
A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

- 1 SECTION 1. The purpose of this Act is to significantly
2 decrease reliance on fossil fuels and increase Hawaii's energy
3 self-sufficiency by:
- 4 (1) Increasing public participation in the public utility
5 commission process while decreasing the use of paper;
- 6 (2) Changing the name of the consumer advocate to the
7 ratepayer advocate under the public utility commission
8 to more accurately reflect the responsibilities of
9 that office;
- 10 (3) Adding definitions to chapter 269, Hawaii Revised
11 Statutes, relating to the public utilities commission
12 and to chapter 196, Hawaii Revised Statutes, relating
13 to energy resources;
- 14 (4) Amending the renewable portfolio standards to mandate
15 greater renewable energy penetration levels;
- 16 (5) Establishing a photovoltaic feed-in tariff financed by
17 a carbon fee;
- 18 (6) Establishing a carbon fee for grid-based electricity;



- 1 (7) Requiring solar water heaters for new and existing
- 2 buildings under certain conditions;
- 3 (8) Increasing renewable energy rebates;
- 4 (9) Establishing a carbon tax for vehicles to be collected
- 5 and expended by the counties for transportation
- 6 mitigation measures; and
- 7 (10) Establishing an ocean energy council to develop ocean
- 8 energy systems.

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

12 "§196-A Solar energy and comparable renewable energy
13 devices; new construction. (a) Any new single-family
14 residence, condominium, townhouse, commercial building, or state
15 or county building constructed after January 1, 2009, shall
16 include the installation of a solar energy or comparable
17 renewable energy device to heat water, except when:

18 (1) The rebate period exceeds three years due to area,
19 climate, or water usage; or

20 (2) The installation is cost prohibitive;
21 as determined by the county building code authority upon receipt
22 of a letter submitted by the owner or developer from an



1 architect or engineer licensed under chapter 464 stating the
2 reasons that either paragraph (1) or (2) applies.

3 (b) An owner of five or more buildings that meet the
4 requirements of subsection (a)(1) or (2) shall install at least
5 fifteen per cent of the required installations each year until
6 one hundred per cent of the required installations have been
7 made.

8 (c) Installation of solar energy or comparable renewable
9 energy devices shall be in accordance with policies established
10 by the energy-efficiency utility.

11 (d) The energy-efficiency utility shall provide a rebate
12 to each owner or developer who installs a solar energy or
13 comparable renewable energy device to heat water pursuant to
14 subsection (a) in an amount to be determined by the
15 energy-efficiency utility using funds from the existing utility
16 demand side management fee; provided that the solar water heater
17 is installed by a renewable energy company that is:

18 (1) On the energy-efficiency utility's approved list of
19 certified solar water heating installers; and

20 (2) In good standing with the Hawaii solar energy
21 association.



1 (e) The director of business, economic development, and
2 tourism shall adopt rules pursuant to chapter 91 necessary to
3 implement this section.

4 **§196-B Solar energy and comparable renewable energy**
5 **devices; existing buildings.** (a) Before January 1, 2019, each
6 owner of a single-family residence, condominium, townhouse,
7 commercial building, or state and county building shall install
8 a solar energy or comparable renewable energy device to heat
9 water, unless:

- 10 (1) The rebate period exceeds three years due to building
11 design, locality, climate, or water usage; or
12 (2) The installation is cost prohibitive;
13 as determined by the county building code authority
14 upon receipt of a letter submitted by the owner from
15 an architect or engineer licensed under chapter 464
16 stating the reasons that either paragraph (1) or (2)
17 applies.

18 (b) An owner of five or more buildings that meets the
19 requirements of subsection (a) shall install at least fifteen
20 per cent of the required installations each year until one
21 hundred per cent of the required installations have been made.



1 (c) Installation of solar energy or comparable renewable
2 energy devices shall be in accordance with policies established
3 by the energy-efficiency utility.

4 (d) The energy-efficiency utility shall provide a rebate
5 to each building owner or developer who installs a solar water
6 heater in an amount to be determined by the energy-efficiency
7 utility using funds from the existing utility demand side
8 management fee; provided that the system is installed by a
9 renewable energy company that is:

- 10 (1) On the energy-efficiency utility's approved list of
- 11 certified solar water heating installers; and
- 12 (2) In good standing with the Hawaii Solar Energy
- 13 Association.

14 (e) The director of business, economic development, and
15 tourism shall adopt rules pursuant to chapter 91 necessary to
16 implement this section."

17 SECTION 3. Chapter 201, Hawaii Revised Statutes, is
18 amended by adding a new part to be appropriately designated and
19 to read as follows:

20 **"PART X. OCEAN ENERGY COUNCIL**

21 **§201-A Definitions.** As used in this part:



1 "Base load renewable energy facilities" means the same as
2 that term is defined under section 269-B(c).

3 "Council" means the ocean energy council.

4 "Horizontal directional drilling" means a trenchless
5 approach to the laying of pipes and cables.

6 "Hybrid systems" means the same as that term is defined
7 under section 269-B(c).

8 "Micro grids" means the same as that term is defined under
9 section 269-B(c).

10 "Ocean energy" means energy derived from facilities located
11 in the ocean, including ocean thermal energy conversion, wave
12 energy systems, and tidal energy systems.

13 "Ocean hub" means a micro grid for multiple types of wave
14 energy devices.

15 **§201-B Ocean energy council.** (a) There shall be an ocean
16 energy council, which shall be administratively attached to the
17 department of business, economic development, and tourism.

