HOUSE OF REPRESENTATIVES
TWENTY-THIRD LEGISLATURE, 2006
STATE OF HAWAII

H.B. NO. 2308 H.D. 1

A BILL FOR AN ACT

RELATING TO ENERGY.

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

Part I.

SECTION 1. This Act is intended to comprehensively address Hawaii's decades-long overdependence on imported oil for its energy by establishing a bold, strategic energy policy framework of integrated measures to encourage and support market-based development of reliable, cost-effective, more self-reliant energy systems. The Act's integrated, coordinated, and complementary measures constitute a network of policy pathways to achieve results over the near-, mid-, and long-term. This will enable Hawaii to attain a niche leadership role in the global hydrogen energy economy and accelerate the development of the State's own indigenous, renewable energy resources.

For years, Hawaii's dependence on oil has translated into high energy prices and exposed its economy to grave vulnerability from sudden, severe oil price spikes. Presently, this dependency on fossil fuels has heightened oil supply insecurity as Hawaii's oil refiners must increasingly import

crude oil from the Middle East and politically unstable oil-producing countries.

This Act provides policy mechanisms such as: a state procurement preference for biofuels and biofuel blends in diesel fuel or boiler fuel purchase contracts; and the establishment of a unique renewable fuel standard that requires twenty per cent of Hawaii's highway fuel demand to be provided by renewable fuels by 2020.

In addition, demand-side management programs, which encourage people to modify their energy use to maximize energy efficiency, have changed significantly since they were initiated nearly a decade ago in terms of how they are implemented and paid for by Hawaii ratepayers. Ratepayers may no longer be required to pay Hawaii utilities for sales of electricity lost as a result of the success of the demand-side management programs. This Act redirects those fees to provide more funds for other demand-side management programs.

This Act provides a leadership mechanism across all state agencies to ensure the achievement of ambitious energy efficiency standards for building construction and major renovations, as well as targets for energy conservation and efficiency in government-owned or leased facilities. It also

provides the necessary resources to offer the technical training and support for state agencies to attain these tough certification requirements.

The State's combination of abundant renewable resources, high fossil fuel prices, limited geographic area, and recognized expertise in hydrogen research and development makes Hawaii an ideal location to lead the transition to a hydrogen economy over the long term. To accomplish this vision, this Act establishes the Hawaii renewable hydrogen program within the department of business, economic development, and tourism, and creates the Hawaii hydrogen investment capital special fund.

The purpose of this Act is to provide a comprehensive set of measures to reduce Hawaii's dependency on fossil fuel, maximize energy efficiency, and encourage the development and use of renewable resources and alternative fuels across the State. Specifically, the Act:

(1) Establishes a procurement preference for biofuels and biofuel blends in diesel fuel and boiler fuel purchase contracts;

(2) Provides for priority handling and processing of state agency permits required for renewable energy projects;

(3) Establishes renewable fuel standards;

(4) Extends the repeal date of section 237-27.1 which establishes an exemption from the imposition of general excise taxes for the sale of alcohol fuels, including neat biomass-derived alcohol liquid fuel and mixtures containing at least ten volume per cent denatured biomass-derived alcohol fuel for commercial use;

(5) Authorizes the public utilities commission to establish a public benefits fund to support demand-side management and renewable energy programs;

(6) Requires the public utilities commission to re-evaluate utility fuel adjustment clauses;

(7) Requires the establishment of a utility ratemaking structure that:

(A) Includes a methodology to establish the fifteen and twenty-year fixed price for renewable energy power or renewable fuel for power production; and

(B) Provides a system of incentives and penalties encouraging Hawaii's electric utility companies to use cost-effective renewable energy resources found in Hawaii;

(8) Establishes the Hawaii renewable hydrogen program and the hydrogen investment capital special fund;

(9) Clarifies the role of the director of business, economic development, and tourism as Hawaii's chief business advocate and state energy resources coordinator; and

(10) Provides funding:

(A) For an inventory of state lands and offshore areas available for renewable energy;

(B) For assistance to the agricultural community for renewable energy development;

(C) For a statewide multi-fuel biofuels production assessment;

(D) For the Hawaii renewable hydrogen program and the hydrogen investment capital special fund; and

(E) To enable state agencies to meet energy efficiency goals for state facilities and vehicles.

Part II. Alternate Transportation Fuels and Vehicles

SECTION 2. Chapter 103D, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

1 "**§103D-A 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 cent
8 biodiesel. For blends containing both biodiesel and petroleum
9 based diesel, the preference shall be applied only to the
10 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 cent
13 biofuel. For blends containing both biofuel and petroleum based
14 boiler fuel, the preference shall be applied only to the biofuel
15 portion of the blend.
16 (d) As used in this section, "biodiesel" means a vegetable
17 oil based fuel, produced in Hawaii, that meets ASTM
18 International Standard D6751, "Specification for Biodiesel Fuel
19 Blend Stock (B100) for Distillate Fuels", as amended.
20 (e) As used in this section, "biofuel" means fuel produced
21 in Hawaii from non-petroleum plant or animal-based sources that
22 can be used for the generation of heat or power."

