

SB 871



**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
**SENATE COMMITTEES ON
ENERGY AND ENVIRONMENT
AND
COMMERCE AND CONSUMER PROTECTION**
Thursday, February 5, 2009
2:45pm
State Capitol, Conference Room 225

in consideration of

**SB871
RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE IN ENERGY EFFICIENCY.**

Chair Gabbard, Chair Baker, Vice Chair English, Vice Chair Ige and Members of the
Committees.

DBEDT strongly supports SB871, the Administration bill for energy efficiency as developed under the Hawaii Clean Energy Initiative (HCEI). The HCEI was initiated under an historic Memorandum of Understanding (MOU) signed by the U.S. Department of Energy (DOE) and the State of Hawaii. The MOU announced the goal of attaining 70% clean energy in Hawaii's electricity and transportation sectors by 2030.

This initiative and long-term partnership between Hawaii and USDOE is aimed at accelerating the use and development of energy efficiency and renewable energy technologies; allowing Hawaii to serve as a model and demonstration for the United States and other island communities; and developing a national partnership to accelerate system transformation, whereby the following goals are attained:

- (1) Achieve a 70 percent clean energy economy for Hawaii within a generation.
- (2) Increase Hawaii's energy security.
- (3) Capture economic benefits of clean energy for all levels of society.
- (4) Contribute to greenhouse gas reduction.
- (5) Foster and demonstrate innovation.
- (6) Build the workforce of the future.
- (7) Serve as a national model.

The purpose of this bill is to provide a first step in aligning Hawaii's energy policy laws with the State's energy goals.

For Hawaii to realize energy independence and economic stability, the transformation of its energy system must encompass changes to:

- (1) Hawaii's policy or regulatory framework;
- (2) System-level technology development and integration;
- (3) Financing or capital investment; and
- (4) Institutional system planning.

Energy efficiency can contribute significantly towards the goal of utilizing clean energy in meeting 70 percent of Hawaii's energy demand by 2030. Of the 70 percent, analysis has determined that 40 percent can be accomplished through renewable energy initiatives. The remaining 30 percent must be achieved through energy efficiency measures, which equates to 4300 gigawatt-hours of the total electrical load in 2030. During 2008 the Hawaii Clean Energy Initiative set goals for energy efficiency that were developed by the U.S. Department of Energy, the Department of Business, Economic Development, and Tourism, and members of Hawaii's Clean Energy Initiative working groups. This effort presents a range of measures—some proven elsewhere, some innovative—to reach aggressive energy goals while balancing the interests of various stakeholders.

SB871 address the following legislative proposals toward our clean energy future:

1. Establish an energy efficiency portfolio standard which sets the statewide target of 4,300 gigawatt-hours of electricity displaced by efficiency measures by 2030, and directs the Public Utilities Commission to set interim targets, and any island-by-island targets.

2. Initiate energy efficiency studies and planning by that the Public Benefits Fee Administrator using \$500,000 from the public benefit fee to conduct energy efficiency assessments to identify current energy use patterns in this State and areas of greatest potential for energy efficiency savings. The assessments shall not only include end use research regarding Hawaii's homes, businesses, and other utility customers but also shall identify and recommend energy efficiency programs to target.
3. Target higher energy efficiency building codes by directing the Public Benefits Fee Administrator to expend \$600,000 from the public benefits fee to set up procedures for and conduct measurement and verification of buildings and homes constructed under the code to assess code compliance and building performance. The results will help inform necessary changes to the code and code training delivery for subsequent code amendments. The Public Benefits Fee Administrator is also directed to conduct an analysis of the energy intensity of residential and commercial buildings built to code compared to baseline homes, assess the feasibility of implementing a net zero energy building code for residential and commercial construction, and recommend technical code amendments to the International Energy Conservation Codes in order to take advantage of Hawaii's climate
4. Designate the Public Benefits Fee Administrator to not only develop programs to install solar water heating program and to develop program standards, but also to allow variances for the mandatory installation for new construction.
5. Benchmark every existing public building that is either larger than 5000 square feet or uses more than 8000 kilowatt-hour per year by December 31, 2010, and use the benchmark as a basis in determining the State's investment in improving the efficiency of its own building stock.
6. Retrocommission buildings not less than every five years. The Public Benefits Fee Administrator shall create retro-commissioning guidelines by January 1, 2010, to ensure that public buildings are operating at optimum performance.
7. Allow energy savings performance contracts with a third party to cover the capital costs of energy efficiency measures and distributed generation to expedite energy saving performance contracting for public buildings. The Department of Accounting and General Services shall develop a master energy savings performance contracts agreement that any department may use to contract with an energy savings performance contracts provider for energy efficiency and renewable energy services.
8. Initiate on-bill financing for energy efficiency and renewable energy to allow utility customers the opportunity to pay off the cost for energy efficiency measures on their utility bills. By December 31, 2009, the Public Utilities Commission shall institute a rule governing the on-bill financing program, to be administered by the Public Benefits Fee Administrator. The program's goals are to change out inefficient refrigerators, install solar water heaters, and install photovoltaic systems.

9. Establishes a tax credit for a net zero energy building. For buildings that produce as much energy from renewable resources as is used, tax credits will incentivize buildings \$9 per square foot for buildings up to 1000 square feet; \$6 for buildings up to 4,000 square feet; and \$3 for buildings above 4,000 square feet. The credit is maximized with a cap of \$50,000.
10. Ensure consumer information for informed decision-making. Consumers renting or leasing will know how much it will cost to operate the building or residence. They will see the last three utility bills.
11. Offer new incentives for renewable energy income tax credits so that the credits are refundable. The taxpayers will be able to choose to reduce their tax liability or to receive a refund. Also, taxpayers with adjusted gross income of \$20,000 or less (or \$40,000 or less if filing a tax return as married filing jointly) may take a tax credit refund.

These important measures will bring us closer to our goal of 70 percent clean energy by 2030. We have crafted a package of incentives and assignments to various stakeholders.

