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

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

11 "PART . ENERGY EFFICIENT BUILDINGS

12 §196-A Energy efficiency review. (a) The energy
13 resources coordinator shall initiate an ongoing review of energy
14 efficiency in building construction throughout the State. As
15 part of the review, the energy resources coordinator shall:

16 (1) Evaluate buildings and homes constructed in the State
17 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 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 107-25, Hawaii Revised Statutes, is
20 amended to read as follows:

21 "~~§~~**§107-25**~~§~~ **State building code; requirements.** There
22 is established a state building code applicable to all



1 construction in the State of Hawaii. The state building code
2 shall include:

3 (1) The latest edition of the state fire code as adopted
4 by the state fire council;

5 (2) The latest edition of the Uniform Plumbing Code, as
6 copyrighted and published by the International
7 Association of Plumbing and Mechanical Officials,
8 including its appendices;

9 (3) The latest edition of the International Building Code,
10 as published by the International Code Council;

11 (4) Hawaii design standards implementing the criteria
12 pursuant to Act 5, Special Session Laws of Hawaii,
13 2005, as applicable to:

14 (A) Emergency shelters built to comply with hurricane
15 resistant criteria, including enhanced hurricane
16 protection areas capable of withstanding a five
17 hundred year hurricane event as well as other
18 storms and natural hazards; and

19 (B) Essential government facilities requiring
20 continuity of operations; [~~and~~]

21 (5) Code provisions based on nationally published codes or
22 standards that include, but are not limited to,

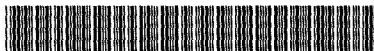


1 residential and hurricane resistive standards for
2 residential construction, fire, elevator, electrical,
3 plumbing, mechanical, flood and tsunami, existing
4 buildings, and energy conservation standards for
5 building design and construction, and onsite sewage
6 disposal[-]; and

7 (6) The latest edition of the International Energy
8 Conservation Code within six months of its adoption by
9 the International Code Council."

10 SECTION 4. Section 107-28, Hawaii Revised Statutes, is
11 amended to read as follows:

12 "~~{}~~§107-28~~{}~~ **County building code authority to amend the**
13 **state model building code without state approval.** (a) The
14 governing body of each county shall amend the state building
15 code as it applies within its respective jurisdiction, in
16 accordance with section 46-1.5(13), without approval of the
17 council. Each county shall use the model codes and standards
18 listed in section 107-25, as the referenced model building codes
19 and standards for its respective county building code ordinance,
20 no later than two years after the adoption of the state building
21 code[-]; provided that each county shall use the International



1 Energy Conservation Code, as updated, no later than six months
2 after the adoption of the state building code.

3 (b) If a county does not amend the statewide model code
4 within the two-year timeframe, the state building code shall
5 become applicable as an interim county building code until the
6 county adopts the amendments[-]; provided that if a county does
7 not amend the statewide model code with regard to energy
8 efficiency within six months, the sections of the state building
9 code that include provisions of the International Energy
10 Conservation Code shall become applicable as part of the county
11 building code until the county adopts the amendments."

12 SECTION 5. There is appropriated out of the general
13 revenues of the State of Hawaii the sum of \$600,000 or so much
14 thereof as may be necessary for fiscal year 2009-2010 for the
15 purposes of initiating an energy efficiency review pursuant to
16 section 196-A, Hawaii Revised Statutes.

17 The sum appropriated shall be expended by the department of
18 business, economic development, and tourism for the purposes of
19 part I of this Act.

20 PART II.

21 SECTION 6. The legislature finds that state government
22 should be a leader in building energy efficiency. Public



1 buildings can be a proving ground for energy efficiency
2 technologies and performance. The legislature further finds
3 that government agencies have a greater level of certainty about
4 the length of time that they will occupy buildings, so the
5 lifecycle savings realized from low operating costs are more
6 assured for public investments than private investments.

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

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

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



1 provide training, as necessary, to affected agencies on the
2 ENERGY STAR portfolio management tool or an equivalent tool.

3 (b) The energy resources coordinator shall establish
4 performance targets for energy efficiency in existing state
5 buildings that are thirty per cent higher than the most recent
6 guideline established by the International Energy Conservation
7 Code for that type of building.

8 (c) No later than January 1, 2010, the energy resources
9 coordinator shall develop guidelines for the retro-commissioning
10 of state government buildings. After that date, all state
11 government buildings shall be retro-commissioned no less than
12 every five years.

