support Senate Bill 644: Requiring solar thermal or comparable renewable energy devices to heat water in single-family residences. This bill makes sense in any environment, even those favored with much less sun than our fair islands.


I recognize the greater initial investment, but weighed against that initial investment are substantial long-term savings, not only to the home-owner, but to our dependency on foreign oil. To quote the Sierra Club's testimony, "Solar hot water is perhaps the easiest, most cost effective means of reducing household electricity use."

The environmental benefits are clear. It would stimulate our economy by keeping money in State, rather than paying for foreign oil, and create employment in both manufacturing the systems and installing them.

I own a mountain cabin that has *never* been "on the grid". In more than thirty years, I've never had an electrical bill. My neighbors have experienced ever higher electrical expenses. These increasing expenses translate to a substantial burden to our State's economy, money that could be spent in Hawaii rather than shipping it off shore. This is one intelligent step forward, one of many we could take to secure a brighter future for our children.

I strongly support Senate Bill 644 and ask that you pass the measure unanimously. Thank you very much.

Me ke aloha,



wakai1-Karen

From: Carol Cunha [ccunha@pplg.com]
Sent: Saturday, March 15, 2008 11:55 AM
To: EDBtestimony
Subject: Support of SB644 Solar Water Heaters

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that all new homes come with solar water heaters. This would be an extremely important step in stopping our dependence on fossil fuels. With all the sun we get, why are we relying on fossil fuels so much? Why does Hawaii depend so much on oil for energy. We depend on oil more than any other state! We should be focusing on making Hawaii the first green state. I would love to see solar power all the way and not just for water heaters, but at least, the solar water heaters would be going in the right direction. Let's strive to be more independent and self-sufficient.

Carol

wakai1-Karen

From: Cheryl Reeser [reeser@hawaii.edu]
Sent: Saturday, March 15, 2008 12:53 PM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

I am writing to add my strong support of SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This bill couldn't be more timely with the rise in energy costs, which show no sign of going down. This is a cost we will be dealing with permanently unless we do something now, and Hawaii has that opportunity. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Sincerely,

Cheryl Reeser
1445 Pi'iholo Road
Makawao, Hawai'i 96768
reeser@hawaii.edu

wakai1-Karen

From: Douglas A. Codiga [codiga@hawaii.rr.com]
Sent: Saturday, March 15, 2008 10:58 AM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i.

As you know, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction.

SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Sincerely,

Douglas A. Codiga
2129 Kamehameha Ave.
Honolulu, HI 96822

wakai1-Karen

From: Susan Murata [smurata@hawaii.edu]
Sent: Saturday, March 15, 2008 11:20 AM
To: EDBtestimony
Subject: Testimony in support of SB644

Dear Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters-despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

We need to focus now on sustaining our environment as this would be one step forward for us.

Sincerely,

Susan Murata
2044 Alaeloa Street
Honolulu, HI 96821
808.734.9267

wakai1-Karen

From: Cindy Siok [cindysiok@hawaii.rr.com]
Sent: Monday, March 17, 2008 2:42 PM
To: EDBtestimony
Subject: Letter supporting SB644

Attn: HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Tuesday, March 18th, 8:45am
Letter in Support of SB 644 SD3 HD1

Dear Chair Yamashita and members of the Committee:

It is imperative that Hawaii, every U.S. state and the world become more self-sufficient and wean themselves from using up the Earth's natural resources. The energy derived from the sunlight is a constant and free source of energy for us and we should make the best use of it.

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in doing what is right, by reducing our contribution to global climate change. Although environmentally-friendly solar water heaters save homeowners a lot money on their electric bills, the vast majority of homes in Hawai'i use fossil fuels to heat their water.

Hawaii should have been a front running, by passing similar legislation much sooner. Even now the majority of new homes built in Hawai'i lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense and "about time" policy. Thank you for addressing this important issue.

Sincerely,

*Cindy Siok
462 Ilimano St.
Kailua, HI 96734*

3/17/2008

wakai1-Karen

From: Elizabeth Dunne [elizabethdunne@hotmail.com]
Sent: Monday, March 17, 2008 2:38 PM
To: EDBtestimony
Subject: Testimony in Support of SB 644 SD3 HD1

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS
Tuesday, March 18th, 8:45am
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. Hawai'i is the perfect environment for solar water heaters. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i.

Solar water heaters make economic and environmental sense. There is no reason for the vast majority of homes in Hawai'i to use fossil fuels to heat their water. Solar water heaters can be easily installed at the time of construction, yet the majority of new homes built in Hawai'i lack solar water heaters. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Sincerely,
Elizabeth M. Dunne
Honolulu, Hawaii 96815
elizabethdunne@hotmail.com

wakai1-Karen

From: Louisa (Lu) DiGrazia [yogakailua@hawaii.rr.com]
Sent: Saturday, March 15, 2008 11:28 AM
To: EDBtestimony
Subject: Testimony in support of SB644

We installed solar on our home in Kailua some time ago. SB644 is very good idea. Keep up the good work, and don't stop there.

We need low flow toilets as a president as well, among other things.

thank you,
Louisa DiGrazia
Kailua

wakai1-Karen

From: Peter Holck [pholck@ewca.eastwestcenter.org]
Sent: Saturday, March 15, 2008 11:47 AM
To: EDBtestimony
Subject: Testimony in support of SB644

Chair Yamashita and members of the Committee:

It is hard to imagine a measure easier to implement that would have such a dramatic effect on Hawaii's energy usage (and thus energy independence) then requiring that new homes are built with solar water heaters included where practical. This concept is "low-hanging fruit" in the state's effort to reduce energy consumption and put forward a more sustainable plan for the future. Surprisingly the majority of existing homes *as well as new homes* in Hawaii continue to rely on fossil fuels for hot water. Ridiculous. Please support SB 644 SD3; really a no-brainer!

Thanks –

Peter Holck, PhD, MPH

3030 Lowrey Ave #110

Honolulu HI 96822

wakai1-Karen

From: Lorna Larsen-Jeyte [tutulorna@hawaii.rr.com]
Sent: Saturday, March 15, 2008 7:51 AM
To: EDBtestimony
Subject: Testimony in support of SB644

March 15, 2008

Dear Chairman Yamashita and Members of this Committee;

The Ides of March. Indeed an auspicious day to write a letter to you concerning a very, very important Bill. Residents of Hawai'i will work towards energy conservation gladly as long as they receive encouragement and financial assistance from an outside source. In our case, that would be the State of Hawai'i. Your reward for making this decision is to make Hawai'i a better place for our children and grandchildren. Let us not waste one more year haggling over this opportunity to eventually bring solar energy, in the form of heated water and perhaps even photovoltaic electricity, to all homes and businesses in our islands. SB644 is a smart bill! Eventually more homeowners will retrofit their homes to keep up with the trends of energy smart houses and businesses. Your support of SB644 will help to make this happen!

