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# A BILL FOR AN ACT

RELATING TO ENERGY.

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

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

13           For years, Hawaii's addiction to oil has translated into  
14 high energy prices, and exposes its economy to grave  
15 vulnerability from sudden, severe oil price spikes, and now,  
16 heightening oil supply insecurity as Hawaii's oil refiners must  
17 increasingly import crude oil from the Middle East and  
18 politically unstable oil-producing countries.



1           This Act provides such policy mechanisms as an increase in  
2 the renewable energy tax credits and elimination of their  
3 "sunset" date, and establishment of a unique renewable fuel  
4 standard for twenty per cent of Hawaii's highway fuel demand to  
5 be provided by renewable fuels by 2020.

6           In addition, demand-side management programs, which  
7 encourage people to modify their energy use to maximize energy  
8 efficiency, in the context in which they are implemented and  
9 paid for by Hawaii ratepayers, have changed significantly since  
10 they were initiated nearly a decade ago. Ratepayers should no  
11 longer be required to pay Hawaii utilities for sales of  
12 electricity lost as a result of the success of the demand-side  
13 management programs. This Act would redirect those fees to  
14 provide more funds for other demand-side management programs.

15           This Act provides a leadership mechanism across all state  
16 agencies to ensure the achievement of ambitious energy  
17 efficiency standards for building construction and major  
18 renovations, as well as targets for energy conservation and  
19 efficiency in government-owned or leased facilities. This Act  
20 provides the necessary resources to offer the technical training  
21 and support for state agencies to attain these tough  
22 certification requirements.



1           The State's combination of abundant renewable resources,  
2 high fossil fuel prices, limited geographic area, and recognized  
3 expertise in hydrogen research and development, makes it an  
4 ideal location to lead the transition to a hydrogen economy over  
5 the long term.

6           To accomplish this vision, this Act establishes the Hawaii  
7 renewable hydrogen program within the department of business,  
8 economic development, and tourism, and creates the Hawaii  
9 hydrogen investment capital special fund.

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

13           "§103D-     Biofuel preference. (a) Notwithstanding any  
14 other law to the contrary, contracts for the purchase of diesel  
15 fuel or boiler fuel shall be awarded to the lowest responsible  
16 and responsive bidders, with preference given to bids for  
17 biofuels or blends of biofuel and petroleum fuel.

18           (b) When purchasing fuel for use in diesel engines, the  
19 preference shall be        cents per gallon of one hundred per cent  
20 biodiesel. For blends containing both biodiesel and petroleum-  
21 based diesel, the preference shall be applied only to the  
22 biodiesel portion of the blend.



1        (c) When purchasing fuel for use in boilers, the  
2 preference shall be        cents per gallon of 100 per cent  
3 biofuel. For blends containing both biofuel and petroleum based  
4 boiler fuel, the preference shall be applied only to the biofuel  
5 portion of the blend.

6        (d) As used in this section, "biodiesel" means a vegetable  
7 oil based fuel which meets ASTM International Standard D6751,  
8 "Specification for Biodiesel Fuel Blend Stock (B100) for  
9 Distillate Fuels", as amended.

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

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

15       **"§226-18 Objectives and policies for facility systems--**  
16 **energy.** (a) Planning for the State's facility systems with  
17 regard to energy shall be directed toward the achievement of the  
18 following objectives, giving due consideration to all:

- 19       (1) Dependable, efficient, and economical statewide energy  
20       systems capable of supporting the needs of the people;  
21       (2) Increased energy self-sufficiency where the ratio of  
22       indigenous to imported energy use is increased;



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

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

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

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

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

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

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



- 1 environmental, social, cultural, and public health  
2 costs and benefits;
- 3 (4) Promote all cost-effective conservation of power and  
4 fuel supplies through measures including:
- 5 (A) Development of cost-effective demand-side  
6 management programs;
- 7 (B) Education; and
- 8 (C) Adoption of energy-efficient practices and  
9 technologies;
- 10 (5) Ensure to the extent that new supply-side resources  
11 are needed, the development or expansion of energy  
12 systems utilizes ~~[the]~~ a diverse assortment of least-  
13 cost energy supply [option] options and resources and  
14 maximizes efficient technologies;
- 15 (6) Support research, development, and demonstration of  
16 energy efficiency, load management, and other demand-  
17 side management programs, practices, and technologies;
- 18 (7) Promote alternate fuels and energy efficiency by  
19 encouraging diversification of transportation fuels,  
20 modes, and infrastructure;



- 1           (8)    Support actions that reduce, avoid, or sequester  
2                   greenhouse gases in utility, transportation, and  
3                   industrial sector applications; [~~and~~]
- 4           (9)    Support actions that reduce, avoid, or sequester  
5                   Hawaii's greenhouse gas emissions through agriculture  
6                   and forestry initiatives[-];
- 7           (10)    Provide priority handling and processing, and expedite  
8                   action on all state agency permits required for  
9                   renewable energy projects; and
- 10          (11)    Support a renewable fuels standard of ten per cent of  
11                   highway fuel demand to be provided by renewable fuels  
12                   by 2010, fifteen per cent by 2015, and twenty per cent  
13                   by 2020. "Renewable fuels" include:
  - 14                   (A)    Ethanol, with each gallon of ethanol produced  
15                           from cellulosic materials considered the  
16                           equivalent of 2.5 gallons of noncellulosic  
17                           ethanol;
  - 18                   (B)    Biodiesel; and
  - 19                   (C)    Hydrogen or other liquid or gaseous fuels  
20                           produced either from renewable feedstocks,  
21                           including organic wastes, or from water, using  
22                           electricity from renewable energy sources."