18 (b) The council shall consist of fourteen members:

19 (1) A representative of each county;

20 (2) The director of business, economic development, and
21 tourism;



- 1 (3) The chairperson of the board of land and natural
- 2 resources;
- 3 (4) The administrator of the aquatic resources division of
- 4 the department of land and natural resources;
- 5 (5) A representative of the University of Hawaii's natural
- 6 energy institute;
- 7 (6) A representative of the University of Hawaii, Hilo
- 8 campus;
- 9 (7) A representative of the office of Hawaiian affairs;
- 10 (8) A representative of the surfing community;
- 11 (9) A representative of the boating community;
- 12 (10) A representative of the fishing community; and
- 13 (11) A representative of the environmental community.
- 14 (c) The council may hire staff necessary to carry out the
- 15 responsibilities of this part.

16 **§201-C Responsibilities.** (a) The council shall:

- 17 (1) Coordinate the State's ocean energy policies;
- 18 (2) Identify sites that can serve as an ocean hub;
- 19 (3) Choose a company or companies to install ocean hubs
- 20 through a competitive bid process;
- 21 (4) Choose, in an open process, the company or companies
- 22 that will test technologies at ocean hubs; and



1 (5) Keep up-to-date on the technologies used and companies
2 involved in ocean energy.

3 (b) Before December 31, 2008, the council shall identify
4 one site in each county that can serve as an ocean energy hub.

5 **§201-D Environmental impact statement.** (a) The
6 department of business, economic development, and tourism shall
7 oversee the creation and publication of an ocean hub
8 environmental impact statement covering the four sites selected
9 by the council pursuant to section 201-C(b).

10 (b) The board of land and natural resources shall be the
11 accepting authority for the environmental impact statement.

12 **§201-E Electric grid interface.** The public utilities
13 commission shall have regulatory authority over the introduction
14 of electricity from ocean hubs onto utility grids pursuant to
15 chapter 269."

16 SECTION 4. Chapter 269, Hawaii Revised Statutes, is
17 amended by adding three new sections to part III to be
18 appropriately designated and to read as follows:

19 **§269-A Feed-in tariff.** (a) As used in this section:

20 "New solar electricity system" means a solar electricity
21 system placed in service after the effective date of this Act.



1 "Solar electricity" means electricity produced by a solar
2 electricity system from solar radiation energy.

3 "Solar electricity producer" means any person who owns,
4 controls, operates, manages, or uses a solar electricity system
5 to produce solar electricity.

6 "Solar electricity purchase agreement" means a contract or
7 tariff under which the electric utility is obliged to purchase
8 solar electricity produced by a new solar electricity system and
9 made available to the electric utility by the solar electricity
10 producer and to compensate the solar electricity producer for
11 the solar electricity provided in accordance with this section.

12 "Solar electricity system" means any identifiable facility,
13 equipment, or apparatus that converts solar radiation energy to
14 electricity, including photovoltaic systems and concentrating
15 solar electric power systems.

16 (b) At the request of a solar electricity producer that
17 places a new solar electricity system in service, the electric
18 utility with the closest electric system, shall interconnect the
19 solar electricity system to the electric system of the electric
20 utility; provided that any technical requirements in the rules
21 of the electric utility, relating to interconnection of
22 distributed generating facilities with the electric utility's



1 electric system, that are approved by the commission, shall
2 apply. Costs incurred by the electric utility to meet technical
3 requirements of interconnection shall be allocated so that those
4 costs that benefit a solar electricity system are borne by the
5 solar electricity producer that uses the solar electricity
6 system to produce solar electricity, in conformity with orders
7 of the commission relating to distributed generation. Electric
8 system data and data of the solar electricity system shall be
9 disclosed by the electric utility and the supplier when
10 necessary to plan and execute any interconnection in conformity
11 with any technical requirements.

12 (c) Each electric utility shall develop a standard solar
13 electricity purchase agreement and shall make the solar
14 electricity purchase agreement available to a solar electricity
15 producer upon request. Each solar electricity purchase
16 agreement shall have a term of twenty years commencing with the
17 date that the new solar electricity system is placed in service.

18 (d) The difference between the number of kilowatt-hours of
19 solar electricity supplied by the solar electricity producer to
20 the electric utility and the number of kilowatt-hours of
21 electricity supplied by the electric utility to the solar
22 electricity producer shall be measured for each monthly billing



1 period during the term of the solar electricity purchase
2 agreement, using net energy metering as defined in section
3 269-101; provided that the term "solar electricity producer"
4 shall be substituted for the term "eligible customer-generator"
5 in the definition. A solar electricity producer that elects to
6 be paid compensation under a solar electricity purchase
7 agreement shall not be an eligible customer-generator for
8 purposes of part VI.

9 (e) At the end of each monthly billing period, if the
10 number of kilowatt-hours of electricity supplied by the electric
11 utility to the solar electricity producer exceeds the number of
12 kilowatt-hours of solar electricity supplied by the solar
13 electricity producer to the electric utility, the solar
14 electricity producer shall compensate the electric utility for
15 the number of kilowatt-hours of electricity supplied by the
16 electric utility in excess of the number of kilowatt-hours of
17 solar electricity supplied to the electric utility. The
18 compensation shall be calculated at the retail rate for the rate
19 class to which the solar electricity producer would be assigned
20 if the solar electricity producer was not a solar electricity
21 producer.



1 (f) At the end of each monthly billing period, if the
2 number of kilowatt-hours of solar electricity supplied by the
3 solar electricity producer to the electric utility exceeds the
4 number of kilowatt-hours of electricity supplied by the electric
5 utility to the solar electricity producer, the electric utility
6 shall compensate the solar electricity producer for the number
7 of kilowatt-hours of solar electricity supplied by the solar
8 electricity producer in excess of the number of kilowatt-hours
9 of electricity supplied to the solar electricity provider. The
10 compensation shall be an amount no less than the number of
11 kilowatt-hours of solar electricity supplied by the electric
12 utility in excess of the number of kilowatt-hours of electricity
13 supplied to the solar electricity producer, multiplied by a rate
14 of compensation that is no less than the greater of:

15 (1) The rate per kilowatt-hour for electricity purchased
16 from the electric utility by the solar electricity
17 producer; or

18 (2) 45 cents per kilowatt-hour.