Hawaii is the most petroleum dependent State for its energy needs. We pay the highest electricity prices in the United States, and our gasoline costs are among the highest in the country. Fuel surcharges that pass the increases in fuel costs to consumers have significantly increased the cost of over 80 percent of the goods and services sold in Hawaii. Household fuels and utilities costs rose 36.4 percent, from the previous year, as reflected in the Honolulu Consumer Price Index during the second quarter of 2008. Hawaii's energy costs approach 11 percent of its Gross Domestic Product, whereas in most states energy costs are 4 percent of Gross Domestic Product. Between 2005 and 2008, state government consumption of electricity increased 3.9 percent, but expenditures increased 56.8 percent.

Reducing our oil dependence and the consequent price volatility and attaining a measure of energy security is critical. More than 96 percent of petroleum in Hawaii now comes from foreign sources. Clean energy from indigenous renewable resources has the potential to provide an estimated 150 percent of current installed electrical capacity.

Thank you for the opportunity to offer this testimony.

LINDA LINGLE
GOVERNOR

JAMES R. AIONA, JR.
LT. GOVERNOR



KURT KAWAFUCHI
DIRECTOR OF TAXATION

SANDRA L. YAHIRO
DEPUTY DIRECTOR

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**SENATE COMMITTEE ON ENERGY & ENVIRONMENT AND
COMMERCE & CONSUMER PROTECTION
TESTIMONY REGARDING SB 871
RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE IN ENERGY EFFICIENCY**

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

DATE: FEBRUARY 5, 2009

TIME: 2:45PM

ROOM: 225

Among other things, this measure creates an income tax credit for net zero energy buildings and amends the renewable energy technologies income tax credit.

The Department of Taxation **strongly supports** this Administration measure.

NET ZERO ENERGY BUILDINGS TAX CREDIT – The Department is satisfied that this tax credit provides an incentive that is narrowly structured to its purpose and clear in its terms. The purpose of the incentive is to encourage owners of real property to take whatever measures are necessary, including energy conservation efforts, in order to produce more energy than is consumed on that property for at least 9 months during a taxable year and during each of the five years following that year.

This measure contains the following safeguards:

- **One-time credit:** This credit can only be taken in the first taxable year in which the building meets the definition of a net zero energy building.
- **Recapture:** Total or partial recapture of the credit occurs if the building ceases to meet the definition of a net zero energy building during any of the five years following the year the credit is claimed.
- **Double tax benefit prevention:** A taxpayer may not claim this credit if claiming the renewable energy technologies income tax credit or to the extent you take a § 179, IRC deduction. Also a basis adjustment is required if this credit is claimed.

RENEWABLE ENERGY TECHNOLOGIES TAX CREDIT – The Department supports the various amendments made to this existing net income tax credit. The amendments to this credit accomplish the following:

- **Simplify system identification:** The Department is not an expert in renewable energy system design or technology. The Department prefers a credit that bases the distinction upon the source of the renewable energy – solar, wind, etc. – rather than on the manner in which that renewable energy source is processed into usable energy.
- **Retains cap structure, but recharacterizes the cap based upon use:** The cap structure remains the same, except that the difference currently made between solar thermal energy systems and photovoltaic energy systems is recharacterized as between a system primarily used to heat water versus a system installed for all other uses.
- **Adds two elections to take the credit as a refundable credit:** A taxpayer is allowed to make an irrevocable election to claim this credit as a refundable credit at a lower amount that should be revenue neutral. A low-income taxpayer, or where all of a person's income is exempt from taxation such as pension income, can elect to claim the credit as a refundable credit without reduction.
- **Removes developer restriction:** Merely because the developer is denied the credit does not mean that the eventual homeowner will be entitled to the credit. The credit can only be used by the owner of the system when the system is placed in service, which will not be the new home buyer if the system is placed in service prior to a home buyer contracting to purchase the new home. A system is placed in service when it is ready and available for use. If the developer owns the renewable energy system when the system is ready and available for use, the current developer prohibition denies the credit to the only person eligible to take the credit. Developers should be allowed to take the credit if they install the systems before the ultimate buyer of the home contracts to purchase the home.
- **Clarifies the treatment of systems mandated under section 196-6.5:** The Department believes that if a system is mandated, it should not also be eligible for a tax credit. The state should choose one approach or the other, but not both. These amendments clarify that a taxpayer may not claim a credit for a system that is mandated pursuant to § 196-6.5.

SUPPORT FOR ALTERNATIVE ENERGY—The Department strongly supports the encouragement and implementation of alternative energy systems in Hawaii in order to lessen the State's dependence on alternative energy. As fossil fuel and petroleum prices become more volatile, Hawaii's ability to generate its own energy from home will make the State more secure and less reliant on others. The Department concurs that photovoltaic and other sun-related energy generation is particularly beneficial given Hawaii's relative location to the sun.

REVENUE LOSS— The revenue loss for this bill is estimated by DBEDT at \$4.2 million in FY10 and \$4.7 million from FY11 to FY15. We concur with DBEDT estimate. This measure has been factored into the biennium budget and the financial plan.

LINDA LINGLE
GOVERNOR



RUSS K. SAITO
Comptroller

BARBARA A. ANNIS
Deputy Comptroller

**STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
P.O. BOX 119
HONOLULU, HAWAII 96810-0119**

TESTIMONY
OF
RUSS K. SAITO, COMPTROLLER
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE
SENATE COMMITTEES
ON
ENERGY AND ENVIRONMENT
AND
COMMERCE AND CONSUMER PROTECTION
ON
February 5, 2009

S.B. 871

RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE IN ENERGY
EFFICIENCY

Chair Gabbard, Chair Baker, and members of the Committees, thank you for the opportunity to testify on S.B. 871.

The Department of Accounting and General Services supports S.B. 871. This administration bill establishes the requirements for achieving energy efficiency in the State of Hawai'i based on unprecedented collaboration involving the U.S. Department of Energy, the Department of Business, Economic Development, and Tourism, and the Hawai'i Clean Energy Initiative working groups.

S.B. 871 addresses an energy efficiency portfolio standard, initiates energy efficiency studies, looks at the effects of building codes, develops solar water heating programs, creates building efficiency benchmarks, establishes retro-commissioning guidelines, encourages energy savings performance contracts, enables utility customers to

pay for energy efficiency through their utility bills, establishes tax credits for net zero energy buildings, enhances customer decision making, and offers refundable tax credits.

