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

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 **COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION** Tuesday, February 3, 2009 9:00 a.m. State Capitol, Conference Room 325

in consideration of HB432 RELATING TO ENERGY EFFICIENCY

Chair Morita, Vice Chair Coffman, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) has concerns about the level of detail in HB432. We prefer the broader approach in the "on-bill financing for energy efficiency and renewable energy" provision of HB1053, which is a comprehensive bill introduced under the Hawaii Clean Energy Initiative (HCEI), a partnership of the state and the U.S. Department of Energy. HB1053 allows more latitude to the Public Utilities Commission to incorporate a broad range of plans, programs, and strategies to help remove barriers to cost-effective energy efficiency in Hawaii, including household appliances.

Both HB432 and HB1053 address the first cost issue by allowing the Public Utilities Commission (PUC)to adopt a rule to be administered by the Public Benefits Fee Administrator to implement on-bill financing for changing out inefficient refrigerators, installing solar water heaters, and installing photovoltaic systems. Both bills propose that this rule would be adopted by December 31, 2009. HB432, however, provides considerable detail and implementation guidelines for this program which are better left to development by the PUC. These include such things as:

- Who is legible and how they regulate the program;
- Penalties for non-payment;
- Credits;
- Specific answers how the program is to be administered by the PUC's Public Benefit Fee Administration;
- Contracting; and
- Reporting.

Implementing the expanded pay as you save program for installing solar water heating,

replacing inefficient refrigerators, and installing photovoltaic systems would provide cost-

effective energy efficiency measures that will immediately result in high energy savings, meeting

one of the goals of the HCEI.

Thank you for the opportunity to offer these comments.

TESTIMONY OF CARLITO P. CALIBOSO CHAIRMAN, PUBLIC UTILITIES COMMISSION DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION FEBRUARY 3, 2009

MEASURE: H.B. No. 432 TITLE: Relating to Energy Efficiency.

Chair Morita and Members of the Committee:

DESCRIPTION:

This bill proposes to amend Section 13 of Act 240, Session Laws of Hawaii 2006, by expanding the Pay As You Save program. The Public Utilities Commission ("Commission") would be required to, among other things 1) implement pilot programs for photovoltaic ("PV") energy systems and refrigerator exchanges; 2) provide partially subsidized energy audits for customers in the pilot programs; and 3) adopt rules, pursuant to Chapter 91, for the purposes of the Pay as You Save program by December 31, 2009.

POSITION:

The Commission supports the intent of this bill, however advises the committee that this bill may not be necessary.

COMMENTS:

- The Commission currently has a Pay as You Save pilot program for residential solar water heaters that is administered by the HECO Companies, pursuant to Act 240, Session Laws of Hawaii 2006. The three-year pilot program which began in June, 2007, recently completed its first evaluation report and is being reviewed by the Commission.
- In addition, Act 151, Session Laws of Hawaii 2008 added a new section to Chapter 269, Hawaii Revised Statutes, relating to the establishment of a PV rebate program. In December 2008, the Commission awarded a contract to a third party administrator ("TPA"), to provide energy efficiency programs in the HECO Companies' service territories. The TPA will be required to develop and propose a PV Rebate Program to the Commission in 2009.

H.B. No. 432 Page 2

- The TPA will also be required to review and develop new programs, including appliance recycling incentives programs.
- The Commission recommends the committee allow the Commission to work with the TPA to develop these programs and to determine if the programs are in the public interest.

Thank you for the opportunity to testify.



February 3, 2009

Representative Hermina Morita, Chair Committee on Energy and Environmental Protection Conference Room 325 State Capitol 415 South Beretania Street

Representative Morita:

Subject: House Bills No. HB 429, HB 430, HB 432, HB 433 and HB 436 Relating to Energy Efficiency

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 concerned on the approach proposed in each of the bills to that are intended to make the State of Hawaii more energy efficient.

The following is a list that attempts to summarize what is being proposed in each of the five (5) bills being heard.

