# SB 2038

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Council Services Division 4396 Rice Street, Suite 209 Līhu'e, Kaua'i, Hawai'i 96766 OFFICE OF THE COUNTY CLERK

Ricky Watanabe, County Clerk Jade K. Fountain-Tanigawa, Deputy County Clerk

> Telephone (808) 241-4188 Fax (808) 241-6349 Email cokcouncil@kauai.gov

February 13, 2012

TESTIMONY OF JOANN A. YUKIMURA VICE CHAIR, KAUA'I COUNTY COUNCIL

ON

S.B. NO. 2038, RELATING TO ENERGY RESOURCES
Senate Committee on Energy and Environment
February 14, 2012
2:55 p.m.
Conference Room 225

Dear Chair Gabbard and Members of the Senate Committee on Energy and Environment:

Thank you for this opportunity to submit testimony in support of S.B. No. 2038, Relating to Energy Resources. My testimony is submitted in my capacity as Vice Chair of the Kaua'i County Council.

The Kaua'i County Council is in full support of S.B. No. 2038, which clarifies and strengthens the requirement of solar water heaters on new single-family and duplex homes as both a cost effective and efficient way of moving Hawai'i away from fossil fuel dependence.

The law as it currently stands allows for a variance for a tankless gas heater. In Kaua'i County and Hawai'i County the variances granted since the law took effect (mainly for tankless gas), have been running at approximately 50% of all new single family homes (see Attachment A). This is defeating the purpose of the law that intended that all new single family homes install solar except where solar resources are limited or another form of renewable energy is being used (these types of variances are available under the existing law.)

Bill 2038 would clarify the law and require that the variance allowing tankless gas be granted only when the ultimate owner who will pay for the energy bill has read a comparison of the lifecycle costs of a solar water heater and tankless gas water heater and still decides to apply for a gas variance. While preserving choice, this clarification will align the bill with the Hawai'i Clean Energy Initiative (see Attachment B) and would achieve cost savings for the homeowner and environmental benefits for everyone, including future generations.

For the reason stated above, the Kaua'i County Council is in strong support of S.B. No. 2038 and asks for your favorable support.

Again, thank you for this opportunity to submit testimony.

Sincerely, John A. Yuleimura\_

JOANN A. YUKIMURA

Vice Chair, Kaua'i County Council

#### Attachment A

#### Solar Water Heating Variances (January 1, 2010-July 31, 2011)

	Kaua'i	Oʻahu	Maui	Hawai'i
Number of Solar Water Variances	125	75	24	454
Total Permits Issued*	243	1203	319	989
Percent Requesting Variance	51.44%	6.23%	7.52%	45.90%

<sup>\*</sup>New Single Family Dwellings

HOUSE OF REPRESENTATIVES TWENTY-FIFTH LEGISLATURE, 2009 STATE OF HAWAII H.B. NO. H.D. 3 S.D. 2 C.D. 1

## A BILL FOR AN ACT

RELATING TO ENERGY RESOURCES.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1	PART I
2	PURPOSE
3	SECTION 1. Attaining independence from our detrimental
4	reliance on fossil fuels has been a long-standing objective for
5	the state.
6	Hawaii is the state most dependent on petroleum for its
7	energy needs. It pays the highest electricity prices in the
8	United States, and its gasoline costs are among the highest in
9	the country. Fuel surcharges that pass the increases in fuel
10	costs to consumers have significantly increased the cost of over
11	eighty per cent of the goods and services sold in Hawaii.
12	Household fuels and utilities costs rose 36.4 per cent, from the
13	previous year, as reflected in the Honolulu consumer price index
14	during the second quarter of 2008. Hawaii's energy costs
15	approach eleven per cent of its gross domestic product, whereas
16	in most states energy costs are four per cent of gross domestic
17	product. Between 2005 and 2008, state government consumption of

#### H.B. NO. 1464 H.D. 3 S.D. 2 C.D. 1

1	implementation of the loan fund program. The department may set
2	fees or charges for fund management and technical site
3	assistance provided under this section. The department may
4	adopt rules pursuant to chapter 91 to carry out the purposes of
5	this section.
6	(d) All interest earned on the deposit or investment of
7	the moneys in the fund shall become a part of the fund.
8	(e) The department may establish subaccounts within the
9	fund as necessary."
10	PART VII
11	SOLAR WATER HEATER SYSTEM
12	SECTION 13. It is the intent of the legislature that the
13	variances provided for in Act 204, Session Laws of Hawaii 2008,
14	(Act 204) will be rarely, if ever, exercised or granted because
15	the burden of proof will lie with the applicant to demonstrate
16	that a solar water heater system, regardless of location or
17	circumstance, is not cost effective in the context of a thirty-
18	year mortgage term. This requires the use of realistic
19	assumptions regarding interest rates, discount rates, inflation
20	rates, and the expected average cost of electricity by island
21	over the thirty-year period, regardless of the cost of