In short, S.B. 871, if implemented, will produce a complete energy efficiency plan. Moreover, the bill would achieve its ends through a reasoned and studied approach, providing standards, direction, and guidance to and through the agencies responsible for energy consuming activities.

DAGS requests that this bill be approved.

Thank you for the opportunity to testify on this matter.

Testimony on

S.B. NO. 871 –
RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE IN
ENERGY EFFICIENCY

Before the

Senate Committee on Energy and Environment
Thursday, February 5, 2009, 2:45 p.m., Conference Room 225

By

David Rezachek, Consultant
Honolulu Seawater Air Conditioning LLC

Good afternoon Chair Gabbard, Vice Chair English, and members of the Committee. My name is David Rezachek and I am testifying on behalf of Honolulu Seawater Air Conditioning, LLC (HSWAC).

In its testimony on S.B. 1173, HSWAC stated its objection to removing renewable energy electricity displacement technologies from the State's renewable energy portfolio standard.

In its testimony on S.B. 870, HSWAC expressed its concern about removing renewable energy electricity displacement technologies from the State's renewable energy portfolio standard by 2015 without any guarantee that an energy efficiency portfolio standard would be in place, or that any of the renewable energy electricity displacement technologies, such as SWAC, would be included.

S.B. 871 is a slight improvement in that it would provide for an energy efficiency portfolio standard that would include renewable energy electricity displacement technologies.

However, HSWAC cannot support Part II of this bill as it is currently written.

The problem with the many bills that attempt to change the renewable portfolio standard is that they are piecemeal solutions.

They attempt to remove certain renewable energy technologies from the RPS, to redefine them as energy efficiency, and to create an energy efficiency portfolio standard, with no guarantee that such a standard will be created, or certain technologies would be included. The unintended consequence is that some very promising renewable energy technologies could end up in limbo.

These bills also provide additional definitions for renewable energy technologies which are not consistent with each other or with existing statutory definitions. Some definitions include renewable energy electricity displacement technologies, some do not. Others incorrectly include energy efficiency and even energy storage.

These bills also propose to provide various types of economic, siting, and permitting assistance to developers of various types and sizes of renewable energy projects, but not to others.

HSWAC respectfully requests that these bills be held until:

- (1) there is agreement on consistent definitions of "renewable energy" and "energy efficiency" in proposed legislation and in the Hawaii Revised Statutes;
- (2) any changes in the RPS and the establishment of an energy efficiency portfolio standard occur together; and
- (3) economic, siting, and permitting assistance is provided to all renewable energy and energy efficiency technologies on an equitable basis and without regard to technology type and/or project size.

Thank you for this opportunity to testify.



February 5, 2009

Senator Mike Gabbard, Chair
COMMITTEE ON ENERGY AND ENVIRONMENT
Conference Room 225
State Capitol
415 South Beretania Street

Senator Gabbard:

Subject: Senate Bill No. 871 Relating to Hawaii's Clean Energy Initiative in 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 attached table is our attempt to summarize the various section of the bill. The HDC has the following concerns regarding the subject bill.

We understand that this bill is one of several initiatives the State Administration has proposed that are intended to reduce our dependency on imported oil by 70% by the year 2030. This bill addresses the "energy efficiency" element of the initiative which can contribute significantly towards the goal of utilizing clean energy in meeting 70 percent of Hawaii's energy demand by 2030. Of the 70 percent, analysis has determined that 40 percent can be accomplished through renewable energy initiatives. The remaining 30 percent must be achieved through energy efficiency measures.

There are several independent parts and sections to the bill. We are confused in how the different sections are to be implemented either concurrently or sequentially. For example, Part II of the bill has the PUC expending \$500,000 to conduct energy efficiency assessments to identify current energy use patterns in this State and areas of greatest potential for energy efficiency savings. The assessment shall be completed by 12/31/10.

However, in Part II, Section 4 of the bill, by January 1, 2010, the state will expend \$600,000 and develop procedures, conduct analysis and surveys regarding changes to the building code to improve overall energy efficiency. It also will create building energy efficiency commissioning

guidelines appropriate for building practices including recommending enforcement mechanisms in this State by January 1, 2010.

It appears that the bill is implementing specific actions to increase energy efficiency before completing the analysis to identify areas of greatest potential energy savings.

Also, while Part II, Section 6 attempts to bring all existing public buildings into some type of level of energy efficiency over time as buildings are retro-fitted, there does not appear to be the same effort for existing private buildings. The initiative should be looking forward at creating mechanisms to achieve the 70% reduction over time for new and existing buildings. Establishing criteria to objectively assess the cost of developing energy efficient buildings versus the energy savings over time is important to determine which energy savings efforts are economically feasible to pursue. Assessing existing private buildings must also include incentives to encourage property owners to retro-fit their structures over time. This could include some type of "energy efficiency tax credit" that could be used for income tax (personal or corporate) or real property taxes (for people on fixed incomes).

Part II, Section 4 of the bill appears to suggest a "mandate" that all new construction comply with the International Energy Conservation Code.

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. Having government lead by example allows the design professions, contractors and supplier to understand and gain experience in building new and retro-fitting existing structures. This experience will allow for a smooth transition for energy efficient private building at a later date.

Part II, Section 5 and Part III of the bill recognize the "mandate" passed last session requiring all new single family residences to have a solar water heater system after January 1, 2010. The bill does propose to reinstate the tax credits for solar water heaters on all structures that was repealed when the solar mandate was passed last session.

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 a 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 all existing housing units (approximately 491,000 as of July 2005) to convert 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.

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 identified in the bill;
2. Discuss the public benefits among the different outcomes and assess whether or not government involvement is necessary;
3. If government involvement 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.

If the decision is to move the bill forward, we would strongly recommend that Part II, Section 4 of the bill be deleted or removed entirely.

