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# A BILL FOR AN ACT

RELATING TO ENERGY RESOURCES.

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

1 PART I

2 PURPOSE

3 SECTION 1. Attaining independence from our detrimental  
4 reliance on fossil fuels has been a long-standing objective for  
5 the State.

6 Hawaii is the state most dependent on petroleum for its  
7 energy needs. It pays the highest electricity prices in the  
8 United States, and its gasoline costs are among the highest in  
9 the country. Fuel surcharges that pass the increases in fuel  
10 costs to consumers have significantly increased the cost of over  
11 eighty per cent of the goods and services sold in Hawaii.  
12 Household fuels and utilities costs rose 36.4 per cent, from the  
13 previous year, as reflected in the Honolulu consumer price index  
14 during the second quarter of 2008. Hawaii's energy costs  
15 approach eleven per cent of its gross domestic product, whereas  
16 in most states energy costs are four per cent of gross domestic  
17 product. Between 2005 and 2008, state government consumption of



1 electricity increased 3.9 per cent, but expenditures increased  
2 56.8 per cent.

3 Reducing our oil dependence and the consequent price  
4 volatility and attaining energy security are critical. More  
5 than ninety-six per cent of petroleum in Hawaii now comes from  
6 foreign sources. Clean energy from indigenous renewable  
7 resources has the potential to provide an estimated one hundred  
8 fifty per cent of current installed electrical capacity.

9 On January 28, 2008, the signing of a memorandum of  
10 understanding between the State of Hawaii and the United States  
11 Department of Energy launched the Hawaii clean energy  
12 initiative. This initiative and long-term partnership between  
13 Hawaii and the United States Department of Energy is aimed at  
14 accelerating the use and development of energy efficiency and  
15 renewable energy technologies; allowing Hawaii to serve as a  
16 model and demonstration for the United States and other island  
17 communities; and developing a national partnership to accelerate  
18 system transformation, whereby the following goals are attained:

- 19 (1) Achieve a seventy per cent clean energy economy for  
20 Hawaii within a generation;  
21 (2) Increase Hawaii's energy security;



- 1 (3) Capture economic benefits of clean energy for all
- 2 levels of society;
- 3 (4) Contribute to greenhouse gas reduction;
- 4 (5) Foster and demonstrate innovation;
- 5 (6) Build the workforce of the future; and
- 6 (7) Serve as a national model.

7 The purpose of this Act is to provide a first step in  
8 aligning Hawaii's energy policy laws with the State's energy  
9 goals. For Hawaii to realize energy independence and economic  
10 stability, the transformation of its energy system must  
11 encompass changes to:

- 12 (1) Hawaii's policy and regulatory framework;
- 13 (2) System-level technology development and integration;
- 14 (3) Financing or capital investment; and
- 15 (4) Institutional system planning.

16 To enable energy efficiency and renewable energy resources to  
17 meet forty per cent of Hawaii's energy demand by 2030, the  
18 Hawaii clean energy initiative set goals for energy efficiency,  
19 renewable and indigenous electricity production, energy delivery  
20 and improvements to the electrical grid, and diversification of  
21 energy sources for transportation. The initiatives to achieve  
22 these goals were developed by the United States Department of



1 Energy, the department of business, economic development, and  
2 tourism, and members of the five Hawaii clean energy initiative  
3 working groups during 2008. This effort presents a range of  
4 measures to reach aggressive energy goals while balancing the  
5 interests of various stakeholders.

6 PART II

7 RENEWABLE PORTFOLIO STANDARDS

8 SECTION 2. Section 269-91, Hawaii Revised Statutes, is  
9 amended by amending the definitions of "renewable electrical  
10 energy" and "renewable energy" to read as follows:

11 "Renewable electrical energy" means:

12 (1) Electrical energy generated using renewable energy as  
13 the source; and

14 (2) Electrical energy savings brought about by ~~the~~ :

15 (A) The use of renewable displacement or off-set  
16 technologies, including solar water heating, sea-  
17 water air-conditioning district cooling systems,  
18 solar air-conditioning, and customer-sited, grid-  
19 connected renewable energy systems; provided  
20 that, beginning January 1, 2015, electrical  
21 energy savings shall not include customer-sited,  
22 grid-connected renewable-energy systems; or



1        [~~[(3)] Electrical energy savings brought about by the]~~

2            (B)    The use of energy efficiency technologies,  
3            including heat pump water heating, ice storage,  
4            ratepayer-funded energy efficiency programs, and  
5            use of rejected heat from co-generation and  
6            combined heat and power systems, excluding  
7            fossil-fueled qualifying facilities that sell  
8            electricity to electric utility companies and  
9            central station power projects.

