



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

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

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

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

Statement of  
**THEODORE E. LIU**  
Director  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEES ON  
ENERGY & ENVIRONMENTAL PROTECTION,  
HOUSING,  
And  
WATER, LAND & OCEAN RESOURCES**  
Tuesday, March 17, 2009  
9:15am  
State Capitol, Conference Room 325

in consideration of

**SB241 SD2  
RELATING TO ENERGY.**

Bill No. 241

Support **Y**  **N**

Date 3/16/09

Time 1159

Cat AF  AS  AX  BC

Type  1  2  WI

Chairs Morita, Cabanilla, Ito, Vice Chairs Coffman, Chong, Har, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) does not support SB241 SD2, which mandates the use of cool roofs conforming to Energy Star performance standards or radiant barriers on all new residential and commercial construction in Hawaii beginning in 2011. SB241 SD2 also directs all counties to adopt and enforce rules, ordinances, and guidelines and to take all reasonable actions to implement and enforce this new provision. This bill charges the Energy Resources Coordinator with reviewing requests for variances and with issuing detailed findings that the cool roof will or will not significantly reduce the energy consumption of the building. DBEDT has neither the financial nor the personnel resources to conduct such reviews and issue such findings.

While DBEDT supports the use of cool roofs, we have strong reservations about such a sweeping mandate affecting "any new construction of a residential structure, including single-family and multi-family residential properties, and any new construction of a commercial structure, including construction for businesses of any kind. California's cool roof law resulted in the creation of a large Cool Roof Rating Council whose members are required to perform myriad time-consuming duties in order to fairly enforce the law.

We support the cool roof provisions in SB871, our omnibus Administration measure developed in support of the Hawaii Clean Energy Initiative, which proposes that the Public Benefits Fee Administrator consider costs and benefits of requiring cool roof standards as one of the energy efficiency measures under an active program to utility rate payers. Therefore, we propose that the analysis and evaluation by the Public Benefits Fee Administrator be allowed to take place before any mandatory measures are imposed.

Thank you for the opportunity to offer these comments.

DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7TH FLOOR - HONOLULU, HAWAII 96813  
TELEPHONE: (808) 768-8000 • FAX: (808) 768-8041  
DEPT. WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov



MUFI HANNEMANN  
MAYOR

DAVID K. TANOUE  
DIRECTOR  
ROBERT M. SUMITOMO  
DEPUTY DIRECTOR

March 17, 2009

Bill No. 241

Support **Y N**

Date 3/16/09

Time 13:30

Cat AF AS  B C

Type  1 2 WI

The Honorable Hermina M. Morita, Chair  
and Members of the Committee on Energy  
& Environmental Protection

The Honorable Rida Cabanilla, Chair  
and Members of the Committee on Housing

The Honorable Ken Ito, Chair  
and Members of the Committee on Water,  
Land, & Ocean Resources  
State House of Representatives  
State Capitol  
Honolulu, Hawaii 96813

Dear Chairs Morita, Cabanilla, Ito and Members:

**Subject: Senate Bill No. 241, SD2  
Related to Energy**

Although we encourage smart construction in Hawaii and agree with the intent of House Bill No. 241, SD2, the Department of Planning and Permitting has **serious concerns** with the bill.

We cannot support this measure for the following reasons:

1. In today's economy, this mandate will add another requirement, more costs, and more delays to a process that the public (and elected officials) constantly demand that it be streamlined.
2. By utilizing the building permit process, this bill places a potentially costly unfunded mandate on the counties to regulate energy.
3. The installation of a cool roof, while reducing the use of energy for one building, might have the unintended consequence of increasing the energy cost in a neighboring building if heat is reflected onto the adjacent building.