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

Hawaii Clean Energy Initiative	SB 871
Part I	Energy efficiency can contribute significantly towards the goal of utilizing clean energy in meeting 70 percent of Hawaii's energy demand by 2030. Of the 70 percent, analysis has determined that 40 percent can be accomplished through renewable energy initiatives. The remaining 30 percent must be achieved through energy efficiency measures.
Part II-Energy Efficiency	The PUC's public benefits fee administrator shall expend \$500,000 from the public benefit fee to conduct energy efficiency assessments to identify current energy use patterns in this State and areas of greatest potential for energy efficiency savings. The assessment shall be completed by 12/31/10.
Part II, Section 4	<p>The public benefits fee administrator shall expend \$600,000 from the public benefits fee to:</p> <ol style="list-style-type: none"> 1. Establish procedures for and conduct measurement and verification of buildings and homes constructed under the code to assess code compliance and building performance. 2. Conduct an analysis of the energy intensity of residential and commercial buildings built to code compared to baseline homes. 3. Conduct surveys of builders to determine actual costs associated with meeting code for residential and commercial buildings. 4. Analyses and surveys shall be delivered to the legislature twenty days prior the convening of each legislative session. Each report shall include recommendations for building code updates, which can be provided to the state building code council as petitions for rules changes. 5. Assess the feasibility of implementing a net zero energy building code for residential and commercial construction. 6. Recommend technical code amendments to the international energy conservation codes in order to take advantage of Hawaii's climate. 7. Analyze the existing building code and consider the costs and benefits of requiring: <ol style="list-style-type: none"> a. Advanced meters and energy "dashboard" technologies that improve the ability of the occupant to monitor and improve building performance, cool roof standards; b. The roofs of new homes be solar-ready; c. All homes built or rehabilitated in this State have and present an energy label; and, d. Any other measures that can improve the ability of the homeowner to better understand and manage the homeowner's energy use. 8. Create building energy efficiency commissioning guidelines appropriate for building practices including recommending enforcement mechanisms in this State by January 1, 2010.
Part II, Section 5	Require that after 1/1/2010 all new single family dwellings shall include a solar water heater system.
Part II, Section 6	Requires that every public building shall be benchmarked on December 31, 2010 on it energy use as a basis in determining the State's investment in improving the efficiency of its own building stock.
Part II, Section 7	By December 31, 2009, the public utilities commission shall institute a rule governing the on-bill financing program
Part II, Section 8	There shall be allowed to each taxpayer who owns a net zero energy building fixed to real property located in the state an income tax credit which shall be deductible from the taxpayer's net income tax liability for a 10 year period starting 12/31/09.
Part II, Section 9	Prior to the sale or leasing of property, property owners and lessors shall provide the last utility bills for the most recent three month period for property for sale or lease while occupied. The public benefits fee administrator shall develop programs and information to educate financial institutions, realtors, mortgage brokers, and consumers on the economics of energy efficient properties, including savings over the life-cycle of such properties.
Part III, Renewable Energy Income Tax Credits	<p>Effective 1/1/2010, the amount of credit allowed for each eligible renewable energy technology system shall not exceed the applicable cap amount, which is determined as follows:</p> <ol style="list-style-type: none"> 1. If the primary purpose of the solar energy system is to use energy from the sun to heat water for household use, then the cap amounts shall be: <ol style="list-style-type: none"> a. \$2,250 per system for single-family residential property; b. \$350 per unit per system for multi-family residential property; and

	<ul style="list-style-type: none">c. \$250,000 per system for commercial property.2. For all other solar energy systems, the cap amounts shall be:<ul style="list-style-type: none">a. \$5,000 per system for single-family residential property;b. \$350 per unit per system for multi-family residential property; andc. \$500,000 per system for commercial property.3. For all wind-powered energy systems, the cap amounts shall be:<ul style="list-style-type: none">a. \$1,500 per system for single-family residential property;b. \$200 per unit per system for multi-family residential property; andc. \$500,000 per system for commercial property.
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February 5, 2009

COMMITTEE ON ENERGY AND ENVIRONMENT
COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
Conference Room 225
State Capitol
415 South Beretania Street

Chairs Gabbard and Baker and Members of the Committees:

Subject: Senate Bill No. 871 Relating to Hawaii's Clean Energy Initiative in 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 attached table is our attempt to summarize the various section of the bill. The Chamber of Commerce of Hawaii has the following concerns regarding the subject bill.

We understand that this bill is one of several initiatives the State Administration has proposed that are intended to reduce our dependency on imported oil by 70% by the year 2030. This bill addresses the "energy efficiency" element of the initiative which can contribute significantly towards the goal of utilizing clean energy in meeting 70 percent of Hawaii's energy demand by 2030. Of the 70 percent, analysis has determined that 40 percent can be accomplished through renewable energy initiatives. The remaining 30 percent must be achieved through energy efficiency measures.

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Also, while Part II, Section 6 attempts to bring all existing public buildings into some type of level of energy efficiency over time as buildings are retro-fitted, there does not appear to be the same effort for existing private buildings. The initiative should be looking forward at creating mechanisms to achieve the 70% reduction over time for new and existing buildings.

Establishing criteria to objectively assess the cost of developing energy efficient buildings versus the energy savings over time is important to determine which energy savings efforts are economically feasible to pursue. Assessing existing private buildings must also include incentives to encourage property owners to retro-fit their structures over time. This could include some type of "energy efficiency tax credit" that could be used for income tax (personal or corporate) or real property taxes (for people on fixed incomes).

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3. If government involvement is desired, assess the pros and cons of providing incentives or mandating compliance to achieve the desired outcomes.

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If the decision is to move the bill forward, we would strongly recommend that Part II, Section 4 of the bill be deleted or removed entirely.

