
A BILL FOR AN ACT

RELATING TO ENERGY.

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

PART I

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SECTION 1. The legislature finds that Hawaii's dependence on petroleum for about ninety per cent of its energy needs is higher than any other state in the nation. This dependence makes the state extremely vulnerable to any oil embargo, supply disruption, and international market dysfunction, and many other factors beyond the control of the State. Furthermore, the continued consumption of conventional petroleum fuel negatively impacts the environment.

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The legislature also finds that increased energy efficiency and use of renewable energy resources would increase Hawaii's energy self-sufficiency, achieving broad societal benefits, including increased energy security, resistance to increases in oil prices, environmental sustainability, economic development, and job creation.

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Over the years, the legislature has worked steadily to encourage the deployment of renewable energy resources and energy efficiency initiatives. This includes:

HB2175 CD1 HMS 2006-3825



- 1 (1) Establishing a net energy metering program,
2 interconnection standards, and renewable energy tax
3 credits;
- 4 (2) Establishing greenhouse gas and energy consumption
5 reduction goals for state facilities and requiring the
6 use of energy efficient products in state facilities;
7 and
- 8 (3) Providing incentives for the deployment of solar
9 energy devices.

10 The legislature also established an enforceable renewable energy
11 portfolio standard, under which twenty per cent of Hawaii's
12 electricity is to be generated from renewable resources by the
13 end of 2020.

14 To shape Hawaii's energy future and achieve the goal of
15 energy self-sufficiency for the State of Hawaii, our efforts
16 must continue on all fronts, integrating new and evolving
17 technologies and providing incentives and assistance to address
18 barriers.

19 The purpose of this Act is to provide one segment of a
20 larger comprehensive approach to achieving energy self-
21 sufficiency for the state by:



- 1 (1) Authorizing the issuance of general obligation bonds
2 to develop and implement a pilot project to install
3 photovoltaic systems at public schools within the
4 counties of Oahu, Hawaii, Kauai, and Maui;
- 5 (2) Establishing new planning and budget preparation goals
6 for state agencies that incorporate green building
7 practices; the installation of renewable energy
8 resources such as cost-effective solar water heating
9 systems; increased conservation, waste reduction, and
10 pollution prevention directives; the procurement of
11 environmentally preferable products, including fuel-
12 efficient vehicles and alternative fuels; and the use
13 of energy-savings contracts for the provision of
14 energy services and equipment; and
- 15 (3) Promoting the use of green building practices by
16 requiring each county agency that issues building,
17 construction, or development-related permits to
18 establish a procedure for priority processing of
19 permit applications for construction projects
20 incorporating energy and environmental design building
21 standards.



1 PART II

2 RENEWABLE ENERGY AND ENERGY-EFFICIENCY IN HAWAII'S PUBLIC
3 SCHOOLS

4 SECTION 2. There is appropriated out of the general
5 revenues of the State of Hawaii the sum of \$5,000,000 or so much
6 thereof as may be necessary for fiscal year 2006-2007 to develop
7 and implement a photovoltaic, net energy metered pilot project
8 in public schools. The project sites shall be determined by the
9 department of education as those most suitable in meeting the
10 pilot project's objectives. The project objectives are as
11 follows:

- 12 (1) To have, at minimum, a project site at one public
13 school within each of the counties of Oahu, Hawaii,
14 Kauai, and Maui;
- 15 (2) To allow installation of photovoltaic systems to be
16 timed in conjunction with substantial roof repairs or
17 roof replacement of a building to further reduce
18 project costs;
- 19 (3) To use the application of net energy metering to
20 offset costs of the system;
- 21 (4) To recapture system costs within three quarters of the
22 useful life of the photovoltaic system; and



1 "§196-A Energy efficiency and environmental standards for
2 state facilities, motor vehicles, and transportation fuel. (a)

3 Each agency is directed to implement, to the extent possible,
4 the following goals during planning and budget preparation and
5 program implementation.

6 (b) With regard to buildings and facilities, each agency
7 shall:

8 (1) Design and construct buildings meeting the Leadership
9 in Energy and Environmental Design silver or two green
10 globes rating system or another comparable
11 state-approved, nationally recognized, and
12 consensus-based guideline, standard, or system, except
13 when the guideline, standard, or system interferes or
14 conflicts with the use of the building or facility as
15 an emergency shelter;

16 (2) Incorporate energy-efficiency measures to prevent heat
17 gain in residential facilities up to three stories in
18 height to provide R-19 or equivalent on roofs, R-11 or
19 equivalent in walls, and high-performance windows to
20 minimize heat gain and, if air conditioned, minimize
21 cool air loss. R-value is the constant time rate
22 resistance to heat flow through a unit area of a body



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

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

1 conditioned, heat recovery shall be employed as the
2 primary water heating system. Single family
3 residential clients of the department of Hawaiian home
4 lands and any agency or program that can take
5 advantage of utility rebates shall be exempted from
6 the requirements of this paragraph so they may
7 continue to qualify for utility rebates for solar
8 water heating;

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

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

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



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

4 (c) With regard to motor vehicles and transportation fuel,
5 each agency shall:

6 (1) Comply with Title 10, Code of Federal Regulations,
7 Part 490, Subpart C, "Mandatory State Fleet Program",
8 if applicable;

9 (2) Comply with all applicable state laws regarding
10 vehicle purchases;