The Honorable Hermina M. Morita, Chair  
and Members of the Committee on Energy  
& Environmental Protection

The Honorable Rida Cabanilla, Chair  
and Members of the Committee on Housing

The Honorable Ken Ito, Chair  
and Members of the Committee on Water,  
Land, & Ocean Resources

State House of Representatives

Re: Senate Bill No. 241, SD2

March 17, 2009

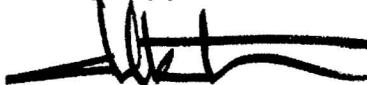
Page 2

4. The industry and owners should have the freedom to choose how they design their buildings as there are many different ways of accomplishing energy savings other than "cool roofs". The language of this bill has the unintended consequence of effectively prohibiting any new technologies which could arise in the building and design industry, any new technological advancement made would mandate a modification of the existing statute.
5. This bill would prohibit someone from designing a building which requires heat gain to decrease the energy use of their building for heating purposes.
6. This bill undermines the "home rule" powers of the counties to administer inspections of buildings. The counties are empowered by Chapter 46 section 1.5(14) (A) (iii), to regulate the building inspection process.
7. This bill in effect creates only one type of roof covering that would be permitted. As such, a "variance process" would be initiated for an alternate type of roof. This would significantly increase the time for processing the building permit. Although attempts have been made to account for various other types of roof covering this bill, falls short of addressing other than "cool roofs".

In conclusion, we respectfully recommend that the bill be filed until more studies are conducted on this measure.

Thank you for the opportunity to testify.

Very truly yours,



David K. Tanoue, Director  
Department of Planning and Permitting



Bill No. 241

Support Y  N

Date 3/15/09

Time 1305

Call AF AS AX  BC

Type  1  2 WI

HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION,  
HOUSING AND WATER, LAND AND OCEAN RESOURCES  
STATE CAPITOL, ROOM 325  
MARCH 17, 2009 AT 9:15 AM

Subject: Senate Bill No. 241, SD2, Relating to Energy

Chairs Morita, Cabanilla and Ito, and members of the committees:

My name is Jim Tollefson, President of the Chamber of Commerce of Hawaii. The Chamber of Commerce of Hawaii works on behalf of its members and the entire business community to:

- Improve the state's economic climate
- Help businesses thrive

The Chamber of Commerce of Hawaii is opposed to bills such as SB 241 that "Mandates" citizens to build in a certain way in the interest of energy conservation. The bill states that the use of cool roofs will facilitate a decrease in dependency on foreign oil by the State and assist in reaching the goal of producing seventy per cent of the State's energy from clean sources by 2011.

No one disagrees with the intended goal of moving the state toward becoming more energy self sufficient. The concern is in the manner our elected leaders are choosing to accomplish this goal. Furthermore, it appears to be unrealistic to state that our goal is have 70% of our energy from clean sources in 2 years (2011).

As was the case last session, this bill does clearly or realistically identify the specific problem or problems that need to be addressed through the proposed legislation. If the underlying intent is to encourage more energy efficient perhaps the proposed legislation should be expanded to include an assessment and analysis that clearly articulates the criteria for assessing and measuring the intended outcomes of the proposed legislation.

In other Cities or municipalities, government has led by example by "Mandating" that all government projects achieve a certain green or sustainable design standard. In so doing, the design professionals and contractors in these Cities were educated and developed the necessary hands on experience to build a green or sustainable project. AFTER the design professionals and contractors gained this experience, there were incentives created based on their hands on experience, to encourage the private projects to incorporate green or sustainable design. People were able to see that costs and benefits of changing behavior and moving toward more energy efficiency.

If this is such a great program to move us to clean energy, than government should lead by example. Is the legislature prepared to "Mandate" that all new and existing government facilities have "cool roofs" by 2011?

While we see interest in the market moving toward more energy efficiency and sustainable designs, we believe there is much more that needs to be done before public policy makers "Mandate" any more "green or sustainable" legislation.

We strongly encourage that SB 241, SD2 be held.

