

Report Title:

Tax Credit; Renewable Energy Technologies

Description:

Provides a framework for energy self-sufficiency, focusing on: increasing renewable energy tax credits; installing photovoltaic systems in public schools; enabling compliance with the State's greenhouse gas and energy efficiency goals; incorporating green building practices for state-funded facilities; establishing a pay as you save program for solar water heating systems; establishing a bio-diesel preference in the state procurement law; and establishing a Hawaii renewable hydrogen program and hydrogen investment capital special fund. Effective date July 1, 2020. (SB2957 HD2)



A BILL FOR AN ACT

RELATING TO ENERGY.

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

1 PART I

2 SECTION 1. The legislature finds that Hawaii's dependence
3 on petroleum for about ninety per cent of its energy needs is
4 more than any other state in the nation. This makes the State
5 extremely vulnerable to any oil embargo, supply disruption,
6 international market dysfunction, and many other factors beyond
7 the control of the State. Furthermore, the continued
8 consumption of conventional petroleum fuel negatively impacts
9 the environment. At the same time, Hawaii has among the most
10 abundant renewable energy resources in the world, in the form of
11 solar, geothermal, wind, biomass, and ocean energy assets.

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



1 Over the years, the legislature has worked steadily to
2 encourage the deployment of renewable energy resources and
3 energy efficiency initiatives. This includes but is not limited
4 to:

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

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

18 There now exists an unprecedented, historical opportunity
19 for Hawaii to emerge as a leader in the hydrogen economy.

20 Hydrogen technology development is already attracting
21 billions of dollars in investment capital not only in the United
22 States, but in other countries in Europe and Japan. On a



1 national level, federal initiatives are resulting in the
2 development of hydrogen and fuel cell technologies in
3 partnership with automakers and major energy companies.
4 Analysts predict that these initiatives, along with efforts in
5 other countries, will lead to the development of markets for
6 hydrogen and supportive hydrogen fuel cell technologies and
7 infrastructure. The question is no longer "if", but "when".

8 Locally, the historic confluence of the State's desire for
9 energy self-sufficiency through development of renewable energy
10 with the global opportunity of the emerging hydrogen economy
11 calls for a major, far-sighted initiative, sustainable over the
12 long-term, to develop Hawaii's renewable energy resources and,
13 ultimately, to transition Hawaii to an indigenous-resource-based
14 energy economy.

15 Right now, the greatest immediate opportunity to achieve
16 this vision resides on the island of Hawaii.

17 On the island of Hawaii, more electricity is produced from
18 renewable resources than can currently be used. Several wind
19 projects are expected to be completed in the near term,
20 exacerbating this problem. Furthermore, the Puna geothermal
21 project is planning to increase its energy contribution, only if
22 the electric utility can take and use the energy. This provides



1 an opportunity to use excess geothermal and other renewable
2 energy resources to produce hydrogen using water electrolysis.
3 This clean, renewable hydrogen would then be used as an energy
4 carrier for stationary power and transportation fuels, making
5 the island self-sufficient.

6 Hydrogen could also be exported to Oahu and other islands
7 as the clean fuel of choice for power generation and
8 transportation fuels, achieving greater self-sufficiency for the
9 State of Hawaii.

10 To shape Hawaii's energy future and achieve the goal of
11 energy self-sufficiency for the State of Hawaii, our efforts
12 must continue on all fronts, integrating new and evolving
13 technologies, seizing upon economic opportunities to become more
14 energy efficient and economically diversified, and providing
15 incentives and assistance to address barriers.

16 The purpose of this Act is to provide a comprehensive
17 approach to achieving energy self-sufficiency for the state by:

18 (1) Increasing the renewable energy technologies income
19 tax credit for certain solar-thermal, wind-powered,
20 and photovoltaic energy systems and removing the tax
21 credits' 2008 sunset date;



- 1 (2) Authorizing the issuance of general obligation bonds
2 to develop and implement a pilot project to install
3 photovoltaic systems at public schools on the islands
4 of Oahu, Hawaii, and Kauai and within the county of
5 Maui;
- 6 (3) Replacing existing energy efficiency and environmental
7 standards and procedures for state facilities,
8 equipment, and vehicles with updated energy efficiency
9 and environmental standards and procedures;
- 10 (3) Promoting the use of green building practices by
11 requiring each county agency that issues building,
12 construction, or development-related permits to
13 establish a procedure for priority processing of
14 permit applications for construction projects
15 incorporating energy and environmentally efficient
16 building standards;
- 17 (4) Establishing a program and strategy for increased
18 hydrogen and biofuel research and use in the state;
19 and
- 20 (5) Establishing the pay as you save pilot project to
21 provide a financing mechanism to make purchases of



1 residential solar hot water heater systems more
2 affordable.

3 This Act shall be called the Energy Self-Sufficiency Act of
4 2006.

5 PART II

6 RENEWABLE ENERGY TECHNOLOGIES INCOME TAX CREDIT

7 SECTION 2. Section 235-12.5, Hawaii Revised Statutes, is
8 amended as follows:

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

10 "(a) When the requirements of subsection (c) are met, each
11 individual or corporate resident taxpayer that files an
12 individual or corporate net income tax return for a taxable year
13 may claim a tax credit under this section against the Hawaii
14 state individual or corporate net income tax. The tax credit
15 may be claimed for every eligible renewable energy technology
16 system that is installed and placed in service by a taxpayer
17 during the taxable year. This credit shall be available for
18 systems installed and placed in service after June 30, 2003.