Energy Efficiency	HB 429	HB 430	HB 432	HB 433	HB 436
Bills					
Proposal:	Directs the public	Public benefits	Expands the pay as	Directs the public	Directs the public
	utilities	fee administrator	you save pilot	benefits fee	utilities commission
	commission to	conduct an	program to include	administrator to	to establish a
	establish energy	energy efficiency	photovoltaic energy	develop and	consumer
	efficiency	assessment of	systems and	implement a	information program
	portfolio standards.	energy use	refrigerator	program to	on energy efficient
	standards.	patterns in the State	exchanges	encourage residential retail	properties
		State		electricity	
				customers to	
				replace inefficient	
				household	
				appliances with	
				ENERGY STAR	
				appliances	
Statutes:	Amend Chapter		Amends Act 240,	Amend Chapter	Amend Chapter 196
	269 HRS		SLH 2006	269 HRS	HRS
Intent:	PUC establish		Adds photovoltaic	The public benefits	Provide for the
	energy efficiency		energy systems to	fee administrator	reporting of energy
	portfolio		the Pay as you save	shall establish a	efficiency
	standards		program	program goal of	information on a
				replacing 50% of	subject property to
				qualifying	consumers, lenders
L	Ĺ			household	and realtors. Also,

				appliances in the State within five years of the implementation of the program	allow for information to be stored in a data base for internet access
Mandates or Incentives	Establishes incentives and penalties based on performance	-	Each electric utility shall implement by tariff a pay as you save model system program for consumers	The public benefits fee administrator develop and implement a cash financial incentive program for the replacement of other qualifying household appliances	
Funding Source:		\$500,000 from the PUC special fund to conduct an energy efficiency assessment	Tariff imposed on future electric bills	The public benefits fee administrator may expend moneys collected through the public benefits fee	

As in most public policy issues, the process toward energy efficiency has many "unintended consequences." For example, last session the Legislature approved SB No. 644 which "mandated" the installation of a solar water heater in all new single family residences. The bill effectively:

- 1. Required all new single family residences constructed after January 1, 2010 to include a solar water heater system;
- 2. Eliminated the Solar thermal energy systems tax credits on all single-family residential properties after 1/1/2010; and
- 3. Prohibited a single family residential developer from claiming any renewable energy technologies tax credits for systems installed between now and 2010.

Government "Mandates" that attempts to direct the free market system generally result in penalizing one section of the market. For example, in this case, while the arguments that a \$7,000 thermal solar water heating system can easily be incorporated into the mortgage of the average priced home in Hawaii resulting in the homeowner realizing an net savings as energy cost rise over time, the mandate does not recognize or provide a mechanism to assist buyers seeking units priced for residents making less than 80% and less than 120% of the Housing and Urban Development (HUD) median income levels in Hawaii. For Honolulu, the HUD median income for a family of four is \$77,300. Irrespective of costs, developers are required to provide generally 20% of their total units for families making 120% or less of the HUD median income and 10% of their total units for families making 80% or less of the HUD median income.

Adding the cost of a thermal solar water heating unit to these houses effectively means the buyer gets \$7,000 "less" house.

If the goal was really to significantly reduce our 90% dependency on imported oil, wouldn't it have made more of an impact on our energy dependency to require <u>all existing housing units</u> (approximately 491,000 as of July 2005) to covert to solar water heaters as opposed to requiring only new units to have solar (approximately 5,700 units in 2006). Why do you think the focus was on new units as opposed to existing?

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.

As was the case last session, none of the energy efficiency bills clearly identifies 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 of the various proposed legislation with clearly articulated criteria for outcomes that unintended consequences 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.

There also does not appear to be a comprehensive approach or "game plan" for how we should approach our dependency on imported oil. A comprehensive approach would require research and analysis of the programs and desired outcomes along with the economic analysis of all the costs associated with achieving these outcomes.

We strongly recommend that the Legislature develop a full understanding of the economic impacts created by this type of legislation. Perhaps the Legislature should conduct its own analysis or comparison to determine, at a minimum, the following:

- 1. What specific outcome or range of outcomes would each of the bills achieve;
- 2. Discuss the public benefits among the different outcomes and assess whether or not government involvement is necessary;
- 3. If government involved is desired, assess the pros and cons of providing incentives or mandating compliance to achieve the desired outcomes.

