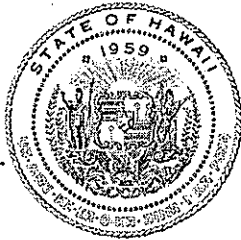


SB 16

RELATING TO ENERGY RESOURCES.

Requires appropriate county permitting agency to receive and process application for variances for installation of solar water heating systems. Requires county councils to establish procedures and standards by which their respective county permitting agencies approve, disapprove, or approve with conditions. Clarifies existing application procedures.



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

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
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Statement of
RICHARD C. LIM
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEES ON ENERGY AND ENVIRONMENT
and
**PUBLIC SAFETY, INTERGOVERNMENTAL
AND MILITARY AFFAIRS**

Tuesday, February 12, 2013
2:15 p.m.
State Capitol, Conference Room 224

in consideration of
SB 0016
RELATING TO ENERGY RESOURCES.

Chairs Gabbard and Espero, Vice Chairs Ruderman and Baker, and Members of the
Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) supports this bill. The proposed measure requires county councils to establish procedures and standards by which their respective county permitting agencies approve, disapprove, or approve with conditions, variances for the solar water heating mandate. The measure also clarifies existing application procedures. DBEDT supports this measure because by allowing counties to grant the variance, both the variance and building permit will be administered by the appropriate county to expedite the process for review and approval. Therefore, this measure will expedite the process

for building permit approval by requiring that only one entity, the building departments of each county, approve the variance and the building permit. The proposed measure also allows the county to collect fees to cover the costs of processing applications for variances.

DBEDT would like to offer the following amendment to the measure:

- (4) A demand water heater device [~~approved by Underwriters Laboratories, Inc.,~~] is installed; provided that at least one other gas appliance is installed in the dwelling. For the purposes of this paragraph, "demand water heater" means a gas-tankless instantaneous water heater that provides hot water only as it is needed. The gas-tankless water heater must be approved by a North American certification organization, such as the Canadian Standards Association International; the Air-Conditioning, Heating, and Refrigeration Institute; or the Gas Appliance Manufacturers Association Certification Program.

This amendment more accurately assures that gas-tankless water heaters still meet performance requirements recognized by a third party, certification organization. Underwriters Laboratories, Inc., lists manufacturers but not the specific product or model numbers of the gas-tankless water heaters. The organizations above test and evaluate gas-tankless water heaters and list which products and models are certified.

Thank you for the opportunity to provide this testimony.

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

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COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

February 12, 2013

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

Honorable Will Espero, Chair
and Members of the Committee on Public
Safety, Intergovernmental and Military Affairs

Hawaii State Senate
State Capitol, Room Nos. 201 and 231
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chairs Gabbard and Espero and Members:

RE: SB 16 RELATING TO ENERGY RESOURCES

Thank you for the opportunity to comment on the subject bill. The County of Maui Department of Public Works (DPW) OPPOSES this bill.

The statewide requirement to mandate the use of solar water heaters was passed after much discussion, and the waiver process that has been established was clearly meant to be a State function. That is now being proposed to be transferred to the Counties. The time and cost associated with taking on this function must be evaluated by the Legislature as it appears to be an unfunded mandate.

However, should the Committees approve this measure and move it forward, we suggest amendments along these lines:

1. "Variance" should be re-described as a "Waiver" to avoid the confusion of a variance from typical building, plumbing or electrical code requirements and the hearing of such by our Board of Variances and Appeals.

Honorable Mike Gabbard and Will Espero, Chairs and Members of the
Committees on Energy and Environment and Public Safety, Intergovernmental and
Military Affairs

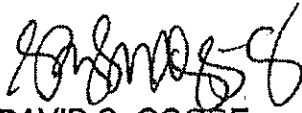
February 12, 2013

Page 2

2. The Permitting Agency is required to adopt rules, but this should only be if rule-making authority is already in place. These types of variances (waivers) should be handled by procedures and standards instead set by DPW through our existing codes.
3. Eliminate Council involvement. The State law already sets up the criteria for variance (waiver) approval which is technical in nature, and could be adapted into existing building, plumbing, or electrical permit applications.

Thank you for the opportunity to submit this testimony and I apologize for the late submittal.

Sincerely,


DAVID C. GOODE
Director of Public Works

DCG:jso

s:\david2\testimony sb 16 re energy resources on solar water heaters 2.12.13

February 12, 2013

The Honorable Mike Gabbard, Chair
Senate Committee on Energy and Environment

The Honorable Will Espero, Chair
Senate Committee on Public Safety, Intergovernmental and Military Affairs
State Capitol, Room 224
Honolulu, Hawaii 96813

RE: S.B. 16, Relating to Energy Resources

HEARING: Tuesday, February 12, 2013 at 2:15 p.m.