SECTION 3. Section 226-18, Hawaii Revised Statutes, is amended to read as follows:

"**§226-18 Objectives and policies for facility systems--energy.** (a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;

(2) Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased;

(3) Greater energy security in the face of threats to Hawaii's energy supplies and systems; and

(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.

(b) To achieve the energy objectives, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable energy services to accommodate demand.

(c) To further achieve the energy objectives, it shall be the policy of this State to:

(1) Support research and development as well as promote the use of renewable energy sources;

(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;

(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;

(4) Promote all cost-effective conservation of power and fuel supplies through measures including:

(A) Development of cost-effective demand-side management programs;

(B) Education; and

(C) Adoption of energy-efficient practices and technologies;

(5) Ensure to the extent that new supply-side resources are needed, the development or expansion of energy systems [~~utilizes the~~] <u>that utilize a diverse assortment of</u> least-cost energy supply [~~option~~]

options and resources and [~~maximizes~~] maximize efficient technologies;

(6) Support research, development, and demonstration of energy efficiency, load management, and other demand-side management programs, practices, and technologies;

(7) Promote alternate fuels and energy efficiency by encouraging diversification of transportation fuels, modes, and infrastructure;

(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications; [~~and~~]

(9) Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives[~~.~~];

(10) Provide priority handling and processing of, and expedite action on, all state agency permits required for renewable energy projects; and

(11) Support a renewable fuels standard of ten per cent of highway fuel demand to be provided by renewable fuels by 2010, fifteen per cent of highway fuel demand to be provided by renewable fuels by 2015, and twenty per

cent by of highway fuel demand to be provided by renewable fuels by 2020. "Renewable fuels" include:

(A) Ethanol, with each gallon of ethanol produced from cellulosic materials considered the equivalent of 2.5 gallons of noncellulosic ethanol;

(B) Biodiesel; and

(C) Hydrogen or other liquid or gaseous fuels produced either from renewable feedstocks, including organic wastes, or from water, using electricity from renewable energy sources."

SECTION 4. Section 237-27.1, Hawaii Revised Statutes, is amended by amending subsection (d) to read as follows:

"(d) This section shall be repealed on December 31, [~~2006.~~] 2009."

SECTION 5. There is appropriated out of the general revenues of the State of Hawaii the sum of $200,000, or so much thereof as may be necessary for fiscal year 2006-2007, for a statewide multi-fuel biofuels production assessment of potential feedstocks, technologies, and economics of the various renewable fuels pathways and the potential for ethanol, biodiesel, and renewable hydrogen production to contribute to Hawaii's near-,

mid-, and long-term energy needs. The sum appropriated shall be expended by the department of business, economic development, and tourism for the purposes of this part.

Part III. Energy Efficiency and Renewable Energy

SECTION 6. There is appropriated out of the general revenues of the State of Hawaii the sum of $630,000, or so much thereof as may be necessary for fiscal year 2006-2007, to provide two full-time permanent positions within the department of business, economic development, and tourism to provide technical and other assistance and support, including training, to state agencies and programs to enable the State to meet energy efficiency goals for state facilities and vehicles. The sum appropriated shall be expended by the department of business, economic development, and tourism.

SECTION 7. Chapter 269, Hawaii Revised Statutes, is amended by adding five new sections to be appropriately designated and to read as follows:

"**§269-A Public benefits fund; authorization.** The public utilities commission, by order or rule, may redirect the funds collected through the current demand-side management surcharge by Hawaii's electric utilities into a public benefits fund that may be established by the commission. If the public utilities

1 commission establishes a public benefits fund, the surcharge
2 shall be known as the public benefits fee. The fee shall be
3 shown separately on each customer's bill, paid to a fund
4 administrator appointed by the public utilities commission, and
5 deposited into the fund. Moneys in the fund shall be ratepayer
6 funds that shall be used to support demand-side management and
7 renewable energy programs and services that meet the
8 requirements of section 269-92. Balances in the fund shall be
9 carried forward and remain in the fund at the end of each fiscal
10 year. These moneys shall not be available to meet any current
11 or past general obligations of the State. Interest earned shall
12 accrue to the fund.
13 **§269-B Public benefits fund administrator; establishment.**
14 The public utilities commission shall appoint a fund
15 administrator to operate and manage the programs established in
16 section 269-A. The fund administrator shall not expend more
17 than ten per cent of the fund in any fiscal year for
18 administration of the programs established by section 269-A.
19 The fund administrator shall report to the public utilities
20 commission on a regular basis. The fund administration shall be
21 delegated to a third party based upon the requirements imposed
22 upon the public utilities commission in section 269-C.

