

A Bill for an Act Relating to Energy Efficiency.

*Be It Enacted by the Legislature of the State of Hawaii:*

SECTION 1. 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;
- (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 public benefits fee administrator and utility rebates where available to reduce purchase and installation costs; and prioritize appliances that meet

**ACT 188**

the standards required to qualify for public benefits fee administrator rebates; and

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

SECTION 2. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 3. This Act shall take effect on July 1, 2022.

(Approved June 27, 2022.)