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.

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

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

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John Crouch Sunpower

Herbert M. (Monty) Richards Kahua Ranch Ltd.

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

HB 432, RELATING TO ENERGY EFFICIENCY

February 3, 2009

Chair Morita, Vice-Chair Coffman and members of the Committee I am 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 HB 432 is to expand the pay as you save pilot program to include photovoltaic energy systems and refrigerator exchanges HREA supports the intent of this bill and offers the following comments:

- <u>Reason for PAYS®</u>. As noted in the bill, a PAYS® pilot program has been initiated in Hawaii for solar water heating systems per HECO's Solar Saver Program. The existing law, however, does not require the utilities to design the PAYS® programs to the trademarked name (as indicated herein), and HREA believes the Solar Saver Program, while modestly successful to date, could be greatly improved;
- 2. <u>How to improve PAYS®</u>. HREA believes the existing program can be greatly improved by designing and implementing to the detailed PAYS® criteria. We believe this bill is an attempt to do that, and we have a number of suggestions for amendments that would align the law closer to the PAYS® criteria. The suggestions are in the attachment and are summarized as follows:
 - a. HREA believes the intent is to implement PAYS®, and if so, use of the trademark is required or else the law would be in violation of the trademark law. Note: a license for use of the trademark is "cost free" and would willingly be provided by the creators of PAYS®, Harlan Lachman and Paul Cillo of the Energy Institute of Colchester, Vermont; and, in short,
 - b. HREA believes the proposed amendments provide sufficient guidance to the public utilities commission and the Public Benefits Fund Administrator for successful PAYS® implementation in Hawaii.

Thus, HREA respectfully requests the consideration of our proposed amendments.

Thank you for this opportunity to testify.

Report Title: Energy Efficiency; Pay As You Save® Program

Description:

Expands the <u>Pay As You Save</u> pilot program to include photovoltaic energy systems and refrigerator exchanges.

HOUSE OF REPRESENTATIVES TWENTY-FIFTH LEGISLATURE, 2009 STATE OF HAWAII H.B. NO. 432

A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

SECTION 1. Act 240, Session Laws of Hawaii 2006, is amended by amending section 13 to read as follows:

"SECTION 13. [Solar water heating pay] Pay As You Save program; purpose;

establishment; tariff filing. (a) Solar water heating systems <u>and photovoltaic energy</u> <u>systems</u> are a renewable energy technology that uses solar collectors placed on roofs to heat water[-] <u>or provide electricity</u>. These systems decrease reliance on imported oil used to generate electricity to heat water <u>or provide electricity</u> because they use less energy than the electric [hot water heating] systems replaced. <u>In addition, the replacement of older, less efficient household</u> appliances with energy efficient appliances will also decrease energy usage.

The legislature finds that the up-front cost of installation is a barrier preventing many Hawaii residents from installing solar water heating systems[-] or photovoltaic energy systems. The legislature further finds that the cost of replacing inefficient household appliances also presents a significant barrier to installing more efficient appliances. The legislature further finds that the renewable energy technologies income tax credit and electric utility rebates have not been

enough of an incentive to overcome these up-front costs, especially for rental housing and homes in need of retrofit for these important energy-saving devices.

The purpose of this section is to authorize the public utilities commission to implement a pilot project to be called the ["solar water heating pay] "Pay As You Save® program".

