

State of Hawaii Agencies' Energy Initiatives: Leading by Example, FY 2005-2006
Hawaii Housing Finance and Development Corporation

Department or Agency: HHFDC

Statutory Requirement

Act 96 SLH 2006: Buildings and Facilities

(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;

Steps taken to address this requirement: Assessment / Strategy

The HHFDC does not have any plans to design or construct new buildings or facilities at this time.

(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;

Steps taken to address this requirement: Assessment / Strategy

The HHFDC is reviewing its requests for proposals, program requirements, policies, procedures, and administrative rules to determine how to incorporate these requirements, where possible, for its affordable housing programs.

(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;

Steps taken to address this requirement: Assessment / Strategy

The HHFDC currently requires program participants receiving state financing to provide a comparative analysis for solar water heating systems to demonstrate whether solar water heating systems are a cost-effective alternative over the life cycle of the system.

(4) Implement water and energy efficiency practices in operations to reduce waste and increase conservation;

Steps taken to address this requirement: Assessment / Strategy

The HHFDC is reviewing its requests for proposals, management contracts, policies, procedures, and administrative rules to determine how to incorporate water and energy efficient practices.

(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;

Steps taken to address this requirement: Assessment / Strategy

The HHFDC is reviewing its requests for proposals, contracts, program requirements, policies, procedures, and administrative rules to determine how to incorporate these requirements, where possible.

(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

Steps taken to address this requirement: Assessment / Strategy

The HHFDC is reviewing its requests for proposals, management contracts, program requirements, policies, procedures, and administrative rules to determine how to incorporate these requirements, where possible.

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

Steps taken to address this requirement: Assessment / Strategy

The HHFDC is reviewing its requests for proposals, management contracts, program requirements, policies, procedures, and administrative rules to determine how to incorporate these requirements, where possible.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(1) Comply with Title 10, Code of Federal Regulations, Part 490, Subpart C, "Mandatory State Fleet Program", if applicable;
n/a

(2) Comply with all applicable state laws regarding vehicle purchases;
n/a

(3) Once federal and state vehicle purchase mandates have been satisfied, purchase the most fuel-efficient vehicles that meet the needs of their programs; provided that life cycle cost-benefit analysis of vehicle purchases shall include projected fuel costs;
n/a

(4) Purchase alternative fuels and ethanol blended gasoline when available;
n/a

(5) Evaluate a purchase preference for biodiesel blends, as applicable to agencies with diesel fuel purchases;
Not applicable. Superseded by Act 240 of 2006, which established a 5¢ gallon preference for biodiesel.

(6) Promote efficient operation of vehicles;
n/a

(7) Use the most appropriate minimum octane fuel; provided that vehicles shall use 87-octane fuel unless the owner's manual for the vehicle states otherwise or the engine experiences knocking or pinging;
n/a

(8) Beginning with fiscal year **2005-2006** as the baseline, collect and maintain, for the life of each vehicle acquired, the following data:
n/a
(A) Vehicle acquisition cost;
(B) United States Environmental Protection Agency rated fuel economy;
(C) Vehicle fuel configuration, such as gasoline, diesel, flex-fuel gasoline/E85, and dedicated propane;
(D) Actual in-use vehicle mileage;
(E) Actual in-use vehicle fuel consumption; and
(F) Actual in-use annual average vehicle fuel economy;

And

(9) Beginning with **fiscal year 2005-2006** as the baseline with respect to each agency that operates a fleet of thirty or more vehicles, collect and maintain, in addition to the data in paragraph (8), the following:
n/a
(A) Information on the vehicles in the fleet, including vehicle year, make, model, gross vehicle weight rating, and vehicle fuel configuration;
(B) Fleet fuel usage, by fuel;
(C) Fleet mileage; and
(D) Overall annual average fleet fuel economy and average miles per gallon of gasoline and diesel."

Renewable Energy and Resource Development

All affected agencies and programs are directed to **review internal policies, rules, and practices regarding permitting requirements affecting renewable energy development.** To the extent possible, permitting policies and practices should be **streamlined to expedite implementation** of renewable energy projects.

It is requested that agencies prepare by January 12, 2007, a report to my office identifying the **specific steps they have taken to expedite** the approval of renewable energy projects.

n/a

Act 160

(1) Energy consumption in kilowatt hours for the past two years (July 1, 2004 to June 30, 2006)

FY '05 (kwh consumption);

Because HHFDC facilities are operated under a private management contract that includes utility expenses, the HHFDC is in the process of obtaining its energy consumption data for the past two years.

Act 160

(2) Steps taken to **inventory, investigate, plan, and implement** energy reduction efforts; and

Steps taken

The HHFDC is in the process of obtaining energy consumption data to submit to HECO to obtain an energy consumption baseline from which to plan and implement energy reduction efforts.

Act 160

(3) A **plan** or alternatives to reduce energy consumption in the future;

Plan or alternatives to reduce energy consumption in the future

The HHFDC is in the process of obtaining energy consumption data to submit to HECO to obtain an energy consumption baseline from which to plan and implement energy reduction efforts.