19 (g) A solar electricity producer shall not be subject to
20 any fee, charge, or rate by the electric utility for any
21 unbundled costs associated with providing any standby services,
22 including any unbundled costs associated with providing any



1 backup services, and shall not be subject to any fee, charge, or
2 rate by the electric utility for any capital costs incurred by
3 the electric utility in expectation that usage by the solar
4 electricity producer, or by all the solar electricity producers
5 as a group, of electricity supplied by the electric utility
6 would not decline. Any new or additional demand charge, standby
7 charge, customer charge, minimum monthly charge, interconnection
8 charge, or other charge that would increase a solar electricity
9 provider's costs beyond those of other customers in the rate
10 class to which the solar electricity producer otherwise would be
11 assigned are contrary to the intent of this section and shall
12 not form part of any solar electricity purchase agreement.

13 (h) By December 31 of the second calendar year following
14 the calendar year that this Act takes effect, and by December 31
15 of every second calendar year thereafter, the energy resources
16 coordinator shall submit, if necessary, a report to the public
17 utilities commission proposing adjustments to the rates of
18 compensation in subsection (f)(2) to reflect technological
19 progress and market developments with respect to the cost of new
20 solar electricity systems.



1 (i) This section shall not apply to a solar electricity
2 system with an installed peak nameplate generating capacity in
3 excess of twenty megawatts.

4 (j) The requirement that an electric utility make
5 available a solar electricity purchase agreement to a solar
6 electricity producer shall not apply to new solar electricity
7 systems that are placed in service after December 31 of the year
8 following the year in which the aggregate peak nameplate
9 generating capacity of solar electricity systems eligible for
10 solar electricity purchase agreements equals five per cent of
11 the electric utility's system peak demand; provided that the
12 public utilities commission may increase, by rule or order, the
13 amount of the aggregate peak nameplate generating capacity above
14 five per cent of the electric utility's system peak demand.

15 (k) A solar electricity producer shall not be eligible for
16 feed-in tariff compensation under this section for any solar
17 electricity produced by a solar electricity system for which an
18 income tax credit was claimed by any taxpayer pursuant to
19 section 235-12.5.

20 **§269-B Greenhouse gases; fee.** (a) All transmitters of
21 electricity shall pay a carbon fee on greenhouse gases emitted
22 during the production of the electricity, measured in carbon



1 equivalence. The carbon fee shall be \$50 per ton beginning in
2 2008 and shall increase by five per cent each year.

3 (b) The funds shall be deposited into the public utility
4 commission's total renewable energy special fund and may be used
5 to partially fund:

6 (1) Energy-efficiency programs regulated and overseen by
7 an energy-efficiency utility, including additional
8 rebates for the installation of solar water heaters;

9 (2) Feed-in tariffs for on-site photovoltaic and micro-
10 wind systems;

11 (3) Projects utilizing base load renewable energy hybrid
12 systems, renewable energy micro grids, or wave hubs;

13 (4) Ocean thermal energy conversion installations; and

14 (5) Sea water air conditioning installations.

15 (c) As used in this section:

16 "Base load renewable energy facilities" mean systems that
17 are able to operate twenty-four hours, seven days a week, with
18 minimal outages, such as ocean thermal energy conversion,
19 biomass, and hydroelectric systems.

20 "Micro grids" means self-contained grids that can be
21 interconnected to larger grids, allowing for the testing of



1 multiple independent generators while providing a uniform
2 interface with a utility electric grid.

3 "Wave hubs" means micro grids for multiple types of wave
4 energy devices.

5 "Hybrid systems" means a system using two or more distinct
6 energy sources.

7 **§269-C Total renewable energy special fund.** (a) There is
8 established in the state treasury the total renewable energy
9 special fund, into which shall be deposited:

- 10 (1) All carbon fees collected pursuant to subsection
- 11 269-B(a); and
- 12 (2) Appropriations made by the legislature into the fund.

13 (b) Moneys in the total renewable energy special fund
14 shall be used for the purposes described in subsection
15 269-B(b)."

16 SECTION 5. Section 196-11, Hawaii Revised Statutes, is
17 amended by adding a new definition to be appropriately inserted
18 and to read as follows:

19 "Life cycle assessment" means:

- 20 (1) The investigation and valuation of the environmental
- 21 impacts of a given product or service caused or
- 22 necessitated by its existence;



- 1 (2) An assessment of raw material production, manufacture,
- 2 distribution, use, and disposal, including all
- 3 intervening transportation steps that are necessary or
- 4 caused by a product's existence;
- 5 (3) Life cycle analysis;
- 6 (4) Ecobalance; and
- 7 (5) Cradle-to-grave analysis."

8 SECTION 6. Section 235-12.5, Hawaii Revised Statutes, is
9 amended by amending subsection (a) to read as follows:

10 "(a) When the requirements of subsection (c) are met, each
11 individual or corporate taxpayer [~~that~~] who files an individual
12 or corporate net income tax return for a taxable year may claim
13 a tax credit under this section against the Hawaii state
14 individual or corporate net income tax. The tax credit may be
15 claimed for every eligible renewable energy technology system
16 that is installed and placed in service in the State by a
17 taxpayer during the taxable year[-], is installed by a company
18 on the energy-efficiency utility's approved list of certified
19 solar water heating installers, and is installed by a company in
20 good standing with the Hawaii solar energy association. This
21 credit shall be available for systems installed and placed in



1 service in the State after June 30, 2003. The tax credit may be
2 claimed as follows:

3 (1) Solar thermal energy systems [~~for~~] installed in:

4 (A) Single-family residential property: [~~thirty-~~
5 ~~five~~] fifty-five per cent of the actual cost or
6 \$2,250, whichever is less; provided that
7 beginning July 1, 2008, the limit shall be raised
8 to \$3,250 and shall apply to single-family
9 residential property constructed before January
10 1, 2009;

