
A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

1 PART I

2 SECTION 1. The legislature finds that a review of the
3 energy efficiency standards used in building construction in the
4 State is essential to determine whether maximum energy
5 efficiency is being achieved.

6 The purpose of this part is to direct the energy resources
7 coordinator to review energy efficiency in building design and
8 construction in the State.

9 SECTION 2. Chapter 196, Hawaii Revised Statutes, is
10 amended by adding a new part to be appropriately designated and
11 to read as follows:

12 "PART . ENERGY EFFICIENT BUILDINGS

13 §196-A Energy efficiency review. (a) The energy
14 resources coordinator shall initiate an ongoing review of energy
15 efficiency in building construction throughout the State. As
16 part of the review, the energy resources coordinator shall:

17 (1) Evaluate buildings and homes constructed in the State
18 pursuant to county building codes or the state



- 1 building code to determine overall energy efficiency
2 in design and construction;
- 3 (2) Evaluate buildings and homes constructed in the State
4 pursuant to county building codes or the state
5 building code to determine compliance with energy
6 efficiency provisions of either code;
- 7 (3) Consult with the counties to survey builders to
8 determine the actual costs of complying with energy
9 efficiency requirements of building codes;
- 10 (4) Assess the feasibility of establishing a net-zero
11 energy building code for residential and commercial
12 construction;
- 13 (5) Recommend energy efficiency standards for construction
14 of new and renovation of older single family homes,
15 duplexes, and low-rise multi-unit residential
16 buildings, less than three stories in height, to be
17 included in county building codes and the state
18 building code;
- 19 (6) Recommend amendments to county building codes and the
20 state building code that are consistent with the
21 International Energy Conservation Code and which also
22 maximize the advantages of Hawaii's climate;



- 1 (7) Evaluate the costs and benefits of requiring advanced
2 meters and energy "dashboard" technologies that allow
3 building occupants to understand and manage energy use
4 and to monitor and improve energy efficiency;
- 5 (8) Evaluate the feasibility of requiring all new homes
6 constructed in the State to incorporate "cool-roof"
7 technology;
- 8 (9) Evaluate the feasibility of requiring all new homes
9 constructed in the State to have roofs that are
10 equipped for installation of photovoltaic energy
11 devices; and
- 12 (10) Evaluate the feasibility of requiring all new homes
13 constructed in the State, or all older homes renovated
14 in the State, to have an energy efficiency
15 certification.
- 16 (b) The energy resources coordinator shall submit a report
17 of its findings and recommendations, including recommended
18 amendments to county building codes or the state building code
19 and proposed legislation, to the legislature no later than
20 twenty days prior to the convening of the regular session of
21 2010 and shall submit updated reports to the legislature before
22 the convening of each regular legislative session thereafter.



1 **§196-B Commissioning guidelines; commercial buildings.** No
2 later than January 1, 2010, the energy resources coordinator
3 shall develop commissioning guidelines for the construction of
4 commercial buildings in the State. The guidelines shall:

- 5 (1) Require building permit applicants to designate a
6 commissioning agent who has experience in energy
7 efficiency and building design;
- 8 (2) Require a building owner, prior to receiving a
9 certificate of occupancy, to submit a building
10 commissioning report prepared by the designated
11 commissioning agent; and
- 12 (3) Require a building owner to remedy any deficiencies
13 indicated in the commissioning report within sixty
14 days of receiving the report, and authorize the
15 counties to assess fines and penalties against a
16 building owner that does not comply.

17 As used in this section, "commissioning" shall have the
18 same meaning as in section 196-11."

19 SECTION 3. Section 107-28, Hawaii Revised Statutes, is
20 amended by amending subsection (a) to read as follows:

21 "(a) The governing body of each county shall amend the
22 state building code as it applies within its respective



1 jurisdiction, in accordance with section 46-1.5(13), without
2 approval of the council. Each county shall use the model codes
3 and standards listed in section 107-25, as the referenced model
4 building codes and standards for its respective county building
5 code ordinance, no later than two years after the adoption of
6 the state building code[-]; provided that each county shall use
7 the International Energy Conservation Code, as updated, no later
8 than six months after the adoption of the state building code."

9 SECTION 4. There is appropriated out of the general
10 revenues of the State of Hawaii the sum of \$600,000 or so much
11 thereof as may be necessary for fiscal year 2009-2010 for the
12 purposes of initiating an energy efficiency review pursuant to
13 section 196-A, Hawaii Revised Statutes.

14 The sum appropriated shall be expended by the department of
15 business, economic development, and tourism for the purposes of
16 part I of this Act.

17 PART II

18 SECTION 5. The legislature finds that state government
19 should be a leader in building energy efficiency. Public
20 buildings can be a proving ground for energy efficiency
21 technologies and performance. The legislature further finds
22 that government agencies have a greater level of certainty about



1 the length of time that they will occupy buildings, so the
2 lifecycle savings realized from low operating costs are more
3 assured for public investments than private investments.