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

3 "(d) This section shall be repealed on December 31,  
4 [~~2006-~~] 2009."

5 SECTION 5. There is appropriated out of the general  
6 revenues of the State of Hawaii the sum of \$200,000, or so much  
7 thereof as may be necessary for fiscal year 2006-2007, for Rocky  
8 Mountain Institute to conduct a statewide multi-fuel biofuels  
9 production assessment of potential feedstocks, technologies, and  
10 economics of the various renewable fuels pathways and the  
11 potential for ethanol, biodiesel, and renewable hydrogen  
12 production to contribute to Hawaii's near-, mid-, and long-term  
13 energy needs. The sum appropriated shall be expended by the  
14 department of business, economic development, and tourism for  
15 the purposes of this part.

16 SECTION 6. Act 207, Session Laws of Hawaii 2003, is  
17 amended by amending section 4 to read as follows:

18 "SECTION 4. This Act shall take effect on July 1, 2003 [~~7~~  
19 ~~and shall be repealed January 1, 2008~~]."

20 SECTION 7. Chapter 235-12.5, Hawaii Revised Statutes, is  
21 amended to read as follows:





1           **"§235-12.5 Renewable energy technologies; income tax**  
2 **credit.** (a) When the requirements of subsection (c) are met,  
3 each individual or corporate resident taxpayer that files an  
4 individual or corporate net income tax return for a taxable year  
5 may claim a tax credit under this section against the Hawaii  
6 state individual or corporate net income tax. The tax credit  
7 may be claimed for every eligible renewable energy technology  
8 system that is installed and placed in service by a taxpayer  
9 during the taxable year. This credit shall be available for  
10 systems installed and placed in service after June 30, 2003.

11 The tax credit may be claimed as follows:

12           (1) Solar thermal energy systems for:

13                   (A) Single-family residential property: thirty-five  
14                   per cent of the actual cost or [~~\$1,750,~~] \$2,250,  
15                   whichever is less;

16                   (B) Multi-family residential property: thirty-five  
17                   per cent of the actual cost or [~~\$350~~] \$1,000 per  
18                   unit, whichever is less; and

19                   (C) Commercial property: thirty-five percent of the  
20                   actual cost or [~~\$250,000,~~] \$500,000, whichever is  
21                   less;

22           (2) Wind-powered energy systems for:



- 1 (A) Single-family residential property: twenty per  
2 cent of the actual cost or \$1,500, whichever is  
3 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 \$250,000, 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 [~~\$1,750~~] \$7,500,  
12 whichever is less;
- 13 (B) Multi-family residential property: thirty-five  
14 per cent of the actual cost or [~~\$350~~] \$1,000 per  
15 unit, whichever is less; and
- 16 (C) Commercial property: thirty-five per cent of the  
17 actual cost or [~~\$250,000~~] \$500,000, whichever is  
18 less;
- 19 provided that multiple owners of a single system shall be  
20 entitled to a single tax credit; and provided further that the  
21 tax credit shall be apportioned between the owners in proportion  
22 to their contribution to the cost of the system.



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

7           (b) For the purposes of this section:

8           "Actual cost" means costs related to the renewable energy  
9 technology systems under subsection (a), including accessories  
10 and installation, but not including the cost of consumer  
11 incentive premiums unrelated to the operation of the system or  
12 offered with the sale of the system and costs for which another  
13 credit is claimed under this chapter.

14           "Renewable energy technology system" means a new system  
15 that captures and converts a renewable source of energy, such as  
16 wind, heat (solar thermal), or light (photovoltaic) from the sun  
17 into:

- 18           (1) A usable source of thermal or mechanical energy;  
19           (2) Electricity; or  
20           (3) Fuel.

21           "Solar or wind energy system" means any identifiable  
22 facility, equipment, apparatus, or the like that converts



1 insolation or wind energy to useful thermal or electrical energy  
2 for heating, cooling, or reducing the use of other types of  
3 energy that are dependent upon fossil fuel for their generation.

4 (c) ~~[The] For taxable years beginning after December 31,~~  
5 ~~2005, the dollar amount of [any new federal energy tax credit~~  
6 ~~similar to the credit provided in this section that is~~  
7 ~~established after June 30, 2003, and]~~ any utility rebate~~[7]~~  
8 shall be deducted from the cost of the qualifying system and its  
9 installation before applying the state tax credit.

10 (d) The director of taxation shall prepare any forms that  
11 may be necessary to claim a tax credit under this section,  
12 including forms identifying the technology type of each tax  
13 credit claimed under this section, whether for solar thermal,  
14 photovoltaic from the sun, or wind. The director may also  
15 require the taxpayer to furnish reasonable information to  
16 ascertain the validity of the claim for credit made under this  
17 section and may adopt rules necessary to effectuate the purposes  
18 of this section pursuant to chapter 91.