19 The tax credit may be claimed as follows:

20 (1) Solar thermal energy systems for:



- 1 (A) Single-family residential property: thirty-five
2 per cent of the actual cost or [~~\$1,750,~~] \$2,250,
3 whichever is less;
- 4 (B) Multi-family residential property: thirty-five
5 per cent of the actual cost or \$350 per unit,
6 whichever is less; and
- 7 (C) Commercial property: thirty-five per cent of the
8 actual cost or \$250,000, whichever is less;
- 9 (2) Wind-powered energy systems for:
- 10 (A) Single-family residential property: twenty per
11 cent of the actual cost or \$1,500, whichever is
12 less;
- 13 (B) Multi-family residential property: twenty per
14 cent of the actual cost or \$200 per unit,
15 whichever is less; and
- 16 (C) Commercial property: twenty per cent of the
17 actual cost or [~~\$250,000,~~] \$500,000, whichever is
18 less; and
- 19 (3) Photovoltaic energy systems for:
- 20 (A) Single-family residential property: thirty-five
21 per cent of the actual cost or [~~\$1,750,~~] \$5,000,
22 whichever is less;



1 (B) Multi-family residential property: thirty-five
2 per cent of the actual cost or \$350 per unit,
3 whichever is less; and

4 (C) Commercial property: thirty-five per cent of the
5 actual cost or [~~\$250,000,~~] \$500,000, whichever is
6 less;

7 provided that multiple owners of a single system shall be
8 entitled to a single tax credit; and provided further that the
9 tax credit shall be apportioned between the owners in proportion
10 to their contribution to the cost of the system.

11 In the case of a partnership, S corporation, estate, or
12 trust, the tax credit allowable is for every eligible renewable
13 energy technology system that is installed and placed in service
14 by the entity. The cost upon which the tax credit is computed
15 shall be determined at the entity level. Distribution and share
16 of credit shall be determined pursuant to section 235-110.7(a)."

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

18 "(c) [~~The~~] For taxable years beginning after December 31,
19 2005, the dollar amount of [~~any new federal energy tax credit~~
20 ~~similar to the credit provided in this section that is~~
21 ~~established after June 30, 2003, and~~] any utility rebate[~~7~~]



1 shall be deducted from the cost of the qualifying system and its
2 installation before applying the state tax credit."

3 SECTION 3. Act 207, Session Laws of Hawaii 2003, is
4 amended by amending section 4 to read as follows:

5 "SECTION 4. This Act shall take effect on July 1, 2003[
6 ~~and shall be repealed January 1, 2008~~]."

7 PART III

8 RENEWABLE ENERGY AND ENERGY EFFICIENCY IN HAWAII'S PUBLIC
9 SCHOOLS

10 SECTION 4. The director of finance is authorized to issue
11 general obligation bonds in the sum of \$1 or so much thereof as
12 may be necessary, and the same sum, or so much thereof as may be
13 necessary, is appropriated for fiscal year 2006-2007 for the
14 purpose of developing and implementing a photovoltaic, net
15 energy metered pilot project in public schools. The project
16 sites shall be determined by the department of education as most
17 suitable in meeting the pilot project's objectives. The project
18 objectives are as follows:

- 19 (1) To have, at minimum, a project site at one public
20 school on each of the islands of Oahu, Hawaii, and
21 Kauai, and one public school within the county of
22 Maui;



- 1 (2) To allow installation of photovoltaic systems to be
2 timed in conjunction with substantial roof repairs or
3 roof replacement of the building to further reduce
4 project costs;
- 5 (3) To use the application of net energy metering to
6 offset costs of the system;
- 7 (4) To recapture system costs within three quarters of the
8 useful life of the photovoltaic system; and
- 9 (5) When advantageous, to use energy-savings contracts
10 such as third party lease or purchase contracts to
11 maximize the objectives of this section.

12 The sum appropriated shall be expended by the department of
13 education.

14 The department of education shall submit an interim report
15 of the pilot project to the legislature no later than twenty
16 days prior to the convening of the regular session of 2007 and a
17 final report to the legislature no later than twenty days prior
18 to the convening of the regular session of 2008.

19 PART IV

20 PROMOTING RENEWABLE ENERGY AND ENERGY EFFICIENCY FOR STATE
21 FACILITIES, MOTOR VEHICLES, AND EQUIPMENT



1 SECTION 5. Chapter 196, Hawaii Revised Statutes, is
2 amended by adding a new section to be appropriately designated
3 and to read as follows:

4 "§196- Energy efficiency and environmental standards for
5 state facilities and vehicles. (a) Each agency is directed to
6 implement, to the extent possible, the following goals during
7 planning and budget preparation and during program
8 implementation.

9 (b) With regard to buildings and facilities, each agency
10 shall comply with the following:

11 (1) Design and construct buildings meeting nationally
12 recognized, consensus-based green building guidelines,
13 standards, or systems as approved by the department of
14 education for public school facilities, and the
15 department accounting and general services for other
16 state facilities, in consultation with the department
17 of business, economic development, and tourism;

18 (2) Incorporate energy efficiency measures to prevent heat
19 gain in residential facilities of three stories and
20 below to provide R-19 or equivalent on roofs, R-11 or
21 equivalent in walls, and high-performance windows to
22 minimize heat gain and, if air conditioned, minimize



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

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



- 1 benefit of solar water heating for preheating water.
- 2 If a multi-story building is centrally air
- 3 conditioned, heat recovery shall be employed as the
- 4 primary water heating system. Single family
- 5 residential clients of the department of Hawaiian home
- 6 lands and any agency or program that can take
- 7 advantage of utility rebates are exempted from the
- 8 requirements of this paragraph so they may continue to
- 9 qualify for utility rebates for solar water heating;
- 10 (4) Implement water and energy efficiency practices in
- 11 operations to reduce waste and increase conservation;
- 12 (5) Incorporate principles of waste minimization and
- 13 pollution prevention, such as reducing, revising, and
- 14 recycling as a standard operating practice in
- 15 programs, including programs for construction and
- 16 demolition of waste management and office paper and
- 17 packaging recycling programs;
- 18 (6) Use life cycle cost-benefit analysis to purchase
- 19 energy efficient equipment such as ENERGY STAR
- 20 products and use utility rebates where available to
- 21 reduce purchase and installation costs; and



- 1 (7) Procure environmentally preferable products, including
2 but not limited to recycled and recycled-content, bio-
3 based, and other resource-efficient products and
4 materials.
- 5 (c) With regard to transportation fuel, 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 6. 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) [~~criteria~~] 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 7. 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 but not limited to the
16 University of Hawaii;

17 [~~(2)~~] ~~County governments;~~

18 ~~—(3)]~~ (2) Energy service companies;

19 [~~(4)]~~ (3) Utility companies;

20 [~~(5)]~~ (4) Equipment manufacturers;

21 [~~(6)]~~ (5) Construction and architectural companies;

22 [~~(7)]~~ (6) Environmental, energy, and consumer groups; and



1 ~~[(+8)]~~ (7) Other energy-related organizations.