4 The purpose of this part is to require state agencies to
5 adopt energy efficiency standards in existing state buildings.

6 SECTION 6. Chapter 196, Hawaii Revised Statutes, is
7 amended by adding two new sections to part II to be
8 appropriately designated and to read as follows:

9 "§196-C Existing buildings; retro-commissioning. (a) No
10 later than December 31, 2010, the department of accounting and
11 general services and the energy resources coordinator shall
12 benchmark each existing state building that has more than five
13 thousand square feet of interior floor space or that uses more
14 than eight thousand kilowatt-hours of electricity per year and
15 shall use the results to determine measures that may be
16 implemented to improve building energy efficiency. Benchmarking
17 shall be conducted using the ENERGY STAR portfolio management
18 tool or an equivalent tool, as determined by the energy
19 resources coordinator. The energy resources coordinator shall
20 provide training, as necessary, to affected agencies on the
21 ENERGY STAR portfolio management tool or an equivalent tool.



1 (b) No later than January 1, 2010, the energy resources
2 coordinator shall develop guidelines for the retro-commissioning
3 of state government buildings. After that date, all state
4 government buildings shall be retro-commissioned no less than
5 every five years.

6 (c) Existing state buildings that undergo a major retrofit
7 or renovation, including other existing buildings that are
8 retrofitted using public moneys to finance more than fifty per
9 cent of the total cost of the retrofit or renovation, shall
10 achieve energy efficiencies that meet or exceed the performance
11 targets established in the most recent guideline established by
12 the International Energy Conservation Code for that type of
13 building; provided that the cost of retrofit or renovation can
14 be recovered by the State within twenty years.

15 §196-D Reporting. (a) No later than December 31 of each
16 year, the energy resources coordinator shall publish a report on
17 the energy efficiency of state buildings. The report may
18 include input from the counties as necessary and shall include:

- 19 (1) Energy used in state buildings by each agency;
20 (2) Steps taken to reduce energy usage; and
21 (3) Savings achieved from energy efficiency measures.



1 (b) The annual report shall establish benchmarks for
2 reducing energy use in state and county buildings."

3 SECTION 7. Section 196-21, Hawaii Revised Statutes, is
4 amended by amending subsections (a) and (b) to read as follows:

5 "(a) Agencies shall maximize their use of available
6 alternative financing contracting mechanisms, including energy-
7 savings contracts, when life-cycle cost-effective, to reduce
8 energy use and cost in their facilities and operations. Energy-
9 savings contracts shall include:

10 (1) Energy performance contracts; provided that the terms
11 of an energy performance contract for retro-
12 commissioning or a major retrofit or renovation of a
13 state building shall require that the state building
14 meets or exceeds the performance targets established
15 in the most recent guideline established by the
16 International Energy Conservation Code for that type
17 of building;

18 (2) Municipal lease and purchase financing; and

19 (3) Utility energy-efficiency service contracts.

20 Energy-savings contracts shall provide significant opportunities
21 for making state facilities more energy efficient at no net cost
22 to taxpayers. The comptroller shall establish guidelines for



1 energy-savings contracts and shall prepare model energy-savings
2 contracts that any agency may use for purchasing and
3 contracting. The comptroller may review and exempt specific
4 projects as necessary to take into account cost effectiveness.

5 (b) Agencies that perform energy efficiency and renewable
6 energy system retrofitting may continue to receive budget
7 appropriations for energy expenditures at an amount that will
8 not fall below the pre-retrofitting energy budget but will rise
9 in proportion to any increase in the agency's overall budget for
10 the duration of the performance contract or project payment
11 term. [~~A portion~~] Fifty per cent of the moneys saved through
12 efficiency and renewable energy system retrofitting shall be set
13 aside to pay for any costs directly associated with
14 administering energy efficiency and renewable energy system
15 retrofitting programs incurred by the agency."

16 PART III

17 SECTION 8. This Act does not affect rights and duties that
18 matured, penalties that were incurred, and proceedings that were
19 begun, before its effective date.

20 SECTION 9. In codifying the new sections added by this
21 Act, the revisor of statutes shall substitute appropriate



1 section numbers for the letters used in designating the new
2 sections in this Act.

3 SECTION 10. Statutory material to be repealed is bracketed
4 and stricken. New statutory material is underscored.

5 SECTION 11. This Act shall take effect upon its approval;
6 provided that section 4 shall take effect on July 1, 2009.



Report Title:

Energy Efficiency; Buildings

Description:

Directs the energy resources coordinator to review energy efficiency in building construction and recommend amendments to county building codes and the state building code. Requires the state building code to contain provisions of the International Energy Conservation Code and directs counties to adopt those provisions. Allows for the review of energy efficiency in existing state buildings and directs the energy resources coordinator to establish energy efficiency guidelines for retro-commissioning and retrofits. Requires existing state buildings to be retro-commissioned no less than every five years. Requires the energy resources coordinator to publish an annual energy efficiency report. Requires energy performance contracts for retro-commissioning to meet energy efficiency standards.
(HB431 HD1)