19 (e) If the tax credit under this section exceeds the  
20 taxpayer's income tax liability, the excess of the credit over  
21 liability may be used as a credit against the taxpayer's income  
22 tax liability in subsequent years until exhausted. All claims



1 for the tax credit under this section, including amended claims,  
2 shall be filed on or before the end of the twelfth month  
3 following the close of the taxable year for which the credit may  
4 be claimed. Failure to comply with this subsection shall  
5 constitute a waiver of the right to claim the credit.

6 (f) By or before December, 2005, to the extent feasible,  
7 using existing resources to assist the energy-efficiency policy  
8 review and evaluation, the department shall assist with data  
9 collection on the following:

10 (1) The number of renewable energy technology systems that  
11 have qualified for a tax credit during the past year  
12 by:

13 (A) Technology type (solar thermal, photovoltaic from  
14 the sun, and wind); and

15 (B) Taxpayer type (corporate and individual); and

16 (2) The total cost of the tax credit to the State during  
17 the past year by:

18 (A) Technology type; and

19 (B) Taxpayer type."

20 SECTION 8. Chapter 269, Hawaii Revised Statutes, is  
21 amended by adding five new sections to be appropriately  
22 designated and to read as follows:



1           **§269-A Public benefits fund; authorization.**   The public  
2 utilities commission, by order or rule, may redirect the funds  
3 collected through the current demand-side management surcharge  
4 by Hawaii's electric utilities into a public benefits fund that  
5 may be established by the commission. If the public utilities  
6 commission establishes a public benefits fund, the surcharge  
7 shall be known as the public benefits fee. The fee shall be  
8 shown separately on each customer's bill, paid to a fund  
9 administrator appointed by the public utilities commission, and  
10 deposited into the fund. Moneys in the fund shall be ratepayer  
11 funds that shall be used to support demand-side management and  
12 renewable energy programs and services that meet the  
13 requirements of section 269-92. Balances in the fund shall be  
14 carried forward and remain in the fund at the end of each fiscal  
15 year. These moneys shall not be available to meet any current  
16 or past general obligations of the State. Interest earned shall  
17 accrue to the fund.

18           **§269-B Public benefits fund administrator; establishment.**

19 The public utilities commission shall appoint a fund  
20 administrator to operate and manage the programs established in  
21 section 269-A. The fund administrator shall not expend more  
22 than ten per cent of the fund in any fiscal year for



1 administration of the programs established by section 269-A.  
2 The fund administrator shall report to the public utilities  
3 commission on a regular basis. The fund administration shall be  
4 delegated to a third party based upon the requirements imposed  
5 upon the public utilities commission in section 269-C.  
6 Notwithstanding any other provision of law, the fund  
7 administrator shall not be a utility or a utility affiliate.

8 **§269-C Requirements for the public benefits fund**

9 **administrator.** The fund administrator shall:

- 10 (1) Have experience and expertise in energy efficient and  
11 renewable energy technologies and methods;  
12 (2) Have experience and expertise in implementing demand-  
13 side management or energy efficiency and renewable  
14 energy programs;  
15 (3) Promote and implement programs, methods, and  
16 technologies that support energy efficiency and the  
17 use of renewable energy;  
18 (4) Require that continued or improved efficiencies be  
19 made in the production, delivery, and use of demand-  
20 side management and renewable energy products and  
21 services;



- 1        (5) Build on the energy efficiency expertise and  
2        capabilities that have developed or may develop in the  
3        State and consult with state agency experts;
- 4        (6) Promote program initiatives, incentives, and market  
5        strategies that address the needs of individuals or  
6        businesses facing the most significant barriers to  
7        participation;
- 8        (7) Promote coordinated program delivery, including  
9        coordination with low-income home energy assistance  
10       and other demand-side management and renewable energy  
11       programs, and utility programs;
- 12       (8) Consider innovative approaches to delivering demand-  
13       side management and renewable energy products and  
14       services, including strategies to encourage third  
15       party financing and customer contributions to the cost  
16       of demand-side management and renewable energy  
17       products and services; and
- 18       (9) Submit to the public utilities commission for review  
19       and approval a multi-year budget and planning cycle  
20       that promotes program improvement, program stability,  
21       and maturation of programs and delivery resources.





1        §269-D Transitioning from utility demand-side management  
2 programs to the public benefits fund. If the public utilities  
3 commission establishes a public benefits fund pursuant to  
4 section 269-A, the commission shall:

5        (1) Develop a transition plan that ensures that utility  
6 demand-side management programs are continued until  
7 the transition date, to be established by the public  
8 utilities commission, and that the fund administrator  
9 will be able to provide demand-side management and  
10 renewable energy products and services on the  
11 transition date;

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

20        (3) Approve programs, measures, and delivery mechanisms  
21 that reasonably reflect current and projected utility

1 integrated resource planning, market conditions,  
2 technological options, and environmental benefits;

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

6 (5) Consider the unique geographic location of the State  
7 and the high costs of energy in developing programs  
8 that will promote technologies to advance energy  
9 efficiency and use of renewable energy and permit the  
10 State to take advantage of activities undertaken in  
11 other states, including the opportunity for multi-  
12 state programs;

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

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

21 (8) On or before January 1, 2008, and every three years  
22 thereafter, require verification by an independent



1           auditor of the reported energy and capacity savings  
2           and incremental renewable energy production savings  
3           associated with the programs delivered by any entity  
4           appointed by the public utilities commission to  
5           deliver demand-side management and renewable energy  
6           programs under section 269-A."

