

**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. 430**

**TITLE: Relating to Energy Efficiency.**

Chair Morita and Members of the Committee:

**DESCRIPTION:**

This bill directs the public benefits fee administrator to review energy use patterns and develop an energy efficiency plan and appropriates funds out of the Public Utilities Commission Special Fund ("PUC Special Fund").

**POSITION:**

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

**COMMENTS:**

- The Commission is currently undertaking the following initiatives that satisfy the intent of the bill:
  - In 2009, the Commission will contract with a public benefits fee ("PBF") administrator who will provide energy efficiency programs in the HECO Companies' service territories.
  - The Commission will also establish a Technical Advisory Group ("TAG"), who, among other things, will work with the PBF administrator to develop the annual plans that will include market intervention strategies, service offerings, emerging market initiatives for the residential and commercial & industrial markets. The TAG will be comprised of the PBF Administrator, the Consumer Advocate, the HECO Companies, the Contract Manager for the TPA, and other interested EE stakeholders, as designated by the Commission.

- The PBF administrator, with TAG's assistance, will develop a Technical Reference Manual that will include a comprehensive list of all measure characterizations and program assumptions used in determining measures and program cost-effectiveness all EE programs launched by the PBF administrator.
- Finally, the PBF administrator is not a government agency. Funding for the PBF administrator is from ratepayer funds, and not the PUC Special Funds.

Thank you for the opportunity to testify.

**Testimony Before the House Committee  
On  
Energy & Environmental Protection**

**February 3, 2009 (9:00 AM)**

**H.B. 430 RELATING TO ENERGY EFFICIENCY**

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

Chair Morita, Vice Chair Coffman 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. 430.

HECO supports the requirement that the public benefits fund administrator conduct an energy efficiency assessment of energy use patterns and funding that effort from public funds. This assessment can form the basis for the energy efficiency portfolio standard that is the subject of HB 429.

However, HECO is concerned with the definition of energy efficiency "cost-effectiveness" included in this bill (page 1, lines 12-17), 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.

Thank you for this opportunity to testify on this measure.



**HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

February 3<sup>rd</sup>, 2008, 9:00 A.M.

Room 325

**(Testimony is 1 page long)**

**TESTIMONY IN SUPPORT OF HB 430**

Chair Morita and members of the committee:

The Blue Planet Foundation supports House Bill 430, directing the public benefits fee administrator to review energy use patterns and develop an energy efficiency plan. 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

Directing the public benefit funds administrator or the PUC to thoroughly analyze opportunities for energy efficiency statewide would help Hawaii take advantage of this critical energy resource.

While Blue Planet supports HB 430, we recommend that this measure be amended so that it includes a clear statement of policy in HRS with regards to energy efficiency’s importance. 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.”*** 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.”***

Thank you for the opportunity to testify.

**Jeff Mikulina, executive director • [jeff@blueplanetfoundation.org](mailto:jeff@blueplanetfoundation.org)**

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# Sierra Club Hawai'i Chapter

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## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 3, 2009, 9:00 A.M.

*(Testimony is 2 page long)*

### TESTIMONY IN SUPPORT OF HB 430

Chair Morita and members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports HB 430, directing the public benefits fee administrator to review energy use patterns and develop an energy efficiency plan. Energy efficiency is considered the lowest of hanging-fruit in the range of options necessary to reduce Hawai'i's energy costs and greenhouse gas emissions.

The Sierra Club acknowledges a recent editorial opinion<sup>1</sup> that addresses this subject in a humorous manner, but effectively makes a point.

### **SUBJECT: REQUEST FOR URGENT BUSINESS RELATIONSHIP**

Please excuse this unsolicited correspondence. I am sure and have confidence of your ability and reliability to prosecute a transaction of this great magnitude. An unusual circumstance on an island in the CENTRAL PACIFIC OCEAN has availed an opportunity for great fortune to be gained. Needed from you is access to investment of \$100,000,000, for which you will be thusly compensated \$50,000,000 annually for the next 10 years. As you see this business transaction provides you a yield of 50 percent annually. Please, note that this transaction is 100 percent SAFE AND GUARANTEED. Time is of the essence, as thousands will continue to suffer without your timely investment. I simply need your full name and also your BANK NAME AND ACCOUNT, where the money will be transfer into ...

