



COLLEGE OF SOCIAL SCIENCES  
**HAWAII ENERGY POLICY FORUM**  
UNIVERSITY OF HAWAI'I AT MĀNOA

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# **Hawaii Energy Policy Forum**

## **Energy Efficiency Working Group**

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# Energy Efficiency

➤ Delivering the same or more output for less energy

❑ Example: Lighting retrofits

- Cut energy use by 50%
- More light output, Longer life, No technology risk
- Local laborer to install
- Local supplier to provide parts
- Paybacks under 1 year

❑ Over \$50 Billion of opportunities exist in existing buildings:

- HVAC
- Lighting
- Building controls
- Insulation
- LEED
- Energy Star

# Energy Efficiency as Economic Stimulus

- Nearly ½ of President Obama's proposed energy stimulus is on energy efficiency spending
  - ☐ Why?
    - Fast mobilization (sometimes immediate)
    - Risk free projects
    - Local spending
    - Creates jobs
    - Save money, Good for environment, Reduce dependence on imported fossil fuels
  - ☐ States need to think energy efficiency too

# 2009 Hawaii Legislature

- Permitting speed an issue
- Streamline State department focus
- Education at K-12, Vocational and University need curriculum around building green collar industry
- Push grant, fed money out to projects ASAP
- Share green accomplishments
  - ❑ Showcase companies, individuals, policy makers
- Lead by example

# HEPF Energy Efficiency Working Group: Actions to be taken

## ➤ **2. Promote Conservation and Energy Efficiency**

### ➤ Actions to be taken:

- Continue work with state agencies and the private sector to improve energy efficiency in buildings. Identify barriers and amendments to existing law or develop new law to advance energy conservation, renewable energy, and to reduce green house gas emissions.
- Improve the Energy performance of State buildings.
  - ❑ HEPF's preliminary energy assessments of the Hawaii State Capitol building in 2006-07, resulted in the retro-commissioning of the building; which will see energy savings of 25%.
  - ❑ Track the Capitol and other projects to promote and expand retro-commissioning services for other state facilities and quantify energy savings realized or anticipated.
- Implement and track the use of commissioning and retro-commissioning services and energy performance contracts in state buildings.
- Work closely with the UHM administration to demonstrate energy conservation and energy efficiency applications on the campus, including "Sustainable Saunders" activities, and explore energy efficiency measures on other UH campuses
- Identify viable options for financing energy efficiency and renewable energy opportunities
- Develop case studies showing the financial benefits of implementing energy efficiency projects in state buildings.
- Provide periodic reports for dissemination to the public.
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# HEPF Energy Efficiency Working Group: Actions Taken

- Actions taken:
- Supported adoption of Act 96, which established energy efficiency objectives in State Facilities efforts by the counties in developing model energy codes (2006).
- Sponsored “Energy by Example” program, performing preliminary energy audits for the State Capitol, Saunders Hall on the UHM campus, Farrington High School, and United Laundry Service. A report of the actions taken to date was produced in 2007. Additionally, support for the Sustainable Saunders project was recognized by the 2007 Legislature with adoption of HR 126; and efforts continue to obtain state CIP funding for the efficiency measures identified.
- Supported adoption of Act 157 (HB 1787), which replaces definition of "energy-savings performance contract" with "energy performance contract" with the addition of commissioning and retro-commissioning; extends the maximum term of an energy performance contract from 15 to 20 years (2007)
- Co-sponsored with Hawaiian Electric Company(HECO) a facilitated dialogue to develop “Ocean Energy Development Guidelines” (2007)
- Supported 2008 legislation (Act 118), clarifying provisions of Chapter 269, Part VII, HRS, relating to the administration and use of moneys for energy-efficiency and demand-side management programs and services
- UHM administration established new energy policy guidelines for the main campus as follows: (a) 30% reduction in overall campus energy use by 2012; (b) 50% reduction by 2015; and ©25% renewable energy supply by 2020; and appointed an Assistant Vice Chancellor to oversee the campus facilities and to ensure that energy performance of all new and existing buildings meet or exceed the Act 96 standards. Additionally, HECO and UHM are partnering to reduce large-scale energy use on the Manoa campus, including installation of an electricity-metering program.
- The State Department of Education (DOE) initiated an incentive/disincentive energy conservation program for 280 schools statewide.
- Hawaii Public Housing Authority is developing a performance-contracting Request for Proposals to initiate energy efficiency improvements in its state and federal public housing facilities.
- DAGS retro-commissioned five state buildings; and is taking the lead on performance contracting initiatives
- DBEDT completed a cost-benefit, life-cycle analysis for the new College of Education; and is developing a cost-benefit, life-cycle analysis for the State Capitol at LEED Silver.