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

Hawaii Clean Energy Initiative	SB 871
Part I	Energy efficiency can contribute significantly towards the goal of utilizing clean energy in meeting 70 percent of Hawaii's energy demand by 2030. Of the 70 percent, analysis has determined that 40 percent can be accomplished through renewable energy initiatives. The remaining 30 percent must be achieved through energy efficiency measures.
Part II-Energy Efficiency	The PUC's public benefits fee administrator shall expend \$500,000 from the public benefit fee to conduct energy efficiency assessments to identify current energy use patterns in this State and areas of greatest potential for energy efficiency savings. The assessment shall be completed by 12/31/10.
Part II, Section 4	<p>The public benefits fee administrator shall expend \$600,000 from the public benefits fee to:</p> <ol style="list-style-type: none"> 1. Establish procedures for and conduct measurement and verification of buildings and homes constructed under the code to assess code compliance and building performance. 2. Conduct an analysis of the energy intensity of residential and commercial buildings built to code compared to baseline homes. 3. Conduct surveys of builders to determine actual costs associated with meeting code for residential and commercial buildings. 4. Analyses and surveys shall be delivered to the legislature twenty days prior the convening of each legislative session. Each report shall include recommendations for building code updates, which can be provided to the state building code council as petitions for rules changes. 5. Assess the feasibility of implementing a net zero energy building code for residential and commercial construction. 6. Recommend technical code amendments to the international energy conservation codes in order to take advantage of Hawaii's climate. 7. Analyze the existing building code and consider the costs and benefits of requiring: <ol style="list-style-type: none"> a. Advanced meters and energy "dashboard" technologies that improve the ability of the occupant to monitor and improve building performance, cool roof standards; b. The roofs of new homes be solar-ready; c. All homes built or rehabilitated in this State have and present an energy label; and, d. Any other measures that can improve the ability of the homeowner to better understand and manage the homeowner's energy use. 8. Create building energy efficiency commissioning guidelines appropriate for building practices including recommending enforcement mechanisms in this State by January 1, 2010.
Part II, Section 5	Require that after 1/1/2010 all new single family dwellings shall include a solar water heater system.
Part II, Section 6	Requires that every public building shall be benchmarked on December 31, 2010 on it energy use as a basis in determining the State's investment in improving the efficiency of its own building stock.
Part II, Section 7	By December 31, 2009, the public utilities commission shall institute a rule governing the on-bill financing program
Part II, Section 8	There shall be allowed to each taxpayer who owns a net zero energy building fixed to real property located in the state an income tax credit which shall be deductible from the taxpayer's net income tax liability for a 10 year period starting 12/31/09.
Part II, Section 9	Prior to the sale or leasing of property, property owners and lessors shall provide the last utility bills for the most recent three month period for property for sale or lease while occupied. The public benefits fee administrator shall develop programs and information to educate financial institutions, realtors, mortgage brokers, and consumers on the economics of energy efficient properties, including savings over the life-cycle of such properties.
Part III, Renewable Energy Income Tax Credits	<p>Effective 1/1/2010, the amount of credit allowed for each eligible renewable energy technology system shall not exceed the applicable cap amount, which is determined as follows:</p> <ol style="list-style-type: none"> 1. If the primary purpose of the solar energy system is to use energy from the sun to heat water for household use, then the cap amounts shall be: <ol style="list-style-type: none"> a. \$2,250 per system for single-family residential property; b. \$350 per unit per system for multi-family residential property; and

	<ul style="list-style-type: none">c. \$250,000 per system for commercial property.2. For all other solar energy systems, the cap amounts shall be:<ul style="list-style-type: none">a. \$5,000 per system for single-family residential property;b. \$350 per unit per system for multi-family residential property; andc. \$500,000 per system for commercial property.3. For all wind-powered energy systems, the cap amounts shall be:<ul style="list-style-type: none">a. \$1,500 per system for single-family residential property;b. \$200 per unit per system for multi-family residential property; andc. \$500,000 per system for commercial property.
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**Testimony Before the Senate Committees
On
Energy and Environment
And
Commerce and Consumer Protection**

February 5, 2009 (2:45 PM)

**S.B. 871 RELATING TO HAWAII'S CLEAN ENERGY INITIATIVE
IN ENERGY EFFICIENCY**

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

Chairs Gabbard and Baker, and Members of the Committees:

My name is Alan Hee, and I represent Hawaiian Electric Company (HECO) and its subsidiary utilities, Hawaii Electric Light Company (HELCO) and Maui Electric Company (MECO). I appreciate the opportunity to present testimony on S.B. 871.

Energy Efficiency Portfolio Standard

HECO supports the development of an energy efficiency portfolio standard. It reflects the commitment of the state to energy efficiency and creates a yardstick against which we can measure our progress as a community towards energy independence.

However, HECO also supports giving the PUC the authority to establish the energy efficiency portfolio standard. It is the right agency to administer this standard because it has been involved in the utilities' integrated resource planning and demand-side management programs for over 13 years. The PUC is also familiar with how the design and implementation of energy efficiency programs must integrate with projections of electricity demand and the energy efficiency potential for Hawaii to set a reasonable level for the energy efficiency portfolio standard.

We therefore request an amendment to the bill. Rather than quantifying the energy efficiency portfolio standard by legislation, HECO suggests that the level of the standard be set by the PUC after it has had an opportunity to review recommendations from the public benefits fund administrator, who will be administering the energy efficiency programs later this year. Other industry participants, including the electric utilities, should also be asked to provide input to quantifying this standard.

For example, the bill requires a reduction of 4,300 GW. We believe this was meant to be 4,300 GWH. Still, it is not clear whether the 4,300 GWH is cumulative or incremental. If incremental, a report presented by HECO and discussed by HECO's Integrated Resource Planning Advisory Group in early 2008, found that the absolute maximum energy efficiency potential on Oahu was substantially less than half of the 4,300 GWH goal in this bill. Thus, HECO questions the basis and the methodology used to determine the 4,300 GWH figure.

Energy Efficiency Assessment

HECO supports the requirement that the public benefits fund administrator conduct an energy efficiency assessment of energy use patterns. This assessment can form the basis for the energy efficiency portfolio standard that is discussed above.

However, HECO is concerned with the definition of energy efficiency “cost-effectiveness” included in this bill (page 6, lines 12-16), which is different from the definition used by the utilities and the PUC since 1996. The language for “cost effectiveness” used in this bill considers only the perspective of the person or business installing the measure. However, ratepayers are funding the energy efficiency programs, and their costs and benefits should also be considered.

For example, it is conceivable that an energy efficiency measure meets the proposed cost-effectiveness requirement only because other ratepayers are paying nearly the full incremental cost of the measure through rebates. This would not be fair to the ratepayers who do not benefit from the energy savings in their bills. HECO therefore requests that the definition of “cost effectiveness” proposed in this measure not be adopted and that the current definition of “cost effectiveness” be retained.