7           SECTION 9. Chapter 269, Hawaii Revised Statutes, is  
8 amended by adding one new sections to be appropriately  
9 designated and to read as follows:

10           "**§269- Energy efficiency portfolio standards.** (a) Each  
11 electric utility company that sells electricity for consumption  
12 in the State shall achieve a statewide energy efficiency  
13 portfolio standard based on an energy efficiency ratio of:

14           (1) Ten per cent by December 31, 2015;

15           (2) Fifteen per cent by December 31, 2020; and

16           (3) Twenty per cent by December 31, 2025.

17           (b) For purposes of determining the baseline standard, the  
18 baseline shall be 2005."

19           SECTION 10. Section 269-91, Hawaii Revised Statutes, is  
20 amended to read as follows:

21           "**§269-91 Definitions.** For the purposes of this part:



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

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

9 "Energy efficiency" means electrical energy savings  
10 resulting from the use of energy saving devices and systems  
11 approved by the commission.

12 "Energy efficiency ratio" means the cumulative quantified  
13 demand side measures divided by net electric sales in that year.

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

21 "Net electric sales" means the actual electric sales  
22 recorded on the utility system.



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

6       "Quantified demand side measures" means those utility  
7 demand side measures reported to the public utilities commission  
8 as net program impacts in megawatt hours, inclusive of all  
9 public utilities commission approved adjustment factors, such as  
10 line losses.

11       "Renewable energy" means electrical energy produced by  
12 wind, solar energy, hydropower, landfill gas, waste to energy,  
13 geothermal resources, ocean thermal energy conversion, wave  
14 energy, biomass, including municipal solid waste, biofuels, or  
15 fuels derived from organic sources, agricultural residues,  
16 animal byproducts, waste cooking oils or greases, hydrogen fuels  
17 derived from renewable energy, or fuel cells where the fuel is  
18 derived from renewable sources. Where biofuels, hydrogen, or  
19 fuel cell fuels are produced by a combination of renewable and  
20 nonrenewable means, the proportion attributable to the renewable  
21 means shall be credited as renewable energy. Where fossil and  
22 renewable fuels are co-fired in the same generating unit, the



1 unit shall be considered to produce renewable electricity in  
2 direct proportion to the percentage of the total heat value  
3 represented by the heat value of the renewable fuels.  
4 "Renewable energy" also means electrical energy savings brought  
5 about by the use of renewable displacement or off-set  
6 technologies, including solar [and heat pump] water heating,  
7 seawater air-conditioning district cooling systems, solar air-  
8 conditioning, and [~~ice storage, quantifiable energy conservation~~  
9 ~~measures, use of rejected heat from co-generation and combined~~  
10 ~~heat and power systems excluding fossil-fueled qualifying~~  
11 ~~facilities that sell electricity to electric utility companies,~~  
12 ~~and central station power projects] customer-sited, grid-  
13 connected renewable energy systems.~~

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

17 SECTION 11. Section 269-92, Hawaii Revised Statutes, is  
18 amended to read as follows:

19 "**§269-92 Renewable portfolio standards.** (a) Each  
20 electric utility company that sells electricity for consumption  
21 in the State shall establish a renewable portfolio standard of:



- 1       ~~[(1) Seven per cent of its net electricity sales by~~  
2               ~~December 31, 2003;~~
- 3       ~~(2) Eight per cent of its net electricity sales by~~  
4               ~~December 31, 2005;~~
- 5       ~~(3)]~~ (1) Ten per cent of its net electricity sales by  
6               December 31, 2010;
- 7       ~~[(4)]~~ (2) Fifteen per cent of its net electricity sales by  
8               December 31, 2015; and
- 9       ~~[(5)]~~ (3) Twenty per cent of its net electricity sales by  
10              December 31, 2020.

11       ~~[The public utilities commission shall determine if an~~  
12 ~~electric utility company is unable to meet the renewable~~  
13 ~~portfolio standards in a cost effective manner, or as a result~~  
14 ~~of circumstances beyond its control which could not have been~~  
15 ~~reasonably anticipated or ameliorated. If this determination is~~  
16 ~~made, the electric utility company shall be relieved of~~  
17 ~~responsibility for meeting the renewable portfolio standard for~~  
18 ~~the period of time that it is unable to meet the standard.]~~

19       (b) If the public utilities commission determined that an  
20 electric utility company failed to meet the renewable portfolio  
21 standard, the utility shall be subject to penalties to be  
22 established by the public utilities commission."