(b) The public utilities commission shall implement a pilot project to be called the ["solar

water heating pay] "Pay As You Save® program", which shall:

(1) Allow [a] residential <u>and small commercial</u> electric utility [customer] customers to purchase a solar water heating system[=] or a photovoltaic energy system:

(A) With no upfront payments; and

(B) By paying the cost of the system over time on the customer's electricity bill[;] at an

interest rate to be determined by the public utilities commission;

provided that the estimated life cycle electricity savings from the solar water heating system or photovoltaic energy system exceeds the cost of the system;

(2) Provide for billing and payment of the solar water heating system or photovoltaic energy system on the utility bill;

(3) Provide for disconnection of utility service for non-payment of [solar water heating system] Pay As You Save® payments; [and]

(4) Allow for assignment of system repayment costs attached to the meter location[-];

(5) Allow customers to exchange a qualifying refrigerator, manufactured prior to a date determined by the public utilities commission, for a new ENERGY STAR refrigerator; subject to qualifications established by the public utilities commission; provided that customers shall make no up front payment but shall be allowed to pay any costs associated with the exchange over time on the customer's electricity bill; and

(6) Allow customers who enroll in the program to receive an energy audit with the cost partially paid by the public benefits fee administrator, contracted pursuant to section 269-122, Hawaii Revised Statutes, at a rate to be determined by the public utilities commission.

(c) The public utilities commission shall work with the Public Benefits Administrator to determine if third party financing and third party ownership of systems during the duration of participants' payments could facilitate available federal and state tax credits and accelerated depreciation lowering the installation cost for all measures for all participants including renters and those who otherwise would not be able to realize the full value of tax credits

(d) The public utilities commission shall work with the Public Benefits Administrator to design the pilot program, including marketing, participating contractor requirements, direct contacts with owners of rental properties, and budget allocations to ensure that at least one-third of all participants live in rental housing.

(e) The public utilities commission shall determine the time frame of the pilot program and shall gather and analyze information to evaluate the pilot program[-]and shall report this information to the energy resources coordinator.

(f) <u>The public benefits fee administrator shall approve and administer the pilot program and shall provide progress reports to the public utilities commission eight months and fourteen months after the start of the program and annually thereafter.</u>

(g) The public benefits fee administrator may contract with appropriately licensed or qualified persons to install solar water heating systems or photovoltaic energy systems in the pilot program and shall provide for the decommissioning and disposal of refrigerators that are recovered from customers pursuant to subsection (b)(5) in a manner that complies with all applicable requirements for waste disposal.

(h) The public utilities commission may conduct follow up evaluations of the program, including energy audits, efficiency measurements, and verification in accordance with evaluation criteria and protocols established during development of the pilot design.

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(i) No later than June 30, [2007,] ____, each electric utility shall implement by tariff a Pay As You Save® model system program for [residential] consumers that is consistent with this section. Each utility shall provide at least six months prior notice of its proposed tariff to the public utilities commission as prescribed in section 269-12(b), Hawaii Revised Statutes. Within the prescribed notice period, the public utilities commission shall review the proposed tariff and after a hearing may require modifications to the proposed tariff as necessary to comply with or effectuate the purposes of this section

(j) The commission shall ensure that all reasonable costs incurred by electric utilities to start up and implement the Pay As You Save® model system are recovered as part of the utility's revenue requirement, including necessary billing system adjustments and any costs for Pay As You Save® model system efficiency measures that are not recovered via participating [residential] consumers' Pay As You Save® model system bill payments or otherwise.

(k) During design and approval of the pilot design, the Commission will investigate the utilities' costs for billing and information system changes that would automate and simplify all PAYS® related transactions and responsibilities, including conversations between participants or successor customers and customer service personnel and report back to the legislature

No later than December 31, 2009, the public utilities commission shall adopt rules,
pursuant to chapter 91, for the purposes of the Pay As You Save® program."

SECTION 2. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 3. This Act shall take effect upon its approval.



Hawaii Solar Energy Association Serving Hawaii Since 1977

February 1, 2008

HB432: Testimony in Support of the Intent but Nonetheless in Opposition

Dear Chair Morita, Vice Chair Coffman, and Members of the Committee:

Hawaii Solar Energy Association (HSEA) is comprised of more than 30 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.

HSEA members manufacture and install the majority of solar water heating systems and install the majority of solar PV systems in the State of Hawaii. Our comments on this measure are based on this expertise, and our related experience in other renewable energy technologies.

HSEA makes the following comments in support of its position on this measure:

HSEA's comments below deal only wit the PV portion of HB432.