Mahala, Lorna Jeyte
Kilauea Lodge, Volcano

wakai1-Karen

From: Annacarmen [annacarmen@hawaii.rr.com]
Sent: Saturday, March 15, 2008 8:44 AM
To: EDBtestimony
Subject: Testimony in support of SB644 Solar Water Heaters

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters. This would be an important first step in moving away from Hawaii's almost complete dependence on fossil fuels. It makes no sense at all with all the sunshine we get for Hawaii to be as dependent on fossil fuels as we are now. Hawaii is unique among the fifty states in that more than 90 percent of its energy comes from oil. That's higher than any other state! If an entire country such as Spain can mandate solar water heaters for all new homes, certainly our state can do so as well. Please take this step in fighting global warming.

Sincerely,

**Ivona Xiezopolski
45-180 Mahalani Pl. 7
Kaneohe, HI 96744**

3/17/2008

wakai1-Karen

From: MSeeley [mseeley@mindspring.com]
Sent: Saturday, March 15, 2008 8:56 AM
To: EDBtestimony
Subject: Testimony in support of SB644

Let's make solar mandatory on new residences in Hawaii. To retrofit to solar may not be cost-effective right now, but new homes can plan it as part of their building. Our energy costs are so high here on the Big Island and solar would conserve our already precious resources.

Mahalo,
Marsha Seeley
12-7134 Waioleka, Pahoa, HI 96778

wakai1-Karen

From: bonnie [nakayamab001@hawaii.rr.com]
Sent: Saturday, March 15, 2008 8:48 AM
To: EDBtestimony
Subject: Testimony in support of SB644

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Tuesday, March 18th, 8:45am
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

*Sincerely,
Roger Campbell*

95-1511 Ainamakua Dr. #39

Mililani, HI. 96789

wakai1-Karen

From: Evelyn Nakamura [evien001@hawaii.rr.com]
Sent: Saturday, March 15, 2008 9:26 AM
To: EDBtestimony
Subject: Testimony in support of SB644

March 15, 2008

EDB Committee
Chair Kyle Yamashita
Vice Chair Glenn Wakai

Testimony in support of SB 644 SD3 HD1

Dear Sir:

I strongly support this bill to require solar water heaters on newly constructed homes. We need to do as much as possible to minimize our dependence on fossil fuels and this is an easy means of doing this. Reducing air pollution and global warming are additional benefits. Please enact this measure.

Sincerely,

Evelyn Nakamura
2010 9th Avenue
Honolulu, Hawaii 96816
737-1556
evien001@hawaii.rr.com

3/17/2008

wakai1-Karen

From: David Finkelstein [davidfinkelstein@juno.com]
Sent: Saturday, March 15, 2008 10:20 AM
To: EDBtestimony
Subject: SB 644

Please support SB 644. Let's make Hawaii a showplace for solar energy. Solar hot water is a proven technology that benefits the owner/resident or tenant for many years in the future. The expected life of the systems is 15-20 years, and they repay for themselves within 3-5 years. Some builders may complain, but all of us will benefit in the long run.

Thanks you for your consideration.

David Finkelstein
RR 2 Box 3313
Pahoa HI 96778
davidfinkelstein@juno.com

3/17/2008

wakai1-Karen

From: Aaron [kuau77@gmail.com]
Sent: Saturday, March 15, 2008 10:46 AM
To: EDBtestimony
Subject: Testimony

Please vote yes to mandate solar water heaters on all new units. Please show some common sense and foresight instead of listening to lobbyists for a change. Thank you.

Aloha,
Aaron Singer
Maui

wakai1-Karen

From: martha dorman [martydor@earthlink.com]
Sent: Saturday, March 15, 2008 6:41 AM
To: EDBtestimony
Subject: I strongly support SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

In fact, it would be even better if new homes were to have an even more concentrated solar panel to completely solve the use of fossil fuels in Hawaii, but - I'm thinking that the technology for that is still in the future and is too costly at present for a mandate.

*Sincerely,
Martha M. Dorman (concerned resident of Kuhi St. Waiialua)*

3/17/2008

wakai1-Karen

From: shermandhb@earthlink.net
Sent: Saturday, March 15, 2008 7:12 AM
To: EDBtestimony
Subject: Support of SB 644 SD3 HD1

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Tuesday, March 18th, 8:45am
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

We currently have a solar water heater in our 25 year old home on Kauai and have experienced a reduced cost to our electricity bill. We strongly urge support for this bill for securing a sustainable future for all who live on our beautiful islands.

Sincerely,

Sherman and Heatherbell Fong

3241 Wawae Road

Kalaheo, HI 96741

shermandhb@earthlink.net
EarthLink Revolves Around You.

wakai1-Karen

From: Micco Godinez [kayakkauai@earthlink.net]
Sent: Saturday, March 15, 2008 5:51 AM
To: EDBtestimony
Subject: Testimony in support of SB644

I like sola.

Do it for the planet and not special interests.

aloha,

Miguel Godinez

--

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----Wailua: <http://www.kayakkauai.com/wailuavacationrental.html>