11 (B) Multi-family residential property: [~~thirty-five~~]
12 fifty-five per cent of the actual cost or \$350
13 per unit, whichever is less; [~~and~~] provided that
14 beginning July 1, 2008, the limit shall be raised
15 to \$450 per unit and shall apply to multi-family
16 residential property constructed prior to January
17 1, 2009; and

18 (C) Commercial property: [~~thirty-five~~] fifty-five
19 per cent of the actual cost or \$250,000,
20 whichever is less;

21 (2) Wind-powered energy systems for:



- 1 (A) Single-family residential property: [~~twenty~~
2 forty per cent of the actual cost or \$1,500,
3 whichever is less;
- 4 (B) Multi-family residential property: [~~twenty~~
5 forty per cent of the actual cost or \$200 per
6 unit, whichever is less; and
- 7 (C) Commercial property: [~~twenty~~] forty per cent of
8 the actual cost or \$500,000, whichever is less;
9 and
- 10 (3) Photovoltaic energy systems for:
- 11 (A) Single-family residential property: [~~thirty-~~
12 five] fifty-five per cent of the actual cost or
13 \$5,000, whichever is less;
- 14 (B) Multi-family residential property: [~~thirty-five~~]
15 fifty-five per cent of the actual cost or \$350
16 per unit, whichever is less; and
- 17 (C) Commercial property: [~~thirty-five~~] fifty-five
18 per cent of the actual cost or \$500,000,
19 whichever is less;
- 20 provided that multiple owners of a single system shall be
21 entitled to a single tax credit; and provided further that the



1 tax credit shall be apportioned between the owners in proportion
2 to their contribution to the cost of the system.

3 In the case of a partnership, S corporation, estate, or
4 trust, the tax credit allowable is for every eligible renewable
5 energy technology system that is installed and placed in service
6 in the State by the entity. The cost upon which the tax credit
7 is computed shall be determined at the entity level.

8 Distribution and share of credit shall be determined pursuant to
9 section 235-110.7(a)."

10 SECTION 7. Section 269-1, Hawaii Revised Statutes, is
11 amended by adding a new definition to be appropriately inserted
12 and to read as follows:

13 "Energy-efficiency utility" means a utility regulated by
14 the public utility commission that is only in the
15 energy-efficiency business."

16 SECTION 8. Section 269-5, Hawaii Revised Statutes, is
17 amended to read as follows:

18 "**~~§269-5 [Annual report]~~ Report and register of orders.**

19 (a) The public utilities commission shall prepare and present
20 to the governor, through the director of finance, in the month
21 of January in each year [a] an annual report respecting its
22 actions during the preceding fiscal year. This report shall



1 include summary information and analytical, comparative, and
2 trend data concerning major regulatory issues acted upon and
3 pending before the commission; cases processed by the
4 commission, including their dispositions; utility company
5 operations, capital improvements, and rates; utility company
6 performance in terms of efficiency and quality of services
7 rendered; environmental matters having a significant impact upon
8 public utilities; actions of the federal government affecting
9 the regulation of public utilities in Hawaii; long and short-
10 range plans and objectives of the commission; together with the
11 commission's recommendations respecting legislation and other
12 matters requiring executive and legislative consideration.
13 Copies of the annual reports shall be furnished by the governor
14 to the legislature. In addition, the commission shall establish
15 and maintain a register of all its orders and decisions[~~which~~
16 that shall be open and readily available for public inspection,
17 and no order or decision of the commission shall take effect
18 until it is filed and recorded in this register.

19 (b) The commission shall produce and make available:

20 (1) A registry of new dockets;

21 (2) A registry of current decisions and orders;

22 (3) A registry of proposed tariff changes; and



1 (4) Copies of decisions and orders for the preceding six
2 months.

3 (c) The commission shall:

4 (1) Update the documents in subsection (b) at least once
5 every two weeks; and

6 (2) Email copies of the registries required under
7 subsection (b)(1), (2), and (3), in portable document
8 format (PDF) to any person who requests them.

9 (d) All commission deadlines shall commence on the date
10 that the log is available in the commission's office or the date
11 that the log is emailed to persons who request to be on the
12 email notification system pursuant to subsection (c), whichever
13 is later."

14 SECTION 9. Section 269-51, Hawaii Revised Statutes, is
15 amended to read as follows:

16 "**§269-51** ~~[Consumer]~~ **Ratepayer advocate; director of**
17 **commerce and consumer affairs.** The director of commerce and
18 consumer affairs shall be the ~~[consumer]~~ ratepayer advocate in
19 hearings before the public utilities commission. The ~~[consumer]~~
20 ratepayer advocate shall represent, protect, and advance the
21 interests of all ~~[consumers,]~~ ratepayers, including small
22 businesses, of utility services. The ~~[consumer]~~ ratepayer



1 advocate shall not receive any salary in addition to the salary
2 received as director of commerce and consumer affairs.

3 The responsibility for advocating the interests of the
4 ~~[consumer]~~ ratepayer of utility services shall be separate and
5 distinct from the responsibilities of the public utilities
6 commission and those assistants employed by the commission. As
7 ~~[consumer]~~ ratepayer advocate, the director of commerce and
8 consumer affairs shall have full rights to participate as a
9 party in interest in all proceedings before the public utilities
10 commission."