HSEA' believes that the intent of HB432 ought to be to address the unmet demand for PV among low- and moderate-income households that are simply unable to meet the upfront cost of a solar system, and to increase the penetration of renewables by making PV a viable option on rental property. HSEA considers both of these to be worthy goals. Nonetheless HSEA stands in opposition to this measure for a number of reasons:

1. The entire market for PV is set to change in ways that are not currently known over the coming months. Such changes will result from the outcome of regulatory proceedings on feed-in tariffs, changes to net energy metering rules, introduction of time-of-use rates and smart meters, and the interaction of these changes with one another. They will also result from the outcome of legislative proceedings.

HSEA therefore feels that it is therefore premature to attempt to understand how PAYS for PV would fit into the PV market following this suite of changes.

- 2. In addition, the PAYS solar water heating program may also be expanding from its pilot level of 100 to 2,500. This will present administrative challenges that will make it more difficult to originate a successful PAYS for PV program at the present time.
- 3. In addition, the Public Benefit Fee Administrator that would be tasked with administering the PAYS for PV program does not yet formally exist and will face a number of challenges in taking on board existing programs, much less starting up new ones
- 4. At least one private company performing a function similar to PAYS is working with DBEDT to set up shop in the state in 2Q 2009. This may make some of the motivation for PAYS redundant.
- 5. PAYS could be confused with the utility's rumored PV Host program, introducing still more uncertainty into the PV market.
- 6. There is no mechanism for certifying/approving participating contractors for PV, nor is there any methodology for evaluating the appropriateness of system size/design. Doing each of these effectively will take time.

In summary, HSEA points out that the PV market in Hawaii is already beset by substantial uncertainty as a result of ongoing policy driven changes. These changes have caused the commercial market to pause and search for clarity regarding he future. HSEA's member companies are concerned that introducing a PV version of PAYS now will have a similar effect on residential market and would strongly prefer to see this measure pushed back to the 2010 legislative session.



Building Industry Association February 3, 2009

Representative Hermina Morita, Chair Committee on Energy and Environmental Protection Conference Room 325 State Capitol 415 South Beretania Street

Representative Morita:

Subject: House Bills No. HB 429, HB 439, HB 432, HB 433 and HB 436 Relating to Energy Efficiency

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 concerned on the approach proposed in each of the bills to that are intended to make the State of Hawaii more energy efficient.

The following is a list that attempts to summarize what is being proposed in each of the five (5) bills being heard.

Enour Efficience	UP too	UP 400	HB 432	UD 400	HB 436
Energy Efficiency Bills	HB 429	HB 430	ПБ 432	HB 433	нь 430
Proposal:	Directs the public	Public benefits	Expands the pay as	Directs the public	Directs the public
	utilities commission to	fee administrator conduct an	you save pilot program to include	benefits fee administrator to	utilities commission to establish a
	establish energy	energy efficiency	photovoltaic energy	develop and	consumer
	efficiency	assessment of	systems and	implement a	information program
	portfolio	energy use	refrigerator	program to	on energy efficient
	standards.	patterns in the	exchanges	encourage	properties
		State		residential retail	F - F
				electricity	
				customers to	
				replace inefficient	
				household	
-				appliances with	
				ENERGY STAR	
				appliances	1.01.1.01
Statutes:	Amend Chapter		Amends Act 240,	Amend Chapter	Amend Chapter 196
Tes . North a	269 HRS		SLH 2006	269 HRS	HRS Provide for the
Intent:	PUC establish		Adds photovoltaic	The public benefits fee administrator	and is and press and the
	energy efficiency portfolio		energy systems to the Pay as you save	shall establish a	reporting of energy efficiency
	standards		program	program goal of	information on a
	Standarus		program	replacing 50% of	subject property to
				qualifying	consumers, lenders
				household	and realtors. Also,
				appliances in the	allow for