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



March 17, 2009

Bill No. 241

Support Y  N

Date 3/14/09

Time 1405

Cat AF AS AX  BC

Type  1 2 WI

Representative Hermina Morita, Chair  
COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION  
Representative Rida Cabanilla, Chair  
COMMITTEE ON HOUSING  
Representative Ken Ito, Chair  
COMMITTEE ON WATER, LAND AND OCEAN RESOURCES  
State Capitol, Conference Room 325  
415 South Beretania Street  
Honolulu, Hawaii 96813

Representatives Morita, Cabanilla and Ito:

Subject: Senate Bill No. 241, SD2, Relating to Energy

My name is Shane Peters, President of the Hawaii Developers' Council (HDC). We represent over 200 members and associates in development-related industries. The mission of Hawaii Developers' Council (HDC) is to educate developers and the public regarding land, construction and development issues through public forums, seminars and publications.

It is also the goal of HDC to promote high ethics and community responsibility in real estate development and related trades and professions.

The HDC is opposed to bills such as SB 241 that "Mandates" citizens to build in a certain way in the interest of energy conservation. The bill states that the use of cool roofs will facilitate a decrease in dependency on foreign oil by the State and assist in reaching the goal of producing seventy per cent of the State's energy from clean sources by 2011.

No one disagrees with the intended goal of moving the state toward becoming more energy self sufficient. The concern is in the manner our elected leaders are choosing to accomplish this goal. Furthermore, it appears to be unrealistic to state that our goal is have 70% of our energy from clean sources in 2 years (2011).

As was the case last session, this bill does clearly or realistically identify the specific problem or problems that need to be addressed through the proposed legislation. If the underlying intent is to encourage more energy efficient perhaps the proposed legislation should be expanded to include an assessment and analysis that clearly articulates the criteria for assessing and measuring the intended outcomes of the proposed legislation.

In other Cities or municipalities, government has led by example by "Mandating" that all government projects achieve a certain green or sustainable design standard. In so doing, the design professionals and contractors in these Cities were educated and developed the necessary

hands on experience to build a green or sustainable project. AFTER the design professionals and contractors gained this experience, there were incentives created based on their hands on experience, to encourage the private projects to incorporate green or sustainable design. People were able to see that costs and benefits of changing behavior and moving toward more energy efficiency.

If this is such a great program to move us to clean energy, than government should lead by example. Is the legislature prepared to "Mandate" that all new and existing government facilities have "cool roofs" by 2011?

While we see interest in the market moving toward more energy efficiency and sustainable designs, we believe there is much more that needs to be done before public policy makers "Mandate" any more "green or sustainable" legislation.

We strongly encourage that SB 241, SD2 be held.

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

**BIA-HAWAII**  
BUILDING INDUSTRY ASSOCIATION

March 17, 2009

Representative Hermina Morita, Chair  
COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION  
Representative Rida Cabanilla, Chair  
COMMITTEE ON HOUSING  
Representative Ken Ito, Chair  
COMMITTEE ON WATER, LAND AND OCEAN RESOURCES  
State Capitol, Conference Room 325  
415 South Beretania Street  
Honolulu, Hawaii 96813

Representatives Morita, Cabanilla and Ito:

Subject: Senate Bill No. 241, SD2, Relating to Energy

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 is opposed to bills such as SB 241 that "Mandates" citizens to build in a certain way in the interest of energy conservation. The bill states that the use of cool roofs will facilitate a decrease in dependency on foreign oil by the State and assist in reaching the goal of producing seventy per cent of the State's energy from clean sources by 2011.

No one disagrees with the intended goal of moving the state toward becoming more energy self sufficient. The concern is in the manner our elected leaders are choosing to accomplish this goal. Furthermore, it appears to be unrealistic to state that our goal is have 70% of our energy from clean sources in 2 years (2011).

As was the case last session, this bill does clearly or realistically identify the specific problem or problems that need to be addressed through the proposed legislation. If the underlying intent is to encourage more energy efficient perhaps the proposed legislation should be expanded to include an assessment and analysis that clearly articulates the criteria for assessing and measuring the intended outcomes of the proposed legislation.