1 Notwithstanding any other provision of law, the fund
2 administrator shall not be a utility or a utility affiliate.
3 **§269-C Requirements for the public benefits fund**
4 **administrator.** The fund administrator shall:
5 (1) Have experience and expertise in energy efficient and
6 renewable energy technologies and methods;
7 (2) Have experience and expertise in implementing demand-
8 side management or energy efficiency and renewable
9 energy programs;
10 (3) Promote and implement programs, methods, and
11 technologies that support energy efficiency and the
12 use of renewable energy;
13 (4) Require that continued or improved efficiencies be
14 made in the production, delivery, and use of demand-
15 side management and renewable energy products and
16 services;
17 (5) Build on the energy efficiency expertise and
18 capabilities that have developed or may develop in the
19 State and consult with state agency experts;
20 (6) Promote program initiatives, incentives, and market
21 strategies that address the needs of individuals or

1 businesses facing the most significant barriers to
2 participation;
3 (7) Promote coordinated program delivery, including
4 coordination with low-income home energy assistance
5 and other demand-side management and renewable energy
6 programs, and utility programs;
7 (8) Consider innovative approaches to delivering demand-
8 side management and renewable energy products and
9 services, including strategies to encourage third
10 party financing and customer contributions to the cost
11 of demand-side management and renewable energy
12 products and services; and
13 (9) Submit to the public utilities commission for review
14 and approval a multi-year budget and planning cycle
15 that promotes program improvement, program stability,
16 and maturation of programs and delivery resources.
17 **§269-D Transitioning from utility demand-side management**
18 **programs to the public benefits fund.** If the public utilities
19 commission establishes a public benefits fund pursuant to
20 section 269-A, the commission shall:
21 (1) Develop a transition plan that ensures that utility
22 demand-side management programs are continued until

the transition date, to be established by the public utilities commission, and that the fund administrator will be able to provide demand-side management and renewable energy products and services on the transition date;

(2) Ensure that all retail electricity customers, including state and county agencies, regardless of the retail electricity or gas provider, have an opportunity to participate in and benefit from a comprehensive set of cost-effective demand-side management and renewable energy programs and initiatives designed to overcome barriers to participation;

(3) Approve programs, measures, and delivery mechanisms that reasonably reflect current and projected utility integrated resource planning, market conditions, technological options, and environmental benefits;

(4) Provide for delivery of these programs as rapidly as possible, taking into consideration the need for these services and cost-effective delivery mechanisms;

(5) Consider the unique geographic location of the State and the high costs of energy in developing programs

that will promote technologies to advance energy efficiency and use of renewable energy and permit the State to take advantage of activities undertaken in other states, including the opportunity for multi-state programs;

(6) Provide for independent evaluation of programs delivered under section 269-A;

(7) Require that any entity approved by the public utilities commission under section 269-C deliver programs in an effective, efficient, timely, and competent manner and meet standards that are consistent with state policy and public utilities commission decisions; and

(8) On or before January 1, 2008, and every three years thereafter, require verification by an independent auditor of the reported energy and capacity savings and incremental renewable energy production savings associated with the programs delivered by any entity appointed by the public utilities commission to deliver demand-side management and renewable energy programs under section 269-A."

SECTION 8. Section 269-1, Hawaii Revised Statutes, is amended by adding three new definitions to be appropriately inserted and to read as follows:

""Automatic adjustment clause" means a provision of a rate, charge, or practice that provides for increases and decreases, or both, and has been previously approved by the commission.

"Fuel adjustment clause" means a provision of a rate schedule that provides for increases or decreases, or both, without prior hearing, in rates and that reflects increases or decreases, or both, in costs incurred by an electric or gas utility for fuel and purchased energy due to changes in the unit cost of fuel and purchased energy.

"Fuel oil" includes all petroleum-based fuels, including but not limited to residual fuel oil, diesel fuel oil, naphtha, and other fuels refined from petroleum."

SECTION 9. Section 269-16, Hawaii Revised Statutes, is amended to read as follows:

"**§269-16 Regulation of utility rates; ratemaking procedures.** (a) All rates, fares, charges, classifications, schedules, rules, and practices made, charged, or observed by any public utility, or by two or more public utilities jointly, shall be just and reasonable and shall be filed with the public

utilities commission. The rates, fares, classifications, charges, and rules of every public utility shall be published by the public utility in such manner as the public utilities commission may require, and copies shall be furnished to any person on request.

To the extent the contested case proceedings referred to in chapter 91 are required in any rate proceeding in order to ensure fairness and to provide due process to parties [~~which~~] that may be affected by rates approved by the commission, [~~such~~] the evidentiary hearings shall be conducted expeditiously and shall be conducted as a part of the ratemaking proceeding.