2 (b) The committee shall provide input on state energy
3 management, including how to:

4 (1) Improve the use of energy-savings [~~performance~~]
5 contracts and utility energy-efficiency service
6 contracts;

7 (2) Improve procurement of ENERGY STAR and other energy
8 efficient products;

9 (3) Improve building design;

10 (4) Reduce [~~process~~] energy use; [~~and~~]

11 (5) Enhance applications of efficient and renewable energy
12 technologies at state facilities~~[-]~~;

13 (6) Establish benchmarks and evaluate the State's progress
14 in incorporating energy efficiency and conservation
15 for state facilities, vehicles, and equipment;

16 (7) Make recommendations on how and when to conduct
17 periodic energy audits; and

18 (8) Make recommendations to the legislature no later than
19 twenty days prior to the convening of each regular
20 session, starting with the 2008 regular session, for
21 policy or other statutory changes to carry out the
22 purposes of this chapter."



1 SECTION 8. 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 but are not limited to:

- 10 (1) Energy-savings 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 services or the design, installation, operation, and
5 maintenance of energy equipment, or both. The request
6 for proposals shall contain terms and conditions
7 relating to submission of proposals, evaluation, and
8 selection of proposals, financial terms, legal
9 responsibilities, and other matters as may be required
10 by law and as the agency determines appropriate;
- 11 (2) Upon receiving responses to the request for proposals,
12 the agency may select the most qualified proposal or
13 proposals on the basis of the experience and
14 qualifications of the proposers, the technical
15 approach, the financial arrangements, the overall
16 benefits to the agency, and other factors determined
17 by the agency to be relevant and appropriate;
- 18 (3) The agency thereafter may negotiate and enter into an
19 [~~energy performance~~] energy-savings contract with the
20 person or company whose proposal is selected as the
21 most qualified based on the criteria established by
22 the agency;



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

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

8 (6) Any [~~energy performance~~] energy-savings contract shall
9 provide that total payments shall not exceed total
10 savings."

11 SECTION 9. Section 196-22, Hawaii Revised Statutes, is
12 amended to read as follows:

13 "**§196-22 State energy projects.** State energy projects may
14 be implemented under this chapter with the approval of the
15 comptroller and the director of finance. Notwithstanding
16 section 36-41 or 196-21, the comptroller or the senior agency
17 official of the department of accounting and general services,
18 along with the director of finance, may exempt a state energy
19 project from the advertising and competitive bidding
20 requirements of section 36-41 or 196-21 and chapter 103, if the
21 comptroller deems exemption appropriate for energy projects with
22 proprietary technology or necessary to meet the goals of the



1 legislature. In addition, this section shall be construed to
2 provide the greatest possible flexibility to agencies in
3 structuring agreements entered into so that economic benefits
4 and existing energy incentives may be used and maximized and
5 financing and other costs to agencies may be minimized. The
6 specific terms of [~~energy performance~~] energy-savings
7 contracting under section 36-41 may be altered if deemed
8 advantageous to the agency and approved by the director of
9 finance and the senior agency official."

10 SECTION 10. Section 196-23, Hawaii Revised Statutes, is
11 amended to read as follows:

12 "[+]§196-23[+] **Energy efficient products.** (a) Agencies
13 shall select, where life-cycle cost-effective, ENERGY STAR and
14 other energy efficient products when acquiring energy-using
15 products. For product groups where ENERGY STAR labels are not
16 yet available, agencies may select products that are in the
17 upper twenty-five per cent of energy efficiency as designated by
18 the United States Department of Energy, Office of Energy
19 Efficiency and Renewable Energy, [~~Federal Energy Management~~
20 ~~Program.~~] federal energy management program.

21 Agencies shall incorporate energy efficient criteria
22 consistent with designated energy efficiency levels [~~into all~~



1 ~~guide specifications and project specifications developed for~~
2 ~~new construction and renovation, as well as]~~ into product
3 specification language developed for all purchasing procedures.

4 The State shall also consider the creation of financing
5 agreements with private sector suppliers to provide private
6 funding to offset higher up-front costs of efficient products.

7 ~~[(b) Agencies shall strive to meet the ENERGY STAR~~
8 ~~building criteria for energy performance and indoor~~
9 ~~environmental quality in their eligible facilities to the~~
10 ~~maximum extent practicable by December 31, 2005. Agencies may~~
11 ~~use energy savings performance contracts, utility energy-~~
12 ~~efficiency service contracts, or other means to conduct~~
13 ~~evaluations and make improvements to facilities. Facilities~~
14 ~~that rank in the top twenty-five per cent in energy efficiency~~
15 ~~relative to comparable commercial and state buildings shall~~
16 ~~receive the ENERGY STAR building label or its equivalent as~~
17 ~~determined by the coordinator. Agencies shall integrate this~~
18 ~~rating tool into their general facility audits.~~

19 ~~— (c) The State shall employ sustainable design principles~~
20 ~~and agencies shall apply the principles to the siting, design,~~
21 ~~and construction of new facilities. Agencies shall optimize~~
22 ~~life-cycle costs, pollution, and other environmental and energy~~