In other Cities or municipalities, government has led by example by "Mandating" that all government projects achieve a certain green or sustainable design standard. In so doing, the design professionals and contractors in these Cities were educated and developed the necessary hands on experience to build a green or sustainable project. AFTER the design professionals and contractors gained this experience, there were incentives created based on their hands on experience, to encourage the private projects to incorporate green or sustainable design. People were able to see that costs and benefits of changing behavior and moving toward more energy efficiency.

Bill No. 241  
Support Y  N  
Date 3/14/09  
Time 1614  
Cat AF AS AX  B C  
Type  1 2 WI

If this is such a great program to move us to clean energy, than government should lead by example. Is the legislature prepared to "Mandate" that all new and existing government facilities have "cool roofs" by 2011?

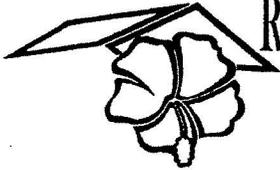
While we see interest in the market moving toward more energy efficiency and sustainable designs, we believe there is much more that needs to be done before public policy makers "Mandate" any more "green or sustainable" legislation.

We strongly encourage that SB 241, SD2 be held.

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

A handwritten signature in cursive script that reads "Karen L. Mahamua".

Chief Executive Officer  
BIA-Hawaii



# ROOFING CONTRACTORS ASSOCIATION OF HAWAII

820 Mililani Street, Ste. 810, Honolulu, Hawaii 96813  
Phone (808) 537-1224 ♦ Facsimile (808) 533-2739

---

March 17, 2009

Testimony To: House Committee on Energy & Environmental Protection  
Representative Hermina Morita, Chair

House Committee on Housing  
Representative Rida Cabanilla, Chair

House Committee on Water, Land, & Ocean Resources  
Representative Ken Ito, Chair

Bill No. 241  
Support  Y  N  
Date 3/16/09  
Time 954  
Cat AF AS AX  B  C  
Type  1  2 WI

Presented By: Tim Lyons, CAE  
Executive Director

Subject: S.B. 241, SD 2 – RELATING TO ENERGY

Chair Morita, Chair Cabanilla, Chair Ito and Members of the Joint Committees:

I am Tim Lyons, Executive Director of the Roofing Contractors Association of Hawaii and we are in overall support of this bill.

We must however, tell you that we have no consensus from our membership or total agreement. Some members subscribe to the theory that the legislature should provide incentives for people to install "cool roofs" including tax credits and any other means available. Others subscribe to the theory that it should be mandatory. Our concern is that we don't know where the technology will be in 2011 when this mandatory system is reported to take effect. Like most environmentally sensitive products, they cost more and that is a policy decision on your part, as to what you want to establish at a minimum that consumers should pay. We do not object however, to the passage of the bill.

We would like to suggest deletion of Section – 3(b) because it does not fit. Photovoltaic and cool roofs go in the same place generally but are for different purposes and one does not need to offset the other. You would still want those portions of the roof covered by a PV or solar system to be the same material that is part of the “cool roof”. Cool roof is an assembly not a specific area.

A cool roof is desirable whether or not there is a heating or cooling system. The first sentence at the top of page three (3) would seem to include a house that employed the use of a fan and while we would agree, we are not sure that is what is meant.

Lastly, we recommend deletion of the language in parentheses at the bottom of page four (4).

Typically, we do not see language “for example” in the statutes and cedar shingle roofs are a rarity and should read “wood shake and shingle roof”.

Thank you.