11 (3) Once federal and state vehicle purchase mandates have
12 been satisfied, purchase the most fuel-efficient
13 vehicles that meet the needs of their programs;
14 provided that life cycle cost-benefit analysis of
15 vehicle purchases shall include projected fuel costs;

16 (4) Purchase alternative fuels and ethanol blended
17 gasoline when available;

18 (5) Evaluate a purchase preference for biodiesel blends,
19 as applicable to agencies with diesel fuel purchases;

20 (6) Promote efficient operation of vehicles;

21 (7) Use the most appropriate minimum octane fuel; provided
22 that vehicles shall use 87-octane fuel unless the



1 owner's manual for the vehicle states otherwise or the
2 engine experiences knocking or pinging;

3 (8) Beginning with fiscal year 2005-2006 as the baseline,
4 collect and maintain, for the life of each vehicle
5 acquired, the following data:

6 (A) Vehicle acquisition cost;

7 (B) United States Environmental Protection Agency
8 rated fuel economy;

9 (C) Vehicle fuel configuration, such as gasoline,
10 diesel, flex-fuel gasoline/E85, and dedicated
11 propane;

12 (D) Actual in-use vehicle mileage;

13 (E) Actual in-use vehicle fuel consumption; and

14 (F) Actual in-use annual average vehicle fuel
15 economy;

16 and

17 (9) Beginning with fiscal year 2005-2006 as the baseline
18 with respect to each agency that operates a fleet of
19 thirty or more vehicles, collect and maintain, in
20 addition to the data in paragraph (8), the following:

21 (A) Information on the vehicles in the fleet,
22 including vehicle year, make, model, gross



- 1 vehicle weight rating, and vehicle fuel
- 2 configuration;
- 3 (B) Fleet fuel usage, by fuel;
- 4 (C) Fleet mileage; and
- 5 (D) Overall annual average fleet fuel economy and
- 6 average miles per gallon of gasoline and diesel."

7 SECTION 5. Section 196-1, Hawaii Revised Statutes, is
 8 amended to read as follows:

9 "**§196-1 Findings and declaration of necessity.** The
 10 legislature finds that:

11 (1) ~~[There is widespread shortage of]~~ The global demand
 12 for petroleum and its derivatives ~~[which]~~ has caused
 13 severe economic hardships throughout the State and
 14 ~~[which]~~ threatens to impair the public health, safety
 15 and welfare.

16 ~~[The current energy crisis is caused by a global~~
 17 ~~energy shortage which will worsen through the~~
 18 ~~remainder of this decade and may continue to the end~~
 19 ~~of this century.]~~ The State of Hawaii, with its total
 20 dependence ~~[for energy]~~ on imported fossil fuel, is
 21 particularly vulnerable to dislocations in the global
 22 energy market. This is an anomalous situation, as

1 there are few places in the world so generously
2 endowed with natural energy: geothermal, solar
3 radiation, ocean temperature differential, wind,
4 waves, and currents--all potential non-polluting power
5 sources[-];

6 (2) There is a real need for strategic comprehensive
7 planning in the effort towards achieving full
8 utilization of Hawaii's energy resource programs and
9 the most effective allocation of energy resources
10 throughout the State. Planning is necessary and
11 desirable in order that the State may recognize and
12 declare the major problems and opportunities in the
13 field of energy resources. Both short-range and long-
14 range planning will permit the articulation of:

- 15 (A) [~~broad~~] Broad policies, goals, and objectives;
16 (B) [~~eriteria~~] Criteria for measuring and evaluating
17 accomplishments of objectives;
18 (C) [~~identification~~] Identification and
19 implementation of programs [~~which~~] that will
20 carry out such objectives; and



1 (D) ~~[a]~~ A determination of requirements necessary for
2 the optimum development of Hawaii's energy
3 resources.

4 Such planning efforts will identify present conditions
5 and major problems relating to energy resources, their
6 exploration, development, production, and
7 distribution. It will show the projected nature of
8 the situation and rate of change and present
9 conditions for the foreseeable future based on a
10 projection of current trends in the development of
11 energy resources in Hawaii~~[--]~~;

- 12 (3) There are many agencies of the federal, state, and
13 county governments in Hawaii, as well as many private
14 agencies, engaged in, or expressing an interest in,
15 various aspects of the exploration, research,
16 distribution, conservation, and production of all
17 forms of energy resources in Hawaii. Some of these
18 agencies include the University of Hawaii, the
19 department of land and natural resources, the
20 department of business, economic development, and
21 tourism, the ~~[consumer protection,]~~ division of
22 consumer advocacy, the federal energy office, and



1 various county agencies, as well as the oil companies,
2 gas stations, and other private enterprises~~[+]~~; and

3 (4) There is immediate need to coordinate the efforts of
4 all these agencies, establish and coordinate programs
5 to effectuate the conservation of fuel, to provide for
6 the equitable distribution thereof, and to formulate
7 plans for the development and use of alternative
8 energy sources. There is a need for such coordination
9 so that there will be maximum conservation and
10 utilization of energy resources in the State."

11 SECTION 6. Section 196-18, Hawaii Revised Statutes, is
12 amended by amending subsections (a) and (b) to read as follows:

13 "(a) The coordinator shall appoint an advisory committee
14 consisting of representatives from:

15 (1) State agencies~~[+]~~, including the University of Hawaii;

16 [~~+2~~] ~~County governments;~~

17 [~~+3~~] (2) Energy service companies;

18 [~~+4~~] (3) Utility companies;

19 [~~+5~~] (4) Equipment manufacturers;

20 [~~+6~~] (5) Construction and architectural companies;

21 [~~+7~~] (6) Environmental, energy, and consumer groups; and

22 [~~+8~~] (7) Other energy-related organizations.