Solar Water Heating Tax Credit for Homes Built After December 31, 2009

HECO appreciates the effort in this bill to continue income tax credits for retrofit installations of solar water heating systems on existing homes. Unfortunately, the new language in Section 5 of the bill (page 9, lines 10-14) creates additional confusion because it is not clear whether the January 1, 2010 date refers to the building permit date, the date of construction completion, or some other date. In addition, tankless gas instantaneous water heaters are retained as an option to solar water heating. HECO recommends that this option be eliminated as it is inconsistent with claims that Act 204 is renewable energy legislation. In addition, HECO also recommends language to strengthen solar water heating system quality assurance as buyers of new homes deserve to receive effective and reliable renewable energy systems. HECO prefers the language found in SB 390.

On-bill Financing of Energy Efficiency

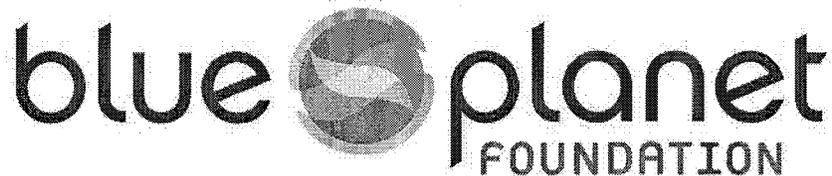
HECO supports the intent of this bill to provide on-bill financing options to change out inefficient refrigerators, install solar water heaters, and install photovoltaic systems. The bill proposes that this program be administered by the Public Benefits Fund (“PBF”) Administrator.

Currently, the utilities are responsible for administering a Pay as you save pilot program for residential solar water heaters. However, it should be noted that this type of financing program is costly for the utility as it is not set up as a loan servicing organization. The PBF Administrator may be in a better position to administer and track these types of transactions. HECO would continue to provide billing and payment support.

Furthermore, the Public Utilities Commission (“Commission”) will be awarding the PBF Administrator contract shortly. The PBF Administrator will be required to develop and propose a PV rebate program to the Commission in 2009. The PBF Administrator will also be required to review and develop new programs, which could include energy efficient appliance incentives programs.

HECO recommends the committee allow the Commission to work with the PBF Administrator to develop these types of programs which may include financing options.

In summary, HECO supports SB 871, but has several recommendations that would enhance the proposed language. Thank you for this opportunity to testify on this measure.



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

February 5th, 2008, 2:45 P.M.

Room 225

(Testimony is 5 pages long)

TESTIMONY IN SUPPORT OF SB 871, SUGGESTED AMENDMENTS

Chairs Gabbard and Baker and members of the committees:

The Blue Planet Foundation supports SB 871, implementing energy efficiency policies to provide a strong foundation for Hawaii's clean energy future. Energy efficiency, unfortunately, is the "dark horse" of clean energy resources. Energy efficiency—efficient lights, appliances, electronics, behavior changes, and the like—is the largest, cheapest, safest, and fastest energy option that Hawai'i can implement. Consider:

- Energy efficiency is the fastest-growing U.S. "energy source" (growth of ~2.5 to 3.5% annually)
- National energy efficiency programs save energy at an average cost of about 3 cents/kWh -- *about 1/10 the average electricity cost in Hawaii*
- Leading states are saving over 1% additional of total electricity sales annually
- Energy efficiency provides major local economic benefits: energy efficiency is 100% obtained from investment in local homes and businesses
- It is also the least visible, least understood, and most neglected

Efficiency Portfolio Standards

Blue Planet supports establishing energy efficiency portfolio standards. Directing the PUC to establish an energy efficiency portfolio standard would help Hawaii take advantage of this critical energy resource. While Blue Planet supports this part of SB 871, we would prefer that the measure go further to create the framework for dramatic increases in energy efficiency in Hawai'i. We offer the following suggested amendments:

1. Hawai'i law should declare that energy efficiency shall be the first priority resource for new electric system resources in Hawai'i. This could be done by adding to HRS the following: ***"Given that energy efficiency is the most cost effective electricity resource, it is the policy of the state of Hawai'i to implement energy efficiency measures before other electricity supply resources."***

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Alternatively, the policy could read: ***“It is the policy of the state of Hawaii to implement commercially available and cost effective energy efficiency measures to the maximum extent feasible.”***

2. While we appreciate the clear direction to the PUC to achieve a certain amount of savings by a certain year, annual percentages may make more sense and be easier to measure and keep on track. For example, the “energy efficiency resource standard” could require annual energy efficiency program electricity savings equivalent to 3% of 2008 retail sales by the end of 2011; 10% by the end of 2015; and an additional 2% per year each year thereafter.
3. To increase compliance with the energy efficiency portfolio standard, a system of incentives and penalties to the third party administrator and the utility for achievement should be established in addition to the standards.

Finally, an energy efficiency portfolio standard should complement a true renewable portfolio standard, should one be established through other measures currently pending before this committee. We hope that the legislature forwards this proposal, IN CONJUNCTION with measures to establish a true renewable portfolio standard.

Building Codes

Blue Planet supports further studying the opportunities for implementing aggressive building energy codes, but we prefer the language in SB 1173 in establishing standards for the counties to adopt. Blue Planet strongly support efforts to radically increase the efficiency of new and existing buildings in Hawai'i, as buildings are the largest consumer of electricity and the building stock turns over very slowly. **To this end, we support the adoption of more aggressive building code standards by the counties—30% higher than the most recent guideline established by International Energy Conservation Code (IECC).** Such a stringent building code would yield the construction of high performance buildings in Hawai'i—performance that would result in much lower energy bills over the life of the home or building.

Efficiency investments pay back to Hawaii's residents and economy in numerous ways.

1. First, the investment in efficiency pays back in savings during the home or building's occupancy and use.
2. Second, building more high performance buildings is typically more labor and material intensive than structures that are inefficient, resulting in more job creation—the tradeoff being money is directed toward local jobs and contractors instead of going overseas to purchase fossil fuel.
3. Finally, building high performance buildings is the only way for Hawai'i to achieve its clean energy future. We simply cannot meet our growing energy demands in the short term without radically improving the efficiency of our buildings.

Improvements to the 2008 Solar Roofs Act

Blue Planet supports making clarifying amendments and improvements to Hawaii's historic Solar Roofs Act. The 2008 Solar Roofs Act, Act 204, was a critical step forward toward Hawaii's clean energy future as it ensures that nearly every new home will be equipped with a solar water heater.