10        "Renewable energy" means energy generated or produced

11    ~~[utilizing]~~ using the following sources:

- 12        (1)    Wind;
- 13        (2)    The sun;
- 14        (3)    Falling water;
- 15        (4)    Biogas, including landfill and sewage-based digester  
16            gas;
- 17        (5)    Geothermal;
- 18        (6)    Ocean water, currents, and waves~~[+]~~, including ocean  
19            thermal energy conversion;
- 20        (7)    Biomass, including biomass crops, agricultural and  
21            animal residues and wastes, and municipal solid waste  
22            and other solid waste;



1 (8) Biofuels; and

2 (9) Hydrogen produced from renewable energy sources."

3 SECTION 3. Section 269-92, Hawaii Revised Statutes, is  
4 amended by amending subsections (a) and (b) to read as follows:

5 "(a) Each electric utility company that sells electricity  
6 for consumption in the [~~State~~] state shall establish a renewable  
7 portfolio standard of:

8 (1) Ten per cent of its net electricity sales by  
9 December 31, 2010;

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

12 (3) [~~Twenty~~] Twenty-five per cent of its net electricity  
13 sales by December 31, 2020[-]; and

14 (4) Forty per cent of its net electricity sales by  
15 December 31, 2030.

16 (b) The public utilities commission may establish  
17 standards for each utility that prescribe what portion of the  
18 renewable portfolio standards shall be met by specific types of  
19 renewable [~~electrical~~] energy resources; provided that:

20 (1) [~~At~~] Prior to January 1, 2015, at least fifty per cent  
21 of the renewable portfolio standards shall be met by  
22 electrical energy generated using renewable energy as



1 the source~~[+]~~, and after December 31, 2014, the entire  
2 renewable portfolio standard shall be met by  
3 electrical generation from renewable energy sources;

4 (2) Beginning January 1, 2015, electrical energy savings  
5 shall not count toward renewable energy portfolio  
6 standards;

7 ~~[(2)]~~ (3) Where electrical energy is generated or displaced  
8 by a combination of renewable and nonrenewable means,  
9 the proportion attributable to the renewable means  
10 shall be credited as renewable energy; and

11 ~~[(3)]~~ (4) Where fossil and renewable fuels are co-fired in  
12 the same generating unit, the unit shall be considered  
13 to generate renewable electrical energy (electricity)  
14 in direct proportion to the percentage of the total  
15 heat input value represented by the heat input value  
16 of the renewable fuels."

17 SECTION 4. Section 269-95, Hawaii Revised Statutes, is  
18 amended to read as follows:

19 "**§269-95 Renewable portfolio standards study.** The public  
20 utilities commission shall:

21 (1) By December 31, 2007, develop and implement a utility  
22 ratemaking structure, which may include performance-

1 based ratemaking, to provide incentives that encourage  
 2 Hawaii's electric utility companies to use cost-  
 3 effective renewable energy resources found in Hawaii  
 4 to meet the renewable portfolio standards established  
 5 in section 269-92, while allowing for deviation from  
 6 the standards in the event that the standards cannot  
 7 be met in a cost-effective manner or as a result of  
 8 events or circumstances, such as described in section  
 9 269-92(d), beyond the control of the utility that  
 10 could not have been reasonably anticipated or  
 11 ameliorated;

12 (2) Gather, review, and analyze empirical data to  
 13 ~~determine~~ determine;

14 (A) Determine the extent to which any proposed  
 15 utility ratemaking structure would impact  
 16 electric utility companies' profit margins ~~and~~  
 17 ~~to ensure~~ and;

18 (B) Ensure that the electric utility companies'  
 19 opportunity to earn a fair rate of return is not  
 20 diminished;

21 (3) ~~Using~~ Use funds from the public utilities special  
 22 fund~~[-]~~ to contract with the Hawaii natural energy





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

- 10 (A) The capability of Hawaii's electric utility  
11 companies to achieve renewable portfolio  
12 standards in a cost-effective manner and shall  
13 assess factors such as ~~the~~ the:
- 14 (i) The impact on consumer rates~~[, utility]~~ ;
  - 15 (ii) Utility system reliability and stability~~[,~~  
16 ~~costs]~~ ;
  - 17 (iii) Costs and availability of appropriate  
18 renewable energy resources and  
19 technologies~~[, permitting]~~ ;
  - 20 (iv) Permitting approvals~~[, effects]~~ ;
  - 21 (v) Effects on the economy~~[, balance]~~ ;





1 days before the convening of the regular session of  
2 [~~2009~~] 2014, and every five years thereafter."

