



**DEPARTMENT OF BUSINESS,
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Statement of
THEODORE E. LIU
Director

Department of Business, Economic Development, and Tourism
before the
**HOUSE COMMITTEE ON
FINANCE**
Monday, March 2, 2009
10:30 a.m.
State Capitol, Conference Room 308

in consideration of
HB429 HD2
RELATING TO ENERGY EFFICIENCY.

Chair Oshiro, Vice Chair Lee, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of HB429 HD2, which directs the Public Utilities Commission (PUC) to establish energy efficiency portfolio standards that will maximize cost-effective energy efficiency programs and technologies. HB429 HD2, requires that the energy efficiency portfolio standards be designed to achieve 4,300 gigawatt hours of electricity use reductions statewide by 2030 and provides that the PUC establish interim goals for electricity use reduction. The PUC may adjust the 2030 standard by rule or order to maximize cost-effective energy programs and technologies and may establish incentives and penalties based on performance. Energy efficiency portfolio standards capture the benefits of energy efficiency as they increase the transparency and simplicity of administration achieving greater certainty of energy savings.

We strongly support instituting an efficiency portfolio standard as a cornerstone complementing the equally essential renewable portfolio standard. These standards serve as critical components transitioning and transforming the State to meeting its 70 percent Hawaii Clean Energy goal for 2030. As a State so highly dependent on imported fossil fuel, it is our responsibility and in our best interest to commit ourselves to expediting increased energy efficiency.

We recommend the following amendments to clarify the following:

1. The goal is to offset forecasted load growth in the electricity sector from 2009 to 2030, with the target of 4,300 gigawatt-hours of electricity savings by 2030.
2. Beginning in 2015 electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, sea-water air-conditioning district cooling systems, solar air-conditioning, customer-sited, and grid-connected renewable energy systems, shall count toward this standard.

(We recommend the inclusion of renewable substitution technologies starting in 2015 since SB1258SD1, relating to renewable portfolio standards, which we support, allows for inclusion of renewable substitution technologies until 2014. Therefore, in 2015 there will be a transition of renewable displacement technologies moving from the Renewable Portfolio Standards to the Efficiency Portfolio Standards.)

3. The PUC may set island-by-island targets as well as interim targets.
4. The PUC shall require annual reports on energy efficiency savings achieved during the previous calendar year.

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 FINANCE
MARCH 2, 2009**

MEASURE: H.B. No. 429 H.D.2
TITLE: Relating to Energy Efficiency.

Chair Oshiro and Members of the Committee:

DESCRIPTION:

This bill proposes to add a new section to chapter 269, Hawaii Revised Statutes ("HRS") requiring the Public Utilities Commission ("Commission") to establish energy efficiency portfolio standards ("EPS" or "Standards") that will maximize cost-effective energy efficiency programs and technologies. The EPS standards shall be designed to achieve four thousand three hundred gigawatt hours of electricity use reductions by 2030. The Commission shall also establish interim goals for energy use reduction to be achieved by 2015, 2020, and 2025, and may adjust the 2030 standard by rule or order to maximize cost-effective energy efficiency programs and technologies.

POSITION:

The Commission supports the intent of this bill.

COMMENTS:

- The Commission supports the intent of this bill, and appreciates the flexibility provided in setting the interim standards, and the ability to adjust the long-term goal if doing so is appropriate.
- The Commission understands the importance of energy efficiency as a low-cost, green resource, and is doing all it can to maximize the implementation of cost-effective measures.
- Setting the policy in statute with a long range goal should assist the Commission and other stakeholders in doing all they can to achieve savings for electricity consumers throughout the state.

Thank you for the opportunity to testify.

HAWAII RENEWABLE ENERGY ALLIANCE

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TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON FINANCE

HB 429 HD2, RELATING TO ENERGY EFFICIENCY

March 2, 2009

Chair Oshiro, Vice-Chair Lee 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 429 HD2 is to direct the public utilities commission to establish energy efficiency portfolio standards ("EEPS"). HREA supports the intent of this bill, but **cannot support** the bill as written for the following reasons:

1. Reason for a EEPS? HREA agrees there is a need for a portfolio standard (separate from RPS, and a companion to RPS) that includes energy efficiency technologies and measures. However, we believe the implied definition in this bill that energy efficiency includes renewable substitution (or "off-set") technologies is wrong and therefore not appropriate;
2. Better Yet a DPS. HREA suggests a demand-side portfolio standard ("DPS") as a more appropriate companion to RPS. DPS would include all demand reduction technologies and measures a customer could employ to "off-set a portion up to all" of his electrical load, e.g:
 - a. traditional energy efficiency,
 - b. off-set renewables, and
 - c. net metered renewables; and
3. How to Implement the DPS. HREA recommends, as was stated in the original bill but not in HD1, that the DPS be the responsibility of the Public Benefits Fund Administrator as directed by Commission.

Given that there are different opinions on this bill, HREA recommends that the Committee amend the bill to direct the Commission to consider the following as it investigates the establishment and implementation of an EEPS:

1. what is an appropriate companion to the RPS, e.g., an EEPS or a DPS or an XPS, what demand reduction technologies should be included in the EEPS or DPS or XPS, and how should the technologies and the overall goals be defined; and
2. whether the responsibility for the EEPS or DPS should be assigned solely to the Public Benefits Fund Administrator.

That said, we recommend that the Commission provide recommendations for the design and implementation of the EEPS or DPS or XPS, along with proposed amendments to the RPS law prior to the 2010 session.

Thank you for this opportunity to testify.

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HOUSE COMMITTEE ON FINANCE

March 2, 2009, 10:30 A.M.