(b) No rate, fare, charge, classification, schedule, rule, or practice, other than one established pursuant to an automatic rate adjustment clause previously approved by the commission, shall be established, abandoned, modified, or departed from by any public utility, except after thirty days' notice as prescribed in section 269-12(b) to the commission and prior approval by the commission for any increases in rates, fares, or charges. The commission [~~may~~], in its discretion and for good cause shown, may allow any rate, fare, charge, classification, schedule, rule, or practice to be established, abandoned, modified, or departed from upon notice less than that provided

for in section 269-12(b). A contested case hearing shall be held in connection with any increase in rates and [~~such~~] the hearing shall be preceded by a public hearing as prescribed in section 269-12(c), at which the consumers or patrons of the public utility may present testimony to the commission concerning the increase. The commission, upon notice to the public utility, may suspend the operation of all or any part of the proposed rate, fare, charge, classification, schedule, rule, or practice or any proposed abandonment or modification thereof or departure therefrom and, after a hearing, by order may regulate, fix, and change all such rates, fares, charges, classifications, schedules, rules, and practices, so that the same shall be just and reasonable and prohibit rebates and unreasonable discrimination between localities, or between users or consumers, under substantially similar conditions, regulate the manner in which the property of every public utility is operated with reference to the safety and accommodation of the public, prescribe its form and method of keeping accounts, books, and records, and its accounting system, regulate the return upon its public utility property, the incurring of indebtedness relating to its public utility business, and its financial transactions, and do all things in addition [~~which~~]

that are necessary and in the exercise of [~~such~~] its power and jurisdiction, all of which as so ordered, regulated, fixed, and changed [~~shall be~~] are just and reasonable[~~,~~] and [~~such as shall~~] provide a fair return on the property of the utility actually used or useful for public utility purposes.

(c) The commission [~~may~~], in its discretion and after public hearing, upon showing by a public utility of probable entitlement and financial need, may authorize temporary increases in rates, fares, and charges; provided that the commission shall by order require the public utility to return, in the form of an adjustment to rates, fares, or charges to be billed in the future, any amounts[~~,~~] with interest, at a rate equal to the rate of return on [~~such~~] the public utility's rate base found to be reasonable by the commission, received by reason of [~~such~~] continued operation [~~which~~], that are in excess of the rates, fares, or charges finally determined to be just and reasonable by the commission. Interest on any [~~such~~] excess shall commence as of the date that any rate, fare, or charge goes into effect [~~which~~] that results in [~~any such~~] the excess and shall continue to accrue on the balance of [~~any such~~] the excess until returned.

(d) By December 31, 2007, to share the risks of reliance on oil fired generation, the commission shall determine whether to either eliminate the fuel adjustment clause or establish ratemaking provisions to amend the fuel adjustment clause so that oil cost increases and decreases are shared between utility shareholders and utility customers; provided that if the commission determines that the fuel adjustment clause should not be eliminated, it shall be amended. Ratemaking shall set the percentage of changes in fuel prices that may be automatically passed through the fuel adjustment clause.

(e) If the commission conducts ratemaking to amend the fuel adjustment clause pursuant to subsection (d), the long-term price for fossil fuels that is used to define base rates shall be consistent with the long-term price of fossil fuels that is used to determine the long-term price for renewables as defined in section 269-27.2.

[~~(d)~~] (f) The commission shall make every effort to complete its deliberations and issue its decision as expeditiously as possible and before nine months from the date the public utility filed its completed application; provided that in carrying out this mandate, the commission shall require all parties to a proceeding to comply strictly with procedural

time schedules [~~which~~] that it establishes. If a decision is rendered after the nine-month period, the commission shall report in writing [~~report~~] the reasons therefor to the legislature within thirty days after rendering the decision.

Notwithstanding subsection (c), if the commission has not issued its final decision on a public utility's rate application within the nine-month period stated in this section, the commission [~~shall~~], within one month after the expiration of the nine-month period, shall render an interim decision allowing the increase in rates, fares and charges, if any, to which the commission, based on the evidentiary record before it, believes the public utility is probably entitled. The commission may postpone its interim rate decision for thirty days if the commission considers the evidentiary hearings incomplete. In the event interim rates are made effective, the commission shall by order require the public utility to return, in the form of an adjustment to rates, fares, or charges to be billed in the future, any amounts[~~,~~] with interest, at a rate equal to the rate of return on [~~such~~] the public utility's rate base found to be reasonable by the commission, received under [~~such~~] the interim rates [~~which~~], that are in excess of the rates, fares or charges finally determined to be just and reasonable by the

commission. Interest on any [~~such~~] excess shall commence as of the date that any rate, fare, or charge goes into effect [~~which~~] that results in [~~any such~~] the excess and shall continue to accrue on the balance of [~~any such~~] the excess until returned.