Cell 808-346-1420

~~~~~

**wakai1-Karen**

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**From:** Selina Heaton [selinah@yahoo.com]  
**Sent:** Saturday, March 15, 2008 5:54 AM  
**To:** EDBtestimony  
**Subject:** Testimony in Support of SB 644 SD3 HD1 Tuesday March 18th 8:45am

**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS**

Tuesday, March 18th, 8:45am  
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I am strongly in support of SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, while reducing our contribution to global climate change and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters - despite the ease of installing them the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Please support this measure!

Sincerely,

Selina Heaton

P.O. Box 173

Laie, HI 96762

3/17/2008

**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS  
CONCERNS**

**Tuesday, March 18th, 8:45am**

**Testimony in Support of SB 644 SD3 HD1**

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters. Like many citizens, I am deeply concerned with sustainability and feel that this measure would be a positive first step. Environmental responsibility will be ignored by developers until the government steps in and mandates change. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai`i use fossil fuels to heat their water. SB 644 SD3 will require that developers have the long-term interest of new home buyers in mind and will help ensure that Hawai`i takes a leadership role in environmental policy.

Thank you:

Joseph Tremonti  
2649 Varsity Place #414  
Honolulu, HI 96826

wakai1-Karen

---

**From:** Steve Ward [smw@hawaii.rr.com]  
**Sent:** Saturday, March 15, 2008 6:45 AM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB644  
**Importance:** High

**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS**

Tuesday, March 18th, 8:45am  
Testimony in Support of SB 644 SD3 HD1

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind,*

*It boggles the mind that Hawaii doesn't do more to encourage solar. Here on the Big Island we're having to build new power generating plants because our legislators have not planned ahead and made solar an integral part of any new construction. It's way past time to change that, and this bill is a good start. Help make Hawaii a leader in fighting global warming!*

*With aloha,*

*Steven M. Ward*

*75-5780 Iuna Place (homeowner and taxpayer since 1980)*

*Kailua Kona HI 96740*

House Committees on  
Economic Development and Business Concerns  
Tuesday, March 18, 2008  
8:45 a.m.  
State Capitol, Conference Room 325

Aloha Chair Yamashita and Members of the Committees

I **support** SB644SD3HD1, Relating to Energy Resources, that would require the installation of solar water heaters on newly constructed single-family homes, condos and townhouses.

Installing solar water heaters in new homes makes sense, both economically and for the environment. The additional costs to the new homeowner will be nominal when bundled into the mortgage and will be offset by the savings in electricity. At a minimum, the bill should mandate that all new homeowners be offered the option to install solar panels while it is being constructed. In 2007, California enacted the Million Solar Roofs bill that requires developers to offer the option.

Since the need for housing is a number one concern of Hawaii's residents, we may not be able to stop the building of new homes, but we should build them in an environmentally sensitive way.

Sincerely,



Lisa Fischer  
4149 Sierra Dr.  
Honolulu HI 96816



**wakai1-Karen**

---

**From:** Scott & Dalia Bowling [sdbowling@earthlink.net]  
**Sent:** Saturday, March 15, 2008 6:20 AM  
**To:** EDBtestimony  
**Subject:** SB644

*Chair Yamashita and members of the Committee:*

*We strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. Thank you for helping the environment.*

wakai1-Karen

---

**From:** Richard Pratt [pratt@hawaii.edu]  
**Sent:** Sunday, March 16, 2008 9:51 PM  
**To:** EDBtestimony  
**Subject:** Testimony on SB644SD3

March 16, 2008

Chair Honorable Kyle Yamashita, House Committee on Economic  
Development and Business

I support SB644SD3, Relating to Energy Resources, that would require the installation of solar water heaters on newly constructed residential properties.

Hawai'i has a history of public regarding legislation - public access to beaches, first public education system west of the

Mississippi, employer mandated health care, and more - and the addition of a mandate to install solar water heaters on new

homes should be added to the list. Solar energy is the one of the few natural resources that Hawaii can harness for energy, so

we should maximize its usage in order to reduce the State's dependency on oil.

No single measure will solve our energy issues, but this is a step in the right direction

Respectfully,

Dick Pratt  
4155 Sierra Drive  
Honolulu, HI 96816

## wakai1-Karen

---

**From:** Dan Smith [dancsmith@rocketmail.com]  
**Sent:** Sunday, March 16, 2008 9:12 PM  
**To:** EDBtestimony  
**Cc:** Rep. Kyle Yamashita; Rep. Kirk Caldwell  
**Subject:** Do require solar water heaters in new construction

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS Tuesday, March 18th, 8:45am  
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

This morning I saw Senator Hooser's commentary in The Advertiser. Makes good sense to me. I wish that my apartment had solar hot water. It's a modern building and solar hot water would benefit the landlord and us tenants. They could raise the rent a little but we would save more in reduced electricity bills.

Needless to say, I strongly support SB 644 SD3 HD1, mandating that new homes have solar solar water heaters installed during construction. The bill, when passed, would be an important step in securing Hawaii's energy future, reducing our contribution to green house gases, and reducing the cost of living in Hawaii. It means a slight cost increase up front and large savings over time -- especially with the rising cost of oil! Even more surprising, I am told that the majority of new homes built in Hawaii; i also lack solar water heaters; despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

I copy my representative, Kirk Caldwell, and hope that he joins in support since he is an alternative energy expert and his constituents like me support the measure.

Sincerely,  
Dan

Daniel C. Smith  
1816 Dole St B203  
Honolulu HI 96822

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\_ylt=Ahu06i62sR8HdDtDypao8Wcj9tAcJ

**wakai1-Karen**

---

**From:** Duane Erway [DuaneErway@hawaii.rr.com]

**Sent:** Sunday, March 16, 2008 8:51 PM

**To:** EDBtestimony

**Subject:** Testimony in support of SB644

Aloha, Senators!!!

Solar water heaters make economic and environmental sense for most houses in Hawai'i..

Duane Erway, Co Editor

*Introduction to the Utilization of Solar Energy*, McGraw Hill

**wakai1-Karen**

---

**From:** Karen Chun [karen@karenchun.com]  
**Sent:** Sunday, March 16, 2008 5:46 PM  
**To:** EDBtestimony  
**Subject:** Testimony in favor of HB 644

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Rep. Kyle T. Yamashita, Chair  
Rep. Glenn Wakai, Vice Chair  
Tuesday March 18, 2008  
8:45am  
Room 325

Mandating Solar Hot Water Heaters on every new residential construction helps with affordable housing. Solar Hot Water is estimated to reduce a homeowner's utility bill by 40% in Hawai'i. Because the savings exceed the additional loan amount to cover the solar hot water system, homeowners actually find themselves paying less for a home with solar hot water than one without.