- 1 (b) The committee shall provide input on state energy
2 management, including how to:
- 3 (1) Improve the use of energy-savings [~~performance~~]
4 contracts [~~and utility energy efficiency service~~
5 ~~contracts~~];
- 6 (2) Improve procurement of ENERGY STAR and other energy
7 efficient products;
- 8 (3) Improve building design;
- 9 (4) Reduce [~~process~~] energy use; [~~and~~]
- 10 (5) Enhance applications of efficient and renewable energy
11 technologies at state facilities[~~-~~];
- 12 (6) Establish benchmarks and evaluate the State's progress
13 in incorporating energy efficiency and conservation
14 for state facilities, vehicles, and equipment;
- 15 (7) Make recommendations on how and when to conduct
16 periodic energy audits; and
- 17 (8) Make recommendations to the legislature no later than
18 twenty days prior to the convening of each regular
19 session, starting with the 2008 regular session,
20 regarding policy or other statutory changes to carry
21 out the purposes of this chapter."



1 SECTION 7. Section 196-21, Hawaii Revised Statutes, is
2 amended as follows:

3 1. By amending subsection (a) to read:

4 "(a) Agencies shall maximize their use of available
5 alternative financing contracting mechanisms, including energy-
6 savings [~~performance~~] contracts [~~and utility energy efficiency~~
7 ~~service 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;

11 (2) Municipal lease and purchase financing; and

12 (3) Utility energy-efficiency service contracts.

13 Energy-savings [~~performance~~] contracts [~~and utility energy-~~
14 ~~efficiency service contracts~~] shall provide significant
15 opportunities for making state facilities more energy efficient
16 at no net cost to taxpayers."

17 2. By amending subsection (c) to read as follows:

18 "(c) Notwithstanding any law to the contrary relating to
19 the award of public contracts, any agency desiring to enter into
20 an [~~energy performance~~] energy-savings contract shall do so in
21 accordance with the following provisions:



- 1 (1) The agency shall issue a public request for proposals,
2 advertised in the same manner as provided in chapter
3 103D, concerning the provision of [~~energy efficiency~~]
4 energy-efficiency services or the design,
5 installation, operation, and maintenance of energy
6 equipment[~~, or both~~]. The request for proposals shall
7 contain terms and conditions relating to submission of
8 proposals, evaluation, and selection of proposals,
9 financial terms, legal responsibilities, and other
10 matters as may be required by law and as the agency
11 determines appropriate;
- 12 (2) Upon receiving responses to the request for proposals,
13 the agency [~~may~~] shall select the most qualified
14 proposal or proposals [~~on~~] and may base its
15 determination on the basis of the experience and
16 qualifications of the proposers, the technical
17 approach, the financial arrangements, the overall
18 benefits to the agency, [~~and~~] 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~~] energy-savings contract with the



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

4 (4) The term of any [~~energy performance~~] energy-savings
5 contract entered into pursuant to this section shall
6 not exceed fifteen years;

7 (5) Any [~~energy performance~~] energy-savings contract may
8 provide that the agency ultimately shall receive title
9 to the energy system being financed under the
10 contract; and

11 (6) Any [~~energy performance~~] energy-savings contract shall
12 provide that total payments shall not exceed total
13 savings."

14 SECTION 8. Section 196-22, Hawaii Revised Statutes, is
15 amended to read as follows:

16 "**§196-22 State energy projects.** State energy projects may
17 be implemented under this chapter with the approval of the
18 comptroller and the director of finance. Notwithstanding
19 section 36-41 or 196-21, the comptroller or the senior agency
20 official of the department of accounting and general services,
21 along with the director of finance, may exempt a state energy
22 project from the advertising and competitive bidding

1 requirements of section 36-41 or 196-21 and chapter 103, if the
2 comptroller deems exemption appropriate for energy projects with
3 proprietary technology or necessary to meet the goals of the
4 legislature. In addition, this section shall be construed to
5 provide the greatest possible flexibility to agencies in
6 structuring agreements [~~entered into~~] so that economic benefits
7 and existing energy incentives may be used and maximized, and
8 financing and other costs to agencies may be minimized. The
9 specific terms of [~~energy performance~~] energy-savings
10 contracting under section 36-41 may be altered if deemed
11 advantageous to the agency and approved by the director of
12 finance and the senior agency official."

13 SECTION 9. Section 196-23, Hawaii Revised Statutes, is
14 amended to read as follows:

15 "[+]§196-23[+] **Energy efficient products.** (a) Agencies
16 shall select, [~~where~~] when life-cycle cost-effective, ENERGY
17 STAR and other energy efficient products when acquiring
18 energy-using products. For product groups where ENERGY STAR
19 labels are not yet available, agencies may select products that
20 are in the upper twenty-five per cent of energy efficiency as
21 designated by the United States Department of Energy, Office of



1 Energy Efficiency and Renewable Energy, [~~Federal Energy~~
2 ~~Management Program.~~] federal energy management program.

3 (b) Agencies shall incorporate [~~energy efficient~~
4 energy-efficient criteria consistent with designated [~~energy~~
5 ~~efficiency~~] energy-efficiency levels [~~into all guide~~
6 ~~specifications and project specifications developed for new~~
7 ~~construction and renovation, as well as~~] into product
8 specification language developed for all purchasing procedures.