The nine-month period in this subsection shall begin only after a completed application has been filed with the commission and a copy served on the consumer advocate. The commission shall establish standards concerning the data required to be set forth in the application in order for it to be deemed a completed application. The consumer advocate [~~may~~], within twenty-one days after receipt, may object to the sufficiency of any application, and the commission shall hear and determine any [~~such~~] objection within twenty-one days after [~~the same~~] it is filed. If the commission finds that the objections are without merit, the application shall be deemed to have been completed upon original filing. If the commission finds the application to be incomplete, it shall require the applicant to submit an amended application consistent with its findings, and the nine-month period shall not commence until the amended application is filed.

[~~(e)~~] (g) In any case of two or more organizations, trades, or businesses (whether or not incorporated, whether or

not organized in the State of Hawaii, and whether or not affiliated) owned or controlled directly or indirectly by the same interests, the commission may distribute, apportion, or allocate gross income, deductions, credits or allowances between or among the organizations, trades, or businesses, if it determines that the distribution, apportionment, or allocation is necessary in order to adequately reflect the income of any such organizations, trades, or businesses to carry out the regulatory duties imposed by this section.

[~~(f)~~] (h) Notwithstanding any law to the contrary, for public utilities having annual gross revenues of less than $2,000,000, the commission may make and amend its rules and procedures [~~which will~~] to provide the commission with sufficient facts necessary to determine the reasonableness of the proposed rates without unduly burdening the utility company and its customers. In the determination of the reasonableness of the proposed rates, the commission shall:

(1) Require the filing of a standard form application to be developed by the commission. The standard form application for general rate increases shall describe the specific facts that must be submitted to support a determination of the reasonableness of the proposed

rates, and require the submission of financial information in conformance with a standard chart of accounts to be approved by the commission, and other commission guidelines to allow expeditious review of a requested general rate increase application;

(2) Hold a public hearing as prescribed in section 269-12(c) at which the consumers or patrons of the public utility may present testimony to the commission concerning the increase. The public hearing shall be preceded by proper notice, as prescribed in section 269-12; and

(3) Make every effort to complete its deliberations and issue a proposed decision and order within six months from the date the public utility files a completed application with the commission[~~.~~]; provided that all parties to the proceeding strictly comply with the procedural schedule established by the commission and no person is permitted to intervene. If a proposed decision and order is rendered after the six-month period, the commission shall report in writing the reasons therefor to the legislature within thirty days after rendering the proposed decision and order.

Prior to the issuance of the commission's proposed decision and order, the parties shall not be entitled to a contested case hearing.

If all parties to the proceeding accept the proposed decision and order, the parties shall not be entitled to a contested case hearing, and section 269-15.5 shall not apply. If the commission permits a person to intervene, the six-month period shall not apply and the commission shall make every effort to complete its deliberations and issue its decision within the nine-month period from the date the public utility's completed application was filed, pursuant to subsections (b), (c), and [~~(d).~~] (f).

If a party does not accept the proposed decision and order, either in whole or in part, that party shall give notice of its objection or nonacceptance within the timeframe prescribed by the commission in the proposed decision and order, setting forth the basis for its objection or nonacceptance; provided that the proposed decision and order shall have no force or effect pending the commission's final decision. If notice is filed, the above six-month

period shall not apply and the commission shall make every effort to complete its deliberations and issue its decision within the nine-month period from the date the public utility's completed application was filed as set forth in subsection [~~(d).~~] (f). Any party that does not accept the proposed decision and order under this paragraph shall be entitled to a contested case hearing; provided that the parties to the proceeding may waive the contested case hearing.

Public utilities subject to this subsection shall follow the standard chart of accounts to be approved by the commission for financial reporting purposes. The public utilities shall file a certified copy of the annual financial statements in addition to an updated chart of accounts used to maintain their financial records with the commission and consumer advocate within ninety days from the end of each calendar or fiscal year, as applicable, unless this timeframe is extended by the commission. The owner, officer, general partner, or authorized agent of the utility shall certify that the reports were prepared in accordance with the standard chart of accounts."

SECTION 10. Section 269-27.2, Hawaii Revised Statutes, is amended by amending subsection (c) to read as follows:

"(c) The rate payable by the public utility to the producer for the nonfossil fuel generated electricity supplied to the public utility shall be as agreed between the public utility and the supplier and as approved by the public utilities commission; provided that in the event the public utility and the supplier fail to reach an agreement for a rate, the rate shall be as prescribed by the public utilities commission according to the powers and procedures provided in this chapter.

In the exercise of its authority to determine the just and reasonable rate for the nonfossil fuel generated electricity supplied to the public utility by the producer, the commission shall establish that the rate for purchase of electricity by a public utility shall not be more than one hundred per cent of the cost avoided by the utility when the utility purchases the electrical energy rather than producing the electrical energy.