Aloha Chair Gabbard, Chair Espero, and Members of the Joint Committees:

I am Myoung Oh, Government Affairs Director, here to testify on behalf of the Hawai'i Association of REALTORS® ("HAR"), the voice of real estate in Hawai'i, and its 8,000 members. HAR **supports** S.B. 16 which requires appropriate county permitting agency to receive and process application for variances for installation of solar water heating systems and county councils to establish procedures and standards by which their respective county permitting agencies approve, disapprove, or approve with conditions.

HAR believe S.B. 16 will bring additional consistency to the permit and building process, and transfers decision making processes to the individual counties, which is more appropriate.

Building permits and building inspections, including plumbing inspections, are conducted at the county level, therefore giving the responsibility to the Counties for approving a variance relative to the installation of a solar hot water heater would centralize all approval and inspections regarding plumbing within the individual counties. In addition, county departments have much greater knowledge of unique weather patterns within the county, than state departments, which will enable better decisions to be made regarding the variance if the rationale is weather related.

HAR believes this measure will continue to on the basis of "home rule" as we believe solar hot water variances can be better determined by our respective counties.

Mahalo for the opportunity to testify.

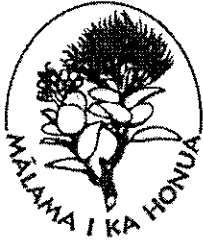


Tuesday, February 12, 2013 2:15 P.M.
State Capitol, Conference Room 224
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
AND
SENATE COMMITTEE ON PUBLIC SAFETY, INTERGOVERNMENTAL AND
MILITARY AFFAIRS

Testimony in opposition with comments of SB 16

Chair Gabbard, Chair Espero, Members of the Senate Committees on Energy and Environmental and Public Safety, Intergovernmental and Military Affairs, my name is Joe Boivin and I am the Senior Vice President for Public Affairs and Communications at HAWAII'IGAS testifying in opposition with comments of SB 16. HAWAII'IGAS is the only franchised gas utility in the state of Hawai'i, providing gas service to over 70,000 utility and tank and bottled gas customers throughout the state.

SB 16 allows the county permitting agencies, rather than the Department of Business Economic Development and Tourism, to approve solar water heating variance applications and also allows each county to establish its own procedures and standards for approving or denying a variance application. HAWAII'IGAS supports allowing counties to approve variance applications, but opposes changing the current procedures and standards. If each county sets its own procedures, this will likely result in confusion and delays in the variance process. There is also no timeline for establishing the procedures and standard for the variances, which will further confuse and delay the process. HAWAII'IGAS recommends amending the bill to allow county permitting agencies to approve the variance applications, but keep the current thirty (30) day approval process in place. Thank you.



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.538.6616 hawaii.chapter@sierraclub.org

SENATE COMMITTEE ON ENERGY & ENVIRONMENT SENATE COMMITTEE ON PUBLIC SAFETY, INTERGOVERNMENTAL AND MILITARY AFFAIRS

February 12, 2013, 2:15 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 16 WITH PROPOSED AMENDMENT

Aloha Chair Gabbard, Chair Espero, and members of the Committees:

The Sierra Club, Hawaii Chapter, with over 10,000 dues paying members and supporters statewide, respectfully *supports* SB 16. This measure would transfer the responsibility for processing solar water heating systems to the counties.

We note that the 2009 Legislature attempted to clarify the intent of our existing Solar Roofs law. Concerned that consumers may not have the option to choose between gas and solar water heaters, the Legislature expressly stated that the gas variance could only be taken by the final consumer. Specifically, "To obviate any attempt to circumvent Act 204, then, the legislature intends that if the potential variance applicant is not the party who will ultimately pay for the energy cost consumption, the only paragraph (1), (2), or (3) of subsection (a) in section 196-6.5, Hawaii Revised Statutes, should apply."

To this end, we propose the following amendment on page 3:

A demand water heater device approved by Underwriters Laboratories, Inc., is installed; provided that at least one other gas appliance is installed in the dwelling. For the purposes of this paragraph, "demand water heater" means a gas-tankless instantaneous water heater that provides hot water only as it is needed. This variance may only be taken by a party who intends on paying for the energy cost consumed at the property for at least one year after the variance application.

Mahalo for the opportunity to testify.



**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON PUBLIC SAFETY, INTERGOVERNMENTAL
AND MILITARY AFFAIRS**

February 12, 2013, 2:15 P.M.