1 SECTION 12. Section 269-94, Hawaii Revised Statutes, is  
2 repealed.

3 ~~["§269-94 Waivers, extensions, and incentives.] Any~~  
4 ~~electric utility company not meeting the renewable portfolio~~  
5 ~~standard shall report to the public utilities commission within~~  
6 ~~ninety days following the goal dates established in section~~  
7 ~~[269-92], and provide an explanation for not meeting the~~  
8 ~~renewable portfolio standard. The public utilities commission~~  
9 ~~shall have the option to either grant a waiver from the~~  
10 ~~renewable portfolio standard or an extension for meeting the~~  
11 ~~prescribed standard.~~

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

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

18 **"§[+]269-95[+] Renewable portfolio standards study.** The  
19 public utilities commission shall:

20 (1) By December 31, ~~[2006,]~~ 2007, develop and implement a  
21 utility ratemaking structure which may include ~~[but is~~  
22 ~~not limited to]~~ performance-based ratemaking, to





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

11 (2) Gather, review, and analyze empirical data to  
12 determine the extent to which any proposed utility  
13 ratemaking structure would impact electric utility  
14 companies' profit margins, and to ensure that [~~these~~  
15 ~~profit margins do not decrease~~] the electric utility  
16 companies' opportunity to earn a fair rate of return  
17 is not diminished as a result of the implementation of  
18 the proposed ratemaking structure;

19 (3) Using funds from the public utilities special fund,  
20 contract with the Hawaii natural energy institute of  
21 the University of Hawaii to conduct independent  
22 studies to be reviewed by a panel of experts from



1 entities such as the United States Department of  
2 Energy, National Renewable Energy Laboratory, Electric  
3 Power Research Institute, Hawaii electric utility  
4 companies, and other similar institutions with the  
5 required expertise. These studies shall include  
6 findings and recommendations regarding:

- 7 (A) The capability of Hawaii's electric utility  
8 companies to achieve renewable portfolio  
9 standards in a cost-effective manner, and shall  
10 assess factors such as the impact on consumer  
11 rates, utility system reliability and stability,  
12 costs and availability of appropriate renewable  
13 energy resources and technologies, effect of  
14 power purchase agreement terms on the financial  
15 viability of renewable power producers,  
16 permitting approvals, impacts on the economy,  
17 culture, community, environment, land and water,  
18 demographics, and other factors deemed  
19 appropriate by the commission; and
- 20 (B) Projected renewable portfolio standards to be set  
21 five and ten years beyond the then current  
22 standards;



- 1           (4) Revise the standards based on the best information  
2           available at the time if the results of the studies  
3           conflict with the renewable portfolio standards  
4           established by section 269-92; and
- 5           (5) Report its findings and revisions to the renewable  
6           portfolio standards based on its own studies and those  
7           contracted under paragraph (3), to the legislature no  
8           later than twenty days before the convening of the  
9           regular session of 2009, and every five years  
10          thereafter."

11          SECTION 14. Section 269-27.2, subsection (c), Hawaii  
12 Revised Statutes, is amended to read as follows:

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

21          In the exercise of its authority to determine the just and  
22 reasonable rate for the nonfossil fuel generated electricity



1 supplied to the public utility by the producer, the commission  
2 shall establish that the rate for purchase of electricity by a  
3 public utility shall not be more than one hundred per cent of  
4 the cost avoided by the utility when the utility purchases the  
5 electrical energy rather than producing the electrical energy.  
6 The commission shall require that the public utility offer to  
7 purchase electricity from the producer at prudent renewable  
8 fixed prices under a long-term agreement, subject to such  
9 exceptions as the commission may determine to be just and  
10 reasonable to the public utility consumer and in the public  
11 interest.

12 The ratemaking structure shall also include a methodology  
13 to establish what the fifteen and twenty-year fixed price for  
14 renewable energy power or renewable fuel for power production  
15 shall be. The methodology shall:

- 16 (1) Establish a periodic review process for the  
17 determination of these prudent renewable fixed prices;  
18 (2) Establish a competitive bidding process for renewable  
19 power, which may be integrated with other power supply  
20 or all source competitive bidding processes at the  
21 public utilities commission's discretion; and



1       (3) Define an advanced approval process for the  
2       procurement of long-term fixed price renewable energy  
3       sources that are competitively bid and that cost less  
4       than the prudent long-term fixed price for renewables  
5       as defined under this section.

6       No later than December 31, 2007, the commission shall  
7       consider and make a determination with respect to each public  
8       utility that supplies electricity to the public, that the public  
9       utility's offer to purchase electricity from producers of  
10      nonfossil fuel generated electricity is at prudent renewable  
11      fixed prices under a long-term agreement, based on the  
12      methodology or methodologies to be used by a public utility to  
13      determine the prudent renewable fixed prices to be offered to  
14      such producers."

15       SECTION 15. Section 269-1, Hawaii Revised Statutes, is  
16      amended by adding three new definitions to be appropriately  
17      inserted and to read as follows:

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



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

7       "Fuel oil" shall include all petroleum-based fuels,  
8 including, but not limited to, residual fuel oil, diesel fuel  
9 oil, naphtha, and other fuels refined from petroleum."

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

12       **"§269-16 Regulation of utility rates; ratemaking**  
13 **procedures.** (a) All rates, fares, charges, classifications,  
14 schedules, rules, and practices made, charged, or observed by  
15 any public utility, or by two or more public utilities jointly,  
16 shall be just and reasonable and shall be filed with the public  
17 utilities commission. The rates, fares, classifications,  
18 charges, and rules of every public utility shall be published by  
19 the public utility in such manner as the public utilities  
20 commission may require, and copies furnished to any person on  
21 request.