Bill No. 241

Support  Y  N

Date 3/16/09

Time 950

Cat AF AS AX B  C

Type  1  2 WI

Statement of Leslie Cole-Brooks

**Energy and Environmental Protection, Housing, and Water, Land, and Ocean Resources**

Tuesday, March 17, 2009

9:15 am

Capitol Room 325

In consideration of  
**SENATE BILL 241, SD2**  
**RELATING TO ENERGY CONSERVATION**

---

Chair Morita, Chair Shimabukuro, Chair Ito and members of the committee,

I support the cool roof proposal and believe it will be an effective next step towards energy conservation. Although the Hawai'i code council has adopted the 2006 International Energy Conservation Code, no implementation date has been set. In addition, although Honolulu and Maui County currently have a residential building code that allows a cool roof as an alternative, the code only uses R-19 equivalents and is voluntary in all other counties. I therefore support the cool roof bill because it will create consistency in building practices that are energy efficient.

**I support the cool roof bill with the following amendment:**

Expand the scope of the bill to include remodels where a new roof is installed.

**Specifically, I support the cool roof bill for the following three reasons:**

Cool Roofs are easy to install and come in a variety of choices

a. Installation same as a standard roof

The installation of cool roofs requires no special equipment or training. Cool roof materials are simply roofing materials that effectively reflect sunlight and emit any trapped heat so that less heat is absorbed into the structure. Any roofer who can install a standard roof can install a cool roof without additional training or any other kind of preparation.

b. Cool roofs come in a variety of material types

Cool roofing materials range from ceramic tile in a range of colors, metal roofs, and roll on roofing material that is used in commercial buildings. Although some of the first cool roofing materials were white, and were called "white roofs," that is no longer the case and the client/builder/designer now may choose from a range of colors and materials that will satisfy the cool roof standard mandated in the cool roof proposal.

Cool roofs are cost effective and will cost the state nothing

a. The payback period is short

Cool roofs are generally more expensive than standard roofing material. However, that is not always the case. For example, for asphalt shingles (a typical roofing material) the standard cost range is 0.5—2.0 \$/sq. ft. In contrast, cool roof asphalt shingles cost on average 0.6—2.1 \$/sq. ft.

And even when there is an additional initial cost, there are several financial benefits to cool roofs that offset that additional cost. First, cool roofs reduce cooling costs 5-15%, depending upon building design, climate, and overall energy use. For instance, for a standard 1,000 square foot single-family residence, installing a cool roof would add an additional \$500 onto the cost of the roof, but cooling costs would be reduced and would pay for the roof within 3-7 years, based on current energy costs. Cool roofs also tend to be more enduring than the standard 30-year roof because the roof material is not subject to the same degree of expansion and contraction from heating, a major factor in the weathering process of roofs.

b. Cool Roofs reduce the heat island effect

The installation of cool roofs reduces the overall heat gain in urban areas that is produced when heat is concentrated in buildings and infrastructure such as roads, sidewalks, and parking areas. The EPA has estimated that steadily increasing temperatures in the last several decades accounts for 3-8% of the current energy demand. Cool roofs would reduce the standard roof's contribution to the heat island effect and thus lower the overall need for cooling in urban areas.

c. Cool Roofs offset the cost of additional power generation

Cool roofs on all new construction would off-set costs of additional energy generation, a critical area of concern as oil prices continue to fluctuate, and the world's oil reserves are increasingly depleted. Finally, the cool roof proposal does not burden the state with additional costs through tax rebates or other incentive programs in these lean economic times.

The Cool Roofs proposal builds upon prior legislation

The Cool Roof proposal builds upon the solar hot water legislation Act 204 (SB 644) which mandates that solar hot water heaters be installed on all new residential single-family construction beginning 2010. Act 204 will facilitate the implementation of cool roofs in several ways. First the Cool Roofs proposal shares many of the same components as Act 204, including special allowances for shadier or cooler zones in Hawaii that may not benefit from solar hot water or cool roofing materials. Both bills also use the same "energy resource manager" to approve an exemption, and both bills verify implementation through the building inspection process overseen through the department of public works. The target date for implementation for cool roofs is 2011, one year after the implementation of Act 204. This will allow all interested parties to become familiar with the new legislation and aid in a smooth transition.

Thank you for the opportunity to provide this testimony.