Room 224

(Testimony is 3 pages long)

TESTIMONY IN SUPPORT OF SB 16, SUGGESTED AMENDMENT

Chairs Gabbard and Espero members of the committees:

The Blue Planet Foundation supports SB 16, a measure making amendments to Hawaii's historic Solar Roofs Act, with the primary amendment transferring the variance approval process to from the State Energy Resources Coordinator to the county building permit authority. We support this change—with clear guidance in statute on allowable variances—and hope that the county building departments will exercise greater scrutiny over the approval process.

Blue Planet believes that the variance option should only be exercised in rare circumstances where solar doesn't make sense or is not cost effective. **Therefore, we respectfully request that SB 16 be amended to allow a variance for gas water heating only if the home has poor solar resource and solar would fail the cost-effectiveness test.** Gas would be an option only if solar is deemed impractical or not cost-effective. *A proposed amendment is provided at the end of this testimony.*

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 significantly improved.

Unfortunately, far too many homes are being built with gas water heaters. Blue Planet Foundation analyzed the variance request information tracked by the Energy Resources Coordinator. Between the time the law took effect in January, 2010, and the beginning of February, 2013, a total of 1420 variances from the solar water requirement have been sought.

info@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawaii 96813 • 808-954-6142 • blueplanetfoundation.org

- Of the 1420 variance applications, over 99% (1408) have been approved. The majority of those denied were due to incomplete applications. Three requests were cancelled.
- Three architects were responsible for over 50% (710) of the total variances requested.
- One architect, Robert Smelker, alone was responsible for over 38% (541) of the variances requested. He was only denied once (incomplete application).
- Over two-thirds (947) of the total variances were requested on Hawaii Island.
- Of those variances granted, over 95% were for gas heaters, 3% had another renewable energy device, and about 1% were deemed “impractical” for solar.

The history of variance granting by the State Energy Resources Coordinator suggests that the intent behind the Solar Roofs policy is being frustrated. In clarifying amendments in 2009 (HB 1464 CD1), the legislature was unambiguous about the original policy’s intent:

It is the intent of the legislature that the variances provided for in Act 204, Session Laws of Hawaii 2008, (Act 204) will be rarely, if ever, exercised or granted because the burden of proof will lie with the applicant to demonstrate that a solar water heater system, regardless of location or circumstance, is not cost effective in the context of a thirty-year mortgage term.

Further, the developer is often installing the gas heaters without the knowledge of the preferences of the ultimate homeowner. The amendments proposed in SB 16 will extend the solar roof requirement to duplexes as well as ensure greater accountability in the variance process currently in place.

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 amendments in SB 16 ensure that the more benefit from the solar requirement and transfers the decision to exempt developers or homeowners from this requirement to the county building permit departments.

Thank you for the opportunity to testify.

SUGGESTED AMENDMENT

§196-6.5 Solar water heater system required for new single-family residential construction. (a) On or after January 1, 2010, no building permit shall be issued for a new single-family dwelling or duplex that does not include a solar water heater system that meets the standards established pursuant to section 269-44, unless the ~~[coordinator]~~ appropriate county permitting agency approves a variance. A variance application shall only be accepted if submitted by an architect or mechanical engineer licensed under chapter 464, who attests that:

- (1) Installation is impracticable due to poor solar resource;
- (2) Installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed fifteen years;
- (3) A renewable energy technology system, as defined in section 235-12.5, is substituted for use as the primary energy source for heating water; or
- (4) A demand water heater device approved by Underwriters Laboratories, Inc., is installed; provided that at least one other gas appliance is installed in the dwelling and the first or second variances in subsection (a) (1) and (a) (2) of this section are met. For the purposes of this paragraph, "demand water heater" means a gas-tankless instantaneous water heater that provides hot water only as it is needed.

COUNTY COUNCIL

Jay Furfaro, Chair
Nadine K. Nakamura, Vice Chair
Tim Bynum
Gary L. Hooser
Ross Kagawa
Mel Rapozo
JoAnn A. Yukimura



OFFICE OF THE COUNTY CLERK

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

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Council Services Division
4396 Rice Street, Suite 209
Lihu'e, Kaua'i, Hawai'i 96766

February 11, 2013

**TESTIMONY OF JOANN A. YUKIMURA
COUNCILMEMBER, KAUAI COUNTY COUNCIL
ON**

**S.B. NO. 16, RELATING TO ENERGY RESOURCES
Senate Joint Committee on Energy and Environment /
Public Safety, Intergovernmental and Military Affairs**

February 12, 2013

2:15 p.m.