				State within five years of the implementation of the program	information to be stored in a data base for internet access
Mandates or Incentives	Establishes incentives and penalties based on performance		Each electric utility shall implement by tariff a pay as you save model system program for consumers	The public benefits fee administrator develop and implement a cash financial incentive program for the replacement of other qualifying household appliances	
Funding Source:		\$500,000 from the PUC special fund to conduct an energy efficiency assessment	Tariff imposed on future electric bills	The public benefits fee administrator may expend moneys collected through the public benefits fee	

As in most public policy issues, the process toward energy efficiency has many "unintended consequences." For example, last session the Legislature approved SB No. 644 which "mandated" the installation of a solar water heater in all new single family residences. The bill effectively:

- 1. Required all new single family residences constructed after January 1, 2010 to include a solar water heater system;
- 2. Eliminated the Solar thermal energy systems tax credits on all single-family residential properties after 1/1/2010; and
- 3. Prohibited a single family residential developer from claiming any renewable energy technologies tax credits for systems installed between now and 2010.

Government "Mandates" that attempts to direct the free market system generally result in penalizing one section of the market. For example, in this case, while the arguments that a \$7,000 thermal solar water heating system can easily be incorporated into the mortgage of the average priced home in Hawaii resulting in the homeowner realizing an net savings as energy cost rise over time, the mandate does not recognize or provide a mechanism to assist buyers seeking units priced for residents making less than 80% and less than 120% of the Housing and Urban Development (HUD) median income levels in Hawaii. For Honolulu, the HUD median income for a family of four is \$77,300. Irrespective of costs, developers are required to provide generally 20% of their total units for families making 120% or less of the HUD median income and 10% of their total units for families making 80% or less of the HUD median income.

Adding the cost of a thermal solar water heating unit to these houses effectively means the buyer gets \$7,000 "less" house.

If the goal was really to significantly reduce our 90% dependency on imported oil, wouldn't it have made more of an impact on our energy dependency to require <u>all existing housing units</u> (approximately 491,000 as of July 2005) to covert to solar water heaters as opposed to requiring only new units to have solar (approximately 5,700 units in 2006). Why do you think the focus was on new units as opposed to existing?

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.

As was the case last session, none of the energy efficiency bills clearly identifies 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 of the various proposed legislation with clearly articulated criteria for outcomes that unintended consequences 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.

There also does not appear to be a comprehensive approach or "game plan" for how we should approach our dependency on imported oil. A comprehensive approach would require research and analysis of the programs and desired outcomes along with the economic analysis of all the costs associated with achieving these outcomes.

We strongly recommend that the Legislature develop a full understanding of the economic impacts created by this type of legislation. Perhaps the Legislature should conduct its own analysis or comparison to determine, at a minimum, the following:

- 1. What specific outcome or range of outcomes would each of the bills achieve;
- 2. Discuss the public benefits among the different outcomes and assess whether or not government involvement is necessary;
- 3. If government involved is desired, assess the pros and cons of providing incentives or mandating compliance to achieve the desired outcomes.

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.

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

Karen Z. Makamura

Executive Vice President & Chief Executive Officer



February 3, 2009

Representative Hermina Morita, Chair Committee on Energy and Environmental Protection Conference Room 325 State Capitol 415 South Beretania Street

Representative Morita:

Subject: House Bills No. HB 429, HB 430, HB 432, HB 433 and HB 436 Relating to Energy Efficiency

My name is Dean Uchida, Vice 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 concerned on the approach proposed in each of the bills to that are intended to make the State of Hawaii more energy efficient.

The following is a list that attempts to summarize what is being proposed in each of the five (5) bills being heard.