11 SECTION 10. Section 269-52, Hawaii Revised Statutes, is
12 amended to read as follows:

13 "**§269-52 Division of ~~[consumer]~~ ratepayer advocacy;**
14 **personnel.** There shall be a division of ~~[consumer]~~ ratepayer
15 advocacy within the department of commerce and consumer affairs
16 to provide administrative support to the director of commerce
17 and consumer affairs acting in the capacity of ~~[consumer]~~
18 ratepayer advocate. The director may employ and at pleasure
19 dismiss an executive administrator, who shall be exempt from
20 chapter 76, may define the executive administrator's powers and
21 duties, and fix the executive administrator's compensation. The
22 director may employ engineers, accountants, investigators,



1 clerks, and stenographers as may be necessary for the
2 performance of the [~~consumer~~] ratepayer advocate's functions, in
3 accordance with chapter 76; provided that:

4 (1) The director may employ up to ten utility analysts
5 exempt from chapter 76; and

6 (2) Each analyst shall possess at least the minimum
7 qualifications required of comparable experts in the
8 relevant industry."

9 SECTION 11. Section 269-53, Hawaii Revised Statutes, is
10 amended to read as follows:

11 "**§269-53 Legal counsel.** The director may appoint or
12 retain, without regard to chapter 76, attorneys to provide legal
13 services for the division of [~~consumer~~] ratepayer advocacy.
14 Nothing in this section precludes the director of commerce and
15 consumer affairs from requesting and securing legal services
16 from the attorney general and the department of the attorney
17 general."

18 SECTION 12. Section 269-54, Hawaii Revised Statutes, is
19 amended to read as follows:

20 "**§269-54 General powers; duties.** (a) The [~~consumer~~]
21 ratepayer advocate shall have the authority expressly conferred
22 by or reasonably implied from the provisions of this part.



- 1 (b) The [~~consumer~~] ratepayer advocate [~~may~~] shall:
- 2 (1) Adopt rules pursuant to chapter 91 necessary to
- 3 effectuate the purposes of this part~~[-]~~;
- 4 (2) Conduct investigations to secure information useful in
- 5 the lawful administration of any provision of this
- 6 part~~[-]~~;
- 7 (3) Assist, advise, and cooperate with federal, state, and
- 8 local agencies and officials to protect and promote
- 9 the interests of the [~~consumer~~] ratepayer in the
- 10 public utilities field~~[-]~~;
- 11 (4) Study the operation of laws affecting all [~~consumers,~~
- 12 ~~including small businesses,~~] ratepayers of utility
- 13 services, including small businesses, and recommend to
- 14 the governor and the legislature new laws and
- 15 amendments of laws in the [~~consumers'~~] ratepayers'
- 16 interest in the public utilities field~~[-]~~;
- 17 (5) Organize and hold conferences on problems affecting
- 18 [~~consumers~~] ratepayers of utility services~~[-]~~;
- 19 (6) Perform [~~such~~] other acts as may be incidental to the
- 20 exercise of the functions, powers, and duties set
- 21 forth in this section~~[-]~~; and



1 (7) Represent the interests of [~~consumers~~] ratepayers of
 2 utility services before any state or federal agency or
 3 instrumentality having jurisdiction over matters
 4 [~~which~~] that affect those interests.

5 (c) The [~~consumer~~] ratepayer advocate shall consider the
 6 long-term benefits of renewable resources in the [~~consumer~~]
 7 ratepayer advocate's role as [~~consumer~~] ratepayer advocate.

8 (d) [~~Whenever~~] The ratepayer advocate may institute
 9 proceedings for appropriate relief before the public utilities
 10 commission whenever it appears to the [~~consumer~~] ratepayer
 11 advocate that:

12 (1) [~~any~~] Any public utility has violated or failed to
 13 comply with any provision of this part or of any state
 14 or federal law;

15 (2) [~~any~~] Any public utility has failed to comply with any
 16 rule, regulation, or other requirement of the public
 17 utilities commission or of any other state or federal
 18 agency;

19 (3) [~~any~~] Any public utility has failed to comply with any
 20 provision of its charter or franchise;

21 (4) [~~changes,~~] Changes, additions, extensions, or repairs
 22 to the plant or service of any public utility are



1 necessary to meet the reasonable convenience or
2 necessity of the public; or

3 (5) ~~[the]~~ The rates, fares, classifications, charges, or
4 rules of any public utility are unreasonable or
5 unreasonably discriminatory [~~, the consumer advocate~~
6 ~~may institute proceedings for appropriate relief~~
7 ~~before the public utilities commission.].~~

8 (e) The ~~[consumer]~~ ratepayer advocate may appeal any final
9 decision and order in any proceeding to which the ~~[consumer]~~
10 ratepayer advocate is a party in the manner provided by law.

11 ~~[(e)]~~ (f) The ~~[consumer]~~ ratepayer advocate may file with
12 the commission and serve on any public utility a request in
13 writing to furnish any information reasonably relevant to any
14 matter or proceeding before the commission or reasonably
15 required by the ~~[consumer]~~ ratepayer advocate to perform the
16 duties hereunder. Any ~~[such]~~ request shall set forth with
17 reasonable specificity the purpose ~~[for which]~~ that the
18 information is requested for and shall designate with reasonable
19 specificity the information desired. The public utility shall
20 comply with ~~[such]~~ a request within the time limit set ~~[forth]~~
21 by the ~~[consumer]~~ ratepayer advocate unless within ten days
22 following service ~~[it]~~ the public utility requests a hearing on



1 the matter before the public utilities commission and states
2 [~~its~~] the reasons therefore. If a hearing is requested, the
3 public utilities commission shall [~~proceed to~~] hold the hearing
4 and make its determination on the request within thirty days
5 after the [~~same~~] request is filed. The [~~consumer~~] ratepayer
6 advocate or the public utility may appeal the decision of the
7 commission on any [~~such~~] request, subject to chapter 602, in the
8 manner provided for civil appeals from the circuit courts.
9 Subject to the foregoing, [~~such~~] requests may ask the public
10 utility to:

- 11 (1) Furnish any information [~~with which~~] that the
12 [~~consumer~~] ratepayer advocate may require concerning
13 the condition, operations, practices, or services of
14 the public utility;
- 15 (2) Produce and permit the [~~consumer~~] ratepayer advocate
16 or the [~~consumer~~] ratepayer advocate's representative
17 to inspect and copy any designated documents [~~(+)~~],
18 including writings, drawings, graphs, charts,
19 photographs, recordings, and other data compilations
20 from which information can be obtained[~~(+)~~] or to
21 inspect and copy, test, or sample any designated



1 tangible thing [~~which~~] that is in the possession,
2 custody, or control of the public utility; or
3 (3) Permit entry upon land or other property in the
4 possession or control of the public utility for the
5 purpose of inspection and measuring, surveying,
6 photographing, testing, or sampling the property or
7 any designated object thereon."