Right now, it is mostly the affluent who can afford the \$5,000 up front cost of a solar hot water installation since lower income people do not have that much money lying around nor do they have easy access to more credit. And even though the loan could be more than repaid with the utility bill savings and the family end up with more money in their pocket, this barrier to installation leaves the people who need help most paying the highest utility bills - and it is unnecessary.

By including the solar hot water system in the initial cost of the home, lower income people will benefit, save money and help the environment.

Additionally, this will help reduce the load on MECO and HECO, thus reducing the need for more generating facilities. It is win-win all around.

Karen Chun  
former utility engineer  
87 Lae St.  
Paia HI 96779  
808 283-3049

**wakai1-Karen**

---

**From:** DRJLAM@aol.com  
**Sent:** Monday, March 17, 2008 8:28 AM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB644

i support new solar heaters in all new homes!

jerry lam  
2230 kamehameha avenue  
honolulu, hi 96822

---

It's Tax Time! [Get tips, forms and advice on AOL Money & Finance.](#)

**wakai1-Karen**

---

**From:** Jeff Sacher [jsacher@kona.net]  
**Sent:** Monday, March 17, 2008 8:19 AM  
**To:** EDBtestimony  
**Subject:** SB644

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Rep. Kyle T. Yamashita, Chair  
Rep. Glenn Wakai, Vice Chair  
Tuesday March 18, 2008  
8:45am  
Room 325

Aloha Representatives,

Please pass SB644. We need to move toward sustainability right away and this bill is instrumental in moving us in that direction.

Jeff Sacher  
Kawaihae, Big Island  
808-882-1692

wakai1-Karen

---

**From:** Laurie [lbaron@hawaii.rr.com]

**Sent:** Monday, March 17, 2008 8:07 AM

**To:** EDBtestimony

**Subject:** TO: COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS Supporting SB 644 SD3 HD1  
please print and distribute 20 copies

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Rep. Kyle T. Yamashita, Chair

Rep. Glenn Wakai, Vice Chair

Tuesday March 18, 2008

8:45am

Room 325

**Supporting** SB 644 SD3 HD1 Requires the installation of solar thermal or comparable renewable energy devices to heat water in single-family residences constructed after 1/1/2010. Restricts renewable energy income tax credit for solar thermal energy systems installed and placed in service in single-family residential properties to those constructed prior to 1/1/2010. (SB644 HD1)

Aloha Chair Yamashita, Vice Chair Wakai and Members of the Committee,

In legislative sessions during the '90's, the spectre of \$50./bbl oil was dismissed as alarmist.

Today oil trades above \$100./bbl.

While regrettable that more wasn't done in the past, the present is in your hands. It is now necessary to take the steps that only you can take to wean our state off of its oil addiction. The economic benefits of keeping our dollars here, the environmental benefit of preventing millions of tons of unnecessary CO2 release, and the jobs that will result are each strong reasons to support this bill.

No single technology will replace oil, and the transition will not be immediate or complete. But incremental progress is real progress, and it is necessary **now!**

The Apollo Alliance's most recent report, "Green-Collar Jobs in America's Cities," makes a strong case that pursuing a four-step strategy – essentially a metropolitan green business and jobs development plan – provides a wealth of environmental, economic, and social benefits. *Greener Pathways* notes: "Energy efficiency may be the fastest, cheapest way for states to address global warming, reduce energy costs for citizens, and create and sustain good jobs."

We look back now and wonder why more was not done in the '70's, '80's, and '90's to develop solar and wind energy for Hawai'i. Please end that long history, and pass SB644 SD3 HD1 now.

Mahalo,

Laurie Baron  
2143 Haena Dr.  
Honolulu, Hawai'i 96822

3/17/2008



**wakai1-Karen**

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**From:** Cory (Martha) Harden [mh@interpac.net]  
**Sent:** Monday, March 17, 2008 7:28 AM  
**To:** EDBtestimony; Rep. Kyle Yamashita; Rep. Glenn Wakai  
**Subject:** HOUSE EC DEV & BUS Tuesday, March 18th, 8:45am

Dear Legislators,

Please support SB 644 for solar water heaters on all new homes.

Solar heaters can save each homeowner \$600 to \$1000 a year, and reduce their carbon footprint by about 2.5 tons of greenhouse gas. But most houses are built without them. Spain and Israel mandate solar on each new residence, and the Navy and Air Force made it a standard feature on new homes they build in Hawai'i.

Mahalo,

Cory (Martha) Harden  
PO Box 10265  
Hilo, Occupied Hawai'i 96721  
808-968-8965  
[mh@interpac.net](mailto:mh@interpac.net)

3/17/2008

**wakai1-Karen**

---

**From:** Jack Kittinger [jkittinger@gmail.com]  
**Sent:** Monday, March 17, 2008 7:18 AM  
**To:** EDBtestimony  
**Subject:** Solar Bill - needs help NOW

Aloha Debra,

Please accept this email as testimony in support of SB644, SD3, HD1 - the bill that requires solar water heaters on new residences.

This is a slam-dunk in terms of legislature moving our state towards increased reliance on locally-available, renewable energy sources and away from near-complete reliance on foreign petroleum energy sources.

I'm sure the extra cost borne by builders and home buyers will be offset by the years of lower energy bills, particularly as oil continues to climb in price as it has in the past years and decades.

I beseech the legislature to pass this important bill and help move our wonderful state into a more sustainable future.

Mahalo,

Jack Kittinger  
NSF IGERT Fellow  
University of Hawai'i at Mānoa  
Geography Department  
445 Saunders Hall, 2424 Maile Way  
Honolulu, HI 96822  
[jkittinger@gmail.com](mailto:jkittinger@gmail.com)

**wakai1-Karen**

---

**From:** leyla cabugos [cabugos@gmail.com]  
**Sent:** Monday, March 17, 2008 7:32 AM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB644, SD3

Aloha honored legislators,

I wish to register my support for the solar water heater bill, SB644, SD3. I was astonished to learn that up to 40% of a family's energy use goes to heating water. In a state with abundant sunshine, imported and increasingly scarce oil, and the interruption of power from natural phenomena such as earthquakes and heavy storms, it is time to take this sensible technology for granted. Forward-thinking companies on the mainland have already developed a list of "green" practices that will serve as their baseline, because there is no longer a reason to use less efficient approaches. We should do the same. I think it wise that this Bill would not limit the options to solar heater technology, but would require the use of equally efficient substitutes. This encourages known good practices, yet leaves the field open to innovation. In our efforts to make life in the Islands sustainable, we need to take advantage of the opportunities that are readily available to us. Solar water heating is one such opportunity.

Mahalo,

Leyla Cabugos

--

Leyla Cabugos  
Botany Department  
University of Hawai`i at Manoa  
3190 Maile Way, Room 101  
Honolulu, HI 96822

**wakai1-Karen**

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 12:15 PM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass the solar water heater bill

---

**From:** Olwen Huxley [mailto:olwen.huxley@gmail.com]  
**Sent:** Monday, March 17, 2008 9:26 AM  
**To:** Rep. Kyle Yamashita  
**Subject:** Please pass the solar water heater bill

Dear Representative Yamashita:

I am writing to urge you to support the solar water bill, SB 644.

Arguments have been raised against this bill from those who fear government intervention in a new facet of homebuilding. When oil rises above \$100 a barrel, such intervention is warranted, just as government intervention is warranted by establishing a building code or an electrical code in the name of the public good.

Compliance with this law is not a massive burden on the building industry. The technology is proven, simple, and easy to install and maintain. A well-designed roofing system can mitigate any aesthetic issues that architects or homebuilders may have with these installations, and these systems add a negligible amount to the total cost of new construction.

More to the point, homeowners can save about 30% on their electricity bill per year. The dampening of electricity demand will mean that in the future we will not have to go through the economic and civic pain of approving, permitting, and building as many power plants.

Hawaii is desperately dependent on oil to make electricity, and leaving aside the political and military aspects of this dependency, at \$100 a barrel it would cost Hawaii more than \$5 BILLION a year to import what we use.

At that cost, we had better start using our oil more wisely if we plan to have an economy worth speaking of.

Sincerely

Olwen Huxley  
152A N. Kalaheo Ave.  
Kailua, HI 96734

3/17/2008

**wakai1-Karen**

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 12:02 PM  
**To:** wakai1-Karen  
**Subject:** FW: Supporting SB 644 requiring solar water heaters

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**From:** Bartlett, Randy [mailto:rbartlett@mlpmaui.com]  
**Sent:** Friday, March 14, 2008 12:36 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai  
**Cc:** Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Supporting SB 644 requiring solar water heaters

Aloha Representative Yamashita and Representative Wakai:

Please support SB 644 requiring solar water heaters on all new home construction by scheduling a hearing in your Committee on Economic Development & Business Concerns as soon as possible.

Requiring solar water heater installations on all new residential construction in the state will have enormous, positive impacts throughout Hawai'i:

- It will help reduce demand on the power grid; thereby reducing the chances of crippling power shut-downs like O`ahu faced last year.
  - o Reducing demand on the power grid will also enable our local utilities to continue to service existing customers w/out having to add as much expensive, new capital improvements to keep up with growing demand for electricity.
  - o Reducing demand on the power grid will reduce the number of local dollars currently being sent overseas to transport and ship oil to Hawai'i that is then burned to create electricity to heat water in residences and business state-wide.
  - o Reducing demand on the power grid will reduce the number of barrels of oil being burned by Hawai'i's power utilities that contribute to global climate change and pollution.
- It will reduce electricity used by residences; thereby reducing their utility bills and freeing up dollars to be used elsewhere to boost our local economy.
- It will provide hundreds of new job opportunities in the construction industry – specifically for the solar hot water heater installation companies – again, boosting our local economy and increasing state tax revenues.
- It will increase the price of new residences marginally; which will increase the profitability of housing contractors, but existing/new solar heating tax credits from the state will help offset the increase to the consumer substantially.

Mahalo nui loa no kou kōkua, e malama pono i ka `aina i ke kai...

**Randy Bartlett**  
POB 11197, Lahaina, Hawai'i 96761  
808.669.7795, rtb@hawaii.rr.com

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3/17/2008

## wakai1-Karen

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 12:01 PM  
**To:** wakai1-Karen  
**Subject:** SB644

From: dianabethel@hawaiiantel.net [mailto:dianabethel@hawaiiantel.net]  
Sent: Friday, March 14, 2008 3:05 PM  
To: Rep. Kyle Yamashita  
Subject:

Dear Representative Yamashita,

I am writing about SB644 requiring solar water heaters. It seems odd to me that those opposed to the bill are all energy-related companies and real estate and building industry players.

It seems as if the energy-related companies don't want solar water heaters to take away from their bottom line - even though it would help Hawaii become more energy independent.

Why would the building-industry organizations be opposed to solar water heaters. Would it be too much trouble to install them? Or would it add additional cost to buildings and therefore not benefit the builders, even though the residents of the buildings would save on energy costs?

It seems so self-serving and short-sighted for those opposed to bill SB644 to stifle efforts to make Hawaii more sustainable and energy efficient.

I hope that you can judge the merits of SB644 and support a more energy-efficient and sustainable economy on behalf of the people of Hawaii.

Sincerely,

Diana Bethel  
Honolulu, HI 96822

**wakai1-Karen**

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:55 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please Support SB 644 requiring solar water heaters

---

**From:** val loh [mailto:vallohfoto@yahoo.com]  
**Sent:** Friday, March 14, 2008 11:42 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai  
**Cc:** Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Please Support SB 644 requiring solar water heaters

Aloha Representative Yamashita and Representative Wakai:

Please support SB 644 requiring solar water heaters on all new home construction by scheduling a hearing in your Committee on Economic Development & Business Concerns as soon as possible.

Requiring solar water heater installations on all new residential construction in the state will have enormous, positive impacts throughout Hawai'i:

- It will help reduce demand on the power grid; thereby reducing the chances of crippling power shut-downs like O`ahu faced last year.
  - o Reducing demand on the power grid will also enable our local utilities to continue to service existing customers w/out having to add as much expensive, new capital improvements to keep up with growing demand for electricity.
  - o Reducing demand on the power grid will reduce the number of local dollars currently being sent overseas to transport and ship oil to Hawai'i that is then burned to create electricity to heat water in residences and business state-wide.
  - o Reducing demand on the power grid will reduce the number of barrels of oil being burned by Hawai'i's power utilities that contribute to global climate change and pollution.
- It will reduce electricity used by residences; thereby reducing their utility bills and freeing up dollars to be used elsewhere to boost our local economy.
- It will provide hundreds of new job opportunities in the construction industry – specifically for the solar hot water heater installation companies – again, boosting our local economy and increasing state tax revenues.
- It will increase the price of new residences marginally; which will increase the profitability of housing contractors, but existing/new solar heating tax credits from the state will help offset the increase to the consumer substantially.

Aloha & thanks very much for helping Hawai'i become energy independent!

~ Val Loh  
2552 Peter St.  
Honolulu, HI 96816