H.B. NO. H.D. 3 S.D. 2 C.D. 1

- 1 electricity, or of oil or other fossil fuels, at a specific
- 2 time.
- 3 The legislature finds that it is necessary to clarify the
- 4 intent of the variance provision that allows for a demand water
- 5 heater device. There is the potential that this provision may
- 6 be used to allow a developer/builder, the purchaser of a water
- 7 heating device, of a single-family dwelling, to circumvent the
- 8 policy objectives of Act 204.
- 9 In its deliberation of Act 204, the legislature found that
- 10 the installation of a solar water heater system will only occur
- 11 if the developer or builder was able to recover the cost of the
- 12 investment from the consumer, who ultimately enjoys the energy
- 13 savings. Therefore, a solar water heater mandate was necessary
- 14 to ensure that an energy savings could be realized by the
- 15 consumer, without which the housing market would be sensitive to
- 16 certain price points that do not factor in the cost-
- 17 effectiveness of energy efficiency devices that reduce the
- 18 overall energy cost of a home to benefit the consumer.
- 19 The legislature further found that retrofitting a home for
- 20 a solar water heater after it was constructed was more costly,
- 21 and that such upfront costs, despite incentives such as state
- 22 and federal tax credits and utility rebates, were substantial



## H.B. NO.

1464 H.D. 3 S.D. 2 C.D. 1

- 1 barriers for the average consumer. The financial barriers can
- 2 be addressed, however, by including the installation of a solar
- 3 water heater into the purchase price and mortgage of a home,
- 4 where the cost of the system may pay for itself immediately.
- 5 Therefore, the legislature intended for a consumer to have
- 6 the option to use gas appliances with the full knowledge that
- 7 such a system may be more costly and less efficient. To obviate
- 8 any attempt to circumvent Act 204, then, the legislature intends
- 9 that if the potential variance applicant is not the party who
- 10 will ultimately pay for the energy cost consumption, then only
- 11 paragraph (1), (2), or (3) of subsection (a) in section 196-6.5,
- 12 Hawaii Revised Statutes, should apply
- 13 Additionally, the legislature finds that the continuation
- 14 of the renewable energy income tax credit needs to remain
- 15 available for all homes built before January 1, 2010.
- The purpose of this part, is to clarify the provisions of
- 17 Act 204, to carry out the legislature's intent.
- 18 SECTION 14. Section 196-6.5, Hawaii Revised Statutes, is
- 19 amended by amending subsections (a) and (b) to read as follows:
- 20 "(a) On or after January 1, 2010, no building permit shall
- 21 be issued for a new single-family dwelling that does not include
- 22 a solar water heater system that meets the standards established



February 10, 2012

Senator Mike Gabbard, Chair Senator J. Kalani English, Vice Chair Committee on Energy and Environment

Strong Opposition to SB 2038 Relating to Energy Resources. (Requires solar water heaters on new duplex buildings and allows for a variance by an occupant.)

Tuesday, February 14, 2012, 2:55 p.m., in Conference Room 225

My name is Dave Arakawa, and I am the Executive Director of the Land Use Research Foundation of Hawaii (LURF), a private, non-profit research and trade association whose members include major Hawaii landowners, developers and a utility company. One of LURF's missions is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources and public health and safety.

LURF <u>strongly opposes</u> SB 2038, which proposes to modify the wording of Act 204 (2008) which requires solar water heaters on new single-family homes to include duplex dwellings, and to clarify that the variance allowing tankless gas shall require application by an ultimate occupant of the dwelling unit.

**SB 2038.** The bill is based on the unfounded belief that installation of solar water heaters on new single-family and duplex homes is the most cost-effective and efficient way of moving Hawaii families off of fossil fuels.

**LURF's Position.** LURF **strongly opposes** SB 2038 based on the following:

> SB 2038 limits consumer choice and precludes builders' access to other energy conserving alternatives (creates a solar rooftop monopoly for all future residential housing).

The bill limits consumers' and builders' ability to freely choose their preferred form of energy, forcing the use of electricity for other household appliances, which may likely offset the benefit of solar water heating intended to reduce the consumption of oil.