8 SECTION 13. Section 269-55, Hawaii Revised Statutes, is
9 amended to read as follows:

10 "**§269-55 Handling of complaints.** The [~~consumer~~] ratepayer
11 advocate shall counsel utility [~~customers~~] ratepayers in the
12 handling of [~~consumer~~] ratepayer complaints before the public
13 utilities commission. The public utilities commission shall
14 provide a central clearinghouse of information by collecting and
15 compiling all [~~consumer~~] ratepayer complaints and inquiries
16 concerning public utilities."

17 SECTION 14. Section 269-91, Hawaii Revised Statutes, is
18 amended to read as follows:

19 "**§269-91 [+]Definitions.[+]** For the purposes of this
20 [{}part[{}]:



1 "Agrofuels" means growing bioenergy crops to produce
2 biofuels through processes that have at least four of the
3 following characteristics:

- 4 (1) Crop grown on rainforests cleared after 1980;
- 5 (2) Crop grown on land in which endangered species were
6 displaced after 1980;
- 7 (3) Crop grown on land where indigenous communities were
8 forced off the property;
- 9 (4) Crop grown on land with disputed or unclear title;
- 10 (5) Crop grown on land cleared through forced relocations
11 by the military after 1980;
- 12 (6) Crop grown by monocropping practices;
- 13 (7) Crop grown in unsustainable ways;
- 14 (8) Where the resulting biofuel is shipped more than two
15 thousand miles for consumption;
- 16 (9) Where the agricultural practices result in excessive
17 loss of top soil;
- 18 (10) Where slash and burn agricultural techniques are used;
19 or
- 20 (11) When lifecycle greenhouse gas emissions are difficult
21 to quantify or are excessive.



1 "Banned fuels" means fuels that are prohibited in
2 generators built or expanded on or after 2007, including palm
3 oil, coal, and other any other fuels deemed banned fuels by the
4 commission.

5 "Biofuels" means liquid or gaseous fuels produced from
6 organic sources such as biomass crops, agricultural residues,
7 and oil crops, such as [~~palm oil,~~] canola oil, soybean oil,
8 waste cooking oil, grease, and food wastes, animal residues and
9 wastes, and sewage and landfill wastes.

10 "Cost-effective" means the ability to produce or purchase
11 electric energy or firm capacity, or both, from renewable energy
12 resources at or below avoided costs consistent with the
13 methodology set by the public utilities commission in accordance
14 with section 269-27.2.

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

18 "Energy conservation" means using less energy by reducing
19 services.

20 "Energy displacement" means using renewable energy to
21 displace the need for grid-based electricity, including solar
22 water heaters and ocean thermal energy conversion systems.



1 "Energy efficiency" means using less energy to provide the
2 same level of energy service.

3 "Externality" means an impact, positive or negative, on a
4 third-party not involved in a given economic transaction, often,
5 although not necessarily, from the use of a public good.

6 "Fossil fuels" means the direct, indirect, or secondary use
7 of feedstock or products made from petroleum, coal, or natural
8 gas.

9 "Life cycle" means the summation of a fair, holistic
10 assessment of raw material production, manufacture,
11 distribution, use, and disposal, including all intervening
12 transportation steps that are necessary or caused by a product's
13 existence.

14 "Life cycle assessment" means the same as that term is
15 defined in section 196-11.

16 "Renewable electrical energy" means[+

17 ~~(1) Electrical energy generated using renewable energy as~~
18 ~~the source;~~

19 ~~(2) Electrical energy savings brought about by the use of~~
20 ~~renewable displacement or off-set technologies,~~
21 ~~including solar water heating, seawater air-~~
22 ~~conditioning district cooling systems, solar air-~~



1 conditioning, and customer sited, grid connected
 2 renewable energy systems; or
 3 ~~{(3)}~~ Electrical energy savings brought about by the use of
 4 energy efficiency technologies, including heat pump
 5 water heating, ice storage, ratepayer funded energy
 6 efficiency programs, and use of rejected heat from co-
 7 generation and combined heat and power systems,
 8 excluding fossil fueled qualifying facilities that
 9 sell electricity to electric utility companies and
 10 central station power projects.] the total electrical
 11 energy that is generated by or displaced from the use
 12 of renewable energy systems.

13 "Renewable energy" means energy [~~generated or~~] produced
 14 [~~utilizing the following sources:~~

- 15 ~~(1) Wind;~~
- 16 ~~(2) The sun;~~
- 17 ~~(3) Falling water;~~
- 18 ~~(4) Biogas, including landfill and sewage based digester~~
 19 ~~gas;~~
- 20 ~~(5) Geothermal;~~
- 21 ~~(6) Ocean water, currents and waves;~~



- 1 ~~(7) Biomass, including biomass crops, agricultural and~~
- 2 ~~animal residues and wastes, and municipal solid waste,~~
- 3 ~~(8) Biofuels; and~~
- 4 ~~(9) Hydrogen produced from renewable energy sources.]~~

5 using a technology that relies on a resource that is being
6 consumed at a harvest rate at or below its natural regeneration
7 rate, including wind, photovoltaic, ocean thermal, wave, tidal,
8 biomass, and other renewable fuels; provided that where life
9 cycle assessment is available, renewable energy means the energy
10 content of the final product minus the energy content of the
11 fossil fuel, at each step of the life cycle, used to create the
12 fuel and to dispose of the waste products.