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3/17/2008

**wakai1-Karen**

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**From:** yamashita1-Ian  
**Sent:** Monday, March 17, 2008 11:54 AM  
**To:** wakai1-Karen  
**Subject:** FW: Pass the Solar Water Heater bill

---

**From:** Rick Long [mailto:dhsc6411@hotmail.com]  
**Sent:** Saturday, March 15, 2008 6:06 AM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Pass the Solar Water Heater bill

Aloha,

RE: SB 644 SD3 HD1

I live in an apartment complex using solar water heaters and I am very satisfied with the result. Even during December's Kona storms when there was no sun for many days in a row, my hot water kept on flowing.

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i.

Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 HD1 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

It's embarrassing to explain to visitors that we still burn coal with all of the free sun, wind, geothermal, and tidal energy available to us in these beautiful islands.

Mahalo.

Rick Long  
120 Manino Circle, #202  
Kihei, HI 96753

3/17/2008



## wakai1-Karen

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:53 AM  
**To:** wakai1-Karen  
**Subject:** FW: Testimony in Support of SB 644 SD3 HD1

From: carolth@hawaii.rr.com [mailto:carolth@hawaii.rr.com]   
Sent: Saturday, March 15, 2008 11:14 AM  
To: Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
Cc: hawaii.chapter@sierraclub.org  
Subject: Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and Members of the Committee on Economic Development and Business Concerns,

I am writing in support of SB 644 SD3 HD1, mandating that new homes come equipped with solar thermal heaters. These devices work to reduce our reliance on fossil fuels and our carbon footprint. They also have tangential benefits in terms of economic stimulation and affordability of housing. And finally, they are cost efficient. We, like so many other Pacific Islands, will suffer the disproportionate impact of climate change and we must act decisively to reduce our contribution to global warming.

SB 644 SD3 is a common-sense policy and a win-win proposition.

Respectfully yours,

Carol Titcomb Hartley  
2094 Mauna Place  
Honolulu, Hawaii 96822

wakai1-Karen

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:51 AM  
**To:** wakai1-Karen  
**Subject:** FW: COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

---

**From:** CDeanChu@aol.com [mailto:CDeanChu@aol.com]  
**Sent:** Saturday, March 15, 2008 1:23 PM  
**To:** Rep. Kyle Yamashita  
**Subject:** COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Regarding Senate Bill 644, relating to requiring solar water heaters

The bill to require solar water heaters on new homes is a good idea and should become law. HECO's objections should be taken with a large grain of salt, of course they are opposed to the bill, more solar water heaters means less revenue for them. The idea that it will unnecessarily raise the cost of a new home doesn't fly either, with the tax credits the approximate \$2000 cost it would add to a home costing hundreds of thousands of dollars is insignificant. It is just the cost of another new appliance, no more than a set of low water, energy efficient front loading washer and dryer, no more than that new plasma screen TV. And with constructing a new home, there are always ways to cut costs here and there to offset the cost of the solar water heater.

This bill doesn't go far enough, it doesn't do anything about the many homes that don't have them that should have them. If not in this bill, in another bill, there should be a requirement for solar water heaters to be installed on existing homes whenever renovations, such as a new roof, kitchen renovation, etc., exceeding a set price of say \$10,000, is done. When a new roof is put on it is the ideal time to install a solar water heater or solar energy panel for that matter. This way many more homes will eventually have solar water heaters, thereby reducing the demand for electricity and bringing us closer to the goal of becoming more energy independent from imported oil.

Folks need to be forced to save electricity and a solar water heater is one painless way to do it on day to day basis. The cost of the electricity saved will be recovered in a few years and continue to save money every day the sun shines.

Mahalo.

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It's Tax Time! [Get tips, forms and advice on AOL Money & Finance.](#)

**wakai1-Karen**

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:50 AM  
**To:** wakai1-Karen  
**Subject:** FW: Support for SB 644 SD3 HD1

---

**From:** Jennifer Bojanowski [mailto:jenboj@hotmail.com]  
**Sent:** Saturday, March 15, 2008 2:05 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai  
**Subject:** Support for SB 644 SD3 HD1

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.*

*I'd like to see us stand out as a state that is exemplary in leading the push for more sustainable energy use.*

*Sincerely,*

*Jennifer Bojanowski  
Honolulu, HI (Kapaehulu Neighborhood)*

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Climb to the top of the charts! Play the word scramble challenge with star power. [Play now!](#)

**wakai1-Karen**

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:49 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

---

**From:** Eva Hillman [mailto:bodyboard@hawaii.rr.com]  
**Sent:** Saturday, March 15, 2008 2:42 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Please pass solar mandate

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. As you know, our reliance on fossil fuels is expensive and environmentally hazardous. Our geographic location makes it highly feasible to reduce our dependence on fossil fuels with solar alternatives that have no environmental downside. Installing solar water heaters at the front end (i.e. during construction) is a relatively simple process with less financial burden to the homeowner as the cost could be rolled into their mortgage. In the long run, the homeowner will save money, our state will reduce its reliance on fossil fuels and our environment will benefit. Thus, I strongly urge you to pass this bill.*

*Sincerely,*

*Eva Hillman*

*87-31 Ili Ili Road*

*Captain Cook, HI 96704*

**wakai1-Karen**

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:46 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

---

**From:** Francis Akamine [mailto:fakamine@hawaii.rr.com]  
**Sent:** Sunday, March 16, 2008 10:41 AM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Please pass solar mandate

Please pass SB 644 SD3 HD1 mandating that new homes have solar panels for water heating, where practical. This mandate creates economic and environmental benefits for our long-term future. Thank you for considering this message.

**wakai1-Karen**

---

**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:45 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

---

**From:** eduardo gandolfo [mailto:gandolfsea@hotmail.com]  
**Sent:** Sunday, March 16, 2008 1:20 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Please pass solar mandate

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB.644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. As a real estate broker I believe that is our commitment with the environment what will keep Hawaii a "green state".*

mahalo nui loa,

Eduardo A. Gandolfo (B.)  
"excellence with aloha"  
Realty Executives of Maui, HI LLC  
Ph/Fax: 1.808.891.8177  
Cell: 1.808.264.4733  
PO Box 790876, Paia, HI 96779, USA

---

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**wakai1-Karen**