(Testimony is 2 page long)

TESTIMONY IN SUPPORT OF HB 429 HD2

Aloha Chair Oshiro and Members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, *supports* HB 429 HD2, directing the Public Utilities Commission to establish energy efficiency portfolio standards. The Sierra Club believes the effective date should be amended and this bill should be passed expeditiously.

Energy efficiency is considered the lowest hanging-fruit in the range of options necessary to reduce our energy costs and greenhouse gas emissions. There are a host of public policy considerations supporting this billing, including:

- **Energy Efficiency Is a Power Source.** Energy efficiency is a source of energy like coal, gas, or nuclear, except instead of drilling for it or blowing up mountaintops to get to it, we can tap into this clean energy source by using ingenuity to do more with the energy we generate: *we work smarter, not harder.*
- **Energy Efficiency Creates Jobs.** A recent 2009 report found that California's economy grew as a result of aggressive energy efficiency projects.¹ Cutting energy bills let California consumers and companies spend their cash on other things, and helped create 1.5 million jobs. Now imagine if Hawai'i had followed California's example? It's not too late to embark on job creation.
- **Energy Efficiency Reduces Our Carbon Footprint.** Buildings contribute to nearly half (43%) of all U.S. carbon emissions.² Improving their energy efficiency lowers energy bills, eliminates the need for new power plants,

¹ See 2009 California Green Innovation Index, available at www.next10.org

² The recent Hawai'i report entitled Greenhouse Gas Inventory Revised, 1990 & 2007, does not appear to have broken these figures out by this category.

- increases our energy independence, reduces air and water pollution and cuts the carbon emissions that cause global warming.
- **Even Small Efficiency Improvements Add Up.** If every household in the United States switched to Energy Star light fixtures, we could prevent 50 million tons of global warming pollution per year, the equivalent of taking 10 million cars off the road. In every home, office, and factory we can use energy more efficiently by putting to work currently available products like advanced lighting, better windows, more efficient heating and cooling systems, and new appliances that use far less energy than their older counterparts.

Other states have already followed this model and have observed tangible results. For example, California's aggressive efforts to improve the efficiency of things like air conditioners and refrigerators have helped hold its electric demand steady per capita for *three decades*. By contrast, electricity consumption has grown by 50 percent for the U.S. as a whole in that same time period.

Thank you for the opportunity to testify.



HOUSE COMMITTEE ON FINANCE

March 2, 2008, 10:30 A.M.

Room 308

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF HB 429 HD2, SUGGESTED AMENDMENT

Chair Oshiro and members of the committee:

The Blue Planet Foundation supports House Bill 429 HD2, directing the public utilities commission (PUC) to establish energy efficiency portfolio standards. We greatly appreciate the amendments made by the previous committee on this measure to further refine the energy efficiency portfolio standards and their achievement.

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
- Also the least visible, least understood, and most neglected

The energy efficiency portfolio standard established through HB 429 HD2 should complement a true renewable portfolio standard, should one be established through the other measure currently pending before this committee (HB 1843 HD2). We hope that the legislature forwards this proposal, **IN CONJUNCTION** with measures to establish a true renewable portfolio standard that would:

- Require renewable portfolio standard (RPS) targets be achieved only by electricity produced from renewable energy resources, and repeal the definition of energy efficiency gains as renewable resources for the purpose of the RPS.
- Eliminate “off-ramps” for failure to meet the standards.
- Establish penalties for utilities' non-attainment of RPS target.

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- Increase the amount of renewable energy generated by Hawaii's utilities to achieve levels of 20% of net electricity sales by 2015, 30% by 2020, 40% by 2025, and 50% by 2030.

Setting an aggressive, clear energy efficiency standard and high renewable portfolio standard will mobilize the whole state to move towards our preferred energy future.

SUGGESTED AMENDMENT

Blue Planet strongly urges the Finance Committee to amend HB 429 HD2 with language from HB 431 (sections 3 and 4) to require stringent building energy codes, thereby accelerating the creation of energy efficient construction in Hawai'i. Due to long building life, getting new buildings built as efficient as possible is critical to achieve energy independence. As buildings are the largest consumer of electricity and the building stock turns over very slowly, requiring high performance buildings for new construction and retrofitting is critical.

Unfortunately, the measure which required the counties to adopt stringent energy codes for new construction based in the International Energy Conservation Code, HB 431, did not receive a hearing. Blue Planet supports 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.

Hawai'i residents and businesses will lose a year of energy efficient and cost-saving buildings if this measure is tabled for this session. Energy efficient buildings are the cornerstone to our clean energy future. 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.

Please amend HB 429 HD2 with sections 3 and 4 of HB 431 to truly put Hawai'i on course to achieve its energy efficiency and clean energy objectives.

Thank you for the opportunity to testify.

**Testimony Before the House Committee
On
Finance**

March 2, 2009 (10:30 AM, Agenda #2)

H.B. 429 HD2 RELATING TO ENERGY EFFICIENCY

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

Chair Oshiro, Vice Chair Lee and Members of the Committee:

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 H.B. 429 HD2.

HECO supports H.B. 429 HD2 and 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.

HECO also supports giving the PUC the authority to adjust the 2030 standard to maximize cost-effective energy efficiency programs and technologies. 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 bill also provides the PUC the opportunity to review recommendations from the public benefits fund administrator, who will be administering the energy efficiency programs later this year, and gather input from other industry participants.

Therefore, while HECO questions the basis and the methodology used to determine the 4,300 GWH standard, HECO supports HB 429 HD2.

Thank you for the opportunity to testify on this measure.