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

7           (b) No rate, fare, charge, classification, schedule, rule,  
8 or practice, other than one established pursuant to an automatic  
9 rate adjustment clause previously approved by the commission,  
10 shall be established, abandoned, modified, or departed from by  
11 any public utility, except after thirty days' notice as  
12 prescribed in section 269-12(b) to the commission and prior  
13 approval by the commission for any increases in rates, fares, or  
14 charges. The commission may, in its discretion and for good  
15 cause shown, allow any rate, fare, charge, classification,  
16 schedule, rule, or practice to be established, abandoned,  
17 modified, or departed from upon notice less than that provided  
18 for in section 269-12(b). A contested case hearing shall be  
19 held in connection with any increase in rates and such hearing  
20 shall be preceded by a public hearing as prescribed in section  
21 269-12(c) at which the consumers or patrons of the public  
22 utility may present testimony to the commission concerning the



1 increase. The commission, upon notice to the public utility,  
2 may suspend the operation of all or any part of the proposed  
3 rate, fare, charge, classification, schedule, rule, or practice  
4 or any proposed abandonment or modification thereof or departure  
5 therefrom and after a hearing by order regulate, fix, and change  
6 all such rates, fares, charges, classifications, schedules,  
7 rules, and practices, so that the same shall be just and  
8 reasonable and prohibit rebates and unreasonable discrimination  
9 between localities, or between users or consumers, under  
10 substantially similar conditions, regulate the manner in which  
11 the property of every public utility is operated with reference  
12 to the safety and accommodation of the public, prescribe its  
13 form and method of keeping accounts, books, and records, and its  
14 accounting system, regulate the return upon its public utility  
15 property, the incurring of indebtedness relating to its public  
16 utility business, and its financial transactions and do all  
17 things in addition which are necessary and in the exercise of  
18 such power and jurisdiction, all of which as so ordered,  
19 regulated, fixed, and changed shall be just and reasonable, and  
20 such as shall provide a fair return on the property of the  
21 utility actually used or useful for public utility purposes.





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

16           (d) By December 31, 2007, to share the risks of reliance  
17 on oil fired generation, the commission shall determine whether  
18 to eliminate the fuel adjustment clause, or the commission shall  
19 establish ratemaking provisions that amend the fuel adjustment  
20 clause to share oil cost increases and decreases between utility  
21 shareholders and utility customers.



1        (e) If the commission determines that the fuel adjustment  
2 clause shall not be eliminated, it shall be amended. Ratemaking  
3 shall set the percentage of changes in fuel prices that may be  
4 automatically passed through the fuel adjustment clause.

5        (f) If the commission conducts ratemaking to amend the  
6 fuel adjustment clause, the long-term price for fossil fuels  
7 that is used to define base rates shall be consistent with the  
8 long-term price of fossil fuels that is used to determine the  
9 prudent long-term price for renewables as defined in section  
10 269-27.2.

11        [~~(d)~~] (g) The commission shall make every effort to  
12 complete its deliberations and issue its decision as  
13 expeditiously as possible and before nine months from the date  
14 the public utility filed its completed application; provided  
15 that in carrying out this mandate the commission shall require  
16 all parties to a proceeding to comply strictly with procedural  
17 time schedules which it establishes. If a decision is rendered  
18 after the nine-month period, the commission shall in writing  
19 report the reasons therefor to the legislature within thirty  
20 days after rendering the decision.

21        Notwithstanding subsection (c), if the commission has not  
22 issued its final decision on a public utility's rate application



1 within the nine-month period stated in this section, the  
2 commission shall within one month after the expiration of the  
3 nine-month period render an interim decision allowing the  
4 increase in rates, fares, and charges, if any, to which the  
5 commission, based on the evidentiary record before it, believes  
6 the public utility is probably entitled. The commission may  
7 postpone its interim rate decision thirty days if the commission  
8 considers the evidentiary hearings incomplete. In the event  
9 interim rates are made effective, the commission shall by order  
10 require the public utility to return in the form of an  
11 adjustment to rates, fares, or charges to be billed in the  
12 future any amounts, with interest at a rate equal to the rate of  
13 return on such public utility's rate base found to be reasonable  
14 by the commission, received under such interim rates which are  
15 in excess of the rates, fares, or charges finally determined to  
16 be just and reasonable by the commission. Interest on any such  
17 excess shall commence as of the date that any rate, fare, or  
18 charge goes into effect which results in any such excess and  
19 shall continue to accrue on the balance of any such excess until  
20 returned.

21 The nine-month period in this subsection shall begin only  
22 after a completed application has been filed with the commission



1 and a copy served on the consumer advocate. The commission  
2 shall establish standards concerning the data required to be set  
3 forth in the application in order for it to be deemed a  
4 completed application. The consumer advocate may within twenty-  
5 one days after receipt object to the sufficiency of any  
6 application and the commission shall hear and determine any such  
7 objection within twenty-one days after the same is filed. If  
8 the commission finds that the objections are without merit, the  
9 application shall be deemed to have been completed upon original  
10 filing. If the commission finds the application to be  
11 incomplete, it shall require the applicant to submit an amended  
12 application consistent with its findings and the nine-month  
13 period shall not commence until the amended application is  
14 filed.

