A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

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

- 1 SECTION 1. Chapter 103D, Hawaii Revised Statutes, is
- 2 amended by adding a new section to be appropriately designated
- 3 and to read as follows:
- 4 "\$103D- Biofuel preference. (a) Notwithstanding any
- 5 other law to the contrary, contracts for the purchase of diesel
- 6 fuel or boiler fuel shall be awarded to the lowest responsible
- 7 and responsive bidders, with preference given to bids for
- 8 biofuels or blends of biofuel and petroleum fuel.
- 9 (b) When purchasing fuel for use in diesel engines, the
- 10 preference shall be cents per gallon of one hundred per cent
- 11 biodiesel. For blends containing both biodiesel and petroleum-
- 12 based diesel, the preference shall be applied only to the
- biodiesel portion of the blend.
- (c) When purchasing fuel for use in boilers, the
- 15 preference shall be cents per gallon of 100 per cent
- 16 biofuel. For blends containing both biofuel and petroleum based
- 17 boiler fuel, the preference shall be applied only to the biofuel
- 18 portion of the blend.

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1 (d) As used in this section, "biodiesel" means a vegetable 2 oil based fuel which meets ASTM International Standard D6751, "Specification for Biodiesel Fuel Blend Stock (B100) for 3 4 Distillate Fuels", as amended. (e) As used in this section, "biofuel" means fuel from 5 non-petroleum plant or animal based sources that can be used for 6 the generation of heat or power." 7 SECTION 2. Section 226-18, Hawaii Revised Statutes, is 8 9 amended to read as follows: "\$226-18 Objectives and policies for facility systems--10 11 energy. (a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the 12 13 following objectives, giving due consideration to all: Dependable, efficient, and economical statewide energy 14 (1)systems capable of supporting the needs of the people; 15 16 Increased energy self-sufficiency where the ratio of (2) **17** indigenous to imported energy use is increased; 18 Greater energy security in the face of threats to (3) 19 Hawaii's energy supplies and systems; and Reduction, avoidance, or sequestration of greenhouse 20 (4)

gas emissions from energy supply and use.

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| 1 | (d) | To achieve the energy objectives, it shall be the |
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| 2 | policy of | this State to ensure the provision of adequate, |
| 3 | reasonably | y priced, and dependable energy services to accommodate |
| 4 | demand. | |
| 5 | (c) | To further achieve the energy objectives, it shall be |
| 6 | the policy | y of this State to: |
| 7 | (1) | Support research and development as well as promote |
| 8 | | the use of renewable energy sources; |
| 9 | (2) | Ensure that the combination of energy supplies and |
| 10 | | energy-saving systems is sufficient to support the |
| 11 | | demands of growth; |
| 12 | (3) | Base decisions of least-cost supply-side and demand- |
| 13 | | side energy resource options on a comparison of their |
| 14 | | total costs and benefits when a least-cost is |
| 15 | | determined by a reasonably comprehensive, |
| 16 | | quantitative, and qualitative accounting of their |
| 17 | | long-term, direct and indirect economic, |
| 18 | | environmental, social, cultural, and public health |
| 19 | | costs and benefits; |
| 20 | (4) | Promote all cost-effective conservation of power and |
| 21 | | fuel supplies through measures including: |

| 1 | | (A) Development of cost-effective demand-side | |
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| 2 | | management programs; | |
| 3 | | (B) Education; and | |
| 4 | | (C) Adoption of energy-efficient practices and | |
| 5 | | technologies; | |
| 6 | (5) | Ensure to the extent that new supply-side resour | ces |
| 7 | | are needed, the development or expansion of ener | .дУ |
| 8 | | systems utilizes [the] a diverse assortment of l | .east- |
| 9 | | cost energy supply [option] options and resource | s and |
| 10 | | maximizes efficient technologies; | |
| 11 | (6) | Support research, development, and demonstration | of |
| 12 | | energy efficiency, load management, and other de | mand- |
| 13 | | side management programs, practices, and technol | ogies; |
| 14 | (7) | Promote alternate fuels and energy efficiency by | • |
| 15 | | encouraging diversification of transportation fu | els, |
| 16 | | nodes, and infrastructure; | |
| 17 | (8) | Support actions that reduce, avoid, or sequester | • |
| 18 | | greenhouse gases in utility, transportation, and | l |
| 19 | | ndustrial sector applications; [and] | |
| 20 | (9) | Support actions that reduce, avoid, or sequester | |
| 21 | | lawaii's greenhouse gas emissions through agricu | lture |
| 22 | | and forestry initiatives[-]; | |

