

Energy Efficiency Spotlight

A shining example of how Hawaii is working to reach its goal of a 30% reduction in energy consumption by 2030.



STATE OF HAWAII STATE BUILDINGS LEAD BY EXAMPLE

State of Hawaii public buildings and facilities are under consistent review and analyses to make each building and facility as energy efficient as possible.



State Office Tower (SOT) Certified Prestigious LEED Gold.

In 2012 the SOT was the first large office building, public or private, in the state to be certified Gold under LEED for Existing Buildings: Operations and Maintenance.

29 state buildings are LEED certified or pending certification. An additional 43 LEED projects are in the process toward the goal of certification.

A primary objective of Lead by Example is to protect the state against escalating energy costs and to expedite energy security to protect Hawaii and our economy against the volatility of world oil markets. In spite of rising energy costs and reduced funding and staff, state agencies are persistent in pursuing energy efficiency:

- For the fourth consecutive year, the State of Hawaii was awarded the Energy Services Coalition's (ESC) *Race to the Top* in recognition for leading the nation in per capita performance contracting for state and county buildings. Over \$402 million in performance contracts have been signed in both State and County with cost savings expected to grow to more than \$989.6 million over the 20-year life of the contracts.
- Economic impacts from the energy savings (not including the equipment installation/construction) since 1996 include: (Source: DBEDT, Research and Economic Analysis Division)
 - \$14.4M in state tax revenues, measured in 2014 dollars
 - \$381.3M in income to households, measured in 2014 dollars
 - An average of 208 jobs generated/supported each year between 1996 and 2033

The above impact is the net of the following:

1. Increase in government spending on non-energy categories
2. The decrease in electricity sales of utilities

Note: Impact of construction/equipment installation is not included in this calculation since data on financing the projects are not available at this time.

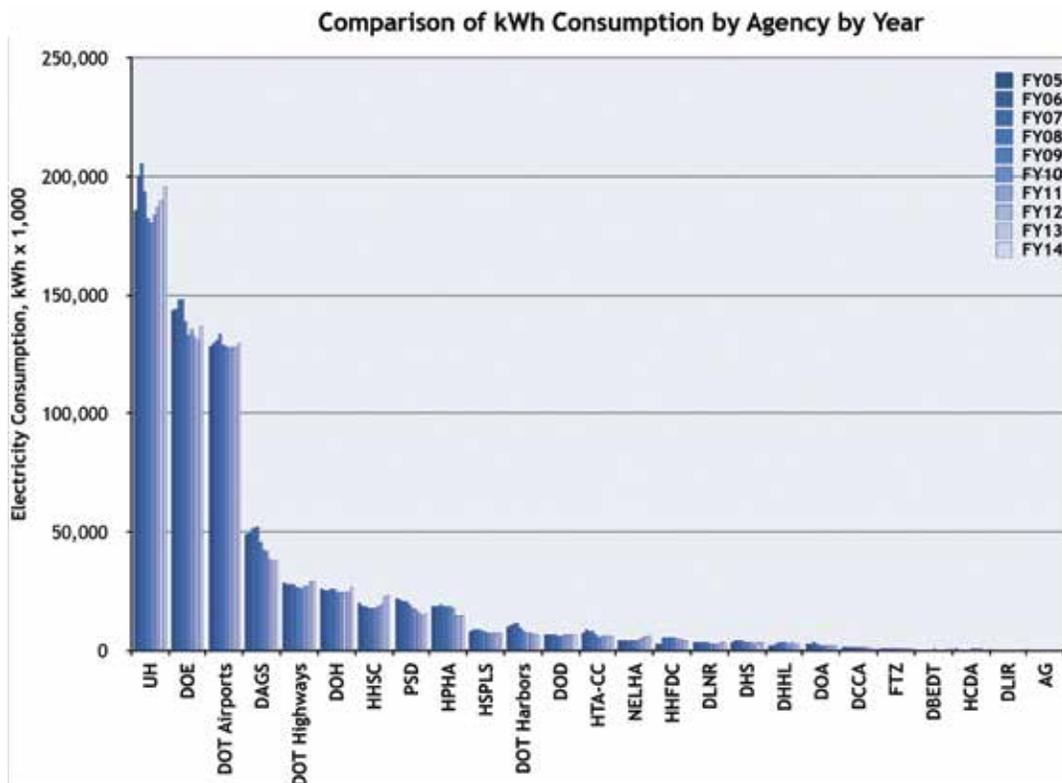
- In December 2013, the State Department of Transportation entered into the largest single state performance contract in the nation: a \$151.3M energy savings contract which guaranteed reduction of energy use by 49 percent and \$496.2M guaranteed savings over the life of the contract in energy costs; actual savings realized are estimated to be 8 percent higher.

- Hawaii remains a member of the U.S. Green Buildings Council, the non-profit entity which administers the Leadership in Energy and Environmental Design (LEED) green building certification program. There are currently over 30 LEED Accredited Professionals on staff at six state agencies; Department of Accounting and General Services; Department of Business, Economic Development, and Tourism; Department of Education; Department of Transportation; Hawaii Public Housing Authority; and the University of Hawaii.



- 52 state buildings have received ENERGY STAR® awards, acknowledging that they rank in the top 25% of similar buildings nationwide.
- State agencies have received more than \$9.43 million in efficiency rebates since 1996 from the Hawaiian Electric Company (HECO) and its subsidiaries and from Hawai'i Energy. These rebates combined have resulted in estimated cumulative dollar savings of over \$172 million. Over the life of the equipment, the savings will be equivalent to approximately 132,000 households' annual electricity use.
- DBEDT is implementing a U.S. Department of Energy Cooperative Agreement to benchmark more than 552 eligible state department buildings with Energy Star Portfolio Manager.
- In January 2014, OpTerra Energy Solutions was awarded the Energy Efficiency and Sustainability Master Plan Request For Proposals. Department of Education (DOE) is rebranding this program *Ka Hei*. Under *Ka Hei*, OpTerra will conduct whole school audits beginning in 2015 to determine energy and water efficiencies for each DOE school. Based on these audits, DOE will determine the feasibility to fund these energy and water efficiency projects, either through *Ka Hei* or using bond funds.
- A total of nearly 5.2 MW of photovoltaics have been installed at various statewide airports. An additional 2.69 MW is pending.

From FY05 to FY14, 14 executive agencies were able to decrease their electricity consumption. Each agency's year-by-year kWh consumption is summarized in the chart below.



For more information on energy efficiency in state agencies, visit energy.hawaii.gov/energy-efficiency-in-soh