9 (c) The State shall [~~also~~] consider the creation of
10 financing agreements with private sector suppliers to provide
11 private funding to offset higher up-front costs of efficient
12 products.

13 [~~(b)~~] ~~Agencies shall strive to meet the ENERGY STAR~~
14 ~~building criteria for energy performance and indoor~~
15 ~~environmental quality in their eligible facilities to the~~
16 ~~maximum extent practicable by December 31, 2005. Agencies may~~
17 ~~use energy savings performance contracts, utility energy-~~
18 ~~efficiency service contracts, or other means to conduct~~
19 ~~evaluations and make improvements to facilities. Facilities~~
20 ~~that rank in the top twenty-five per cent in energy efficiency~~
21 ~~relative to comparable commercial and state buildings shall~~
22 ~~receive the ENERGY STAR building label or its equivalent as~~



1 ~~determined by the coordinator. Agencies shall integrate this~~
2 ~~rating tool into their general facility audits.~~

3 ~~(c) The State shall employ sustainable design principles~~
4 ~~and agencies shall apply the principles to the siting, design,~~
5 ~~and construction of new facilities. Agencies shall optimize~~
6 ~~life-cycle costs, pollution, and other environmental and energy~~
7 ~~costs associated with the construction, life-cycle operation,~~
8 ~~and decommissioning of the facility. Agencies shall consider~~
9 ~~using energy-savings performance contracts or utility energy-~~
10 ~~efficiency service contracts to aid them in constructing~~
11 ~~sustainably designed buildings.]~~

12 (d) Agencies entering into leases, including the
13 renegotiation or extension of existing leases, shall
14 [~~incorporate~~]:

15 (1) Incorporate lease provisions that encourage energy and
16 water efficiency wherever life-cycle cost-effective.
17 Build-to-suit lease solicitations shall contain
18 criteria encouraging sustainable design and
19 development, energy efficiency, and verification of
20 facility performance[~~. Agencies shall include~~];

21 (2) Include a preference for facilities having an ENERGY
22 STAR building label in their selection criteria for



1 acquiring leased facilities [~~. In addition, all~~
2 ~~agencies shall encourage~~]; and

3 (3) Encourage lessors to apply for an ENERGY STAR building
4 label and to explore and implement projects that will
5 reduce costs to the State, including projects carried
6 out through the lessors' energy-savings [~~performance~~]
7 contracts [~~or utility energy efficiency service~~
8 ~~contracts~~].

9 [~~(e) Agencies shall implement energy reduction systems,~~
10 ~~and other highly efficient systems, in new construction or~~
11 ~~retrofit projects when life cycle cost effective. Agencies~~
12 ~~shall consider combined cooling, heat, and power systems when~~
13 ~~determined to be the most cost effective when measured against~~
14 ~~other alternatives on a life cycle cost basis. Agencies shall~~
15 ~~survey local natural resources to optimize use of available~~
16 ~~solar, ocean thermal, biomass, bioenergy, geothermal, or other~~
17 ~~naturally occurring energy sources.~~

18 [~~(f) Agencies shall use off grid generation systems,~~
19 ~~including solar hot water, solar electric, solar outdoor~~
20 ~~lighting, small wind turbines, fuel cells, and other off grid~~
21 ~~alternatives, where such systems are life cycle cost effective~~
22 ~~and offer benefits including energy efficiency, pollution~~



1 ~~prevention, source energy reductions, avoided infrastructure~~
2 ~~costs, or expedited service.]"~~

3 SECTION 10. There is appropriated out of the general
4 revenues of the State of Hawaii the sum of \$500,000 or so much
5 thereof as may be necessary for fiscal year 2006-2007, to carry
6 out the purposes of this part regarding energy-efficiency for
7 state facilities and equipment.

8 The sum appropriated shall be expended by the department of
9 business and economic development, and tourism.

10 SECTION 11. The department of education and department of
11 accounting and general services are requested to identify
12 projects that need to be funded through general obligation bonds
13 and report back to the legislature at least twenty days before
14 the convening of the regular session of 2007.

15 SECTION 12. There is appropriated out of the general
16 revenues of the State of Hawaii the sum of \$65,000 or so much
17 thereof as may be necessary for fiscal year 2006-2007 to
18 establish one full-time permanent energy coordinator position to
19 address energy efficiency in department of education facilities.

20 The sum appropriated shall be expended by the department of
21 education for the purposes of this section.



1 SECTION 13. There is appropriated out of the general
2 revenues of the State of Hawaii the sum of \$130,000 or so much
3 thereof as may be necessary for fiscal year 2006-2007 to
4 establish two full-time energy coordinator positions to address
5 energy efficiency in department of business, economic
6 development, and tourism facilities.

7 The sum appropriated shall be expended by the department of
8 business, economic development, and tourism for the purposes of
9 this section.