1 ~~costs associated with the construction, life cycle operation,~~
2 ~~and decommissioning of the facility. Agencies shall consider~~
3 ~~using energy savings performance contracts or utility energy~~
4 ~~efficiency service contracts to aid them in constructing~~
5 ~~sustainably designed buildings.~~

6 ~~——(d)]~~ (b) Agencies entering into leases, including the
7 renegotiation or extension of existing leases, shall incorporate
8 lease provisions that encourage energy and water efficiency
9 wherever life-cycle cost-effective. Build-to-suit lease
10 solicitations shall contain criteria encouraging sustainable
11 design and development, energy efficiency, and verification of
12 facility performance. Agencies shall include a preference for
13 facilities having an ENERGY STAR building label in their
14 selection criteria for acquiring leased facilities. In
15 addition, all agencies shall encourage lessors to apply for an
16 ENERGY STAR building label and to explore and implement projects
17 that will reduce costs to the State, including projects carried
18 out through the lessors' energy-savings [~~performance~~] contracts
19 [~~or utility energy efficiency service contracts~~].

20 [~~(e) Agencies shall implement energy reduction systems,~~
21 ~~and other highly efficient systems, in new construction or~~
22 ~~retrofit projects when life-cycle cost-effective. Agencies~~



1 ~~shall consider combined cooling, heat, and power systems when~~
2 ~~determined to be the most cost-effective when measured against~~
3 ~~other alternatives on a life cycle cost basis. Agencies shall~~
4 ~~survey local natural resources to optimize use of available~~
5 ~~solar, ocean thermal, biomass, bioenergy, geothermal, or other~~
6 ~~naturally occurring energy sources.~~

7 ~~— (f) Agencies shall use off grid generation systems,~~
8 ~~including solar hot water, solar electric, solar outdoor~~
9 ~~lighting, small wind turbines, fuel cells, and other off grid~~
10 ~~alternatives, where such systems are life-cycle cost-effective~~
11 ~~and offer benefits including energy efficiency, pollution~~
12 ~~prevention, source energy reductions, avoided infrastructure~~
13 ~~costs, or expedited service.]"~~

14 SECTION 11. The director of finance is authorized to issue
15 general obligation bonds in the sum of \$1 or so much thereof as
16 may be necessary, and the same sum or so much thereof as may be
17 necessary is appropriated for fiscal year 2006-2007 to carry out
18 the purposes of this part regarding energy efficiency for state
19 facilities, vehicles, and equipment.

20 The sum appropriated shall be expended by the department of
21 accounting and general services.



1 SECTION 12. The director of finance is authorized to issue
2 general obligation bonds in the sum of \$1 or so much thereof as
3 may be necessary, and the same sum or so much thereof as may be
4 necessary is appropriated for fiscal year 2006-2007 to carry out
5 the purposes of part III of this Act regarding energy efficiency
6 for school facilities, including but not limited to
7 supplementing other capital improvement project appropriations
8 to meet energy efficiency and environmental standards and
9 planning and developing the Hawaii state school facilities and
10 energy efficiency and environmental design standards.

11 The sum appropriated shall be expended by the department of
12 education.

13 SECTION 13. There is appropriated out of the general
14 revenues of the State of Hawaii the sum of \$1 or so much thereof
15 as may be necessary for fiscal year 2006-2007 for the purpose of
16 one full-time permanent energy conservation coordinator position
17 to address energy efficiency in department of education
18 facilities.

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

21 SECTION 14. There is appropriated out of the general
22 revenues of the State of Hawaii the sum of \$1 or so much thereof



1 as may be necessary for fiscal year 2006-2007 for the purpose of
2 allocating one full-time energy efficiency coordinator position
3 to address energy efficiency in department of business, economic
4 development, and tourism facilities.

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

8 SECTION 15. The appropriations made for the capital
9 improvement projects authorized by this part shall not lapse at
10 the end of the fiscal biennium for which the appropriation is
11 made; provided that all moneys from the appropriation
12 unencumbered as of June 30, 2008, shall lapse as of that date.

13 SECTION 16. Section 196-8, Hawaii Revised Statutes, is
14 repealed.

15 ~~["§196-8]—Energy efficiency policy review and evaluation.~~

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



- 1 ~~(b) The review and evaluation shall include:~~
- 2 ~~(1) The efficacy of section 235-12.5 to determine whether~~
3 ~~the tax credits should be continued or enhanced based~~
4 ~~on impact and cost-benefit analyses or other public~~
5 ~~policy considerations;~~
- 6 ~~(2) Whether the energy technology systems eligible for tax~~
7 ~~credits under section 235-12.5 should be expanded,~~
8 ~~reduced, or remain the same; and~~
- 9 ~~(3) Any other issue regarding energy technology systems~~
10 ~~identified during the seven-year review.~~
- 11 ~~(c) The energy resources coordinator, in undertaking the~~
12 ~~review and evaluation, shall consult with representatives from:~~
- 13 ~~(1) The department of business, economic development, and~~
14 ~~tourism;~~
- 15 ~~(2) The solar, wind, and photovoltaic industries;~~
- 16 ~~(3) The utilities industry;~~
- 17 ~~(4) The building industry; and~~
- 18 ~~(5) Any other professional or public sector group the~~
19 ~~energy resources coordinator deems appropriate."]~~
- 20 SECTION 17. Section 196-12, Hawaii Revised Statutes, is
21 repealed.