The ratemaking structure shall also include a methodology to establish prudent fifteen and twenty-year fixed prices for renewable energy power or renewable fuel for power production. The methodology shall:

(1) Establish a periodic review process for the determination of these prudent fixed prices for renewables;

(2) Establish a competitive bidding process for renewable power, which may be integrated with other power supply or all source competitive bidding processes at the public utilities commission's discretion; and

(3) Define an advanced approval process for the procurement of long-term fixed price renewable energy sources that are competitively bid and whose cost is less than the prudent long-term fixed price for renewables as determined above."

SECTION 11. Section 269-91, Hawaii Revised Statutes, is amended to read as follows:

"**§269-91 [~~[]~~]Definitions.[~~]~~]** For the purposes of this [~~[~~]part[~~]~~]:

"Cost-effective" means the ability to produce or purchase electric energy or firm capacity, or both, from renewable energy resources at or below avoided costs[~~.~~] consistent to the extent possible with the methodology set by the public utilities commission in accordance with section 269-27.2.

"Electric utility company," means a public utility as defined under section 269-1, for the production, conveyance, transmission, delivery, or furnishing of power.

"Incentive" means a financial reward established by the public utilities commission for meeting or exceeding the renewable portfolio standard in a particular year. The incentive may be paid on a per kilowatt-hour basis for renewable energy purchased from a non-utility generator for sale to utility customers, or may be an added return on capital for utility-owned renewable generation systems.

"Penalty" means a financial disincentive established by the public utilities commission for failing to meet the renewable portfolio standard in a particular year. Any penalty shall be paid from utility profits and shall not be passed on to the ratepayers.

"Renewable energy" means electrical [~~energy produced by wind, solar energy, hydropower, landfill gas, waste to energy, geothermal resources, ocean thermal energy conversion, wave energy, biomass, including municipal solid waste, biofuels, or fuels derived from organic sources, hydrogen fuels derived from renewable energy, or fuel cells where the fuel is derived from renewable sources.~~], thermal, or mechanical energy generated or produced utilizing:

(1) Wind, the sun, falling water, landfill gas, geothermal, ocean water and waves, and biomass,

including biomass crops, agricultural residues, and municipal solid waste;

(2) Biofuels, which are fuels produced from organic sources such as biomass crops, agricultural residues, and oil crops, including palm oil, canola oil, soybean oil, waste cooking oil, grease, and food wastes; and

(3) Hydrogen produced from renewable energy sources.

Where [~~biofuels,~~] fuels, including hydrogen, [~~or fuel cell fuels~~] are produced by a combination of renewable and nonrenewable means, the proportion attributable to the renewable [~~means~~] sources shall be credited as renewable energy. Where fossil and renewable fuels are co-fired in the same generating unit, the unit shall be considered to [~~generate~~] produce renewable electricity in direct proportion to the percentage of the total heat value represented by the heat value of the renewable fuels. When a combination of fossil and renewable sources are used to charge a pumped hydro facility, the facility shall be considered to generate renewable electricity in direct proportion to the percentage of the renewable electricity to the total that is used to pump water to the upper reservoir.

"Renewable energy" also means electrical energy savings brought about by the use of renewable displacement or off-set

technologies, including solar [~~and heat pump~~] water heating, seawater air-conditioning district cooling systems, solar air-conditioning, and customer-sited, net-metered and non-net-metered renewable energy systems, such as photovoltaic, wind, biomass, and hydro systems.

For purposes of this section, "renewable energy" also includes electrical energy savings resulting from the use of energy efficient technologies, such as the use of heat pump water heating, ice storage, quantifiable energy conservation measures, use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies[~~,~~] and central station power projects.

"Renewable portfolio standard" means the percentage of electrical energy sales that is represented by renewable energy."

SECTION 12. Section 269-92, Hawaii Revised Statutes, is amended to read as follows:

"**§269-92 Renewable portfolio standards.** Each electric utility company that sells electricity for consumption in the State shall establish a renewable portfolio standard of:

[~~(1) Seven per cent of its net electricity sales by December 31, 2003;~~

~~(2) Eight per cent of its net electricity sales by December 31, 2005;~~

~~(3)~~] (1) Ten per cent of its net electricity sales by December 31, 2010;

[~~(4)~~] (2) Fifteen per cent of its net electricity sales by December 31, 2015; and

[~~(5)~~] (3) Twenty per cent of its net electricity sales by December 31, 2020.

[~~The public utilities commission shall determine if an electric utility company is unable to meet the renewable portfolio standards in a cost-effective manner, or as a result of circumstances beyond its control which could not have been reasonably anticipated or ameliorated. If this determination is made, the electric utility company shall be relieved of responsibility for meeting the renewable portfolio standard for the period of time that it is unable to meet the standard.~~] If it is determined that an electric utility company failed to meet the renewable portfolio standard, the utility shall be subject to penalties to be established by the public utilities commission."