10 SECTION 14. Section 196-8, Hawaii Revised Statutes, is
11 repealed.

12 ~~["§196-8] Energy efficiency policy review and evaluation.~~

13 ~~(a) The energy resources coordinator shall ensure that review~~
14 ~~and evaluation comparable to those accomplished by the energy~~
15 ~~efficiency policy task force established pursuant to Act 163,~~
16 ~~Session Laws of Hawaii 1998, are undertaken, and that the~~
17 ~~findings and recommendations of the review and evaluation are~~
18 ~~reported to the legislature no later than twenty days prior to~~
19 ~~the convening of the regular session of 2007.~~

20 ~~(b) The review and evaluation shall include:~~

21 ~~(1) The efficacy of section 235-12.5 to determine whether~~
22 ~~the tax credits should be continued or enhanced based~~



1 ~~on impact and cost-benefit analyses or other public~~
2 ~~policy considerations;~~

3 ~~(2) Whether the energy technology systems eligible for tax~~
4 ~~credits under section 235-12.5 should be expanded,~~
5 ~~reduced, or remain the same; and~~

6 ~~(3) Any other issue regarding energy technology systems~~
7 ~~identified during the seven-year review.~~

8 ~~(c) The energy resources coordinator, in undertaking the~~
9 ~~review and evaluation, shall consult with representatives from:~~

10 ~~(1) The department of business, economic development, and~~
11 ~~tourism;~~

12 ~~(2) The solar, wind, and photovoltaic industries;~~

13 ~~(3) The utilities industry;~~

14 ~~(4) The building industry; and~~

15 ~~(5) Any other professional or public sector group the~~
16 ~~energy resources coordinator deems appropriate."]~~

17 SECTION 15. Section 196-12, Hawaii Revised Statutes, is
18 repealed.

19 ~~["~~§196-12~~ Greenhouse gases reduction goal. Through~~
20 ~~life-cycle cost-effective energy measures, each agency shall~~
21 ~~reduce its greenhouse gas emissions attributed to facility~~
22 ~~energy use by thirty per cent by January 1, 2012, compared to~~



1 ~~emission levels in calendar year 1990. In order to encourage~~
2 ~~optimal investment in energy improvements, agencies may count~~
3 ~~greenhouse gas reductions from improvements in non-facility~~
4 ~~energy use toward this goal to the extent that these reductions~~
5 ~~are approved by the coordinator."]~~

6 SECTION 16. Section 196-13, Hawaii Revised Statutes, is
7 repealed.

8 ~~["~~§196-13~~ Energy efficiency improvement goals. (a)~~
9 ~~Through life-cycle cost-effective measures, each agency shall~~
10 ~~reduce energy consumption per gross square foot of its~~
11 ~~facilities, excluding laboratory facilities, by twenty per cent~~
12 ~~by January 1, 2007, and thirty per cent by January 1, 2012,~~
13 ~~relative to calendar year 1990. No facility shall be exempt~~
14 ~~from these goals unless it meets criteria for exemptions~~
15 ~~established by the coordinator.~~

16 ~~(b) Through life-cycle cost-effective measures, each~~
17 ~~agency shall reduce energy consumption per square foot, per unit~~
18 ~~of production, or per other unit as applicable, of its~~
19 ~~laboratory facilities by fifteen per cent by January 1, 2007,~~
20 ~~and twenty-five per cent by January 1, 2012, relative to~~
21 ~~calendar year 1995. No facility shall be exempt from these~~



1 ~~goals unless it meets criteria for exemptions established by the~~
2 ~~coordinator.~~

3 ~~(c) Each agency shall strive to expand the use of~~
4 ~~renewable energy within its facilities and in its activities by~~
5 ~~implementing renewable energy projects and by purchasing~~
6 ~~electricity from renewable energy sources. Through life-cycle~~
7 ~~cost-effective measures, each agency shall provide twenty per~~
8 ~~cent of its remaining energy requirements, after energy~~
9 ~~efficiency improvement goals have been achieved, with renewable~~
10 ~~energy resources.~~

11 ~~(d) Through life-cycle cost-effective measures, each~~
12 ~~agency shall reduce the use of petroleum generated energy within~~
13 ~~its facilities. Agencies may accomplish this reduction by~~
14 ~~switching to less greenhouse gas-intensive or renewable energy~~
15 ~~sources, by eliminating unnecessary fuel use, or by other~~
16 ~~appropriate methods. Where alternative fuels are not practical~~
17 ~~or life-cycle cost-effective, agencies shall strive to improve~~
18 ~~the efficiency of their facilities.~~

19 ~~(e) The State shall strive to reduce total energy use and~~
20 ~~associated greenhouse gas and other air emissions, as measured~~
21 ~~at the source. To that end, agencies shall undertake life-cycle~~
22 ~~cost-effective projects in which source energy decreases, even~~



1 ~~if site energy use increases. In those cases, agencies shall~~
2 ~~receive credit toward energy reduction goals through guidelines~~
3 ~~established by the coordinator.~~

4 ~~(f) Through life-cycle cost-effective measures, agencies~~
5 ~~shall reduce water consumption and associated energy use in~~
6 ~~their facilities to reach the goals set under this part. Where~~
7 ~~possible, water cost savings and associated energy cost savings~~
8 ~~shall be included in energy-savings performance contracts and~~
9 ~~other financing mechanisms.~~

10 ~~(g) Each agency's biennial budget submission shall include~~
11 ~~funding necessary to achieve the goals of this part. Budget~~
12 ~~submissions shall include the costs associated with encouraging~~
13 ~~the use of, administering, and fulfilling agency~~
14 ~~responsibilities under energy-savings performance contracts,~~
15 ~~utility energy efficiency service contracts, and other~~
16 ~~contractual provisions for achieving conservation goals~~
17 ~~implementing life-cycle cost-effective measures, procuring life-~~
18 ~~cycle cost-effective products, and constructing sustainably~~
19 ~~designed new buildings, among other energy costs.~~