3 PART III

4 ENERGY RESOURCES COORDINATOR

5 SECTION 5. Section 196-4, Hawaii Revised Statutes, is  
6 amended to read as follows:

7 "**§196-4 Powers and duties.** Subject to the approval of the  
8 governor, the coordinator shall:

9 (1) Formulate plans, including objectives, criteria to  
10 measure accomplishment of objectives, programs through  
11 which the objectives are to be attained, and financial  
12 requirements for the optimum development of Hawaii's  
13 energy resources;

14 (2) Conduct systematic analysis of existing and proposed  
15 energy resource programs, evaluate the analysis  
16 conducted by government agencies and other  
17 organizations and recommend [~~to the governor and to~~  
18 ~~the legislature~~] programs [~~which~~] that represent the  
19 most effective allocation of resources for the  
20 development of energy sources;

21 (3) Formulate and recommend specific proposals, as  
22 necessary, for conserving energy and fuel, including



- 1 the allocation and distribution thereof [~~, to the~~  
2 ~~governor and to the legislature~~];
- 3 (4) Assist public and private agencies in implementing  
4 energy conservation and efficiency programs, the  
5 development of indigenous energy resources, and  
6 related measures;
- 7 (5) Coordinate the State's energy [~~conservation and~~  
8 ~~allocation~~] programs with [~~that~~] those of the federal  
9 government, other state governments, governments of  
10 nations with interest in common energy resources, and  
11 the political subdivisions of the State;
- 12 (6) Develop programs to encourage private and public  
13 exploration [~~and~~], research, and development of  
14 [~~alternative~~] indigenous energy resources [~~which~~] that  
15 will benefit the State;
- 16 (7) Conduct public education programs to inform the public  
17 of the energy situation as may exist from time to time  
18 and of the government actions taken thereto;
- 19 (8) Serve as consultant to the governor, public agencies,  
20 and private industry on energy-related matters  
21 [~~related to the acquisition, utilization and~~  
22 ~~conservation of energy resources~~];



- 1 (9) Contract for services when required for implementation  
2 of this chapter;
- 3 (10) Review proposed state actions [~~which~~] that the  
4 coordinator finds to have significant effect on  
5 [~~energy consumption~~] the State's energy objectives and  
6 report to the governor their effect on the energy  
7 [~~conservation~~] program, and perform [~~such~~] other  
8 services as may be required by the governor and the  
9 legislature;
- 10 (11) Prepare and submit an annual report and [~~such~~] other  
11 reports as may be requested to the governor and to the  
12 legislature on the implementation of this chapter and  
13 all matters related to energy resources; [~~and~~]
- 14 (12) Formulate a systematic process, including the  
15 development of requirements, to identify geographic  
16 areas that are rich with renewable energy resource  
17 potential that can be developed in a cost-effective  
18 and environmentally benign manner and designate these  
19 areas as renewable energy zones;
- 20 (13) Develop and recommend incentives, plans, and programs  
21 to encourage the development of renewable energy  
22 resource projects within the renewable energy zones;



1       (14) Assist public and private agencies in identifying  
2       utility transmission projects or infrastructure  
3       required to accommodate and facilitate the development  
4       of renewable energy resources;

5       (15) Assist public and private agencies, in coordination  
6       with the department of budget and finance, in  
7       accessing the use of special purpose revenue bonds to  
8       finance the engineering, design, and construction of  
9       transmission projects and infrastructure that are  
10       deemed critical to the development of renewable energy  
11       resources;

12       (16) Develop the criteria or requirements for identifying  
13       and qualifying specific transmission projects and  
14       infrastructure that are critical to the development of  
15       renewable energy resources, including providing  
16       assistance in accessing the use of special purpose  
17       revenue bonds to finance the projects or  
18       infrastructure;

19       (17) Develop and maintain a comprehensive and systematic  
20       quantitative and qualitative capacity to analyze the  
21       status of energy resources, systems, and markets, both  
22       in-state and those to which Hawaii is directly tied,



1 particularly in relation to the State's economy, and  
2 to recommend, develop proposals for, and assess the  
3 effectiveness of policy and regulatory decisions, and  
4 conduct energy emergency planning; and  
5 ~~[-(12)]~~ (18) Adopt rules for the administration of this  
6 chapter pursuant to chapter 91~~[, provided that the~~  
7 ~~rules shall be submitted to the legislature for~~  
8 ~~review]."~~

## PART IV

## RENEWABLE ENERGY FACILITATOR

11 SECTION 6. Section 201-12.5, Hawaii Revised Statutes, is  
12 amended by amending subsection (b) to read as follows:

13 "(b) The renewable energy facilitator shall have the  
14 following duties:

15 (1) Facilitate the efficient permitting of renewable  
16 energy projects~~[-]~~, including:

17 (A) The land parcel on which the facility is  
18 situated;