15       ~~(e)~~ (h) In any case of two or more organizations,  
16 trades, or businesses, ~~(+)~~ whether or not incorporated, whether  
17 or not organized in the State of Hawaii, and whether or not  
18 affiliated~~(+)~~, (+) owned or controlled directly or indirectly by the  
19 same interests, the commission may distribute, apportion, or  
20 allocate gross income, deductions, credits, or allowances  
21 between or among the organizations, trades, or businesses, if it  
22 determines that the distribution, apportionment, or allocation



1 is necessary in order to adequately reflect the income of any  
2 such organizations, trades, or businesses to carry out the  
3 regulatory duties imposed by this section.

4 ~~[(f)]~~ (i) Notwithstanding any law to the contrary, for  
5 public utilities having annual gross revenues of less than  
6 \$2,000,000, the commission may make and amend its rules and  
7 procedures which will provide the commission with sufficient  
8 facts necessary to determine the reasonableness of the proposed  
9 rates without unduly burdening the utility company and its  
10 customers. In the determination of the reasonableness of the  
11 proposed rates, the commission shall:

12 (1) Require the filing of a standard form application to  
13 be developed by the commission. The standard form  
14 application for general rate increases shall describe  
15 the specific facts that must be submitted to support a  
16 determination of the reasonableness of the proposed  
17 rates, and require the submission of financial  
18 information in conformance with a standard chart of  
19 accounts to be approved by the commission, and other  
20 commission guidelines to allow expeditious review of a  
21 requested general rate increase application;



- 1           (2) Hold a public hearing as prescribed in section 269-  
2           12(c) at which the consumers or patrons of the public  
3           utility may present testimony to the commission  
4           concerning the increase. The public hearing shall be  
5           preceded by proper notice, as prescribed in section  
6           269-12; and
- 7           (3) Make every effort to complete its deliberations and  
8           issue a proposed decision and order within six months  
9           from the date the public utility files a completed  
10          application with the commission, provided that all  
11          parties to the proceeding strictly comply with the  
12          procedural schedule established by the commission and  
13          no person is permitted to intervene. If a proposed  
14          decision and order is rendered after the six-month  
15          period, the commission shall report in writing the  
16          reasons therefor to the legislature within thirty days  
17          after rendering the proposed decision and order.  
18          Prior to the issuance of the commission's proposed  
19          decision and order, the parties shall not be entitled  
20          to a contested case hearing.
- 21                 If all parties to the proceeding accept the  
22          proposed decision and order, the parties shall not be



1 entitled to a contested case hearing, and section 269-  
2 15.5 shall not apply. If the commission permits a  
3 person to intervene, the six-month period shall not  
4 apply and the commission shall make every effort to  
5 complete its deliberations and issue its decision  
6 within the nine-month period from the date the public  
7 utility's completed application was filed, pursuant to  
8 subsections (b), (c), and ~~[(d)-]~~ (g).

9 If a party does not accept the proposed decision  
10 and order, either in whole or in part, that party  
11 shall give notice of its objection or nonacceptance  
12 within the timeframe prescribed by the commission in  
13 the proposed decision and order, setting forth the  
14 basis for its objection or nonacceptance; provided  
15 that the proposed decision and order shall have no  
16 force or effect pending the commission's final  
17 decision. If notice is filed, the above six-month  
18 period shall not apply and the commission shall make  
19 every effort to complete its deliberations and issue  
20 its decision within the nine-month period from the  
21 date the public utility's completed application was  
22 filed as set forth in subsection ~~[(d)-]~~ (g). Any party



1           that does not accept the proposed decision and order  
 2           under this paragraph shall be entitled to a contested  
 3           case hearing; provided that the parties to the  
 4           proceeding may waive the contested case hearing.

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

16          SECTION 17. There is appropriated out of the general  
 17          revenues of the State of Hawaii the sum of \$200,000, or so much  
 18          thereof as may be necessary for fiscal year 2006-2007, to  
 19          complete a comprehensive inventory of state lands available for  
 20          renewable energy, and to establish renewable energy resource  
 21          development sub-zones, to consider streamlining the permitting  
 22          for said sub-zones, to encourage and facilitate renewable energy



1 development and attract private investment. The sum  
2 appropriated shall be expended by the department of land and  
3 natural resources.

4 SECTION 18. There is appropriated out of the general  
5 revenues of the State of Hawaii the sum of \$150,000, or so much  
6 thereof as may be necessary, for fiscal year 2006-2007 to  
7 provide assistance to the agricultural community interested in  
8 developing energy projects, especially for the production of  
9 biodiesel from energy crops and cellulosic ethanol from  
10 agricultural waste streams, and to seek funding that may be  
11 available from the United States Departments of Agriculture and  
12 Energy, and other external sources. The sum appropriated shall  
13 be expended by the department of agriculture for the purposes of  
14 this part.