> The proposed amendment of Act 204 will limit innovation, thus preventing the introduction of new forms of renewable energy using existing infrastructure.

Senate Committee on Energy and Environment February 10, 2012 Page 2

Mandating the use of solar water heaters as proposed by this bill will also discourage innovation and thwart the development and introduction of new forms of renewable energy. LURF understands, for example, that gas, which delivers almost three times more energy to the home than grid electricity, is produced in Hawaii (does not require the importation of ANY oil) and is made from petroleum bi products already produced in the State today. Locally, The Gas Company is currently engaging in the production of renewable gas products from sustainable feedstock sources in Hawaii. The proposed limiting of homes that consume gas in this State, thereby limiting the number of outlets for this type of renewable gas energy source, will consequently deter innovation as to these kinds of sustainable solutions.

For the reasons set forth above, LURF respectfully requests that SB 2038 **be held in this** Committee.

Thank you for the opportunity to provide testimony strongly opposing this bill.



#### **Testimony to Senate Committee on Energy and Environment**

Tuesday, February 14, 2012 2:55 p.m. Capitol Room 225

#### RE: S.B. 2308, Relating to Energy Resources

Good morning Chair Gabbard, Vice-Chair English, and members of the Committee:

My name is Gladys Quinto Marrone, Government Relations Director for the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, BIA-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 is **strongly opposed** to S.B. 2038, which would require solar water heaters on new duplex buildings and allows for a variance by an occupant. In essence, this bill would limit consumer choices, does not recognize that builders should have access to a variety of energy conserving alternatives, and creates a solar rooftop monopoly for virtually all future residences.

BIA-Hawaii supports the use of solar water heating systems, but is strongly opposed to any mandate requiring its installation and use. BIA-Hawaii supports customer choice in the selection of water heating systems. The customer should have the option to select the use of a solar water heating system if it makes sense economically.

This change will unreasonably limit innovation in Hawaii by specifying a single technology, which will prevent the introduction of new forms of renewable energy that can be distributed using existing infrastructure. This change will also limit consumer and builder choice to select their preferred form of energy.

For the foregoing reasons, BIA-Hawaii is strongly opposed to S.B. 2038.

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



#### SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 14, 2012, 9:00 A.M. (Testimony is 2 pages long)

#### TESTIMONY IN STRONG SUPPORT OF SB 2038 WITH PROPOSED AMENDMENTS

Aloha Chair Gabbard and Members of the Committee:

The Sierra Club, Hawaii Chapter, with 10,000 dues paying members and supporters statewide, *strongly supports* SB 2038. This bill would clarify and enhance the historic solar roofs law, passed by this legislature four years ago.

The 2008 Solar Roofs Act was a historic first that attempted to allow every new homeowner the benefits of solar water heating. This Legislature recognized that solar water heaters are one of the most effective ways to reduce high electricity bills -- slashing the average utility bill by 30 to 40 percent. When these systems are installed during construction, solar water heaters are less expensive then an electric heater retrofit and avoid the need for tax incentives.

This bill makes several improvements to the law. First, this bill would ensure that variance applications, which allow the installation of devices other then a solar water heater, are from the actual homeowner rather than a developer. Solar water heaters are frequently paid off after the first year or so; terrific for the homeowner, but not necessarily an incentive for the housing developer. In order to fulfill the intent of the historic solar roof law, this amendment is a critical clarification.

As reported in the Civil Beat (Michael Levine 11/11/2010) and later in the Honolulu StarAdvertiser, a significant number of developers have utilized the "gaping loophole" in the Solar Roof Act. Within the first year of this Solar Roof Act, twenty five percent of homes failed to install solar. Nearly half of the new homes on the Big Island -- 303 of 660 -- installed gaspowered heaters instead of solar. One developer reported that variances were "granted as a matter of course, as I understand it."