13 (d) Existing state buildings that undergo a major retrofit
14 or renovation, including other existing buildings that are
15 retrofitted using public moneys to finance more than fifty per
16 cent of the total cost of the retrofit or renovation, shall
17 achieve energy efficiencies that meet or exceed the performance
18 targets established in subsection (b), provided that the cost of
19 retrofit or renovation can be recovered by the State within
20 twenty years.

21 §196-D Reporting. (a) No later than December 31 of each
22 year, the energy resources coordinator shall publish a report on



1 the energy efficiency of state buildings. The report may
2 include input from the counties as necessary and shall include:
3 (1) Energy used in state buildings by each agency;
4 (2) Steps taken to reduce energy usage; and
5 (3) Savings achieved from energy efficiency measures.
6 (b) The annual report shall establish benchmarks for
7 reducing energy use in state and county buildings."

8 SECTION 8. Section 196-21, Hawaii Revised Statutes, is
9 amended to read as follows:

10 "**§196-21 Financing mechanisms.** (a) Agencies shall
11 maximize their use of available alternative financing
12 contracting mechanisms, including energy-savings contracts, when
13 life-cycle cost-effective, to reduce energy use and cost in
14 their facilities and operations. Energy-savings contracts shall
15 include:

- 16 (1) Energy performance contracts; provided that the terms
17 of an energy performance contract for retro-
18 commissioning or a major retrofit or renovation of a
19 state building shall require that the state building
20 meets or exceeds the performance targets established
21 pursuant to section 196-C(b);
22 (2) Municipal lease and purchase financing; and



1 (3) Utility energy-efficiency service contracts.
2 Energy-savings contracts shall provide significant opportunities
3 for making state facilities more energy efficient at no net cost
4 to taxpayers. The comptroller shall establish guidelines for
5 energy-savings contracts and shall prepare model energy-savings
6 contracts that any agency may use for purchasing and
7 contracting. The comptroller may review and exempt specific
8 projects as necessary to take into account cost effectiveness.

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

20 (c) Notwithstanding any law to the contrary relating to
21 the award of public contracts, any agency desiring to enter into
22 an energy performance contract shall do so in accordance with



1 guidelines established by the comptroller and the following
2 provisions:

3 (1) The agency shall issue a public request for proposals,
4 advertised in the same manner as provided in chapter
5 103D, concerning the provision of energy-efficiency
6 services or the design, installation, operation, and
7 maintenance of energy equipment. The request for
8 proposals shall contain terms and conditions relating
9 to submission of proposals, evaluation, and selection
10 of proposals, financial terms, legal responsibilities,
11 and other matters as may be required by law and as the
12 agency determines appropriate;

13 (2) Upon receiving responses to the request for proposals,
14 the agency shall select the most qualified proposal or
15 proposals and may base its determination on the basis
16 of the experience and qualifications of the proposers,
17 the technical approach, the financial arrangements,
18 the overall benefits to the agency, or other factors
19 determined by the agency to be relevant and
20 appropriate;

21 (3) The agency thereafter may negotiate and enter into an
22 energy performance contract with the person or company



1 whose proposal is selected as the most qualified based
2 on the criteria established by the agency;

3 (4) The term of any energy performance contract entered
4 into pursuant to this section shall not exceed twenty
5 years;

6 (5) Any energy performance contract may provide that the
7 agency ultimately shall receive title to the energy
8 system being financed under the contract; and

9 (6) Any energy performance contract shall provide that
10 total payments shall not exceed total savings."

11 PART III.

12 SECTION 9. This Act does not affect rights and duties that
13 matured, penalties that were incurred, and proceedings that were
14 begun, before its effective date.

15 SECTION 10. In codifying the new sections added by this
16 Act, the revisor of statutes shall substitute appropriate
17 section numbers for the letters used in designating the new
18 sections in this Act.

19 SECTION 11. Statutory material to be repealed is bracketed
20 and stricken. New statutory material is underscored.



1 SECTION 12. This Act shall take effect upon its approval,
2 provided that section 5 shall take effect on July 1, 2009.

3

INTRODUCED BY: *Annunzio*

C. J.
Cynthia Heben

Denny Coffman

K. L.

[Signature]

JAN 23 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.