Specifically, Blue Planet supports the following changes to the existing solar requirement:

1. **Blue Planet supports charging the new public benefits fund administrator with the duty to accept and issue variances** instead of the energy resources coordinator at the Department of Business, Economic Development, and Tourism. We understand that there is some discussion about the legality of tasking a private entity with this somewhat regulatory responsibility, but if it is allowed, aligning the existing demand side management entity with this duty makes sense. The public benefits fund administrator should have an up-to-date understanding of the solar technology and the basis for granting or denying waivers.
2. **Blue Planet strongly supports removing the on-demand gas heater variance option.** Such an option should only be allowed (and perhaps required) if the first and second variances are met—that is, the home has poor solar resource and solar would fail the cost-effectiveness test.
3. **Blue Planet strongly supports clarifying that the solar tax credits for homes built prior to January 1, 2010, remain in place.** We believe this was the clear intent of the original Act, but making this policy abundantly clear is critical to provide comfort and certainty in the industry.
4. **Blue Planet supports using a portion of the demand side management surcharge for maintaining a post-installation inspection process.** Such an inspection would verify that the solar water heater was installed in accordance with the quality and performance standards established in §269-44.

State Building Efficiency Retrofits

Blue Planet supports the requirement that state-owned buildings to be retrofitted with efficiency improvements. It is critical that the state operate high performance buildings. Not only should be state be leading by example in energy efficiency, but taxpayers are paying the energy costs for state buildings. Blue Planet particularly appreciates the direction that state buildings must be retrofitted to achieve 30% higher than the most recent guideline established by the IECC, and the requirement that performance-based contracting be employed to meet the targets. This makes energy efficiency improvements more affordable, as the investment is paid off over time through energy cost savings.

On-Bill Financing for Energy Efficiency

Senate Bill 871 expands on-bill financing options to make energy efficiency investments more affordable to Hawai'i residents. On-bill financing is one of the most powerful tools to increase adoption of energy efficiency and clean energy investments. Blue Planet believes that pay as you save, or "on-bill financing," should be made a regular program administered by the public utilities commission (PUC) or the utilities.

On-bill financing is a critical tool to overcome the biggest barrier to energy efficiency and clean energy investment: the up-front cost. Consumers have proven to be terribly myopic in their purchasing decisions when it comes to energy saving technologies. Despite the environmental and long-term economic advantages of converting to photovoltaic power, a miniscule percentage of Hawai'i homes take advantage of this technology. Even less expensive purchases, like high efficiency refrigerators, are passed over because of their initial cost. By eliminating the up-front cost and enabling residents to pay for the investment through the energy savings over time, adoption of efficiency and clean energy will accelerate.

An examination of some of the economic barriers present in the diffusion of energy efficiency technologies provides insight into the challenges of greater adoption of efficient appliances and photovoltaic. Empirical studies examining the purchase of energy-saving devices reveal that high initial investment costs—regardless of the money savings from reduced electricity use—fosters to a tendency to avoid energy saving innovations. These decisions can result in outcomes that are economically suboptimal considering likely investment alternatives available to the decision maker. By foregoing certain energy efficiency investments, individuals demonstrate implied discount rates that are frequently an order of magnitude or higher over the prevailing discount rate.

A 1983 study on refrigerators¹ is notable for being one of the first to use very specific data and a simple technique. They examined two refrigerator models sold by the same national retailer between 1977 and 1979. The two refrigerators were identical in nearly every way except their energy use and cost: one used 410 kilowatt-hour (kWh) per year less electricity but cost \$60 more. Using a 6% discount rate and a 20-year lifetime, the more efficient refrigerator saved energy at an electricity cost of just over one cent per kWh—lower than electricity prices prevailing in every state at the time. Despite being widely advertised and being recommended by a prominent consumer magazine, the energy-efficient refrigerator was purchased by customers less frequently than the less expensive inefficient model. Using regional electricity cost data, Meier and Whittier calculated the implied discount rate by these purchases, which varied between 34% and 59%, depending on the region's prevailing residential electricity rate.

¹ Meier, A., and Whittier, J. (1983). Consumer Discount Rates Implied by Purchases of Energy-Efficient Refrigerators. *International Journal of Energy*, 8(12), 957-962.

The issues that give rise to the “energy-efficiency paradox” are likely to be more pronounced in the decision to purchase a photovoltaic system, with high initial investment costs and lengthy payback times. Expanding the on-bill financing program to energy efficient appliances (such as high efficiency refrigerators) and residential photovoltaic systems will help to eliminate this barrier and make these money-saving technologies more accessible to local residents.

Zero Net Energy Buildings

Blue Planet supports establishing tax credits for developers to build net-zero energy buildings. Blue Planet supports this incentive to encourage the development of high performance, zero energy buildings of the future in Hawai'i.

Consumer Energy Efficiency Information

Blue Planet supports directing the PUC to establish a consumer information program on energy efficient properties. Home buyers or renters deserve to know what they will likely be paying per month for energy.

Hawaii residents pay the highest electricity rates in the nation. Many homeowners have vastly inefficient homes and operate inefficient appliances simply because they are not aware of the energy they are wasting or they don't want to make the investment to improve the situation. Unfortunately, energy efficiency investments are sometimes penalized in the marketplace as homes or apartments that have invested in energy efficient appliances or solar water heaters cost more up front (or have a higher rent)—despite being less expensive to live in on a monthly basis. This measure would change that by creating a program whereby potential homebuyers or tenants could see what the monthly energy cost of the home would be. This information disclosure would enable an honest assessment of the true costs of home ownership or renting and encourage energy efficiency investments by homeowners.

Blue Planet supports amending HB 871 to go further in fostering high performance and energy efficient homes in Hawai'i by requiring that homes achieve a certain efficiency standard at the time of sale. Such a “Time of Sale Efficiency Standard” would ensure that homes in Hawai'i meet a minimum level of efficiency, saving homeowners money in energy bills over the long term. The standard should be tied to the energy code established for new buildings, such as 30% higher than the latest IECC.

Renewable Energy Income Tax Credits

Blue Planet supports the tax credits amendments in HB 871. To further accelerate the adoption of residential clean energy technologies, we would additionally support making the solar and wind tax credits 100% refundable for individuals with limited income.

Thank you for the opportunity to testify.



