

UH-Mānoa in forefront of helping Hawai'i go green

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By Virginia S. Hinshaw and Stephen E. Meder

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Last month, we received a very special invitation to attend a White House ceremony led by President Barack Obama and former President Bill Clinton, who announced their commitment to energy reduction initiatives at the national level. We joined a small but growing group of selected leaders to advance energy efficiency and renewable energy strategies in both public and private building sectors.

Hawai'i's leadership in sustainability is being increasingly recognized, and we all share a sense of urgency to move forward. No other state in the nation is more dependent on electricity generated by fossil fuel. We have the highest cost of electricity in the country. We are dependent on a fuel that is dwindling in supply, escalating in cost and requires transportation over long distances.

In response, the University of Hawai'i at Mānoa has committed — through research, teaching, building design and campus operations — to turn the tide from fossil fuel dependence to clean energy independence.

Energy costs have hit UH-Mānoa especially hard. Our 300-acre campus, plus Mānoa facilities on other islands, represents more than 6 million square feet of occupied buildings. The cost to illuminate and cool them is climbing precariously, to the point that UH-Mānoa is now paying more than \$23 million annually for electricity.

Several years ago, the campus adopted the ambitious goal of cutting energy use 30 percent by the year 2012 — a goal that we are on target to achieve. We want to further reduce energy use 50 percent by 2015; convert to 25 percent renewable energy sources by 2020; and become energy, water and waste independent by 2050.

We were one of the first campuses in the country to set and achieve goals like these, which is why we were invited to the White House Better Buildings Challenge. At the December gathering, Presidents Obama and Clinton endorsed nationwide efforts, such as UH-Mānoa's goal of renovating our half-century-old Kuykendall Hall into the first zero net energy (non-fossil fuel dependent) retrofitted building in the state.

This exciting renovation project will cut energy use while also creating green job training and employment opportunities in Hawai'i. Design work on the Kuykendall Hall renovation, as one of only three national models of net zero energy usage, was performed by experts chosen by the U.S. Department of Energy.

To make the greatest impact, UH-Mānoa must continue to transform from energy user to energy generator. We've begun by installing photovoltaic panels on the roof of Sinclair Library, in 2011, and are pursuing solar energy generation on Coconut Island. Our next plan is to invest \$35 million in additional solar rooftop systems on campus that would meet an increasing percentage of our campus electricity needs.

We have also embarked on a campus-wide lighting retrofit to replace old incandescent fixtures with

more high-quality, low-energy lighting and are undertaking a number of other aggressive energy conserving and energy efficiency projects that will reduce our costs.

Accomplishing our goals is a team effort requiring sustained commitment by campus and community partners — particularly the state government — to continue this momentum toward greenhouse gas reduction and energy independence for the university and state. By working together, we will light the way toward energy solutions.



Virginia S. Hinshaw, former chancellor of UH-Mānoa; Stephen E. Meder is assistant vice chancellor for physical environment and long-range planning at UH-Mānoa