Energy Efficiency Bills	HB 429	HB 430	HB 432	HB 433	HB 436
Proposal:	Directs the public utilities commission to establish energy efficiency portfolio standards.	Public benefits fee administrator conduct an energy efficiency assessment of energy use patterns in the State	Expands the pay as you save pilot program to include photovoltaic energy systems and refrigerator exchanges	Directs the public benefits fee administrator to develop and implement a program to encourage residential retail electricity customers to replace inefficient household appliances with ENERGY STAR appliances	Directs the public utilities commission to establish a consumer information program on energy efficient properties
Statutes:	Amend Chapter		Amends Act 240,	Amend Chapter	Amend Chapter 196

	269 HRS		SLH 2006	269 HRS	HRS
Intent:	269 HRS PUC establish energy efficiency portfolio standards		SLH 2006 Adds photovoltaic energy systems to the Pay as you save program	The public benefits fee administrator shall establish a program goal of replacing 50% of qualifying household appliances in the State within five years of the	HRS Provide for the reporting of energy efficiency information on a subject property to consumers, lenders and realtors. Also, allow for information to be stored in a data base for internet access
Mandates or Incentives	Establishes incentives and penalties based on performance		Each electric utility shall implement by tariff a pay as you save model system program for consumers	implementation of the program The public benefits fee administrator develop and implement a cash financial incentive program for the replacement of	for internet access
				other qualifying household appliances	
Funding Source:		\$500,000 from the PUC special fund to conduct an energy efficiency assessment	Tariff imposed on future electric bills	The public benefits fee administrator may expend moneys collected through the public benefits fee	

As in most public policy issues, the process toward energy efficiency has many "unintended consequences." For example, last session the Legislature approved SB No. 644 which "mandated" the installation of a solar water heater in all new single family residences. The bill effectively:

- 1. Required all new single family residences constructed after January 1, 2010 to include a solar water heater system;
- 2. Eliminated the Solar thermal energy systems tax credits on all single-family residential properties after 1/1/2010; and
- 3. Prohibited a single family residential developer from claiming any renewable energy technologies tax credits for systems installed between now and 2010.

Government "Mandates" that attempts to direct the free market system generally result in penalizing one section of the market. For example, in this case, while the arguments that a \$7,000 thermal solar water heating system can easily be incorporated into the mortgage of the average priced home in Hawaii resulting in the homeowner realizing an net savings as energy cost rise over time, the mandate does not recognize or provide a mechanism to assist buyers seeking units priced for residents making less than 80% and less than 120% of the Housing and Urban Development (HUD) median income levels in Hawaii. For Honolulu, the HUD median income for a family of four is \$77,300. Irrespective of costs, developers are required to provide generally 20% of their total units for families making 120% or less of the HUD median income and 10% of their total units for families making 80% or less of the HUD median income.

Adding the cost of a thermal solar water heating unit to these houses effectively means the buyer gets \$7,000 "less" house.

If the goal was really to significantly reduce our 90% dependency on imported oil, wouldn't it have made more of an impact on our energy dependency to require <u>all existing housing units</u> (approximately 491,000 as of July 2005) to covert to solar water heaters as opposed to requiring only new units to have solar (approximately 5,700 units in 2006). Why do you think the focus was on new units as opposed to existing?

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.

As was the case last session, none of the energy efficiency bills clearly identifies 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 of the various proposed legislation with clearly articulated criteria for outcomes that unintended consequences 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.

There also does not appear to be a comprehensive approach or "game plan" for how we should approach our dependency on imported oil. A comprehensive approach would require research and analysis of the programs and desired outcomes along with the economic analysis of all the costs associated with achieving these outcomes.

We strongly recommend that the Legislature develop a full understanding of the economic impacts created by this type of legislation. Perhaps the Legislature should conduct its own analysis or comparison to determine, at a minimum, the following:

- 1. What specific outcome or range of outcomes would each of the bills achieve;
- 2. Discuss the public benefits among the different outcomes and assess whether or not government involvement is necessary;
- 3. If government involved is desired, assess the pros and cons of providing incentives or mandating compliance to achieve the desired outcomes.

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.

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



February 3, 2009

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

- Presented By: Tim Lyons, CAE Executive Director
- Subject: H.B. 432 Relating to Energy Efficiency

Chair Morita and Members of the Committee:

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

New technology has recently brought to the forefront roofing material that has photovoltaic energy panels built into the roofing material. We find that photovoltaic is a viable way in order to help have more efficient energy use.

Based on the above, we support this bill and request your favorable adoption.

Thank you.