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<sup>1</sup> Editorial Opinion printed on 8/24/2008 in the Honolulu Star Bulletin, available at <http://archives.starbulletin.com/2008/08/24/editorial/special.html>

...Does this scam sound vaguely familiar? It should. Only this one isn't a scam at all. It's the real-life earnings potential for an energy efficiency investment in Hawaii. Aside from being legitimate, this investment's added benefits include reduced greenhouse gas emissions, local job creation and an infusion of cash locally.

Skyrocketing energy costs have positioned efficiency investments as head-spinning money makers - particularly with this down economy. Yield rates of 25 percent, 50 percent, or higher - unheard of in the financial markets - are possible with properly structured investments in clean technology.

Consider the above example - a salivating 50 percent annual "return" on investment for a 10-year term. How? Imagine you have an energy SWAT team that can go into homes and replace the water heater and light bulbs. The homeowners continue to pay the same average monthly cost for electricity, but instead of sending a check to the utility, they send it to you. You pay the lower actual bill - reaping the savings from the efficiency investments. The homeowners benefit from having a stable electricity cost and new lights and a water heater that they own after time.

Here are the numbers: A residential solar water heater installed will run about \$5,000. After the rebate and state tax credit are taken, the effective cost is about \$2,700 (leaving out the federal tax credit, whose future is currently uncertain). Solar will save about 2,800 kilowatt-hours annually over an electric heater, which means a Kauai resident who pays \$0.44 per kwh will save about \$1,232 every year. Add to that a handful of compact fluorescent light replacements, replacing seven 75-watt incandescent bulbs with 20-watt CFLs. Let's say those cost \$9 each (with labor) for a total cost of \$63 for the lights (they last about 10,000 hours). If those lights are on about three hours a day, the annual savings is 422 kwh per year, or \$185 annually for a Kauai resident.

Add it all up and you have a \$2,763 initial investment that saves (or yields) \$1,417 over the course of each year on Kauai - the equivalent of a 50 percent return on investment. Estimating that 10,000 homes on Kauai could benefit from this retrofitting (of the 30,000 housing units on the island) and you have nearly a \$28 million investment potential. Let's say you include an additional 15,000 retrofits on the Big Island (cost: \$40 million) and 12,000 on Maui (\$32 million). The electricity rates are slightly lower on these islands but the solar rebates are higher. Put them

together and you have a \$100 million investment that has the potential to return about \$50 million every year.

But wait, there's more. This statewide investment would reduce greenhouse gas emissions by about 120,000 tons annually and provide hundreds of local jobs.

So where do you sign up? Good question, because the financing structure for such an investment at this scale isn't in place. Sure, individual homeowners are replacing bulbs and buying solar, but not at a pace that matches their money-making potential. Since these investments are so lucrative and add so much value to Hawaii and the environment, there must be a way to put our brightest business minds to work and figure out how to leverage this massive investment potential across the state.

So where are Hawaii's heavy investors? Where are Hawaii's "local" banks, moneyed institutions like Kamehameha Schools and private investors putting their money? Is it helping local folks in Hawaii? Are they getting a better yield than 50 percent? What do we need to do to focus serious money on vastly improving Hawaii's energy efficiency in the short term?

This proposal just looked at solar water heaters and lights for a limited number of homes. Hundreds of millions of additional energy efficiency investments exist in the form of Energy Star appliances, air conditioning, insulation and commercial equipment, among others.

If we're not maxing out our local energy efficiency investments, we might as well be falling for the spam fraud and sending our hard-earned money overseas to questionable regimes and unscrupulous business interests. With our utter dependency on oil, we already do that every day.

Thank you for the opportunity to testify.