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

16 "Total energy" means:

- 17 (1) The combined total British thermal units (BTUs)
18 generated from fossil fuels, renewable energy; and
- 19 (2) The British thermal units (BTUs) saved from the use of
20 installed energy displacement systems; or
- 21 (3) The sum of two non-overlapping components, total
22 renewable energy and total fossil fuel energy.



1 "Total electrical energy" means:

2 (1) The total energy, as measured in British thermal units
3 (BTUs), used for electricity, heating, cooling, and
4 lighting; and

5 (2) The sum of two non-overlapping components, total
6 renewable electrical energy and total fossil fuel
7 electrical energy.

8 "Total fossil fuel electrical energy" means the fossil
9 fuels, as measured in British thermal units (BTUs), used for
10 electricity, heating, cooling, and lighting.

11 "Total fossil fuel energy" means the sum of total fossil
12 fuel electrical energy and total fossil fuels, as measured in
13 British thermal units (BTUs), used in transportation.

14 "Total renewable electrical energy" means the renewable
15 energy used, or fossil fuels, as measured in BTUs, displaced for
16 electricity, heating, cooling, and lighting.

17 "Total renewable energy" means the sum of the total
18 renewable electrical energy and the total renewable energy, as
19 measured in British thermal units (BTUs), used in
20 transportation."

21 SECTION 15. Section 269-92, Hawaii Revised Statutes, is
22 amended to read as follows:



- 1 "**§269-92 Renewable portfolio standards.** (a) Each
- 2 electric utility company that sells electricity for consumption
- 3 in the State shall establish a renewable portfolio standard of:
- 4 (1) Ten per cent of its net electricity sales by December
- 5 31, 2010;
- 6 (2) [~~Fifteen~~] Thirty per cent of its net electricity sales
- 7 by December 31, 2015; and
- 8 (3) [~~Twenty~~] Fifty per cent of its net electricity sales
- 9 by December 31, 2020.
- 10 (b) The public utilities commission may establish
- 11 standards for each utility that prescribe what portion of the
- 12 renewable portfolio standards shall be met by specific types of
- 13 renewable electrical energy resources[~~, provided that:~~
- 14 ~~(1) At least fifty per cent of the renewable portfolio~~
- 15 ~~standards shall be met by electrical energy generated~~
- 16 ~~using renewable energy as the source;~~
- 17 ~~(2) Where electrical energy is generated or displaced by a~~
- 18 ~~combination of renewable and nonrenewable means, the~~
- 19 ~~proportion attributable to the renewable means shall~~
- 20 ~~be credited as renewable energy; and~~
- 21 ~~(3) Where fossil and renewable fuels are co-fired in the~~
- 22 ~~same generating unit, the unit shall be considered to~~



1 ~~generate renewable electrical energy (electricity) in~~
2 ~~direct proportion to the percentage of the total heat~~
3 ~~value represented by the heat value of the renewable~~
4 ~~fuels].~~

5 (c) If the public utilities commission determines that an
6 electric utility company failed to meet the renewable portfolio
7 standard, after a hearing in accordance with chapter 91, the
8 utility shall be subject to penalties to be established by the
9 public utilities commission~~[, provided that if the commission~~
10 ~~determines that the electric utility company is unable to meet~~
11 ~~the renewable portfolio standards due to reasons beyond the~~
12 ~~reasonable control of an electric utility, as set forth in~~
13 ~~subsection (d), the commission, in its discretion, may waive in~~
14 ~~whole or in part any otherwise applicable penalties.~~

15 ~~(d) Events or circumstances that are outside of an~~
16 ~~electric utility company's reasonable control may include, to~~
17 ~~the extent the event or circumstance could not be reasonably~~
18 ~~foreseen and ameliorated:~~

- 19 ~~(1) Weather related damage;~~
- 20 ~~(2) Natural disasters;~~
- 21 ~~(3) Mechanical or resource failure;~~



- 1 ~~(4) Failure of renewable electrical energy producers to~~
- 2 ~~meet contractual obligations to the electric utility~~
- 3 ~~company;~~
- 4 ~~(5) Labor strikes or lockouts;~~
- 5 ~~(6) Actions of governmental authorities that adversely~~
- 6 ~~affect the generation, transmission, or distribution~~
- 7 ~~of renewable electrical energy under contract to an~~
- 8 ~~electric utility company;~~
- 9 ~~(7) Inability to acquire sufficient renewable electrical~~
- 10 ~~energy due to lapsing of tax credits related to~~
- 11 ~~renewable energy development;~~
- 12 ~~(8) Inability to obtain permits or land use approvals for~~
- 13 ~~renewable electrical energy projects;~~
- 14 ~~(9) Inability to acquire sufficient cost effective~~
- 15 ~~renewable electrical energy;~~
- 16 ~~(10) Substantial limitations, restrictions, or prohibitions~~
- 17 ~~on utility renewable electrical energy projects; and~~
- 18 ~~(11) Other events and circumstances of a similar nature]."~~

19 SECTION 16. Section 269-95, Hawaii Revised Statutes, is
20 amended to read as follows:

21 "**§269-95 Renewable portfolio standards study.** The public
22 utilities commission shall:



- 1 (1) By December 31, 2007, develop and implement a utility
2 ratemaking structure, which may include performance-
3 based ratemaking, to provide incentives that encourage
4 Hawaii's electric utility companies to use cost-
5 effective renewable energy resources found in Hawaii
6 to meet the renewable portfolio standards established
7 in section 269-92[, ~~while allowing for deviation from~~
8 ~~the standards in the event that the standards cannot~~
9 ~~be met in a cost effective manner or as a result of~~
10 ~~events or circumstances, such as described in section~~
11 ~~269-92(d), beyond the control of the utility that~~
12 ~~could not have been reasonably anticipated or~~
13 ~~ameliorated];~~
- 14 (2) Gather, review, and analyze empirical data to
15 determine the extent to which any proposed utility
16 ratemaking structure would impact electric utility
17 companies' profit margins and to ensure that the
18 electric utility companies' opportunity to earn a fair
19 rate of return is not diminished;
- 20 (3) Using funds from the public utilities special fund,
21 contract with the Hawaii natural energy institute of
22 the University of Hawaii to conduct independent



1 studies to be reviewed by a panel of experts from
2 entities such as the United States Department of
3 Energy, National Renewable Energy Laboratory, Electric
4 Power Research Institute, Hawaii electric utility
5 companies, environmental groups, and other similar
6 institutions with the required expertise. These
7 studies shall include findings and recommendations
8 regarding:

9 (A) The capability of Hawaii's electric utility
10 companies to achieve renewable portfolio
11 standards in a cost-effective manner and shall
12 assess factors such as the impact on consumer
13 rates, utility system reliability and stability,
14 costs and availability of appropriate renewable
15 energy resources and technologies, permitting
16 approvals, effects on the economy, balance of
17 trade, culture, community, environment, land and
18 water, climate change policies, demographics, and
19 other factors deemed appropriate by the
20 commission; and



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

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

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

14 SECTION 17. Section 286-51, Hawaii Revised Statutes, is
15 amended to read as follows:

16 "**§286-51 Registration, expense.** (a) Every certificate of
17 registration issued under this part shall expire at midnight on
18 December 31 of each year and shall be renewed annually before
19 April 1 of each year upon application by the registered owner by
20 presentation of the last issued certificate of registration or
21 the last issued application for renewal, such renewal to take
22 effect as of January 1 of each year; provided that the



1 certificate of registration for each motor vehicle in the
2 counties of the State may be renewed on a staggered basis, if a
3 county elects to do so. The director of finance of each county
4 may adopt rules to carry out the purposes stated in this section
5 and shall expend the necessary funds from the director's
6 operating funds as may be necessary for these purposes; provided
7 that the director of finance, if the director has ascertained as
8 of the date of the application that the registered owner has not
9 deposited or paid bail with respect to any summons or citation
10 issued to the registered owner for stopping, standing, or
11 parking in violation of traffic ordinances within the county,
12 may require, as a condition precedent to the renewal, that the
13 registered owner deposit or pay bail with respect to all such
14 summons or citations. The certificates of registration issued
15 hereunder shall show, in addition to all information required
16 under section 286-47, the serial number of the tag or emblem and
17 shall be valid during the registration year only for which they
18 are issued. The certificates of ownership need not be renewed
19 annually but shall remain valid as to any interest shown therein
20 until canceled by the director of finance as provided by law or
21 replaced by new certificates of ownership as hereinafter
22 provided.



1 (b) This part shall be administered by the director of
2 finance in conjunction with the requirements of sections 249-1
3 to 249-13 and shall entail no additional expense or charge to
4 the person registering the ownership of a motor vehicle other
5 than as provided by this section or by other laws; provided that
6 for each new certificate of ownership issued by the director of
7 finance under section 286-52, the director of finance may charge
8 a fee which shall be deposited in the general fund. The fees
9 charged to issue a new certificate of ownership shall be
10 established by the county's legislative body.

11 Notwithstanding any other law to the contrary, an
12 additional fee of not more than \$1 for each certificate of
13 registration for a U-drive motor vehicle and \$2 for each
14 certificate of registration for all other motor vehicles may be
15 established by ordinance and collected annually by the director
16 of finance of each county, to be used and administered by each
17 county:

18 (1) For the purpose of beautification and other related
19 activities of highways under the ownership, control,
20 and jurisdiction of each county; and

21 (2) To defray the additional cost in the disposition and
22 other related activities of abandoned or derelict



1 vehicles as prescribed in chapter 290. For the
2 purposes of this paragraph, other related activities
3 shall include but need not be limited to any and all
4 storage fees that are negotiated between each county
5 and a towing company contracted by the county to
6 remove and dispose of abandoned or derelict vehicles.

7 The \$2 fee established pursuant to this subsection for
8 certificates of registration for motor vehicles other than U-
9 drive motor vehicles may be increased by ordinance up to a
10 maximum of \$10; provided that all amounts received from any fee
11 increase over \$2 shall be expended only for the purposes of
12 paragraph (2). The moneys so assessed and collected shall be
13 placed in a revolving fund entitled, "the highway beautification
14 and disposal of abandoned or derelict vehicles revolving fund".

15 (c) Notwithstanding any law to the contrary, an additional
16 fee of \$50 per year shall be established by ordinance and
17 collected annually by the director of finance of each county, to
18 be used and administered by each county to fund:

- 19 (1) The purchase of vehicles powered by electricity;
20 (2) The purchase of vehicles powered by biodiesel from
21 waste material;
22 (3) Mass transit;



- 1 (4) Solar lighting at bus stops; and
- 2 (5) Other energy-efficient or renewable energy
- 3 transportation projects."

4 SECTION 18. Statutory material to be repealed is bracketed
 5 and stricken. New statutory material is underscored.

6 SECTION 19. This Act shall take effect upon its approval;
 7 provided that the amendments made to section 269-54, Hawaii
 8 Revised Statutes, by section 12 of this Act shall not be
 9 repealed on June 30, 2010, pursuant to section 1 of Act 94,
 10 Session Laws of Hawaii 2006.

11

INTRODUCED BY:

Cynthia Thelen
 By Request

JAN 23 2008



Report Title:

Renewable Energy

Description:

Provides a comprehensive approach towards reducing greenhouse gas emissions and improving Hawaii's energy self-sufficiency.