1 ~~["§196-12]—Greenhouse gases reduction goal. Through~~
2 ~~life-cycle cost-effective energy measures, each agency shall~~
3 ~~reduce its greenhouse gas emissions attributed to facility~~
4 ~~energy use by thirty per cent by January 1, 2012, compared to~~
5 ~~emission levels in calendar year 1990. In order to encourage~~
6 ~~optimal investment in energy improvements, agencies may count~~
7 ~~greenhouse gas reductions from improvements in non facility~~
8 ~~energy use toward this goal to the extent that these reductions~~
9 ~~are approved by the coordinator."]~~

10 SECTION 18. Section 196-13, Hawaii Revised Statutes, is
11 repealed.

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

20 ~~(b) Through life-cycle cost-effective measures, each~~
21 ~~agency shall reduce energy consumption per square foot, per unit~~
22 ~~of production, or per other unit as applicable, of its~~



1 ~~laboratory facilities by fifteen per cent by January 1, 2007,~~
2 ~~and twenty five per cent by January 1, 2012, relative to~~
3 ~~calendar year 1995. No facility shall be exempt from these~~
4 ~~goals unless it meets criteria for exemptions established by the~~
5 ~~coordinator.~~

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

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



1 ~~(e) The State shall strive to reduce total energy use and~~
2 ~~associated greenhouse gas and other air emissions, as measured~~
3 ~~at the source. To that end, agencies shall undertake life cycle~~
4 ~~cost-effective projects in which source energy decreases, even~~
5 ~~if site energy use increases. In those cases, agencies shall~~
6 ~~receive credit toward energy reduction goals through guidelines~~
7 ~~established by the coordinator.~~

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

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



1 ~~cycle cost effective products, and constructing sustainably~~
2 ~~designed new buildings, among other energy costs.~~

3 ~~The director of finance shall issue guidelines to assist~~
4 ~~agencies in developing appropriate requests that support sound~~
5 ~~investments in energy improvements and energy using products,~~
6 ~~and shall consider establishing a fund that agencies may draw on~~
7 ~~to finance exemplary energy management activities and~~
8 ~~investments with higher initial costs but lower life-cycle~~
9 ~~costs.~~

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

13 SECTION 19. Section 196-14, Hawaii Revised Statutes, is
14 repealed.

15 ~~["~~§196-14~~] ~~Annual report.~~ Beginning January 1, 2004,~~
16 ~~each agency shall measure and report annually to the coordinator~~
17 ~~on its progress in meeting the requirements of this part.~~

18 ~~The report shall include:~~

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



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

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

4 SECTION 20. Section 196-15, Hawaii Revised Statutes, is
5 repealed.

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

12 SECTION 21. Section 196-16, Hawaii Revised Statutes, is
13 repealed.

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



1 SECTION 22. Section 196-17, Hawaii Revised Statutes, is
2 repealed.

3 ~~["§196-17]—Interagency coordination, policy committee.~~

4 ~~(a) The coordinator shall be responsible for evaluating each~~
5 ~~agency's progress in improving energy management and for~~
6 ~~submitting agency energy scorecards to the governor and the~~
7 ~~legislature to report progress.~~

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

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

20 ~~(2) Overall efficiency;~~

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

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



1 ~~The scorecards shall be based on the annual energy reports~~
2 ~~submitted to the coordinator.~~

3 ~~(b) The coordinator shall be responsible for working with~~
4 ~~agencies to ensure that they meet the goals of this part and~~
5 ~~report their progress. The coordinator shall develop and issue~~
6 ~~guidelines for agencies' preparation of their annual reports to~~
7 ~~the coordinator on energy management. The coordinator shall~~
8 ~~also have primary responsibility for collecting and analyzing~~
9 ~~the data and shall ensure that agency reports are received in a~~
10 ~~timely manner.~~

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

21 SECTION 23. Section 196-20, Hawaii Revised Statutes, is
22 repealed.



1 ~~["**§196-20**—**Facility energy audits.** Agencies shall~~
2 ~~conduct energy and water audits for approximately ten per cent~~
3 ~~of their facilities each year, either independently or through~~
4 ~~energy-savings performance contracts or utility energy-~~
5 ~~efficiency service contracts."]~~

6 SECTION 24. Section 196-24, Hawaii Revised Statutes, is
7 repealed.

8 ~~["**§196-24**—**Electricity use.** To advance the greenhouse~~
9 ~~gas and renewable energy goals of this part, and reduce source~~
10 ~~energy use, each agency shall strive to use electricity from~~
11 ~~clean, efficient, and renewable energy sources. An agency's~~
12 ~~efforts in purchasing electricity from efficient and renewable~~
13 ~~energy sources shall be taken into account in assessing the~~
14 ~~agency's progress and formulating its scorecard under section~~
15 ~~196-17(a)."~~]

16 SECTION 25. Section 196-25, Hawaii Revised Statutes, is
17 repealed.

18 ~~["**§196-25**—**Competition.** Agencies shall take advantage of~~
19 ~~competitive opportunities in the electricity and natural gas~~
20 ~~markets to reduce costs and enhance services. Agencies are~~
21 ~~encouraged to aggregate demand across facilities or agencies to~~
22 ~~maximize their economic advantage."]~~



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

3 [~~"§196-26—Reduced greenhouse gas intensity of electric~~
4 ~~power.~~ When selecting electricity providers, agencies shall
5 purchase electricity from sources that use high efficiency
6 electric generating technologies when life-cycle cost-effective.
7 Agencies shall consider the greenhouse gas intensity of the
8 source of the electricity and strive to minimize the greenhouse
9 gas intensity of purchased electricity."]