SECTION 13. Section 269-95, Hawaii Revised Statutes, is amended to read as follows:

"[~~[~~]§269-95[~~]~~] **Renewable portfolio standards study.** The public utilities commission shall:

(1) By December 31, [~~2006,~~] 2007, develop and implement a utility ratemaking structure [~~which~~] that may include but is not limited to performance-based ratemaking, to provide a system of incentives and penalties that encourage Hawaii's electric utility companies to use cost-effective renewable energy resources found in Hawaii to meet the renewable portfolio standards established in section 269-92[~~, while allowing for deviation from the standards in the event that the standards cannot be met in a cost-effective manner, or as a result of circumstances beyond the control of the utility which could not have been reasonably anticipated or ameliorated~~];

(2) Gather, review, and analyze empirical data to determine the extent to which any proposed utility ratemaking structure would impact electric utility companies' profit margins, and to ensure that [~~these profit margins do not decrease~~] the electric utility

1 companies' opportunity to earn a fair rate of return
2 is not diminished as a result of the implementation of
3 the proposed ratemaking structure;
4 (3) Using funds from the public utilities special fund,
5 contract with the Hawaii natural energy institute of
6 the University of Hawaii to conduct independent
7 studies to be reviewed by a panel of experts from
8 entities such as the United States Department of
9 Energy, National Renewable Energy Laboratory, Electric
10 Power Research Institute, Hawaii electric utility
11 companies, and other similar institutions with the
12 required expertise. These studies shall include
13 findings and recommendations regarding:
14 (A) The capability of Hawaii's electric utility
15 companies to achieve renewable portfolio
16 standards in a cost-effective manner, and shall
17 assess factors such as the impact on consumer
18 rates, utility system reliability and stability,
19 costs and availability of appropriate renewable
20 energy resources and technologies, effect of
21 power purchase agreement terms on the financial
22 viability of renewable power producers,

permitting approvals, impacts on the economy, culture, community, environment, land and water, demographics, and other factors deemed appropriate by the commission; and

(B) Projected renewable portfolio standards to be set five and ten years beyond the then current standards;

(4) Revise the standards based on the best information available at the time if the results of the studies conflict with the renewable portfolio standards established by section 269-92; and

(5) Report its findings and revisions to the renewable portfolio standards based on its own studies and those contracted under paragraph (3), to the legislature no later than twenty days before the convening of the regular session of 2009, and every five years thereafter."

SECTION 14. Section 269-94, Hawaii Revised Statutes, is repealed.

["~~[**§269-94 Waivers, extensions, and incentives.**] Any electric utility company not meeting the renewable portfolio standard shall report to the public utilities commission within~~

~~ninety days following the goal dates established in section [269-92], and provide an explanation for not meeting the renewable portfolio standard. The public utilities commission shall have the option to either grant a waiver from the renewable portfolio standard or an extension for meeting the prescribed standard.~~

~~The public utilities commission may provide incentives to encourage electric utility companies to exceed their renewable portfolio standards or to meet their renewable portfolio standards ahead of time, or both.~~"]

SECTION 15. There is appropriated out of the general revenues of the State of Hawaii the sum of $200,000, or so much thereof as may be necessary for fiscal year 2006-2007, to complete a comprehensive inventory of state lands and offshore areas available for renewable energy, establish renewable energy resource development sub-zones, and consider streamlining the permitting for the sub-zones to encourage and facilitate renewable energy development and attract private investment. The sum appropriated shall be expended by the department of land and natural resources for the purposes of this section.

SECTION 16. There is appropriated out of the general revenues of the State of Hawaii the sum of $150,000, or so much

thereof as may be necessary, for fiscal year 2006-2007 to provide assistance to the agricultural community interested in developing energy projects, especially by the production of renewable energy from energy crops or agricultural waste or other organic types of waste streams, such as municipal solid waste; provided that this shall include assistance in seeking funding available from the United States Departments of Agriculture and Energy and other external sources. The sum appropriated shall be expended by the department of agriculture for the purposes of this section.

Part IV. Hawaii Renewable Hydrogen Program

SECTION 17. The Hawaii Revised Statutes is amended by adding a new section to be appropriately designated and to read as follows:

"§ -A **Hawaii renewable hydrogen program.** There is established within the department of business, economic development, and tourism, a Hawaii renewable hydrogen program, to coordinate the State's transition to a renewable hydrogen economy. Towards this goal, the program shall plan, implement, and conduct activities including but not limited to:

(1) The establishment of strategic partnerships with the private sector; the federal government; national and