<sup>&</sup>lt;sup>1</sup> Civil Beat, "State Allows Developers to Flout Solar Mandate," available at <a href="http://www.civilbeat.com/articles/2010/11/12/6389-dbedt-developers-burn-gas-flout-solar-mandate/">http://www.civilbeat.com/articles/2010/11/12/6389-dbedt-developers-burn-gas-flout-solar-mandate/</a>

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Variance Requests													
Honolulu	3	2	4	2	1	0	3	0	0	3	11	22	51
Kauai	7	4	10	10	38	3	1	3	2	4	7	4	93
Maui	0	1	0	0	. 0	0	0	1	2	0	1	3	8
Hawaii	9	21	25	32	16	22	28	24	40	24	23	39	303
Unknown	, 0	0	0	0	0	0	0	0	0	0	2	0	2
Total	19	28	39	44	55	25	32	28	44	31	44	68	457
Single-Family Building Permits													
Honolulu	33	54	50	106	108	52	51	53	111	91	48	58	815
Kauai	16	8	14	11	46	11	9	25	7	8	15	14	184
Maui	19	18	15	27	13	22	19	24	14	14	12	18	215
Hawaii	50	67	46	57	40	71	64	43	67	ે49	57	49	660
Total	118	147	125	201	207	156	143	145	199	162	132	139	1874
Ratio of Variances to Permits Issued													
Honolulu	9.1%	3.7%	8.0%	1.9%	0.9%	0.0%	5.9%	0.0%	0.0%	3.3%	22.9%	37.9%	6.3%
Kauai	43.8%	50.0%	71.4%	90.9%	82.6%	27.3%	11.1%	12.0%	28.6%	50.0%	46.7%	28.6%	50.5%
Maui	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	14.3%	0.0%	8.3%	16.7%	3.7%
Hawaii	18.0%	31.3%	54.3%	56.1%	40.0%	31.0%	43.8%	55.8%	59.7%	49.0%	40.4%	79.6%	45.9%
Total	16.1%	19.0%	31.2%	21.9%	26.6%	16.0%	22.4%	19.3%	22.1%	19.1%	33.3%	48.9%	24.4%

Second, this bill would expand the law to apply to duplex dwellings. This is a logical extension to the Solar Roofs act -- it ensures we maximize clean, renewable sources of power and reduce our dependence on fossil fuels.

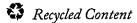
The solar mandate was a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. Respectfully, we ask this Committee to reject 25% or 50% success, and instead ensure a solar water heater on each and every home in Hawai'i.

Finally, we propose ensuring that DBEDT has the discretion to accept or reject variance applications. This ensures flexibility as the program proceeds forward.

#### Proposed Amendment:

On or after January 1, 2010, no building permit shall be issued for a new single-family dwelling that does not include a solar water heater system that meets the standards established pursuant to section 269-44, unless[, at the coordinator's discretion,] the coordinator approves a variance[ is approved].

Mahalo for the opportunity to testify.





#### Hawaii Solar Energy Association

Serving Hawaii Since 1977

February 14, 2012 2:45 PM

# SENATE COMMITTEE ON ENEGY & ENVIRONMENT SB 2038

Mark Duda President

#### TESTIMONY IN STRONG SUPPORT

Aloha Chair Gabbard, Vice Chair English and Members of the Committee:

SB 2038 makes better energy policy for the state by helping close a glaring loophole that has resulted in hundreds of residential water heating systems being installed with tankless gas water heating in spite of the existence of the "solar mandate." This loophole allows developers to comply with a law whose purpose is to reduce Hawaii's dependence on imported fuels by installing tankless gas water heaters, which burn fossil fuel. This would not be much of a problem but for the extent to which use has been made of the loophole.

HSEA tabulated data for the first year in which the mandate existed, 2010, and found that variance requests, which allow developers to avoid the mandate, applied to about 20 percent of all new homes constructed. And, these requests were almost universally granted. That is, of 345 variance applications, 342 were approved. Among the three others were one cancelation, one incomplete application, and one marked not applicable. Further, of the 345 total requests, 341 were for tankless gas (PV and wind are other options).

By making the standard for achieving a variance higher and especially by lodging decisionmaking authority with the end user of the property, SB 2038 ensures that long run economic logic will govern the decision of which technology to use to heat the water. That is, the person who has to pay the bill gets to make the decision about how to heat their water. This should result in more renewable energy and less fossil fuel use in Hawaii.

Thank you for the opportunity to testify on this measure.

Mark Duda President, Hawaii Solar Energy Association

#### About Hawaii Solar Energy Association

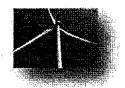
Hawaii Solar Energy Association (HSEA) is comprised of installers, distributors, manufacturers and financers of solar energy systems, both hot water and PV, most of which are Hawaii based, owned and operated. Our primary goals are: (1) to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the area; (2) to encourage the widespread utilization of

solar equipment as a means of lowering the cost of energy to the American public, to help stabilize our economy, to develop independence from fossil fuel and thereby reduce carbon emissions that contribute to climate change; (3) to establish, foster and advance the usefulness of the members, and their various products and services related to the economic applications of the conversion of solar energy for various useful purposes; and (4) to cooperate in, and contribute toward, the enhancement of widespread understanding of the various applications of solar energy conversion in order to increase their usefulness to society.









#### SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 14, 2012, 2:55 P.M. Room 225 (Testimony is 2 pages long)

#### **TESTIMONY IN SUPPORT OF SB 2038**

Chair Gabbard and members of the Committee:

The Blue Planet Foundation supports SB 2038, a measure making clarifying amendments and improvements to Hawaii's historic Solar Roofs Act. The 2008 Solar Roofs Act, Act 204, was a critical step forward toward Hawaii's clean energy future as it ensures that nearly every new home will be equipped with a solar water heater. Since taking effect in 2010, the law has over doubled the percentage of new homes being built with solar water heaters. While Blue Planet strongly supports the existing law, we believe that it could be improved.

The amendment proposed in SB 2038 will extend the solar roof requirement to duplexes as well as ensure greater accountability in the variance process currently in place. Unfortunately, too many homes are being built with gas water heaters. In a clear frustration of the original intent behind the Solar Roofs policy, the developer is often installing the gas heaters without the knowledge of the preferences of the ultimate homeowner. This measure corrects that by requiring that the homeowner proactively affirms that they are making the decision not to use solar and to use gas instead. We believe such a requirement, while not eliminating the variance, will ensure that it is not abused.

Solar water heating is a foundation block in building Hawaii's clean energy future. 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 (the Romans, in fact, used solar energy to heat the water flowing to baths in aqueducts). Solar water heaters provide the greatest energy savings per dollar for reducing substantial residential energy demand. The Solar Roofs Act ensures that the vast majority of new homes come equipped with this clean energy device, and helps to smooth the transition toward zero-energy homes of the future.

Solar water heating is the single best "clean" energy alternative for residences in Hawai'i. The Solar Roofs law increases the efficiency and affordability of new homes built in Hawai'i. Solar water heaters are among the most effective means of reducing the high electricity cost burden

that residents now endure. The solar roofs bill makes the cost of living more affordable by slashing the electric utility bill of an average new home by 30 to 40 percent—saving upwards of \$1000 annually for an average household statewide.

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."

The cost of living is a top-of-mind issue for many in Hawai'i. The Solar Roofs law makes new home ownership more affordable by reducing the monthly utility burden. The simple amendments in SB 2038 ensure that the more benefit from the solar requirement and that the decision to forgo solar on a new home is made by the homeowner paying the monthly utility bills with full knowledge of the ramifications.

Thank you for the opportunity to testify.

### THE GAS COMPANY

P.O. Box 3000 Honolulu, Hawaii 96802-3000 www.hawaiigas.com

Chair Mike Gabbard Members of the Committee Committee on Energy and Environment

Testimony from Stephanie Ackerman - Vice President Public Policy and Communications The Gas Company

Contact: 808-535-5913

Tuesday, February 14, 2012

Position: Strongly oppose S.B. 2038 Relating to Energy Resources

Chair Gabbard and Members of the Committee on Energy and the Environment,

I am Stephanie Ackerman, Vice President of the Gas Company. The Gas Company strongly opposes this measure because it limits consumer choice, does not recognize that builders should have access to a variety of energy conserving alternatives and creates a solar rooftop monopoly for virtually all future residential housing.

This change will unreasonably limit innovation in Hawaii by specifying a single technology, which will prevent the introduction of new forms of renewable energy that can be distributed using existing infrastructure. As many of you know, The Gas Company is actively engaged in producing renewable gas products from sustainable feedstock sources in Hawaii. Limiting the number of homes that consume gas in Hawaii will limit the number of outlets for this renewable source of gas energy.

This change will also limit consumer and builder choice to select their preferred form of energy. Homeowners who prefer to cook and dry their clothes using gas will be forced to use electricity. But the use of grid electricity to cook and dry nearly completely offsets the entire benefit of solar water heating to reduce oil consumption.

In Hawaii, we know that gas delivers nearly three times more energy to the home than grid electricity making it a far more efficient, clean and cost effective source of energy. Please remember that the gas produced in Hawaii, is made from petroleum bi products already produced here today. It does not require the importation of one drop of additional oil.

The Gas Company is proud of its reputation of providing our island residents and businesses with dependable gas energy service. Gas has one-third the carbon footprint as electricity, and is available day and night. When teamed with Solar, it can reduce costs and carbon consumption over its grid powered electric alternative.