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

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



1 ~~In evaluating opportunities to comply with this section,~~
2 ~~agencies shall consider any renewable portfolio standard~~
3 ~~specified in the restructuring guidelines for the State and the~~
4 ~~United States Environmental Protection Agency guidelines on~~
5 ~~crediting renewable energy power."]~~

6 SECTION 28. Section 196-28, Hawaii Revised Statutes, is
7 repealed.

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

15 SECTION 29. Section 196-29, Hawaii Revised Statutes, is
16 repealed.

17 [~~"[§196-29]—Management strategies. Agencies shall use the~~
18 ~~following management strategies in meeting the goals of this~~
19 ~~part:~~

20 ~~(1) Employee incentive programs to reward exceptional~~
21 ~~performance in implementing this part;~~



- 1 ~~(2) Performance evaluations of successful implementation~~
2 ~~of this part in areas such as energy savings~~
3 ~~performance contracts, sustainable design, energy~~
4 ~~efficient procurement, energy efficiency, water~~
5 ~~conservation, and renewable energy projects and~~
6 ~~performance evaluations of agency heads, members of~~
7 ~~the agency energy team, principal program managers,~~
8 ~~heads of field offices, facility managers, energy~~
9 ~~managers, and other appropriate employees;~~
- 10 ~~(3) Agencies shall be allowed to retain a portion of~~
11 ~~savings generated from efficient energy and water~~
12 ~~management and shall use the savings at the facility~~
13 ~~or site where the savings occur to provide greater~~
14 ~~incentives for that facility and its site managers to~~
15 ~~undertake more energy management initiatives, invest~~
16 ~~in renewable energy systems, and purchase electricity~~
17 ~~from renewable energy sources;~~
- 18 ~~(4) Training and education shall be provided for all~~
19 ~~appropriate personnel relating to the energy~~
20 ~~management strategies contained in this part,~~
21 ~~including the incorporation into existing procurement~~
22 ~~courses information on energy management tools,~~



1 ~~energy savings performance contracts, utility energy~~
2 ~~efficiency service contracts, energy efficient~~
3 ~~products, and life cycle cost analysis; and~~
4 ~~(5) Agencies shall designate showcase facilities to~~
5 ~~highlight energy or water efficiency and renewable~~
6 ~~energy improvements."]~~

PART V

ENERGY-EFFICIENT VEHICLES

9 SECTION 30. Section 103D-412, Hawaii Revised Statutes, is
10 amended to read as follows:

11 "[+]§103D-412[+] [~~Highly energy efficient~~] Energy-
12 efficient vehicles. (a) The procurement policy for all
13 agencies purchasing or leasing motor [~~vehicle fleets~~] vehicles
14 shall be to obtain [~~alternative fuel~~] energy-efficient vehicles.
15 [~~Beginning January 1, 2006, all state agencies~~] All covered
16 fleets are directed to procure increasing percentages of
17 [~~alternative fuel~~] energy-efficient vehicles as part of their
18 annual vehicle acquisition plans, which shall be as follows:
19 (1) [~~By January 1, 2007,~~] In the fiscal year beginning
20 July 1, 2006, at least twenty per cent of newly
21 purchased light-duty vehicles acquired by each



1 [~~agency~~] covered fleet shall be [~~alternative fuel~~]
2 energy-efficient vehicles;

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

7 [~~(2) By January 1, 2009,~~] (3) In the fiscal year beginning
8 July 1, 2008, at least forty per cent of newly
9 purchased light-duty vehicles acquired by each
10 [~~agency~~] covered fleet shall be [~~alternative fuel~~]
11 energy-efficient vehicles; and

12 [~~(3)~~] (4) For each subsequent fiscal year [~~subsequent to~~
13 January 1, 2009], the percentage of [~~alternative fuel~~]
14 energy-efficient vehicles newly purchased shall be
15 five percentage points higher than the previous year,
16 until at least [~~sixty~~] seventy-five per cent of each
17 [~~agency's~~] covered fleet's newly purchased, light-duty
18 vehicles are [~~alternative fuel~~] energy-efficient
19 vehicles.

20 (b) For the purposes of this section:

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



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

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

5 [~~"Alternative fuel"~~] "Energy-efficient vehicle" means a
6 vehicle that:

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

8 [~~(1)~~] (2) Is powered primarily through the use of an
9 electric battery or battery pack that stores energy
10 produced by an electric motor through regenerative
11 braking to assist in vehicle operation;

12 [~~(2)~~] (3) Is propelled by power derived from one or more
13 cells converting chemical energy directly into
14 electricity by combining oxygen with hydrogen fuel
15 that is stored on board the vehicle in any form; [~~or~~]

16 [~~(3)~~] (4) Draws propulsion energy from onboard sources of
17 stored energy generated from an internal combustion or
18 heat engine using combustible fuel and a rechargeable
19 energy storage system[-]; or

20 (5) Is on the list of "Most Energy Efficient Vehicles" in
21 its class or is in the top one-fifth of the most
22 energy-efficient vehicles in its class available in



1 Hawaii, as shown by vehicle fuel efficiency lists,
2 rankings, or reports maintained by the United States
3 Environmental Protection Agency.

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

6 "Light-duty vehicle" has the same meaning as contained in
7 10 Code of Federal Regulations Part 490.

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

16 (d) Agencies that use biodiesel fuel may offset the
17 vehicle purchase requirements of this section at the rate of one
18 vehicle for each four hundred fifty gallons of neat biodiesel
19 fuel used. Neat biodiesel fuel is one hundred per cent
20 biodiesel (B100) by volume.

21 (e) Agencies may apply to the chief procurement officer
22 for exemptions from the requirements of this section to the



1 extent that the vehicles required by this section are not
2 available or do not meet the specific needs of the agency.

3 (f) Vehicles acquired from another state agency and
4 excluded vehicles are exempt from the requirements of this
5 section.

6 (g) Nothing in this section is intended to interfere with
7 an agency's ability to comply with federally-imposed vehicle
8 purchase mandates such as those required by 10 Code of Federal
9 Regulations Part 490 Subpart C."

10 PART VI

11 COUNTY BUILDING PERMITS AND

12 ENERGY AND ENVIRONMENTAL EFFICIENT DESIGN PRIORITY PROCESSING

13 SECTION 31. Chapter 46, Hawaii Revised Statutes, is
14 amended by adding a new section to be appropriately designated
15 and to read as follows:

16 "§46- County building permits; incorporation of energy
17 and environmental design building standards in project design;
18 priority processing. (a) Each county agency that issues
19 building- construction- or development-related permits shall
20 establish a procedure for the priority processing of a permit
21 application submitted by a private entity for a construction
22 project that incorporates energy and environmental design



1 building standards into its project design. The permit
2 processing procedure shall give priority to private sector
3 permit applicants at no additional cost to the applicant. Any
4 priority permit processing procedure established by a county
5 pursuant to this section shall not imply or provide that any
6 permit application filed under the priority processing procedure
7 shall be automatically approved.

