THE SENATE
TWENTY-FIFTH LEGISLATURE, 2009
STATE OF HAWAII

S.B. NO. 1090

JAN 26 2009

A BILL FOR AN ACT

RELATING TO ENERGY RESOURCES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that state agencies may do more to implement simple, but important, energy conservation practices in the workplace.

During the last decade, the State has invested millions of dollars in technology to bring energy costs down. In addition, the State has established various operational procedures to lower electricity costs. At the state capitol, for instance, air conditioning is turned off at 4:30 p.m. and left completely off during the weekend.

The legislature finds that even with these measures in place, more can be done by department leadership and employees. At the department of education, for example, employees leave fluorescent lights on when no one is in the room, computers are left on over the weekend, and windows are propped open and space heaters are on even though the air conditioner is operating.

The legislature finds that state employees should be encouraged to conserve energy. Simple, inexpensive conservation

reminders, such as signs placed at each exit, announcements during meetings and training sessions, brief articles in department newsletters, emails to employees, and morning announcements, may be effective. Even the current practice of leaving a limited number of lights on at night to deter theft should also be reviewed to see if the benefits outweigh the costs. Although the savings per item may be minimal, the savings will be substantial when consolidated.

The purpose of this Act is to require state agencies to implement inexpensive energy conservation practices and review existing conservation strategies.

SECTION 2. Section 196-9, Hawaii Revised Statutes, is amended by amending subsection (b) to read as follows:

"(b) With regard to buildings and facilities, each agency shall:

(1) Design and construct buildings meeting the Leadership in Energy and Environmental Design silver or two green globes rating system or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, except when the guideline, standard, or system interferes or

conflicts with the use of the building or facility as an emergency shelter;

(2) Incorporate energy-efficiency measures to prevent heat gain in residential facilities up to three stories in height to provide R-19 or equivalent on roofs, R-11 or equivalent in walls, and high-performance windows to minimize heat gain and, if air conditioned, minimize cool air loss. R-value is the constant time rate resistance to heat flow through a unit area of a body induced by a unit temperature difference between the surfaces. R-values measure the thermal resistance of building envelope components such as roof and walls. The higher the R-value, the greater the resistance to heat flow. Where possible, buildings shall be oriented to maximize natural ventilation and day-lighting without heat gain and to optimize solar for water heating. This provision shall apply to new residential facilities built using any portion of state funds or located on state lands;

(3) Install solar water heating systems where it is cost-effective, based on a comparative analysis to determine the cost-benefit of using a conventional

water heating system or a solar water heating system. The analysis shall be based on the projected life cycle costs to purchase and operate the water heating system. If the life cycle analysis is positive, the facility shall incorporate solar water heating. If water heating entirely by solar is not cost-effective, the analysis shall evaluate the life cycle, cost-benefit of solar water heating for preheating water. If a multi-story building is centrally air conditioned, heat recovery shall be employed as the primary water heating system. Single family residential clients of the department of Hawaiian home lands and any agency or program that can take advantage of utility rebates shall be exempted from the requirements of this paragraph so they may continue to qualify for utility rebates for solar water heating;

(4) Implement water and energy efficiency practices in operations to reduce waste and increase conservation[~~:~~], including cost-effective programs that encourage conservation in the workplace among agency personnel, such as:

(A) Agency-wide energy conservation meetings and training; and

(B) Workplace notices posted in highly visible areas to encourage energy-saving behavior, such as turning off unneeded lights, powering down computers and electronics, raising air-conditioner thermostat settings, and reducing elevator use;

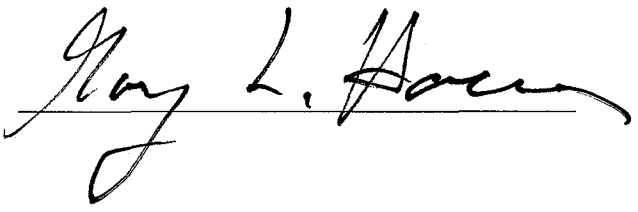
(5) Incorporate principles of waste minimization and pollution prevention, such as reducing, revising, and recycling as a standard operating practice in programs, including programs for waste management in construction and demolition projects and office paper and packaging recycling programs;

(6) Use life cycle cost-benefit analysis to purchase energy efficient equipment such as ENERGY STAR products and use utility rebates where available to reduce purchase and installation costs; and

(7) Procure environmentally preferable products, including recycled and recycled-content, bio-based, and other resource-efficient products and materials."

SECTION 3. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.

INTRODUCED BY: 

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Report Title:
Energy Resources; State Agencies; Conservation

Description:
Directs each state agency to establish cost-effective programs that encourage personnel to conserve electricity and water.