19 (B) Any renewable energy production structure or  
20 equipment;

21 (C) Any energy transmission line from the facility to  
22 a public utility's electricity system; and



- 1           (D) Any on-site infrastructure necessary for the
- 2                           production of electricity or biofuel from the
- 3                           renewable energy site;
- 4           (2) Initiate the implementation of key renewable energy
- 5                           projects by permitting various efficiency improvement
- 6                           strategies identified by the department;
- 7           (3) Administer the day-to-day coordination for renewable
- 8                           energy projects on behalf of the department and the
- 9                           day-to-day operations of the renewable energy facility
- 10                          siting process established in [~~Act 207, Session Laws~~
- 11                          ~~of Hawaii 2008~~]; chapter 201N; and
- 12           (4) Submit periodic reports to the legislature on
- 13                           renewable energy facilitation activities and the
- 14                           progress of the renewable energy facility siting
- 15                           process."

PART V

RENEWABLE ENERGY PERMITTING

18           SECTION 7. Section 201N-1, Hawaii Revised Statutes, is  
19 amended by amending the definition of "renewable energy  
20 facility" or "facility" to read as follows:

21            "Renewable energy facility" or "facility" means a new  
22 facility located in the [~~State~~] state with the capacity to





1 produce from renewable energy at least two hundred megawatts of  
2 electricity[-]; provided that an electricity production facility  
3 with a capability between five megawatts and one hundred ninety-  
4 nine megawatts of electricity and a biofuel production facility  
5 with a capacity to produce one million gallons or more annually  
6 may apply to the coordinator for designation as a renewable  
7 energy facility. The term includes any of the following  
8 associated with the initial permitting and construction of the  
9 facility:

- 10 (1) The land parcel on which the facility is situated;
- 11 (2) Any renewable energy production structure or  
12 equipment;
- 13 (3) Any energy transmission line from the facility to a  
14 public utility's electricity transmission or  
15 distribution system;
- 16 (4) Any on-site infrastructure; and
- 17 (5) Any on-site building, structure, other improvement, or  
18 equipment necessary for the production of electricity  
19 or biofuel from the renewable energy site,  
20 transmission of the electricity or biofuel, or any  
21 accommodation for employees of the facility."



1 SECTION 8. Section 201N-4, Hawaii Revised Statutes, is  
2 amended by amending subsection (g) to read as follows:  
3 "(g) Each appropriate state and county agency shall  
4 diligently endeavor to process and approve or deny any permit in  
5 the permit plan no later than twelve months after a completed  
6 permit plan application is approved by the coordinator. If the  
7 coordinator has given at least thirty days written notice  
8 stating that the permit plan application is subject to this  
9 section and a permit is not approved or denied within twelve  
10 months after approval of a completed permit plan application,  
11 the permitting agency, within thirty days following the end of  
12 the twelve-month period, shall provide the coordinator with a  
13 report identifying diligent measures that are being taken by the  
14 agency to complete processing and take action as soon as  
15 practicable. If no further processing and action are reported  
16 by the permitting agency within five months following the end of  
17 the thirty-day agency report period, the coordinator may deem  
18 the permit approved. If a permitting agency fails to provide  
19 this report identifying diligent measures and if the permit has  
20 not been approved or denied within eighteen months following the  
21 approval of a completed permit plan application by the  
22 coordinator, the permit shall be deemed approved."



1 SECTION 9. There is appropriated out of the renewable  
2 energy facility siting special fund the sum of \$1,000,000 or so  
3 much thereof as may be necessary for fiscal year 2009-2010 and  
4 the sum of \$1,000,000 or so much thereof as may be necessary for  
5 fiscal year 2010-2011.

6 The sums appropriated shall be expended by the department  
7 of business, economic development, and tourism for the purposes  
8 of the renewable energy facility siting special fund as set  
9 forth in section 201N-11, Hawaii Revised Statutes.

10 PART VI

11 ENERGY EFFICIENCY

12 SECTION 10. In January 2008, the United States Department  
13 of Energy and the State of Hawaii signed a memorandum of  
14 understanding to strengthen cooperation to implement clean  
15 energy technologies that will increase energy-efficiency and  
16 maximize use of the State's vast and abundant renewable  
17 resources. The legislature finds that the establishment of this  
18 long-term partnership, called the Hawaii Clean Energy  
19 Initiative, is designed to transform Hawaii's energy system into  
20 one that uses renewable energy and energy-efficient technologies  
21 for a significant portion of its energy needs. The partnership  
22 aims to put Hawaii on a path to supply seventy per cent of its



1 energy needs using clean energy by 2030, which can significantly  
2 reduce Hawaii's current crude oil consumption. This type of  
3 clean energy transformation will help to stabilize and  
4 strengthen Hawaii's economy by reducing its dependency on  
5 imported fossil fuels and protect its environment by sharply  
6 reducing greenhouse gas emissions.

