



EXECUTIVE CHAMBERS
HONOLULU

LINDA LINGLE
GOVERNOR

January 20, 2006

ADMINISTRATIVE DIRECTIVE NO. 06-01

TO: ALL DEPARTMENT HEADS AND AGENCY HEADS

FROM: LINDA LINGLE, GOVERNOR

SUBJECT: ENERGY AND RESOURCE EFFICIENCY AND RENEWABLE ENERGY
AND RESOURCE DEVELOPMENT

As an island state that is over 90 percent dependent on imported fossil fuel, Hawaii is especially vulnerable to volatile energy prices. The growing energy demand of State operations increase costs and poses potential electricity delivery problems. As such, agencies need to assess their practices and programs to reduce energy use and curtail the rise in State expenditures for fuel and utilities.

State agencies and programs are directed to increase their leadership commitment to implement innovative and resource-efficient operations and management. Better management practices can include reduced energy and water use; reduce, reuse, and recycle options; improved construction and demolition waste management; environmentally preferable purchasing; efficient use of transportation fuels, especially greater use of alternative fuels; as well as increased incorporation of sustainable building practices.

We have many excellent, ongoing programs, which have challenged us to do more with less. There are, however, additional challenges which bring new opportunities. These opportunities may not be easy to implement but over time will serve the State's best interest.

The initial costs may be higher, but incorporating lifecycle analysis result in long term savings. For example, Energy Star equipment and products are identified as those which produce fewer emissions and save energy, and we should opt for these types of appliances when purchasing replacements of existing State assets.

As a state blessed with abundant renewable resources, it is in our best interest to develop renewable energy projects which increase our use of renewable resources. State agencies can contribute to expediting our progress toward the use of clean, renewable, and indigenous energy resources.

Therefore, all departments and programs are directed to implement, to the extent possible, the following goals during budget planning and program implementation.

Buildings and Facilities

For items 1 through 6, the following shall apply to facilities using any portion of State funds and/or located on State owned lands.

1. Design and construct buildings to meet and receive certification for U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards. As appropriate for the type of construction, the buildings should meet LEED Silver certification for new commercial construction and major renovation, LEED for existing building operations, and LEED for commercial interiors.
2. Incorporate energy efficiency measures to prevent heat gain in residential facilities of one to three stories by providing R-19 or equivalent insulation on roofs, R-11 or equivalent in walls, and high-performance windows to minimize heat gain and, if air conditioned, to minimize cool air loss. Where possible, orient buildings to maximize natural ventilation and day lighting without heat gain, and optimize building roof exposure for solar water heating.
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 multistory building is centrally air conditioned, heat recovery or ice/thermal storage systems may be employed as the primary water heating or cooling system.

Single-family residential clients of the Department of Hawaiian Home Lands are exempted from this Executive Order so that 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.
5. Incorporate principles of waste minimization and pollution prevention: reduce, reuse, and recycle as a standard operating practice, including programs for construction and demolition waste management 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 the purchase and installation costs. Energy Star products meet strict efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.

7. Procure environmentally preferable products, including but not limited to, recycled and recycled-content, bio-based, and other resource-efficient products and materials.

Transportation Fuel

1. Comply with Title 10, Code of Federal Regulations, Part 490, Subpart C, "Mandatory State Fleet Program," if applicable.
2. Comply with all applicable State laws regarding vehicle purchases.
3. Once federal and State vehicle purchase mandates have been satisfied, purchase the most fuel-efficient vehicles that meet the needs of their programs. Life cycle cost-benefit analysis of vehicle purchases should include projected fuel costs.
4. Purchase alternative fuels and ethanol blended gasoline when available.
5. Evaluate a purchase preference for biodiesel blends, as applicable to agencies with diesel fuel purchases.
6. Promote efficient operation of vehicles.
7. Use the most appropriate (minimum) octane fuel. Vehicles should use 87-octane fuel unless the owner's manual for the vehicle states otherwise, or the engine experiences knocking or pinging.

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.