20 ~~The director of finance shall issue guidelines to assist~~
21 ~~agencies in developing appropriate requests that support sound~~
22 ~~investments in energy improvements and energy-using products,~~



1 ~~and shall consider establishing a fund that agencies may draw on~~
2 ~~to finance exemplary energy management activities and~~
3 ~~investments with higher initial costs but lower life-cycle~~
4 ~~costs.~~

5 ~~(h) Each agency shall develop an annual implementation~~
6 ~~plan for fulfilling the requirements of this part. The plans~~
7 ~~shall be included in the annual reports to the coordinator."]~~

8 SECTION 17. Section 196-14, Hawaii Revised Statutes, is
9 repealed.

10 ~~["**[§196-14] Annual report.** Beginning January 1, 2004,~~
11 ~~each agency shall measure and report annually to the coordinator~~
12 ~~on its progress in meeting the requirements of this part.~~

13 ~~The report shall include:~~

14 ~~(1) How the agency is using each of the strategies~~
15 ~~described in this part to help meet energy and~~
16 ~~greenhouse gas reduction goals;~~

17 ~~(2) A listing and explanation as to why certain~~
18 ~~strategies, if any, have not been used; and~~

19 ~~(3) A listing and explanation of exempt facilities."]~~

20 SECTION 18. Section 196-15, Hawaii Revised Statutes, is
21 repealed.



1 ~~["§196-15] Senior agency official. Each agency shall~~
2 ~~designate a senior official to be responsible for meeting the~~
3 ~~goals and requirements of this part, including preparation of~~
4 ~~the annual report. Designated officials shall participate in~~
5 ~~the interagency energy policy committee established under~~
6 ~~section 196-17(c)."]~~

7 SECTION 19. Section 196-16, Hawaii Revised Statutes, is
8 repealed.

9 ~~["§196-16] Agency energy teams. Each agency shall form a~~
10 ~~technical support team consisting of appropriate procurement,~~
11 ~~legal, budget, management, and technical representatives to~~
12 ~~expedite and encourage the agency's use of appropriations,~~
13 ~~energy savings performance contracts, and other alternative~~
14 ~~financing mechanisms necessary to meet the goals and~~
15 ~~requirements of this part. Agency energy team activities shall~~
16 ~~be undertaken in collaboration with each agency's representative~~
17 ~~to the interagency energy policy committee."]~~

18 SECTION 20. Section 196-17, Hawaii Revised Statutes, is
19 repealed.

20 ~~["§196-17] Interagency coordination; policy committee.~~
21 ~~(a) The coordinator shall be responsible for evaluating each~~
22 ~~agency's progress in improving energy management and for~~



1 ~~submitting agency energy scorecards to the governor and the~~
2 ~~legislature to report progress.~~

3 ~~The coordinator, in consultation [with] other agencies,~~
4 ~~shall develop the agency energy scorecards and scoring system to~~
5 ~~evaluate each agency's progress in meeting the goals of this~~
6 ~~part. The scoring criteria shall include:~~

7 ~~(1) The extent to which agencies are taking advantage of~~
8 ~~key tools to save energy and reduce greenhouse gas~~
9 ~~emissions, such as energy savings performance~~
10 ~~contracts, utility energy efficiency service~~
11 ~~contracts, ENERGY STAR and other energy efficient~~
12 ~~products, renewable energy technologies, electricity~~
13 ~~from renewable energy sources, and other strategies~~
14 ~~and requirement;~~

15 ~~(2) Overall efficiency;~~

16 ~~(3) Greenhouse gas reduction; and~~

17 ~~(4) Use of other innovative energy efficiency practices.~~

18 ~~The scorecards shall be based on the annual energy reports~~
19 ~~submitted to the coordinator.~~

20 ~~(b) The coordinator shall be responsible for working with~~
21 ~~agencies to ensure that they meet the goals of this part and~~
22 ~~report their progress. The coordinator shall develop and issue~~



1 ~~guidelines for agencies' preparation of their annual reports to~~
2 ~~the coordinator on energy management. The coordinator shall~~
3 ~~also have primary responsibility for collecting and analyzing~~
4 ~~the data and shall ensure that agency reports are received in a~~
5 ~~timely manner.~~

6 ~~(c) There is established within the department of~~
7 ~~business, economic development, and tourism, an interagency~~
8 ~~energy policy committee consisting of senior agency officials,~~
9 ~~to be chaired by the coordinator. The committee shall be~~
10 ~~responsible for encouraging implementation of energy efficiency~~
11 ~~policies and practices. The major energy consuming agencies, as~~
12 ~~designated by the coordinator, shall participate on the~~
13 ~~committee. The committee shall communicate its activities to~~
14 ~~all designated senior agency officials to promote coordination~~
15 ~~and achievement of the goals of this part."]~~

16 SECTION 21. Section 196-20, Hawaii Revised Statutes, is
17 repealed.

18 ~~["**§196-20** Facility energy audits. Agencies shall~~
19 ~~conduct energy and water audits for approximately ten per cent~~
20 ~~of their facilities each year, either independently or through~~
21 ~~energy-savings performance contracts or utility energy-~~
22 ~~efficiency service contracts."]~~



1 SECTION 22. Section 196-24, Hawaii Revised Statutes, is
2 repealed.

3 [~~"§196-24 Electricity use. To advance the greenhouse
4 gas and renewable energy goals of this part, and reduce source
5 energy use, each agency shall strive to use electricity from
6 clean, efficient, and renewable energy sources. An agency's
7 efforts in purchasing electricity from efficient and renewable
8 energy sources shall be taken into account in assessing the
9 agency's progress and formulating its scorecard under section
10 196-17(a)."~~]