7 The United States Department of Energy, as a leader in  
8 clean energy technologies, is working with the State of Hawaii  
9 to further the potential of its natural resources, including  
10 wind, sun, and bioenergy resources, and engage experts in clean  
11 energy technology development to help Hawaii launch projects in  
12 conjunction with public and private sector partners that target  
13 opportunities and address critical needs for Hawaii's transition  
14 to a clean energy economy, including:

- 15 (1) Designing cost-effective approaches for the exclusive  
16 use of renewable energy on smaller islands;
- 17 (2) Designing systems to improve the stability of electric  
18 grids operating with variable generating sources, such  
19 as wind power plants on the islands of Hawaii and  
20 Maui;



1 (3) Minimizing energy use while maximizing energy-  
2 efficiency and renewable energy technologies at new  
3 large military housing developments;

4 (4) Expanding Hawaii's capability to use locally-grown  
5 crops and by-products for producing fuel and  
6 electricity; and

7 (5) Assisting in the development of comprehensive energy  
8 regulatory and policy frameworks for promoting clean  
9 energy technology use.

10 Similar to the establishment of a renewable energy  
11 portfolio standard, an energy-efficiency portfolio standard sets  
12 a target of electricity-use reduction to be achieved in  
13 incremental stages, as end-use energy-efficiency programs can  
14 make a significant and cost-effective contribution to achieving  
15 the goals and objectives of the Hawaii Clean Energy Initiative.

16 The purpose of this part is to maximize cost-effective  
17 energy-efficiency programs and technologies to achieve  
18 electricity-use reductions to the maximum extent feasible by  
19 establishing an energy-efficiency portfolio standard, making  
20 public buildings more energy-efficient, disclosing a property's  
21 energy consumption at the time of sale, and establishing a



1 building energy efficiency revolving loan fund, to achieve  
2 electricity use reductions to the maximum extent feasible.

3 SECTION 11. The Hawaii Revised Statutes is amended by  
4 adding three new sections to be appropriately designated and to  
5 read as follows:

6 "§ - Energy-efficiency portfolio standards. (a) The  
7 public utilities commission shall establish energy-efficiency  
8 portfolio standards that will maximize cost-effective energy-  
9 efficiency programs and technologies.

10 (b) The energy-efficiency portfolio standards shall be  
11 designed to achieve four thousand three hundred gigawatt hours  
12 of electricity use reductions statewide by 2030; provided that  
13 the commission shall establish interim goals for electricity use  
14 reduction to be achieved by 2015, 2020, and 2025 and may also  
15 adjust the 2030 standard by rule or order to maximize cost-  
16 effective energy-efficiency programs and technologies.

17 (c) The commission may establish incentives and penalties  
18 based on performance in achieving the energy-efficiency  
19 portfolio standards by rule or order.

20 (d) The public utilities commission shall evaluate the  
21 energy-efficiency portfolio standard every five years, beginning  
22 in 2013, and may revise the standard, based on the best



1 information available at the time, to determine if the energy-  
2 efficiency portfolio standard established by this section  
3 remains effective and achievable. The commission shall report  
4 its findings and revisions to the energy-efficiency portfolio  
5 standard, based on its own studies and other information, to the  
6 legislature no later than twenty days before the convening of  
7 the regular session of 2014, and every five years thereafter.

8 (e) Beginning in 2015, electric energy savings brought  
9 about by the use of renewable displacement or off-set  
10 technologies, including solar water heating and seawater air  
11 conditioning district cooling systems, shall count toward this  
12 standard.

13 **§ - Public buildings; benchmarks; retro-commissioning**  
14 **guidelines; energy savings performance contracts.** (a) By  
15 December 31, 2010, each state department with responsibilities  
16 for the design and construction of public buildings and  
17 facilities shall benchmark every existing public building that  
18 is either larger than five thousand square feet or uses more  
19 than eight thousand kilowatt-hours of electricity or energy per  
20 year and shall use the benchmark as a basis for determining the  
21 State's investment in improving the efficiency of its own  
22 building stock. Benchmarking shall be conducted using the



1 ENERGY STAR portfolio management or equivalent tool. The energy  
2 resources coordinator shall provide training to affected  
3 departments on the ENERGY STAR portfolio management or  
4 equivalent tool.

5 (b) Public buildings shall be retro-commissioned no less  
6 often than every five years. The energy resources coordinator  
7 shall establish retro-commissioning guidelines by January 1,  
8 2010.