| 1 | (10) | Prov | ide priority handling and processing, and expedite |
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| 2 | | acti | on on all state agency permits required for |
| 3 | | rene | wable energy projects; and |
| 4 | (11) | Supp | ort a renewable fuels standard of ten per cent of |
| 5 | | high | way fuel demand to be provided by renewable fuels |
| 6 | | by 2 | 010, fifteen per cent by 2015, and twenty per cent |
| 7 | | <u>by 2</u> | 020. "Renewable fuels" include: |
| 8 | | <u>(A)</u> | Ethanol, with each gallon of ethanol produced |
| 9 | | | from cellulosic materials considered the |
| 10 | | | equivalent of 2.5 gallons of noncellulosic |
| 11 | | | ethanol; |
| 12 | | (B) | Biodiesel; and |
| 13 | | (C) | Hydrogen or other liquid or gaseous fuels |
| 14 | | | produced either from renewable feedstocks, |
| 15 | | | including organic wastes, or from water, using |
| 16 | | | electricity from renewable energy sources." |
| 17 | SECT | ION 3 | . There is appropriated out of the general |
| 18 | revenues | of th | e State of Hawaii the sum of \$200,000, or so much |
| 19 | thereof a | s may | be necessary for fiscal year 2006-2007, for Rocky |
| 20 | Mountain | Insti | tute to conduct a statewide multi-fuel biofuels |
| 21 | production | n ass | essment of potential feedstocks, technologies, and |
| 22 | economics | of t | he various renewable fuels pathways and the |

- 1 potential for ethanol, biodiesel, and renewable hydrogen
- 2 production to contribute to Hawaii's near-, mid-, and long-term
- 3 energy needs. The sum appropriated shall be expended by the
- 4 department of business, economic development, and tourism for
- 5 the purposes of this part.
- 6 SECTION 4. There is appropriated out of the general
- 7 revenues of the State of Hawaii the sum of \$150,000, or so much
- 8 thereof as may be necessary, for fiscal year 2006-2007 to
- 9 provide assistance to the agricultural community interested in
- 10 developing energy projects, especially for the production of
- 11 biodiesel from energy crops and cellulosic ethanol from
- 12 agricultural waste streams, and to seek funding that may be
- 13 available from the United States Departments of Agriculture and
- 14 Energy, and other external sources. The sum appropriated shall
- 15 be expended by the department of agriculture for the purposes of
- 16 this part.
- 17 SECTION 5. Chapter 196A, Hawaii Revised Statutes, is
- 18 amended by adding a new section to be appropriately designated
- 19 and to read as follows:
- 20 "\$196A- Hawaii renewable hydrogen program. (a) There
- 21 is established within the department of business, economic
- 22 development, and tourism, a Hawaii renewable hydrogen program,

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

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

| 1 | | economy by 2020, and to initiate that model throughout |
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| 2 | | the State; and |
| 3 | (9) | An evaluation of policy instruments and development, |
| 4 | | in coordination with program partners, of policy |
| 5 | | recommendations to encourage the adoption of hydrogen- |
| 6 | | fueled vehicles, to continually replenish the hydroger |
| 7 | | investment capital special fund, and to support |
| 8 | | investment in hydrogen infrastructure, including |
| 9 | | production, storage, and dispensing facilities." |
| 10 | SECT | ION 6. Chapter 211F, Hawaii Revised Statutes, is |
| 11 | amended by | y adding a new section to be appropriately designated |
| 12 | and to re | ad as follows: |
| 13 | " <u>§</u> 21 | 1F- Hydrogen investment capital special fund. (a) |
| 14 | There sha | ll be established a hydrogen investment capital special |
| 15 | fund into | which shall be deposited: |
| 16 | (1) | Appropriations made by the legislature to the fund; |
| 17 | (2) | All contributions from public or private partners; |
| 18 | <u>(3)</u> | All interest earned on or accrued to moneys deposited |
| 19 | | in the special fund; and |
| 20 | (4) | Any other moneys made available to the special fund |
| 21 | | from other sources. |
| 22 | (b) | Moneys in the fund shall be used: |

| 1 | (1) | To seed private sector and federal projects for | |
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| 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 h | ydrogen projects shall be made with the advice and | |
| 11 | assistanc | e of an advisory board of experts and knowledgeable | |
| 12 | individua | ls who shall be appointed by the director of the | |
| 13 | departmen | t of business, economic development, and tourism to | |
| 14 | help the State develop projects and partnerships with industry | | |
| 15 | and the f | ederal government." | |
| 16 | SECT | ION 7. (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 a | s may be necessary, for fiscal year 2006-2007 to carry | |
| 19 | out the p | urposes of this part, of which \$250,000 shall be | |
| 20 | allocated | to three permanent full-time equivalent (3.0 FTE) | |
| 21 | professio | nal 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 2. The sum
- 7 appropriated shall be expended by department of business,
- 8 economic development, and tourism.
- 9 SECTION 8. 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 9. Statutory material to be repealed is bracketed
- 18 and stricken. New statutory material is underscored.
- 19 SECTION 10. This Act shall take effect upon its approval;
- 20 provided that sections 3, 4, 7 and 8 shall take effect on July
- **21** 1, 2006.

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Report Title:

Renewable Energy

Description:

Establishes a biofuel preference; establishes objectives and policies for state facility systems with regard to energy; appropriates funds for a statewide multi-fuel biofuel production assessment; appropriates funds to assist the agricultural community interested in developing renewable energy projects; establishes a renewable hydrogen program and hydrogen investment capital special fund, and appropriates funds for three positions and to fund the hydrogen investment capital special fund. (SD1)