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:43 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

---

**From:** Star M [mailto:starmullins@hotmail.com]  
**Sent:** Sunday, March 16, 2008 1:44 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
**Subject:** Please pass solar mandate

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.*

*Please look to the future, and begin now ,to make the necessary changes in our energy polcies*

*Sincerely,*

*Star Mullins*

*PO Box 651  
Mountain View , HI 96771*

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**wakai1-Karen**

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:41 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

---

**From:** fireflydive@aol.com [mailto:fireflydive@aol.com]  
**Sent:** Sunday, March 16, 2008 7:42 PM  
**To:** Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; repmarumoto@Capitol.hawaii.go  
**Subject:** Fwd: Please pass solar mandate

Subject: Please pass solar mandate

*Chair Yamashita and members of the Committee:  
I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind. I have had solar since I bought my home, I recycle everything, have my own Worm Bin, Insulation. What are you doing to save our planet????*

*Sincerely,*

MICHAEL CURTIS  
45-007 Bayside Place  
Kaneohe, HI 96744

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3/17/2008

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## wakai1-Karen

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:37 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

From: Steve Carll [mailto:stevecar@lava.net]  
Sent: Sunday, March 16, 2008 6:12 PM  
To: Rep. Kyle Yamashita; Rep. Glenn Wakai; Rep. Lyla B. Berg; Rep. Tom Brower; Rep. Jerry Chang; Rep. Faye Hanohano; Rep. Robert Herkes; Rep. Joey Manahan; Rep. Clifton K. Tsuji; Rep. Ryan Yamane; Rep. Corinne Ching; Rep. Barbara Marumoto  
Subject: Please pass solar mandate

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical.

Solar water heaters make economic and environmental sense for most houses in Hawai'i. They can save a typical household over \$600 on O'ahu, over \$700 on Maui, \$900 on the Big Island, and over \$1000 on Kaua'i. They reduce the carbon footprint of a typical household by about 2.5 tons of greenhouse gas.

Despite the robust and healthy solar industry in Hawai'i, most new and existing homes lack solar water heaters. While efforts have been made to get builders to include them as a standard feature in new homes, most houses still are built without them.

Both Spain and Israel mandate solar on each new residence. The Navy and Air Force have made it a standard feature on the new homes they build in Hawai'i.

Thank you,  
Stephen Carll  
933 16th Ave.  
Honolulu, HI 96816

**wakai1-Karen**

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**From:** yamashita1-lan  
**Sent:** Monday, March 17, 2008 11:24 AM  
**To:** wakai1-Karen  
**Subject:** FW: Please pass solar mandate

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**From:** Ann [mailto:earlesan@hawaiiintel.net]  
**Sent:** Monday, March 17, 2008 1:02 AM  
**To:** Rep. Kyle Yamashita  
**Subject:** Please pass solar mandate

**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS**

Testimony in Support of SB 644 SD3 HD1  
*Chair Yamashita and members of the Committee:*

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.

Not only did we install a solar heater, we removed and reinstalled it when our roof needed repair. Whatever expense we incurred was well worth it. It is inconceivable that developers are allowed to NOT make solar hot water part of their packages here where the sun is so available.

Please, please pass this common sense mandate.

Sincerely,

Ann Earles  
Waikoloa, HI

## wakai1-Karen

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**From:** Zoe M Norcross [norcross@hawaii.edu]  
**Sent:** Monday, March 17, 2008 12:10 PM  
**To:** EDBtestimony  
**Subject:** SB644 SD3 HD1 Relating to Renewable Energy SUPPORT

SB644 SD3 HD1 Relating to Renewable Energy SUPPORT

Aloha Chair Yamashita, Vice Chair Wakai and Members of the Committee;

SB 644 SD3 HD1 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

**wakai1-Karen**

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**From:** For The Planet [fortheplanet@yahoo.com]  
**Sent:** Monday, March 17, 2008 11:27 AM  
**To:** EDBtestimony  
**Subject:** solar bill

please pass this, as it is good for everyone, even if it is incomplete and will need adjustment or complete overhaul, it is a start.

jeff jost  
[fortheplanet@gmail.com](mailto:fortheplanet@gmail.com)

**[www.geocities.com/fortheplanet](http://www.geocities.com/fortheplanet)**

**amani fridde maluhia muka muka nala pace pais paix pax paz peace**

**rauha salaam shalom shanti sipala za mir**

**和平**

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wakai1-Karen

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**From:** Michal F. Stover [mfsleh@hawaii.rr.com]  
**Sent:** Monday, March 17, 2008 11:02 AM  
**To:** EDBtestimony  
**Subject:** I Support SB 644 SD3 HD1

\*HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS\* Tuesday, March 18th, 8:45am  
Testimony in Support of SB 644 SD3 HD1

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, which mandates that new homes come equipped with solar water heaters where practical, and I respectfully request that you do all you can to assure this bill's passage into law. This measure is crucial to securing Hawaii's energy independence and meeting our goals for reducing greenhouse gas emissions.

SB 644 SD3 HD1 will also improve the affordability of housing in Hawaii. As a homeowner with a solar water heater, I am ever so grateful that my utility bills are consistently lower than those of my neighbors who do not. Given the ease of installing solar water heaters when houses are under construction, they should be mandated.

In sum, SB 644 SD3 HD1 is a common-sense and far-sighted policy that will protect our environment, our energy future and new home buyers for years to come.

Sincerely

Michal F. Stover  
3300 Kalihiwai Rd  
Kilauea, HI 96754

## wakai1-Karen

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**From:** phil barnes [greenhi@interpac.net]  
**Sent:** Monday, March 17, 2008 10:44 AM  
**To:** EDBtestimony  
**Subject:** SB644

Chairman Yamashita and committee members:

I would urge you to strongly support this bill. As an individual who has installed solar hot water heating on both houses that I have owned in Hawaii I can personally testify to the monetary savings from solar hot water. It should be noted that the bill has an exception for those areas with insufficient solar radiation. It is a bogus argument to state that this bill puts housing prices out of reach for many residents. When the cost of the solar system is built into the mortgage the monthly expense would be greatly offset by a reduction in electric bills. The state should be doing everything in our power to reduce Hawaii's dependance on expensive imported fossil fuels. This is a measure that is a win win for both consumers and the environment.

Sincerely,

Dr. Phil Barnes  
Kehena Beach, HI 96778

**wakai1-Karen**

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**From:** Michele Nihipali [nihipalim001@hawaii.rr.com]

**Sent:** Monday, March 17, 2008 9:18 AM

**To:** EDBtestimony

**Subject:** Testimony in support of SB644

Dear Senators:

I strongly support SB664 SD3 HD1 mandating solar water heating for all new homes. Just as several years ago it was legislated that all new homes must have low flow toilets to conserve water, the time has now come for all new homes to include solar water heating. Not only is water precious on our islands, but we now need to conserve and reduce our dependence on oil. Global warming is real; Hawaii needs to be the leader in solar technology.

The legislature must move Hawaii in the correct direction. Many new "green" technology jobs will be created with the passage of SB 664. Please pass this bill as a start in moving Hawaii towards energy independence.

Thank you,

Michele Nihipali  
54-074 A Kam Hwy  
Hauula, HI 96717

wakai1-Karen

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**From:** Lisa Veneri [lisav@hawaii.rr.com]  
**Sent:** Monday, March 17, 2008 8:33 AM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB644 Solar Water Heaters

Chair Yamashita and members of the Committee:

I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters. This would be an important first step in moving away from Hawaii's almost complete dependence on fossil fuels. It makes no sense at all with all the sunshine we get for Hawaii to be as dependent on fossil fuels as we are now. Hawaii is unique among the fifty states in that more than 90 percent of its energy comes from oil. That's higher than any other state! If an entire country such as Spain can mandate solar water heaters for all new homes, certainly our state can do so as well. Please take this step in fighting global warming.

Sincerely,

*Lisa Veneri, MCP*

[lisav@hawaii.rr.com](mailto:lisav@hawaii.rr.com)

808-286-2850



**wakai1-Karen**

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**From:** Pam Lightfoot [good.designworks@hawaiiantel.net]  
**Sent:** Monday, March 17, 2008 1:06 PM  
**To:** EDBtestimony  
**Subject:** SB644,SD3,HD1

To the House Economic Development and Business Committee,

I thoroughly believe that the State of Hawaii would do a great deal to advance itself in the goal of Sustainability by mandating solar water heating systems on new construction. This would be a major step in reducing the need of fuel imports and be a very simple solution.

Prior to 1/1/2010, I feel tax credits should still be in place.

Thank you for considering this very important matter to our islands energy needs.

Regards,

Pamela Lightfoot Burrell, Apollo Kaua'i member

**wakai1-Karen**

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**From:** Ron [ronald@kewalo.org]  
**Sent:** Monday, March 17, 2008 2:16 PM  
**To:** EDBtestimony  
**Subject:** Testimony SB644 SD3 HD1

COMMITTEE ON ECONOMIC DEVELOPMENT AND BUSINESS

Chair: Rep. Kyle Yamashita

Vice Chair: Rep. Glenn Wakai

Hearing on Tuesday, March 18, 2008

8:45 a.m. in room 325

SB644 SD3 HD1 - Relating to Renewable Energy SUPPORT

Aloha Chair Yamashita, Vice Chair Wakai, and Members  
of the Committee,

I support SB644 SD3 HD1, 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.

We need to think "GREEN"

Please pass SB644 SD3 HD1. Mahalo.

Sincerely,

Ronald T. Iwami  
President Friends of Kewalo Basin Park Association

3/17/2008

**wakai1-Karen**

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**From:** iman clarke [imanhawaii@yahoo.com]  
**Sent:** Monday, March 17, 2008 1:47 PM  
**To:** EDBtestimony  
**Subject:** mandated solar heaters in new residences

To Whom it May Concern,

I am absolutely in support of this new bill and I congratulate all that are involved.

Sincerely,

Iman Bance

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**wakai1-Karen**

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**From:** Kona Village Resort Ocean Adventures [ocean@konavillage.com]  
**Sent:** Sunday, March 16, 2008 1:45 PM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB644

*Chair Yamashita and members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that new homes come equipped with solar water heaters where practical. This measure is a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction. SB 644 SD3 is a common-sense policy to require that developers have the long-term interest of new home buyers in mind.*

*Aloha,*

*Derinda Cantrell  
P.O. Box 479  
Holualoa, HI 96725*

3/17/2008

**wakai1-Karen**

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**From:** Bill Metzger [wjmetzger@hotmail.com]  
**Sent:** Monday, March 17, 2008 3:04 PM  
**To:** EDBtestimony  
**Subject:** Testimony in support of SB 644, SD 3, HD 1

Dear Committee Members,

We are avid believers in the value of solar water heaters ever since we had solar installed in our home in Manoa a few years ago. Why pay for energy from fossil fuels when the sun provides us with free energy? More importantly, requiring solar water heaters with new house construction will positively affect Hawaii's energy future and reduce our contribution to global climate change. And the best and easiest time to install a solar water heater is during construction.

It is within your power to effect the energy future of Hawaii. Please act responsibly.

Mahalo,  
Melodee and Bill Metzger  
3120 Beaumont Woods Place  
Honolulu, HI 96822

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Climb to the top of the charts! Play the word scramble challenge with star power. [Play now!](#)

**wakai1-Karen**

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**From:** Art Mori [amori@netserver05.chaminade.edu]  
**Sent:** Monday, March 17, 2008 3:56 PM  
**To:** EDBtestimony  
**Subject:** SB 644 SD3 HD1

COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS CONCERNS

Rep. Kyle T. Yamashita, Chair

Rep. Glenn Wakai, Vice Chair

Tuesday March 18, 2008

8:45am

Room 325

Aloha Chair Yamashita, Vice Chair Wakai and Members of the Committee

SB 644 SD3 HD1 Requires the installation of solar thermal or comparable renewable energy devices to heat water in single-family residences constructed after 1/1/2010. Restricts renewable energy income tax credit for solar thermal energy systems installed and placed in service in single-family residential properties to those constructed prior to 1/1/2010. (SB644 HD1)

As many others have said, this is a no brainer. A few thousand dollars (if that) added to the price of a new house which goes for hundreds of thousands! Get real.

Would you allow houses to be built without bathrooms so that the owner could have the choice of retrofitting or not? Solar heating in Hawai`i is just as much of a necessity. Consider the saving to the home owner and to the environment.

Solar heating is a requirement for new military housing. Why not ask them how it works.

Let's stop being part of the problem.

Art Mori  
373-4386  
571 Hao St.  
Honolulu, Hi 96821

wakai1-Karen

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**From:** Margery H. Freeman [freeman@aloha.net]  
**Sent:** Monday, March 17, 2008 4:01 PM  
**To:** EDBtestimony  
**Subject:** SB 644 SD3 HD1 - in support

**HOUSE COMMITTEE ON EC. DEV. & BUSINESS**

Hearing Tuesday, March 18th, 8:45am

SB 644 SD3 HD1 - in support

*Chair Yamashita & members of the Committee:*

*I strongly support SB 644 SD3 HD1, mandating that all new houses have solar hot water heaters. This law is important to decrease Hawaii's dependence on fossil fuels. Although environmentally friendly solar water heaters save homeowners money, the vast majority of homes in Hawai'i use fossil fuels to heat their water. Even more surprising, the majority of new homes built in Hawai'i also lack solar water heaters—despite the ease of installing them when the house is under construction.*

*SB 644 SD3 is a common-sense way to increase the use of solar hot water heaters. Please support this bill.*

*Sincerely,*

Marge Freema  
6448 Kaahele St.  
Kapaa, HI 96746