15 SECTION 19. Chapter 196A, Hawaii Revised Statutes, is  
16 amended by adding a new section to be appropriately designated  
17 and to read as follows:

18 "§196A- Hawaii renewable hydrogen program. (a) There  
19 is established within the department of business, economic  
20 development, and tourism, a Hawaii renewable hydrogen program,  
21 to coordinate the State's transition to a renewable hydrogen

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



- 1        (6) The promotion of Hawaii's renewable hydrogen assets  
2        and project opportunities to potential partners and  
3        investors;
- 4        (7) A plan, for implementation during 2007-2010, to more  
5        fully deploy hydrogen technologies and infrastructure  
6        capable of supporting the island of Hawaii's fuel  
7        needs, including:
  - 8        (A) Expanded installation of hydrogen production  
9        facilities;
  - 10       (B) Development of integrated energy systems  
11       including hydrogen vehicles;
  - 12       (C) Construction of additional hydrogen refueling  
13       stations; and
  - 14       (D) Encouragement of building design and construction  
15       that fully incorporates clean energy assets,  
16       including reliance on hydrogen-fueled distributed  
17       generation;
- 18       (8) A plan, for implementation during 2010-2020, to  
19       transition the island of Hawaii to a hydrogen-fueled  
20       economy by 2020, and to initiate that model throughout  
21       the State; and

1       (9) An evaluation of policy instruments and development,  
 2       in coordination with program partners, of policy  
 3       recommendations to encourage the adoption of hydrogen-  
 4       fueled vehicles, to continually replenish the hydrogen  
 5       investment capital special fund, and to support  
 6       investment in hydrogen infrastructure, including  
 7       production, storage, and dispensing facilities."

8       SECTION 20. Chapter 211F, Hawaii Revised Statutes, is  
 9       amended by adding a new section to be appropriately designated  
 10      and to read as follows:

11       "§211F-       Hydrogen investment capital special fund. (a)

12      There shall be established a hydrogen investment capital special  
 13      fund into which shall be deposited:

- 14       (1) Appropriations made by the legislature to the fund;
- 15       (2) All contributions from public or private partners;
- 16       (3) All interest earned on or accrued to moneys deposited  
 17       in the special fund; and
- 18       (4) Any other moneys made available to the special fund  
 19       from other sources.

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



- 1        (1) To seed private sector and federal projects for
- 2                    research, development, testing, and deployment of
- 3                    renewable hydrogen systems in Hawaii;
- 4        (2) To pay reasonable expenses incurred by fund advisory
- 5                    board members in the execution of their relevant
- 6                    duties; and
- 7        (3) For any other purpose deemed necessary to carry out
- 8                    the purposes of this section.

9        (c) Investment of the hydrogen investment capital special  
 10 fund in hydrogen projects shall be made with the advice and  
 11 assistance of an advisory board of experts and knowledgeable  
 12 individuals who shall be appointed by the director of the  
 13 department of business, economic development, and tourism to  
 14 help the State develop projects and partnerships with industry  
 15 and the federal government."

16        SECTION 21. (a) There is appropriated out of the general  
 17 revenues of the State of Hawaii the sum of \$750,000, or so much  
 18 thereof as may be necessary, for fiscal year 2006-2007 to carry  
 19 out the purposes of this part, of which \$250,000 shall be  
 20 allocated to three permanent full-time equivalent (3.0 FTE)  
 21 professional positions namely, a hydrogen program manager,  
 22 hydrogen program specialist, and hydrogen project specialist.

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

3 (b) There is appropriated out of the general revenues of  
4 the State of Hawaii the sum of \$10,000,000 for fiscal year 2006-  
5 2007 to be paid into the hydrogen investment capital special  
6 fund to carry out the purposes of section 19. The sum  
7 appropriated shall be expended by department of business,  
8 economic development, and tourism.

9 SECTION 22. There is appropriated out of the hydrogen  
10 investment capital special fund the sum of \$10,000,000, or so  
11 much thereof as may be necessary, for fiscal year 2006-2007 to  
12 be used for the purposes of the hydrogen investment capital  
13 special fund.

14 The sum appropriated shall be expended by the department of  
15 business, economic development, and tourism for the purposes of  
16 this Act.

17 SECTION 23. The director of business, economic  
18 development, and tourism, in the director's role as both  
19 Hawaii's chief business advocate and the state energy resources  
20 coordinator, shall facilitate and coordinate the State's efforts  
21 to implement and effectuate the purposes of this Act. The  
22 director of business, economic development, and tourism,



1 supported by relevant department staff, shall develop and  
2 establish formal and informal procedures and mechanisms for  
3 efficient and effective coordination and collaboration with, and  
4 among the departments of taxation, transportation, land and  
5 natural resources, agriculture, budget and finance, and  
6 accounting and general services, and other relevant federal,  
7 state, and county government agencies and stakeholders for this  
8 purpose. The departments of taxation, transportation, land and  
9 natural resources, agriculture, budget and finance, and  
10 accounting and general services and those any department or  
11 agency involved at the request of the director of business,  
12 economic development, and tourism shall cooperate and provide  
13 support to the fullest possible extent to effectuate the  
14 purposes of this Act.

15 SECTION 24. In codifying the new sections added by this  
16 Act, the revisor of statutes shall substitute appropriate  
17 section numbers for the letters used in designating the new  
18 sections in this Act.

19 SECTION 25. Statutory material to be repealed is bracketed  
20 and stricken. New statutory material is underscored.

21 SECTION 26. This Act shall take effect on July 1, 2050.



**Report Title:**

Energy; Self-Reliance

**Description:**

Establishes an energy policy framework of integrated measures to encourage and support market-based development of reliable, cost-effective, more self-reliant energy systems. (SD1)

