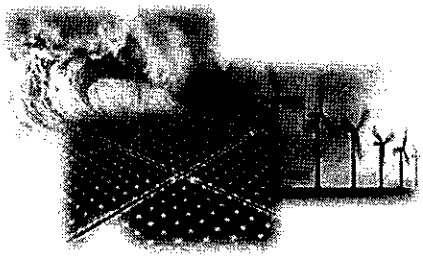
HB 1346

blue planet FOUNDATION



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
February 3, 2011, 8:30 A.M.
Room 325
(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF HB 1346

Chair Morita and members of the Committee:

The Blue Planet Foundation supports HB 1346, a measure which establishes minimum energy efficiency standards for televisions sold in Hawai'i. This is an appropriate policy tool to address a growing energy problems and help Hawai'i achieve its aggressive clean energy goals.

Television energy efficiency standards will save substantial electricity—and oil

Based on California television electricity consumption patterns[1], Blue Planet estimates that the typical TV in Hawai'i consumes about 250 kilowatt-hours of electricity annually. If approximately one million TVs are in use in Hawai'i (a per capita approximation given California's estimates), 250 gigawatt-hours of electricity are consumed annually in Hawai'i. Given a statewide average residential electricity rate of $0.29 per kilowatt-hour, this translates to $72.5 million spent annually on electricity just to power TVs. The energy efficiency standards contemplated in HB 1346—modeled after California's standards—could reduce the per-TV consumption by 33% or more. At full adoption, this would result in a savings of nearly $24 million annually while preventing the burning of over 170,000 barrels of oil for electricity annually.

Energy efficiency standards are smart policy

Setting standards for appliances such as televisions overcome intractable consumer buying habits. 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 high efficiency appliances, such choices are passed over in favor of lower efficiency counterparts because of their initial cost or availability.

[1] http://www.energy.ca.gov/appliances/tv_faqs.html

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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 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 refrigerators[2] 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.

A precedent exists for television efficiency standards

In November 2009, the California Energy Commission (CEC) adopted rules that require television manufacturers to produce new models that use 33 percent less electricity by 2011 and 49 percent less electricity by 2013. At the time, the chairwoman of the CEC was quoted[3] as saying: "This is a consumer protection measure, a measure that will protect the environment and which will save us from building a massive new power plant." California is a large market for consumer appliances such as televisions. Hawai'i can ride on its coattails and ensure that televisions being sold in the state also meet basic energy efficiency standards.

Please forward HB 1346 to help Hawai'i residents save money and to help the state achieve its clean energy goals.

Thank you for the opportunity to testify.

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

[3] http://green.blogs.nytimes.com/2009/11/18/california-approves-tv-efficiency-rules/

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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 3, 2011, 8:30 A.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 1346 WITH PROPOSED AMENDMENTS

Chair Morita and Members of the Committee:

The Sierra Club, Hawaii Chapter, with 8,000 dues paying members and supporters statewide, ***supports*** HB 1346. This measure would require most televisions sold in the State of Hawai'i to achieve modest energy efficiency standards.

Hawai`i is the most dependent state in the nation on imported oil. Some 50 million barrels are imported annually, nearly 80% of which originate from foreign sources. In addition, over 805,000 tons of coal are imported into our state. These sources provide power for over 92% of Hawaii's electricity generation. The combustion of these resources also contributes over 23 million tons of climate changing greenhouse gas into our atmosphere annually.

Hawaii's energy security could be increased by requiring new appliances to comply with reasonable energy efficiency standards. This bill is a solid step in that direction. Televisions are one of the largest unregulated appliances in the home and represent approximately 10% of overall residential electricity use. Many folks would be startled to discover that many large televisions consume more electricity then a refrigerator.

Under HB 1346, the benefits to the Hawai'i economy and environment are significant. Loosely using California projections, Hawai'i would see:

- **Electric bill savings of around $50,000,000**
- **Power savings of 20 MW per year**
- **The prevention of more than 74,000 tons of CO2/yr, the main heat trapping global warming pollutant**

There are already nearly 300 models on the market today that meet these proposed standards, sold by leading companies including Samsung, Vizio, Sharp, and Sony, and lower cost house brands sold at Best Buy and other retailers. With time, even more brands will meet the standards established in California and, with the passage of this measure, in Hawai'i.

Let's get with the picture and pass this smart measure.

Mahalo for the opportunity to testify.