11 SECTION 23. Section 196-25, Hawaii Revised Statutes, is
12 repealed.

13 [~~"§196-25 Competition. Agencies shall take advantage of
14 competitive opportunities in the electricity and natural gas
15 markets to reduce costs and enhance services. Agencies are
16 encouraged to aggregate demand across facilities or agencies to
17 maximize their economic advantage."~~]

18 SECTION 24. Section 196-26, Hawaii Revised Statutes, is
19 repealed.

20 [~~"§196-26 Reduced greenhouse gas intensity of electric
21 power. When selecting electricity providers, agencies shall
22 purchase electricity from sources that use high efficiency~~



1 ~~electric generating technologies when life cycle cost effective.~~
2 ~~Agencies shall consider the greenhouse gas intensity of the~~
3 ~~source of the electricity and strive to minimize the greenhouse~~
4 ~~gas intensity of purchased electricity."]~~

5 SECTION 25. Section 196-27, Hawaii Revised Statutes, is
6 repealed.

7 ~~["~~§196-27~~ Purchasing electricity from renewable energy~~
8 ~~sources. Each agency shall evaluate its current use of~~
9 ~~electricity from renewable energy sources and report this level~~
10 ~~in its annual report to the coordinator. Based on this review,~~
11 ~~each agency shall adopt policies and pursue projects that~~
12 ~~increase the use of such electricity. Agencies shall include~~
13 ~~provisions for the purchase of electricity from renewable energy~~
14 ~~sources as a component of their requests for bids whenever~~
15 ~~procuring electricity. Agencies may use savings from energy~~
16 ~~efficiency projects to pay additional incremental costs of~~
17 ~~electricity from renewable energy sources.~~

18 ~~In evaluating opportunities to comply with this section,~~
19 ~~agencies shall consider any renewable portfolio standard~~
20 ~~specified in the restructuring guidelines for the State and the~~
21 ~~United States Environmental Protection Agency guidelines on~~
22 ~~crediting renewable energy power."]~~

1 SECTION 26. Section 196-28, Hawaii Revised Statutes, is
2 repealed.

3 ~~["**§196-28** Mobile equipment. Each agency shall seek to~~
4 ~~improve the design, construction, and operation of its mobile~~
5 ~~equipment, and shall implement all life-cycle cost-effective~~
6 ~~energy efficiency measures that result in cost savings while~~
7 ~~improving mission performance. To the extent that such measures~~
8 ~~are life-cycle cost-effective, agencies shall consider enhanced~~
9 ~~use of alternative or renewable-based fuels."]~~

10 SECTION 27. Section 196-29, Hawaii Revised Statutes, is
11 repealed.

12 ~~["**§196-29** Management strategies. Agencies shall use the~~
13 ~~following management strategies in meeting the goals of this~~
14 ~~part:~~

- 15 ~~(1) Employee incentive programs to reward exceptional~~
16 ~~performance in implementing this part;~~
- 17 ~~(2) Performance evaluations of successful implementation~~
18 ~~of this part in areas such as energy savings~~
19 ~~performance contracts, sustainable design, energy~~
20 ~~efficient procurement, energy efficiency, water~~
21 ~~conservation, and renewable energy projects and~~
22 ~~performance evaluations of agency heads, members of~~



1 ~~the agency energy team, principal program managers,~~
2 ~~heads of field offices, facility managers, energy~~
3 ~~managers, and other appropriate employees;~~

4 ~~(3) Agencies shall be allowed to retain a portion of~~
5 ~~savings generated from efficient energy and water~~
6 ~~management and shall use the savings at the facility~~
7 ~~or site where the savings occur to provide greater~~
8 ~~incentives for that facility and its site managers to~~
9 ~~undertake more energy management initiatives, invest~~
10 ~~in renewable energy systems, and purchase electricity~~
11 ~~from renewable energy sources;~~

12 ~~(4) Training and education shall be provided for all~~
13 ~~appropriate personnel relating to the energy~~
14 ~~management strategies contained in this part,~~
15 ~~including the incorporation into existing procurement~~
16 ~~courses information on energy management tools,~~
17 ~~energy savings performance contracts, utility energy-~~
18 ~~efficiency service contracts, energy efficient~~
19 ~~products, and life cycle cost analysis; and~~

20 ~~(5) Agencies shall designate showcase facilities to~~
21 ~~highlight energy or water efficiency and renewable~~
22 ~~energy improvements."]~~



PART IV

ENERGY-EFFICIENT VEHICLES

SECTION 28. Section 103D-412, Hawaii Revised Statutes, is amended to read as follows:

"~~[†]~~ §103D-412 ~~[†]~~ [~~Highly energy-efficient~~] Energy-efficient vehicles. (a) The procurement policy for all agencies purchasing or leasing motor ~~[vehicle fleets]~~ vehicles shall be to obtain ~~[alternative fuel]~~ energy-efficient vehicles.