1 international organizations, such as national
2 laboratories and universities; other states; and
3 Hawaii stakeholders for research, development,
4 testing, and deployment of renewable hydrogen
5 technologies;
6 (2) Engineering and economic studies to define Hawaii's
7 potential for renewable hydrogen and evaluate near-
8 term project opportunities presented by the State's
9 available renewable resources;
10 (3) Electric grid reliability and security projects that
11 will enable integration of extensive renewable
12 electricity on the island of Hawaii;
13 (4) Hydrogen demonstration projects, including
14 infrastructure for the production, storage, and
15 refueling of hydrogen vehicles;
16 (5) A statewide hydrogen economy public education and
17 outreach plan, focusing on the island of Hawaii, to be
18 developed in coordination with Hawaii's public
19 education institutions;
20 (6) Promotion of Hawaii's renewable hydrogen assets and
21 project opportunities to potential partners and
22 investors;

(7) A plan, for implementation during the 2007-2010 time frame, to more fully deploy hydrogen technologies and infrastructure capable of supporting the island of Hawaii's fuel needs, including but not limited to:

(A) Expanded installation of hydrogen production facilities;

(B) Development of integrated energy systems including hydrogen vehicles;

(C) Construction of additional hydrogen refueling stations; and

(D) Encouragement of building design and construction that fully incorporates clean energy assets, including reliance on hydrogen-fueled distributed generation.

(8) A plan, for implementation during the 2010-2020 time frame, to transition the island of Hawaii to a hydrogen-fueled economy by 2020, and to initiate that model throughout the State; and

(9) Evaluation of policy instruments and development of policy recommendations, in coordination with program partners, to encourage the adoption of hydrogen-fueled vehicles, continually replenish the hydrogen

investment capital special fund, and support investment in hydrogen infrastructure, including production, storage, and dispensing facilities."

SECTION 18. Chapter 211F, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"**§211F- Hydrogen investment capital special fund.** (a) There shall be established the hydrogen investment capital special fund into which shall be deposited:

(1) Appropriations made by the legislature to the fund;

(2) All contributions from public or private partners;

(3) All interest earned on or accrued to moneys deposited in the special fund; and

(4) Any other moneys made available to the special fund from other sources.

(b) Moneys in the fund shall be used to:

(1) Seed private sector and federal projects for research, development, testing, and deployment of renewable hydrogen systems in Hawaii;

(2) Pay reasonable expenses incurred by fund advisory board members in the execution of their relevant duties; and

1 (3) For any other purpose deemed necessary to carry out
2 the purposes of this section.
3 (c) Investment of the hydrogen investment capital special
4 fund in hydrogen projects shall be made with the advice and
5 assistance of an advisory board of experts and knowledgeable
6 individuals, who shall be appointed by the governor from
7 nominees proposed by the department of business, economic
8 development, and tourism, to help the State develop projects and
9 partnerships with industry and the federal government.
10 SECTION 19. (a) There is appropriated out of the general
11 revenues of the State of Hawaii the sum of $750,000, or so much
12 thereof as may be necessary, for fiscal year 2006-2007 to carry
13 out the purposes of this part, of which $250,000 shall be
14 allocated to three permanent full-time equivalent (3.0 FTE)
15 professional positions, including a hydrogen program manager,
16 hydrogen program specialist, and hydrogen project specialist.
17 The sum appropriated shall be expended by the department of
18 business, economic development, and tourism for the purposes of
19 this part.
20 (b) There is appropriated out of the general revenues of
21 the State of Hawaii the sum of $10,000,000 for fiscal year 2006-
22 2007 to be paid into the hydrogen investment capital special

fund to carry out the purposes of sections 17 and 18 of this Act. The sum appropriated shall be expended by department of business, economic development, and tourism.

SECTION 20. There is appropriated out of the hydrogen investment capital special fund the sum of $10,000,000, or so much thereof as may be necessary, for fiscal year 2006-2007 to be used for the purposes of the hydrogen investment capital special fund as set forth under section 211F- . The sum appropriated shall be expended by the department of business, economic development, and tourism for the purposes of this part.

Part V.

SECTION 21. The director of business, economic development, and tourism, in the director's role as both Hawaii's chief business advocate and the state energy resources coordinator, shall be responsible for facilitating and coordinating the State's efforts to implement the purposes of this Act. Accordingly, the director of business, economic development, and tourism, supported by relevant department staff, shall develop and establish formal and informal procedures and mechanisms for efficient and effective coordination and collaboration with, and among, the departments of taxation, transportation, land and natural resources,

agriculture, budget and finance, and accounting and general services, and other relevant federal, state, and county government agencies and stakeholders for this purpose. State agencies named in this section and those involved at the request of the director of business, economic development, and tourism shall cooperate and provide support to the fullest possible extent to implement the purposes of this Act.

SECTION 22. 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 23. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 24. This Act shall take effect upon its approval; provided that sections 5, 6, 15, 16, 19, and 20 of this Act shall take effect on July 1, 2006.

Report Title:
Energy; Self-reliance

Description:
Provides a comprehensive set of measures to reduce Hawaii's dependency on fossil fuel, maximize energy efficiency, and encourage the development and use of renewable resources and alternative fuels across the State. (HD1)