Conference Room 224

Dear Chair Gabbard, Chair Espero, and Members of the Senate Joint Committee on Energy and Environment / Public Safety, Intergovernmental and Military Affairs:

Thank you for this opportunity to submit testimony in support of S.B. No. 16, Relating to Energy Resources. My testimony is submitted in my capacity as a member of the Kaua'i County Council, as vice chair of the Council's Economic Development (Sustainability / Agriculture / Food / Energy) & Intergovernmental Relations Committee and as a member of the County's Energy Plan Advisory Committee (EPAC) which is overseeing the implementation of Kaua'i's Energy Sustainability Plan. (KESP)

I am in full support of S.B. No. 16, which provides for County permitting agencies, rather than the State Energy Resources Coordinator to have the responsibility of processing solar water heating variance applications as a part of the building permit process. Since the counties already issue building permits, it makes sense to have the solar water heating variance applications processed by the counties as well.

I am also in support of S.B. No. 16 because it allows the counties, through their respective County Council, to set standards for the variances. On Kaua'i, variances have been granted inappropriately and in conflict with the original intent and purpose of the State's solar water heating initiative as articulated in the Hawaii Clean Energy Act 155 (2009). S.B. No. 16 would allow the counties to clear up the misalignment and ensure that the purpose of the original bill will be fulfilled.

To make this intent clear, I would suggest a couple of small wording changes to the bill. In Section 2(b), line 12 of page 3 of the bill, for the words, "in subsection (a)", substitute the wording, "by the counties." It would thus read: "the criteria established by the counties."

To remove unnecessary bureaucracy and associated cost, I also recommend that the requirement on line 10 of page 2 of a licensed architect or engineer to submit applications for variances be deleted. Only in instances 2(a)(1) and (2) might an architect or engineer be helpful, but it is also possible that a fill-in-the-blanks formula might be devised by the

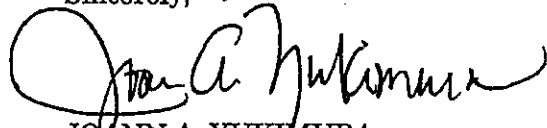
AN EQUAL OPPORTUNITY EMPLOYER

Senate Joint Committee on Energy and Environment /
Public Safety, Intergovernmental and Military Affairs
February 11, 2013
RE: S.B. No. 16, Relating to Energy Resources

permitting agency. We would recommend leaving to the counties when and whether an licensed architect or engineer might be necessary. Thus lines 8, 9, and 10 on page 2 would be amended as follows: "A variance application shall [only] be accepted if [submitted by an architect or mechanical engineer licensed under chapter 464, who attests] the application demonstrates to the satisfaction of the permitting agency that:"

For the reasons stated above, I am in support of S.B. No. 16 and ask for your favorable support. Again, thank you for this opportunity to submit testimony.

Sincerely, 



JOANN A. YUKIMURA
Councilmember, Kaua'i County Council

Thank you for the opportunity to comment on SB 16

My name is Del Alexander, and I am a plumbing contractor on Kauai (license #C 22038). I make my living plumbing solar, gas, and electric water heaters. SB 16 fails to address the need for leadership in our challenge to provide sustainable solutions for water heating. We must not leave this decision to others nor let special interest groups lead for us. I urge you to throw SB 16 out and replace it with clear statewide direction for variances for fossil fuel burning water heaters.

I'd like to point out a few simple truths:

1. A properly sized and installed solar hot water system is the most cost-effective means of heating water. No other method yields a better return on investment.
2. Although the sun is 93 million miles away, it has no problems serving us in this endeavor. There are no middle men, shipping costs or fuel, selfish motives, nor wars waged to harness it.
3. Although we can provide most of our hot water needs with solar, we are the only obstacle in the way of this becoming a reality. Our leaders have fallen short in their responsibility to lead in this direction. We can choose to have 98% of our water heating needs met with solar hot water systems and save our precious imported oil for other needs for which solar is not an option. I urge you to assert your leadership in addressing this problem now and at the State level. Leaving it to the counties is leaving it open to the special interests who stand to make millions selling oil-based systems they promote as "green" and "natural" such as tankless gas. These lobbies are backed by billion-dollar industry and they are biased.

I also urge you to revise act 204. This act has crippled the solar industry by removing the State tax incentive for new homes constructed in Hawaii. On Kauai, the solar variance has given oil-burning water heaters an advantage. While solar is far more cost-effective over its lifecycle and sustainable, there is a greater initial investment, and many homeowners lack the funds for the initial investment.. I urge you to correct Act 204 so we can meet the aggressive clean energy standards set forth in the Hawaii Clean Energy Initiative and live pono.

A handwritten signature in cursive script that reads "Del Alexander". The signature is written in dark ink and is positioned at the bottom of the page.