9 (c) Departments may enter into energy savings performance  
10 contracts with a third party to cover the capital costs of  
11 energy-efficiency measures and distributed generation provided  
12 the terms of the energy savings performance contracts conform to  
13 the benchmark standard. The comptroller may review and exempt  
14 specific projects as appropriate to take into account cost-  
15 effectiveness.

16 Energy savings performance contracts shall be executed  
17 according to state guidelines issued by the comptroller, and the  
18 contracts shall be reviewed by the comptroller. To expedite  
19 energy savings performance contracting for public buildings, the  
20 department of accounting and general services shall develop a  
21 master energy savings performance contracts agreement that any  
22 department may use to contract with an energy savings





1 performance contracts provider for energy-efficiency and  
2 renewable energy services.

3 (d) For existing public buildings that undergo a major  
4 retrofit or renovation, the department or departments  
5 responsible for design and construction shall make investments  
6 in efficiency; provided that the cost of the measures shall be  
7 recouped within twenty years.

8 **§ - Energy-efficiency consumer information in sale or**  
9 **lease of real property.** Prior to the sale of residential real  
10 property, the property owner shall make a good faith declaration  
11 of electricity cost based on the most recent three-month period  
12 in which the property was occupied prior to the date of the  
13 seller's disclosure, pursuant to chapter 508D. This declaration  
14 shall only apply where the owner directly pays the electrical  
15 utility bills, and shall not apply in the case of a foreclosure  
16 of residential real property or where there are no electrical  
17 utility accounts associated with the property."

18 SECTION 12. Chapter 201, Hawaii Revised Statutes, is  
19 amended by adding a new section to read as follows:

20 **"§201- Building energy efficiency revolving loan fund.**

21 (a) There is established in the state treasury the building  
22 energy efficiency revolving loan fund which shall be



1 administered by the department, and into which shall be  
2 deposited:

3 (1) Funds from federal, state, county, private, or other  
4 funding sources;

5 (2) Moneys received as repayment of loans and interest  
6 payments; and

7 (3) Any fees collected by the department under this  
8 section.

9 (b) Moneys in the building energy efficiency revolving  
10 loan fund shall be used to provide low or no interest loans or  
11 other authorized financial assistance to eligible public,  
12 private, and nonprofit borrowers to make energy efficiency  
13 improvements in buildings. Moneys from the fund may be used to  
14 cover administrative and legal costs of fund management and  
15 management associated with individual loans, to include  
16 personnel, services, technical assistance, data collection and  
17 reporting, materials, equipment, and travel for the purposes of  
18 this section.

19 (c) Appropriations or authorizations from the fund shall  
20 be expended by the department. The department may contract with  
21 other public or private entities for the provision of all or a  
22 portion of the services necessary for the administration and



1 implementation of the loan fund program. The department may set  
2 fees or charges for fund management and technical site  
3 assistance provided under this section. The department may  
4 adopt rules pursuant to chapter 91 to carry out the purposes of  
5 this section.

6 (d) All interest earned on the deposit or investment of  
7 the moneys in the fund shall become a part of the fund.

8 (e) The department may establish subaccounts within the  
9 fund as necessary."

10 PART VII

11 SOLAR WATER HEATER SYSTEM

12 SECTION 13. It is the intent of the legislature that the  
13 variances provided for in Act 204, Session Laws of Hawaii 2008,  
14 (Act 204) will be rarely, if ever, exercised or granted because  
15 the burden of proof will lie with the applicant to demonstrate  
16 that a solar water heater system, regardless of location or  
17 circumstance, is not cost effective in the context of a thirty-  
18 year mortgage term. This requires the use of realistic  
19 assumptions regarding interest rates, discount rates, inflation  
20 rates, and the expected average cost of electricity by island  
21 over the thirty-year period, regardless of the cost of



1 electricity, or of oil or other fossil fuels, at a specific  
2 time.

3 The legislature finds that it is necessary to clarify the  
4 intent of the variance provision that allows for a demand water  
5 heater device. There is the potential that this provision may  
6 be used to allow a developer/builder, the purchaser of a water  
7 heating device, of a single-family dwelling, to circumvent the  
8 policy objectives of Act 204.

9 In its deliberation of Act 204, the legislature found that  
10 the installation of a solar water heater system will only occur  
11 if the developer or builder was able to recover the cost of the  
12 investment from the consumer, who ultimately enjoys the energy  
13 savings. Therefore, a solar water heater mandate was necessary  
14 to ensure that an energy savings could be realized by the  
15 consumer, without which the housing market would be sensitive to  
16 certain price points that do not factor in the cost-  
17 effectiveness of energy efficiency devices that reduce the  
18 overall energy cost of a home to benefit the consumer.