8 (b) For the purposes of this section:

9 "Energy and environmental design building standards" means
10 nationally recognized consensus-based green building guidelines,
11 standards, or systems recommended by the American Institute of
12 Architects Hawaii State Council.

13 "Private entity" means any permit applicant that is not the
14 State, a county, the federal government, or any political
15 subdivision thereof."

16 PART VII

17 RENEWABLE ENERGY RESEARCH AND DEVELOPMENT AND TRANSITION INTO A

18 RENEWABLE HYDROGEN ECONOMY

19 SECTION 32. Chapter 103D, Hawaii Revised Statutes, is
20 amended by adding a new section to be appropriately designated
21 and to read as follows:



1 "§103D- **Biofuel preference.** (a) Notwithstanding any
2 other law to the contrary, contracts for the purchase of diesel
3 fuel or boiler fuel shall be awarded to the lowest responsible
4 and responsive bidders, with preference given to bids for
5 biofuels or blends of biofuel and petroleum fuel.

6 (b) When purchasing fuel for use in diesel engines, the
7 preference shall be cents per gallon of one hundred per
8 cent biodiesel. For blends containing both biodiesel and
9 petroleum-based diesel, the preference shall be applied only to
10 the biodiesel portion of the blend.

11 (c) When purchasing fuel for use in boilers, the
12 preference shall be cents per gallon of one hundred per
13 cent biofuel. For blends containing both biofuel and petroleum
14 based boiler fuel, the preference shall be applied only to the
15 biofuel portion of the blend.

16 (d) As used in this section, "biodiesel" means a vegetable
17 oil-based fuel that meets ASTM International standard D6751,
18 "Standard Specification for Biodiesel (B100) Fuel Blend Stock
19 for Distillate Fuels", as amended.

20 (e) As used in this section, "biofuel" means fuel from
21 non-petroleum plant or animal based sources that can be used for
22 the generation of heat or power."



1 SECTION 33. Chapter 196, Hawaii Revised Statutes, is
2 amended by adding a new section to be appropriately designated
3 and to read as follows:

4 "§196-A Hawaii renewable hydrogen program. There is
5 established, within the department of business, economic
6 development, and tourism, a Hawaii renewable hydrogen program to
7 manage the State's transition to a renewable hydrogen economy.
8 The program shall design, implement, and administer activities
9 that shall include:

- 10 (1) Strategic partnerships for the research, development,
11 testing, and deployment of renewable hydrogen
12 technologies;
- 13 (2) Engineering and economic evaluations of Hawaii's
14 potential for renewable hydrogen use and near-term
15 project opportunities for the State's renewable energy
16 resources;
- 17 (3) Electric grid reliability and security projects that
18 will enable the integration of a substantial increase
19 of electricity from renewable energy resources on the
20 island of Hawaii;



- 1 (4) Hydrogen demonstration projects, including
2 infrastructure for the production, storage, and
3 refueling of hydrogen vehicles;
- 4 (5) A statewide hydrogen economy public education and
5 outreach plan focusing on the island of Hawaii, to be
6 developed in coordination with Hawaii's public
7 education institutions;
- 8 (6) Promotion of Hawaii's renewable hydrogen resources to
9 potential partners and investors;
- 10 (7) A plan, for implementation during the years 2007 to
11 2010, to more fully deploy hydrogen technologies and
12 infrastructure capable of supporting the island of
13 Hawaii's energy needs, including:
- 14 (A) Expanded installation of hydrogen production
15 facilities;
- 16 (B) Development of integrated energy systems,
17 including hydrogen vehicles;
- 18 (C) Construction of additional hydrogen refueling
19 stations; and
- 20 (D) Promotion of building design and construction
21 that fully incorporates clean energy assets,



- 1 including reliance on hydrogen-fueled energy
2 generation;
- 3 (8) A plan, for implementation during the years 2010 to
4 2020, to transition the island of Hawaii to a
5 hydrogen-fueled economy and to extend the application
6 of the plan throughout the state; and
- 7 (9) Evaluation of policy recommendations to:
- 8 (A) Encourage the adoption of hydrogen-fueled
9 vehicles;
- 10 (B) Continually fund the hydrogen technologies
11 special fund; and
- 12 (C) Support investment in hydrogen infrastructure,
13 including production, storage, and dispensing
14 facilities."

15 SECTION 34. Chapter 211F, Hawaii Revised Statutes, is
16 amended by adding a new section to be appropriately designated
17 and to read as follows:

- 18 "**§211F-A Hydrogen investment capital special fund.** (a)
19 There shall be established the hydrogen investment capital
20 special fund, into which shall be deposited:
- 21 (1) Appropriations made by the legislature to the fund;
22 (2) All contributions from public or private partners;



- 1 (3) All interest earned on or accrued to moneys deposited
2 in the special fund; and
- 3 (4) Any other moneys made available to the special fund
4 from other sources.
- 5 (b) Moneys in the fund shall be used to:
- 6 (1) Provide seed capital for and venture capital
7 investments in private sector and federal projects for
8 research, development, testing, and implementation of
9 the Hawaii renewable hydrogen program, as set forth in
10 section 196-A; and
- 11 (2) For any other purpose deemed necessary to carry out
12 the purposes of this section."

