
A BILL FOR AN ACT

RELATING TO PUBLIC SCHOOL FACILITIES.

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

1 SECTION 1. The legislature recognizes that proper
2 maintenance of public school buildings is critical to the health
3 and educational well-being of Hawaii's students. The
4 construction and maintenance of public school buildings provide
5 an opportunity to decrease current and future energy demand and
6 stimulate economic growth in the labor and manufacturing
7 industries.

8 The purpose of this Act is to improve public school
9 facilities by reducing the cost of energy and decreasing carbon
10 emissions and energy dependence by public schools.

11 SECTION 2. Section 36-35, Hawaii Revised Statutes, is
12 amended as follows:

13 1. By amending subsection (c) to read:

14 "(c) Criteria used to establish current repair and
15 maintenance requirements may include:

16 (1) The remaining useful life of the school facility and
17 its major components;

1 (2) The adjusted life of the school facility and its major
2 components after repair or maintenance; [~~and~~]

3 (3) The current and future repair and maintenance
4 requirements of the school facility and its components
5 based on established industry standards or product
6 manufacturer recommendations; and

7 (4) Energy efficiency and environmental standards as
8 required under section 196-9(b) to achieve high
9 performance classrooms;

10 provided that demolition of a facility or any of its components
11 may be recommended if the cost of the repairs do not justify the
12 adjusted life or remaining life of the facility."

13 2. By amending subsection (f) to read:

14 "(f) The superintendent of education shall ensure that all
15 repair and maintenance projects achieve maximum cost-efficiency
16 by emphasizing functional or performance criteria, uniformity of
17 design, and commonality of products, and by avoiding unique or
18 custom requirements that increase costs[~~-~~]; provided that energy
19 efficiency and environmental standards as required under section
20 196-9(b) shall be maintained. The superintendent of education
21 shall develop project specifications based on generic
22 specifications or prescriptive specifications using standard

1 commercial products. Prescriptive specifications may include a
2 qualified product list.

3 For the purposes of this subsection:

4 "Generic specification" means a technical specification
5 that is written in a clear, unambiguous, and nonrestrictive
6 manner establishing:

- 7 (1) Design, performance, or functional requirements to
8 identify the work to be performed; and
9 (2) Material standards to be used on a project.

10 "Prescriptive specification" means a technical
11 specification:

- 12 (1) Establishing that the required work to be performed is
13 written in a clear, unambiguous, and nonrestrictive
14 manner; and
15 (2) Listing manufacturers or products that are acceptable
16 for use on the project.

17 "Standard commercial product" means a product or material
18 that in the normal course of business is customarily maintained
19 in stock by, or readily available for marketing from a
20 manufacturer, distributor, or dealer.

21 This subsection shall not apply to any school facility
22 designated a historic property pursuant to section 6E-5.5."

1 SECTION 3. Section 196-9, Hawaii Revised Statutes, is
2 amended by amending subsection (b) to read as follows:

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

- 5 (1) Design [~~and~~], construct, and renovate buildings
6 [~~meeting~~] to meet the Leadership in Energy and
7 Environmental Design silver or two green globes rating
8 system or another [~~comparable state-approved,~~]
9 nationally recognized[~~7~~] and consensus-based
10 guideline, standard, or system, except when the
11 guideline, standard, or system interferes or conflicts
12 with the use of the building or facility as an
13 emergency shelter;
- 14 (2) Incorporate energy-efficiency measures to prevent heat
15 gain in residential facilities up to three stories in
16 height to provide R-19 or equivalent on roofs, R-11 or
17 equivalent in walls, and high-performance windows to
18 minimize heat gain and, if air conditioned, minimize
19 cool air loss. R-value is the constant time rate
20 resistance to heat flow through a unit area of a body
21 induced by a unit temperature difference between the
22 surfaces. R-values measure the thermal resistance of

1 building envelope components such as roof and walls.
2 The higher the R-value, the greater the resistance to
3 heat flow. Where possible, buildings shall be
4 oriented to maximize natural ventilation and day-
5 lighting without heat gain and to optimize solar for
6 water heating. This provision shall apply to new
7 residential facilities built using any portion of
8 state funds or located on state lands;

- 9 (3) Install solar water heating systems where it is cost-
10 effective, based on a comparative analysis to
11 determine the cost-benefit of using a conventional
12 water heating system or a solar water heating system.
13 The analysis shall be based on the projected life
14 cycle costs to purchase and operate the water heating
15 system. If the life cycle analysis is positive, the
16 facility shall incorporate solar water heating. If
17 water heating entirely by solar is not cost-effective,
18 the analysis shall evaluate the life cycle, cost-
19 benefit of solar water heating for preheating water.
20 If a multi-story building is centrally air
21 conditioned, heat recovery shall be employed as the
22 primary water heating system. Single family

1 residential clients of the department of Hawaiian home
2 lands and any agency or program that can take
3 advantage of utility rebates shall be exempted from
4 the requirements of this paragraph so they may
5 continue to qualify for utility rebates for solar
6 water heating;

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

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

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

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

1 SECTION 4. Section 302A-1312, Hawaii Revised Statutes, is
2 amended by amending subsection (a) to read as follows:

3 "(a) The department of education shall prepare a six-year
4 program and financial plan for school repair and maintenance
5 that shall be:

6 (1) Based on:

7 (A) Estimated preventive and scheduled maintenance
8 costs;

9 (B) Budgeted recurring maintenance;

10 (C) Health and safety requirements; [~~and~~]

11 (D) Legal mandates; and

12 (E) Energy efficiency and environmental standards as
13 required under section 196-9(b);

14 (2) Insofar as is practical, prepared in accordance with
15 the principles and procedures contained in section
16 514A-83.6 or 514B-148; and

17 (3) Submitted initially to the legislature not less than
18 thirty days prior to the convening of the 2002 regular
19 session, with annual funding requirements for the
20 physical plant operations and maintenance account
21 submitted not less than thirty days prior to the

1 convening of the 2002 regular session and each regular
2 session thereafter;
3 provided that the governor may incorporate the six-year program
4 and financial plan required by this subsection into the six-year
5 program and financial plan required by section 37-69, if the
6 plan required by this subsection is incorporated without
7 reductions or restrictions."

8 SECTION 5. Section 302A-1505, Hawaii Revised Statutes, is
9 amended by amending subsection (c) to read as follows:

10 "(c) In prioritizing a school's repair and maintenance
11 needs, the department and the school's principal shall consider
12 energy efficiency and environmental standards as required under
13 section 196-9(b), as well as the availability of donated and
14 discounted repair and maintenance services and materials that
15 will be provided by community groups, volunteers, and
16 businesses."

17 SECTION 6. This Act shall apply to all school
18 construction, repair, and maintenance contracts executed after
19 its effective date.

20 SECTION 7. Statutory material to be repealed is bracketed
21 and stricken. New statutory material is underscored.

22 SECTION 8. This Act shall take effect on July 1, 2030.

Report Title:

Energy Efficiency and Environmental Standards; Public Schools

Description:

Adds renovation of state buildings to energy efficiency and environmental standards guidelines; requires public schools to meet energy and efficiency standards. Effective 7/1/2030.

(SD1)