19 The legislature further found that retrofitting a home for  
20 a solar water heater after it was constructed was more costly,  
21 and that such upfront costs, despite incentives such as state  
22 and federal tax credits and utility rebates, were substantial



1 barriers for the average consumer. The financial barriers can  
2 be addressed, however, by including the installation of a solar  
3 water heater into the purchase price and mortgage of a home,  
4 where the cost of the system may pay for itself immediately.

5 Therefore, the legislature intended for a consumer to have  
6 the option to use gas appliances with the full knowledge that  
7 such a system may be more costly and less efficient. To obviate  
8 any attempt to circumvent Act 204, then, the legislature intends  
9 that if the potential variance applicant is not the party who  
10 will ultimately pay for the energy cost consumption, then only  
11 paragraph (1), (2), or (3) of subsection (a) in section 196-6.5,  
12 Hawaii Revised Statutes, should apply.

13 Additionally, the legislature finds that the continuation  
14 of the renewable energy income tax credit needs to remain  
15 available for all homes built before January 1, 2010.

16 The purpose of this part, is to clarify the provisions of  
17 Act 204, to carry out the legislature's intent.

18 SECTION 14. Section 196-6.5, Hawaii Revised Statutes, is  
19 amended by amending subsections (a) and (b) to read as follows:

20 "(a) On or after January 1, 2010, no building permit shall  
21 be issued for a new single-family dwelling that does not include  
22 a solar water heater system that meets the standards established



1 pursuant to section 269-44, unless the energy resources  
2 coordinator approves a variance. A variance application shall  
3 only be [~~approved~~] accepted if submitted by an architect or  
4 mechanical engineer licensed under chapter 464, who attests  
5 that:

- 6 (1) Installation is impracticable due to poor solar  
7 resource;
- 8 (2) Installation is cost-prohibitive based upon a life  
9 cycle cost-benefit analysis that incorporates the  
10 average residential utility bill and the cost of the  
11 new solar water heater system with a life cycle that  
12 does not exceed fifteen years;
- 13 (3) A [~~substitute~~] renewable energy technology system, as  
14 defined in section 235-12.5, is [~~used~~] substituted for  
15 use as the primary energy source for heating water; or
- 16 (4) A demand water heater device approved by Underwriters  
17 Laboratories, Inc., is installed; provided that at  
18 least one other gas appliance is installed in the  
19 dwelling. For the purposes of this paragraph, "demand  
20 water heater" means a gas-tankless instantaneous water  
21 heater that provides hot water only as it is needed.



1 (b) A request for a variance shall be submitted to the  
2 energy resources coordinator on an application prescribed by the  
3 energy resources coordinator and shall include [~~but not be~~  
4 ~~limited to,~~] a description of the location of the property and  
5 justification for the approval of a variance using the criteria  
6 established in subsection (a). A variance shall be deemed  
7 approved if not denied within thirty working days after receipt  
8 of the variance application. The energy resources coordinator  
9 shall publicize:

10 (1) All applications for a variance within seven days  
11 after receipt of the variance application; and

12 (2) The disposition of all applications for a variance  
13 within seven days of the determination of the variance  
14 application."

15 SECTION 15. Section 235-12.5, Hawaii Revised Statutes, is  
16 amended by amending subsection (a) to read as follows:

17 "(a) When the requirements of subsection (c) are met, each  
18 individual or corporate taxpayer that files an individual or  
19 corporate net income tax return for a taxable year may claim a  
20 tax credit under this section against the Hawaii state  
21 individual or corporate net income tax. The tax credit may be  
22 claimed for every eligible renewable energy technology system



1 that is installed and placed in service in the [State] state by  
2 a taxpayer during the taxable year. This credit shall be  
3 available for systems installed and placed in service in the  
4 [State] state after June 30, 2003. The tax credit may be  
5 claimed as follows:

6 (1) Solar thermal energy systems for:

7 (A) Single-family residential property for which a  
8 building permit for a single-family dwelling was  
9 issued prior to January 1, 2010: thirty-five per  
10 cent of the actual cost or \$2,250, whichever is  
11 less;

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

15 (C) Commercial property: thirty-five per cent of the  
16 actual cost or \$250,000, whichever is less;

17 (2) Wind-powered energy systems for:

18 (A) Single-family residential property: twenty per  
19 cent of the actual cost or \$1,500, whichever is  
20 less; provided that if all or a portion of the  
21 system is used to fulfill the substitute  
22 renewable energy technology requirement pursuant





1                   to section 196-6.5(a)(3), the credit shall be  
2                   reduced by twenty per cent of the actual system  
3                   cost or \$1,500, whichever is less;