13 SECTION 35. There is appropriated out of the general
14 revenues of the State of Hawaii the sum of \$1 or so much thereof
15 as may be necessary for fiscal year 2006-2007 to conduct a
16 statewide multi-fuel biofuels production assessment of potential
17 feedstocks and technologies, the economics of the various
18 renewable fuels pathways, and the potential for ethanol,
19 biodiesel, and renewable hydrogen production to contribute to
20 Hawaii's near-, mid-, and long-term energy needs.



1 The sum appropriated shall be expended by the department of
2 business, economic development, and tourism for the purposes of
3 this section.

4 SECTION 36. There is appropriated out of the general
5 revenues of the State of Hawaii the sum of \$1 or so much thereof
6 as may be necessary for fiscal year 2006-2007 to provide
7 assistance to the agricultural community interested in
8 developing energy projects, especially for the production of
9 biodiesel from energy crops and cellulosic ethanol from
10 agricultural waste streams, and to seek funding that may be
11 available from the United States Departments of Agriculture and
12 Energy, and other external sources.

13 The sum appropriated shall be expended by the department of
14 agriculture for the purposes of this section.

15 SECTION 37. There is appropriated out of the general
16 revenues of the State of Hawaii the sum of \$1 or so much thereof
17 as may be necessary for fiscal year 2006-2007 for the Hawaii
18 renewable hydrogen program established pursuant to section 196-
19 A, Hawaii Revised Statutes.

20 The sum appropriated shall be expended by the department of
21 business, economic development, and tourism for the purposes of
22 section 196-A.



1 SECTION 38. There is appropriated out of the general
2 revenues of the State of Hawaii the sum of \$1 or so much thereof
3 as may be necessary for fiscal year 2006-2007 to be deposited
4 into the hydrogen investment capital special fund.

5 The sum appropriated shall be expended by the department of
6 business, economic development, and tourism for the purposes of
7 section 211F-A(b).

8 SECTION 39. There is appropriated out of the hydrogen
9 investment capital special fund the sum of \$1 or so much thereof
10 as may be necessary for fiscal year 2006-2007 to be used for the
11 purposes of the hydrogen investment capital special fund
12 established pursuant to section 211F-A, Hawaii Revised Statutes.

13 The sum appropriated shall be expended by the department of
14 business, economic development, and tourism for the purposes of
15 section 211F-A(b).

16 SECTION 40. There is appropriated out of the general
17 revenues of the State of Hawaii the sum of \$1 or so much thereof
18 as may be necessary for fiscal year 2006-2007 for the Hawaii
19 natural energy institute to hire one full-time hydrogen system
20 program manager position.



1 The sum appropriated shall be expended by the University of
2 Hawaii through a contract with the Hawaii natural energy
3 institute for the purposes of this part.

4 PART VIII

5 SOLAR WATER HEATING PAY AS YOU SAVE

6 SECTION 41. **Solar water heating pay as you save program;**
7 **purpose; establishment; tariff filing.** (a) Solar water heating
8 systems are a renewable energy technology that uses solar
9 collectors placed on roofs to heat water. These systems
10 decrease reliance on imported oil used to generate electricity
11 to heat water because they use less energy than the electric hot
12 water heating systems replaced.

13 The legislature finds that the upfront cost of installation
14 is a barrier preventing many Hawaii residents from installing
15 solar water heating systems. The legislature further finds that
16 the renewable energy technologies income tax credit and electric
17 utility rebates have not been enough of an incentive to overcome
18 these upfront costs, especially for rental housing and homes in
19 need of retrofit for these important energy-saving devices.

20 The purpose of this section is to authorize the public
21 utilities commission to implement a pilot project to be called
22 the "solar water heating pay as you save program".



1 (b) The public utilities commission shall implement a
2 pilot project to be called the "solar water heating pay as you
3 save program", which shall:

4 (1) Allow a residential electric utility customer to
5 purchase a solar water heating system:

6 (A) With no upfront payments; and

7 (B) By paying the cost of the system over time on the
8 customer's electricity bill;

9 provided that the estimated electricity savings from
10 the solar water heating system exceeds the cost of the
11 system;

12 (2) Provide for billing and payment of the solar water
13 heating system on the utility bill;

14 (3) Provide for disconnection of utility service for non-
15 payment of solar water heating system pay as you save
16 payments; and

17 (4) Allow for assignment of system repayment costs
18 attached to the meter location.

19 (c) The public utilities commission shall determine the
20 time frame of the pilot program and shall gather and analyze
21 information to evaluate the pilot program.



1 (d) No later than June 30, 2007, each electric utility
2 shall implement by tariff a pay as you save model system program
3 for residential consumers that is consistent with this section,
4 or a similar program for residential customers that meets the
5 objectives of this section. Each utility shall provide at least
6 six months' prior notice of its proposed tariff to the public
7 utilities commission as prescribed in section 269-12(b), Hawaii
8 Revised Statutes. Within the prescribed notice period, the
9 public utilities commission shall review the proposed tariff
10 and, after a hearing, may require modifications to the proposed
11 tariff as is necessary to comply with or effectuate the purposes
12 of this section.

13 (e) The commission shall ensure that all reasonable costs
14 incurred by electric utilities to start up and implement the pay
15 as you save model system are recovered as part of the utility's
16 revenue requirement, including but not limited to necessary
17 billing system adjustments and any costs for pay as you save
18 model system efficiency measures that are not recovered via
19 participating residential consumers' pay as you save model
20 system bill payments or otherwise.



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PART IX

MISCELLANEOUS PROVISIONS

SECTION 42. This Act does not affect rights and duties that matured, penalties that were incurred, and proceedings that were begun, before its effective date.

SECTION 43. In codifying the new sections added by this Act, the revisor of statutes shall substitute appropriate section numbers for the letters used in designating the new sections in this Act.

SECTION 44. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 45. This Act shall take effect on July 1, 2020; provided that section 2 of this Act shall apply to taxable years beginning after December 31, 2005; and provided further that the increased tax credits established in section 2 of this Act shall be available only to eligible renewable energy technology systems installed after July 1, 2006.