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February 4, 2009

The Honorable Mike Gabbard, Chair
Senate Committee on Energy & Environmental Protection
The Honorable Rosalyn H. Baker, Chair
Senate Committee on Commerce and Consumer Affairs
State Capitol, Room 225
Honolulu, Hawaii 96813

RE: S.B. 871 Relating to Hawaii's Clean Energy Initiative in Energy Efficiency

HEARING DATE: Thursday, February 5, 2009 at 2:45 p.m.

Aloha Chair Gabbard, Chair Baker and Members of the Joint Committees,

I am Mihoko Ito, here to testify on behalf of the Hawai'i Association of REALTORS® ("HAR") and its 9,600 members in Hawai'i. HAR **expresses concerns** regarding S.B. 871, and in particular **Section 9**, which requires that a history of utility bills be provided prior to the sale or lease of property and that the public benefits fee administrator develop energy programs and information.

HAR is concerned that S.B. 871 would require utility bills to be disclosed prior to the sale or lease of property. Utility bills may not contain information that would be helpful to subsequent owners or lessors, since the usage of utilities may widely differ from user to user. In addition, requiring the disclosure of utility bills may create the possibility of delays, point-of-sale mandates, and other requirements in property transactions.

Additionally, S.B. 871 gives the benefits fee administrator authority to develop programs and information to educate a number of industry groups, including REALTORS®. HAR feels that this provision is vague as it does not specify the programs and information to be provided, and as a result may place unintended burdens on the industry groups. HAR feels that the first step in the developing of an energy information program should be for the PUC to study and report on the implementation of a consumer information program.

However, if the Committees are inclined to pass the bill, HAR makes the following suggestion to amend Section 9:

1. Page 17, line 5: Deletion of "realtors". The term REALTOR® is a registered membership mark. "Real estate brokers and salespersons" would be a more applicable and appropriate term.

Mahalo for the opportunity to testify.

TAXBILLSERVICE

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TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Net zero energy building tax credit

BILL NUMBER: SB 871; HB 1053 (Identical)

INTRODUCED BY: SB by Hanabusa by request; HB by Say by request

BRIEF SUMMARY: Adds a new section to HRS chapter 235 to allow a taxpayer to claim a net zero energy building tax credit that shall be deductible from the taxpayer's income tax liability for the first taxable year in which the building meets the definition of net zero energy building. The tax credit shall be equal to:

Area of building (square feet)	Tax credit per square foot
1,000 or less	\$9
1,001 to 3,999	6
4,000 or larger	3

The tax credit shall not exceed \$50,000.

Defines "net zero energy building" as any building that produces more energy from renewable energy technology systems than it consumes from all sources on a monthly basis during any nine months of the tax year.

Credits in excess of a taxpayer's income tax liability shall be applied to subsequent tax liability. Claims for the credit, including any amended claims, must be filed on or before the end of the 12th month following the close of the taxable year. Allows the director of taxation to adopt necessary rules and forms pursuant to HRS chapter 91 to carry out this section. Taxpayers claiming tax credits for renewable energy systems under this section shall not be eligible for the state energy tax credits under HRS 235-12.5. Delineates recapture provisions in the event a building ceases to be a net zero energy building.

The credit shall be applicable to tax years beginning after December 31, 2009 and shall not apply to tax years beginning after December 31, 2019.

Amends HRS section 235-12.5 to reorganize and regroup the renewable energy tax credits. Deletes the term "photovoltaic" and separates the solar energy systems into two types - one that uses the sun to heat water and the other that includes photovoltaic systems.

In the case of solar energy systems, a taxpayer may elect to reduce the eligible credit by 30% and if this reduced tax credit exceeds the amount of income tax, then any excess credit shall be refunded; provided that tax credits properly claimed by a taxpayer with no income tax liability shall be paid to the taxpayer provided such amount is over \$1.

For any renewable energy technology system, an individual taxpayer may elect to have any excess of the credit over payments due refunded to the taxpayer, if: (1) all of the taxpayer's income is exempt from taxation under section 235-7(a)(2) or (3); or (2) the taxpayer's adjusted gross income is \$20,000 or less (or \$40,000 or less if filing a tax return as married filing jointly.)

A taxpayer shall not be allowed to claim a credit under this section for a solar water heater system required by HRS section 196-6.5 that is installed and placed in service on any newly constructed residence authorized by a building permit issued on or after January 1, 2010. This section shall apply to eligible renewable energy technology systems that are installed and placed in service on or after January 1, 2010.

Makes other nontax amendments relating to energy efficiency.

EFFECTIVE DATE: Upon approval

STAFF COMMENTS: This is an administration measure submitted by the department of business, economic development and tourism BED-16(09). The proposed measure would allow a taxpayer to claim a net zero energy building tax credit depending on the square footage of the building up to a maximum of \$50,000. In order to claim the tax credit, the building must produce more electricity from renewable energy technology than it consumes from all sources during nine months of the year.

This measure proposes an incentive in the form of an income tax credit to encourage taxpayers to make buildings energy self-sufficient and efficient to the point that the buildings can generate their own energy. It would grant tax credits without a taxpayer's need for tax relief.

Lawmakers need to remember two things. First, the tax system is the device that raises the money that they, lawmakers, like to spend. Using the tax system to shape social policy merely throws the revenue raising system out of whack, making the system less than reliable as there is no way to determine how many taxpayers will avail themselves of the credit and in what amount. The second point to remember about tax credits is that they are nothing more than the expenditure of public dollars albeit out the back door. If, in fact, these dollars were subject to the appropriations process, would taxpayers be as kind about the expenditure of these funds when schools go wanting for books and repairs, or for the lack of space prisoners are sent off to the mainland for incarceration or there isn't enough money for substance abuse treatment?

The energy cost savings on an energy efficient building should be enough of an incentive without the need for a monetary handout by the state. Given the current state budget situation, it is questionable whether the state can afford to payout the credit proposed in this measure.

Finally, it should be noted that because these systems are currently very expensive to purchase and install, only those taxpayers who have the means to make the conversion or installation will be able to claim the credit. Thus, those families at the lower end of the income scale will not benefit from either the credit or the cost savings to be realized from the device. Since the state still needs resources to provide services and programs, the burden of paying for those programs and services will be shifted to those taxpayers who cannot afford to acquire these devices.