4           (B) Multi-family residential property: twenty per  
5           cent of the actual cost or \$200 per unit,  
6           whichever is less; and

7           (C) Commercial property: twenty per cent of the  
8           actual cost or \$500,000, whichever is less; and

9           (3) Photovoltaic energy systems for:

10           (A) Single-family residential property: thirty-five  
11           per cent of the actual cost or \$5,000, whichever  
12           is less; provided that if all or a portion of the  
13           system is used to fulfill the substitute  
14           renewable energy technology requirement pursuant  
15           to section 196-6.5(a)(3), the credit shall be  
16           reduced by thirty-five per cent of the actual  
17           system cost or \$2,250, whichever is less;

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

21           (C) Commercial property: thirty-five per cent of the  
22           actual cost or \$500,000, whichever is less;



1 provided that multiple owners of a single system shall be  
2 entitled to a single tax credit; and provided further that the  
3 tax credit shall be apportioned between the owners in proportion  
4 to their contribution to the cost of the system.

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

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

12 PART VIII

13 PUBLIC BENEFITS FEE ADMINISTRATOR

14 SECTION 16. Section 269-122, Hawaii Revised Statutes, is  
15 amended by amending subsection (a) to read as follows:

16 "(a) The public utilities commission may contract with a  
17 third-party administrator, to operate and manage any programs  
18 established under section 269-121. The administrator shall not  
19 be deemed to be a "governmental body" as defined in section  
20 103D-104; provided that all moneys transferred to the third-  
21 party administrator shall be comprised solely of public benefit  
22 fees collected pursuant to section 269-121[-] or from funds



1 provided by the federal government or by private funding  
2 sources. The administrator shall not expend more than ten per  
3 cent of the collected public benefits fees in any fiscal year,  
4 or other reasonable percentage determined by the public  
5 utilities commission, for administration of the programs  
6 established under section 269-121."

7 PART IX

8 HAWAII STATE PLANNING ACT

9 SECTION 17. Section 226-18, Hawaii Revised Statutes, is  
10 amended to read as follows:

11 "**§226-18 Objectives and policies for facility systems--**

12 **energy.** (a) Planning for the State's facility systems with  
13 regard to energy shall be directed toward the achievement of the  
14 following objectives, giving due consideration to all:

- 15 (1) Dependable, efficient, and economical statewide energy  
16 systems capable of supporting the needs of the people;
- 17 (2) Increased energy self-sufficiency where the ratio of  
18 indigenous to imported energy use is increased;
- 19 (3) Greater energy security and diversification in the  
20 face of threats to Hawaii's energy supplies and  
21 systems; and



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

3 (b) To achieve the energy objectives, it shall be the  
4 policy of this State to ensure the short- and long-term  
5 provision of adequate, reasonably priced, and dependable energy  
6 services to accommodate demand.

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

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

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

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



- 1 (4) Promote all cost-effective conservation of power and  
2 fuel supplies through measures, including:
- 3 (A) Development of cost-effective demand-side  
4 management programs;
- 5 (B) Education; and
- 6 (C) Adoption of energy-efficient practices and  
7 technologies;
- 8 (5) Ensure, to the extent that new supply-side resources  
9 are needed, that the development or expansion of  
10 energy systems uses the least-cost energy supply  
11 option and maximizes efficient technologies;
- 12 (6) Support research, development, ~~and~~ demonstration,  
13 and use of energy efficiency, load management, and  
14 other demand-side management programs, practices, and  
15 technologies;
- 16 (7) Promote alternate fuels and transportation energy  
17 efficiency [~~by encouraging diversification of~~  
18 ~~transportation modes and infrastructure~~];
- 19 (8) Support actions that reduce, avoid, or sequester  
20 greenhouse gases in utility, transportation, and  
21 industrial sector applications;



1 (9) Support actions that reduce, avoid, or sequester  
2 Hawaii's greenhouse gas emissions through agriculture  
3 and forestry initiatives; and

4 (10) Provide priority handling and processing for all state  
5 and county permits required for renewable energy projects."

6 PART X

7 MISCELLANEOUS

8 SECTION 18. Statutory material to be repealed is bracketed  
9 and stricken. New statutory material is underscored.

10 SECTION 19. This Act shall take effect on July 1, 2009.



**Report Title:**

Renewable Energy; Energy Efficiency

**Description:**

Provides for and encourages renewable energy use and development, and energy efficiency, including increasing requirements for renewable energy portfolio standard, expanding duties of the energy resources coordinator, establishing energy efficiency portfolio standards, requiring energy-efficient state buildings, requiring sellers to provide electricity-cost information, and appropriating funds from the Renewable Energy Facility Siting Special Fund. (HB1464 CD1)

