HCR 166 / HR 125

Testimony Presented Before the
House Committee on Energy & Environmental Protection

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By

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HCR 166 / HR 125 Requesting The Center For Smart Building And Community Design To Develop Energy Efficient Design and Performance Standards For New Construction, Renovation, and Retrofitting for Buildings Throughout The University Of Hawaii System

Chair Morita, Vice Chair Evans, and Members of the Committee:

Aloha, my name is Stephen Meder. I have a joint appointment at the University of Hawaii. I serve as the Director of the Center for Smart Building and Community Design and I am also an Associate Professor performing research and teaching at the School of Architecture. With me today is Dr. Gordon Grau, Director of the University of Hawaii Sea Grant College Program. We are here to testify in favor of the adoption of HCR 166/HR125.

This year, the University of Hawaii will spend over $20 million on electricity. During the 2003-2004 budget cycle, oil costs averaged $37 a barrel. As we speak, oil costs are $53 per barrel and climbing. That change represents a 70% increase in fuel costs and no authority on the topic expects to see those prices decrease in the future. Establishing standards for energy efficient building design can reduce the University’s overall energy consumption by 20-50% and reduce our energy costs by millions of dollars annually at current costs.

The University, through the Center for Smart Building and Community Design, can realize these savings and demonstrate leadership to the larger community by creating design standards that consider energy conserving, healthful design strategies and life cycle costs for efficient building operations. Building orientation, passive design techniques, thermal mitigation, appropriate material choices, daylighting, energy efficient lighting and air conditioning design, water conserving strategies and viable renewable energy applications can substantially reduce the energy demand and improve the quality of life within and around our buildings.

By generating these standards the University of Hawaii demonstrates the value of responsible planning and building design to its students and increases their professional capacity through related curricula. Energy efficient design standards motivate the design professions to increase their design capacity to meet the new standards. We have supported outreach design workshops with our partners at HECO, DBEDT and the US Department of Energy that provide valuable
information to our design community. Such outreach supplies them with the
design and analysis tools to develop energy conserving buildings and keep more
money in the state economy.

The University of Hawaii and the State of Hawaii have a special responsibility to
taxpayers to use resources in a manner that is as productive and efficient as
possible today and for future generations. The University of Hawaii is the perfect
starting point from which to generate energy conserving design principles. UH is
the largest user of electricity on Oahu after the US military. The Center is
prepared to develop design standards for energy efficiency for new and
retrofitted buildings. We are in the process identifying engineers and architects to
develop the standards and we anticipate a Fall completion date. We have found
the University Administration to be very supportive in this endeavor. The
Administration stands to benefit economically from the information contained in
the new design standards. In addition, the utility of the design standards will not
be limited to the edge of Manoa or Hilo or Windward and Leeward Community
Colleges; they will be applicable to other buildings in the state and could serve to
bolster the greater economy of the state while doing the right thing for our
environment and our people. The Center for Smart Building and Community
Design is committed to improving the interaction among the built, natural and
human environments by focusing resources and expertise to solve issues facing
the university and Hawaii’s larger community.

Dr. Grau and I strongly urge you to adopt HCR 166/HR 125. We thank you for
your time this morning and the opportunity to testify on these resolutions.