~~[Beginning January 1, 2006, all state agencies]~~ All covered fleets are directed to procure increasing percentages of ~~[alternative fuel]~~ energy-efficient vehicles as part of their annual vehicle acquisition plans, which shall be as follows:

(1) ~~[By January 1, 2007,]~~ In the fiscal year beginning July 1, 2006, at least twenty per cent of newly purchased light-duty vehicles acquired by each ~~[agency]~~ covered fleet shall be ~~[alternative fuel]~~ energy-efficient vehicles;

(2) In the fiscal year beginning July 1, 2007, at least thirty per cent of newly purchased light-duty vehicles acquired by each covered fleet shall be energy-efficient vehicles;



1 [~~(2)~~ By January 1, 2009,] (3) In the fiscal year beginning
2 July 1, 2008, at least forty per cent of newly
3 purchased light-duty vehicles acquired by each
4 [~~agency~~] covered fleet shall be [~~alternative fuel~~]
5 energy-efficient vehicles; and
6 [~~(3)~~] (4) For each subsequent fiscal year [~~subsequent to~~
7 January 1, 2009,] the percentage of [~~alternative fuel~~]
8 energy-efficient vehicles newly purchased shall be
9 five percentage points higher than the previous year,
10 until at least [~~sixty~~] seventy-five per cent of each
11 [~~agency's~~] covered fleet's newly purchased, light-duty
12 vehicles are [~~alternative fuel~~] energy-efficient
13 vehicles.

14 (b) For the purposes of this section:

15 "Agency" means a state agency, office, or department.

16 "Alternative fuel" has the same meaning as contained in 10
17 Code of Federal Regulations Part 490.

18 "Covered fleet" has the same meaning as contained in 10
19 Code of Federal Regulations Part 490 Subpart C.

20 [~~"Alternative fuel~~] "Energy-efficient vehicle" means a
21 vehicle that:

22 (1) Is capable of using an alternative fuel;



1 [~~(1)~~] (2) Is powered primarily through the use of an
2 electric battery or battery pack that stores energy
3 produced by an electric motor through regenerative
4 braking to assist in vehicle operation;

5 [~~(2)~~] (3) Is propelled by power derived from one or more
6 cells converting chemical energy directly into
7 electricity by combining oxygen with hydrogen fuel
8 that is stored on board the vehicle in any form; [~~or~~]

9 [~~(3)~~] (4) Draws propulsion energy from onboard sources of
10 stored energy generated from an internal combustion or
11 heat engine using combustible fuel and a rechargeable
12 energy storage system~~[-]~~; or

13 (5) Is on the list of "Most Energy Efficient Vehicles" in
14 its class or is in the top one-fifth of the most
15 energy-efficient vehicles in its class available in
16 Hawaii as shown by vehicle fuel efficiency lists,
17 rankings, or reports maintained by the United States
18 Environmental Protection Agency.

19 "Excluded vehicles" has the same meaning as provided in 10
20 Code of Federal Regulations Section 490.3.

21 "Light-duty vehicle" has the same meaning as contained in
22 10 Code of Federal Regulations Part 490.



1 (c) Agencies may offset ~~[the]~~ energy-efficient vehicle
2 purchase requirements ~~[for alternative fuel vehicles]~~ by
3 successfully demonstrating percentage improvements in overall
4 light-duty vehicle fleet mileage economy. The offsets shall be
5 measured against the fleet average ~~[mileage economy]~~ miles per
6 gallon of petroleum-based gasoline and diesel fuel, using
7 ~~[calendar year 2004]~~ the fiscal year beginning July 1, 2006, as
8 a baseline, on a percentage-by-percentage basis.

9 (d) Agencies that use biodiesel fuel may offset the
10 vehicle purchase requirements of this section at the rate of one
11 vehicle for each four hundred fifty gallons of neat biodiesel
12 fuel used. Neat biodiesel fuel is one hundred per cent
13 biodiesel (B100) by volume.

14 (e) Agencies may apply to the chief procurement officer
15 for exemptions from the requirements of this section to the
16 extent that the vehicles required by this section are not
17 available or do not meet the specific needs of the agency.

18 (f) Vehicles acquired from another state agency and
19 excluded vehicles are exempt from the requirements of this
20 section.

21 (g) Nothing in this section is intended to interfere with
22 an agency's ability to comply with federally-imposed vehicle



1 purchase mandates such as those required by 10 Code of Federal
2 Regulations Part 490 Subpart C."

3 PART V

4 COUNTY BUILDING PERMITS AND

5 ENERGY AND ENVIRONMENTAL EFFICIENT DESIGN PRIORITY PROCESSING

6 SECTION 29. Chapter 46, Hawaii Revised Statutes, is
7 amended by adding a new section to be appropriately designated
8 and to read as follows:

9 "§46- County building permits; incorporation of energy
10 and environmental design building standards in project design;
11 priority processing. (a) Each county agency that issues
12 building, construction, or development-related permits shall
13 establish a procedure for the priority processing of a permit
14 application submitted by a private entity for a construction
15 project that incorporates energy and environmental design
16 building standards into its project design. The permit
17 processing procedure shall give priority to private sector
18 permit applicants at no additional cost to the applicant. Any
19 priority permit processing procedure established by a county
20 pursuant to this section shall not imply or provide that any
21 permit application filed under the priority processing procedure
22 shall be automatically approved.

1 SECTION 33. This Act shall take effect upon its approval;
2 provided that sections 2, 3, 10, 12 and 13 shall take effect on
3 July 1, 2006.

Report Title:

Energy Efficiency; Renewable Energy; Alternate Fuel

Description:

Provides a framework for energy self-sufficiency, focusing on energy efficiency and renewable energy resource employment in state facilities, vehicles, and equipment; in the public schools; and by means of priority permitting for renewable energy projects at the county level. (HB2175 CD1)