Even after hurricanes, electricity blackouts, and the attack on Pearl Harbor, our customers could always depend on our reliable delivery of gas. It is because of our solid reputation of serving Hawaii as a clean, efficient and reliable energy provider that we believe The Gas Company must continue to have an integral role in Hawaii's sustainable solutions.

We encourage you to hold this bill and retain the consumer choice options for energy efficiency provided in Act 204 (2008).

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



ARCHITECTURE 2970 Kele Street #115 Lihue HI 96766 (808) 246-4796 www.palmshawaii.com

Senator Mike Gabbard ENE Chairman Senate District 19 Hawaii State Capitol, Room 201 Feb. 13, 2012

Respect Chairman,

I should offer my support for SB-2038 as another step forward in the direction of energy responsibility.

As an architect I have offered several exemptions to the Solar hot Water mandate as presently allowed. This amendment provides additional opportunity to engage clients, who may not find direct financial benefit compelling enough to help Hawaii toward our goal, in the firm argument for Solar assisted water heating. It may also close a loophole for reduced performance in speculative development of "investment" property at the expense of the user.

Until we build political will to resolve the burden that languishes in the existing low performance housing environment this bit of tooth in the law applied to new homes, will help limit the proliferation of oil dependent homes.

I ask you to consider these benefits carefully and work with your colleagues to build on the intent of this Bill.

With aloha,

pН

Palmer W. Hafdahl, AIA

Yalma W Hafdall

Testimony for ENE 2/14/2012 2:55:00 PM SB2038

Conference room: 225

Testifier position: Support Testifier will be present: No

Submitted by: Pat Gegen
Organization: Individual
E-mail: Psgegen@hotmail.com
Submitted on: 2/12/2012

#### Comments:

Aloha Chair Gabbard and distinguished members of the ENE committee:

I support the passage of bill SB2038 as it rectifies and brings the law into closer alignment with the original intent.

I am also happy to see the inclusion of duplexes as a required dwelling.

On our beautiful Garden Island of Kauai we have seen too many variances being granted for gas water heaters being issued to contractors and landlords and not the end user. While this variance is proving beneficial to developers and landlords in the short run, it is not helping the ultimate inhabitants of these dwellings as the occupants are now left with an additional, and unnecessary, bill to pay. SB2038 will correct this issue.

I would really like to see an even stronger stance being taken by eliminating this particular variance all together. In Hawai'i we have an abundance of natural resources(in this case thermal heat from the sun) and it is a shame that we are taking a step back and allowing an opt-out for just having a preference for gas. Gas is not a renewable resource and does not add to our independence, security or sustainability. By definition it is not sustainable because once it is burned ( and has created it's greenhouse gas contribution) it is gone. This is true whether it was obtained through the fracing process which is harming water supplies and has been blamed for creating earthquakes or by some alternative recapturing process.

Thank you for your consideration of SB2038 and of the issues I have cited.

Kind Regards from Beautiful (and sunny) Kaua'i,

Pat Gegen

#### Senate Committee on Energy and Environment

Public Hearing: February 14, 2012, 2:55pm, Room 225

Re: SB 2038, Relating to Solar Water Heating

Dear Chair Gabbard and members of the Committee,

I am writing in support of Senate Bill 2038.

I have a MBA at the University of Hawaii where I focused on renewable energy and preserving natural resources through business opportunities. I have and continue to work on projects related to renewable energy, waste reduction, recycling, conservation and sustainable transportation.

The legislature in 2008 passed Act 204 requiring solar water heaters on new single-family homes and SB 2038 will improve on this important law. It will help eliminate a variance that allows a tankless gas heater to be substituted for solar water heating. In order to get a variance with the new language, the owner will have to make an informed decision, not at the sole discretion of a developer.

This Bill also requires new construction duplexes to have the same requirements for installing solar heaters as single-family homes. We should not let water heaters that use gas or electric be substituted for solar water systems where there is adequate sun.

No water heater is more efficient and reduces our dependence on fossil fuels more than solar hot water systems.

Thank you for considering my comments in support of this Bill,

Steven Mazur (808) 469-5022 steven.mazur@gmail.com 3258 Catherine St., Honolulu, HI 96815

#### Testimony for ENE 2/14/2012 2:55:00 PM SB2038

Conference room: 225

Testifier position: Support Testifier will be present: No Submitted by: Carolyn L Knoll

Organization: Individual E-mail: <a href="mailto:clk5356@gmail.com">clk5356@gmail.com</a> Submitted on: 2/14/2012

Comments: