HOUSE OF REPRESENTATIVES TWENTY-FOURTH LEGISLATURE, 2007 STATE OF HAWAII H.B. NO. ¹⁰⁰³ H.D. 3 S.D. 2

A BILL FOR AN ACT

RELATING TO ENERGY.

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

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PART I

2 SECTION 1. The legislature finds and declares that Hawaii 3 has struggled for thirty years to develop renewable energy 4 resources to reduce its dependence on imported sources of energy, such as fossil fuels. In 1974, the legislature passed a 5 series of Acts that recognized the vulnerability of Hawaii's 6 residents to the petroleum industry as a result of its reliance 7 8 on imported oil for transportation fuels and power generation. 9 Over the thirty years that followed, the legislature has enacted laws and appropriated funds to further develop alternative 10 sources of energy. 11

In 2006, the legislature passed groundbreaking legislation, found in Act 240, Session Laws of Hawaii 2006, to promote energy self-sufficiency for the State. Act 240 promoted further development of renewable energy, including increased financial incentives, mechanisms for dedicated sources of funding, and the development of hydrogen as a renewable energy source. While progress has been made, there is still much to be done. HB1003 SD2 LRB 07-4065.doc Page 2

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In 2006, the legislature also adopted House Concurrent 1 Resolution No. 195, calling for a study of the feasibility of 2 developing biofuels as a renewable energy primarily for 3 electricity generation. The legislature recognized that the 4 land-based development of crops for use in biofuels production 5 for Hawaii would achieve the objective of energy self-6 sufficiency. The legislature also recognized that complex 7 issues relating to land acquisition, water supply, and 8 investment risk would need to be addressed before a viable and 9 cost-effective biofuels program could be developed. The 10 legislature finds that an integrated approach must be undertaken 11 to coordinate the various industries and federal and state 12 agencies to ensure the success of any substantial investment in 13 biofuels development. 14

15 The legislature also finds that Hawaii should diversify its 16 energy system and reduce its dependence on imported petroleum by 17 introducing bioenergy resources into the overall energy system. 18 In response to the desire to diversify Hawaii's energy 19 system, a biofuels summit and bioenergy workshop was held in 2006 to explore the potential for a domestic bioenergy and 21 biofuels future. Both meetings resulted in the acknowledgement

22 that the initiation of a bioenergy industry in Hawaii must first HB1003 SD2 LRB 07-4065.doc



address a diverse and very complex set of issues that involves 1 many public and private stakeholders. 2 The summit and workshop demonstrated the effectiveness of 3 facilitated collaboration and pointed to the value of a 4 mechanism to coordinate the development of supply, production 5 capability, and infrastructure, each with long, independent lead 6 times, that is understood and supported by both public and 7 private stakeholders. Therefore, the legislature finds that the 8 preparation of a biofuels master plan is necessary to establish 9 10 an effective strategy for the development of a bioenergy 11 industry in Hawaii. The purpose of this Act is three-fold: 12 Part II statutorily establishes the Hawaii natural 13 (1)energy institute of the University of Hawaii at Manoa, 14 defines its mission, and creates the energy systems 15 development special fund for the development of 16 renewable energy and end-use energy-efficient 17 technologies, including those that ameliorate peak 18 demand problems. The roles of the institute will 19 20 include:

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Managing the portfolio of renewable energy and (A) energy efficiency technology programs to ensure an integrated approach; Using its technical expertise to advise state and (B) federal agencies on the maximization of funding sources and encouragement of private industry investments; and (C) Evaluating Hawaii's efforts toward energy selfsufficiency; Part III establishes the Hawaii biofuels program (2)within the department of business, economic development, and tourism to manage the State's transition to energy self-sufficiency based in part on biofuels for power generation and transportation fuels, and creates the biofuels development revolving loan fund, to be administered by the Hawaii strategic development corporation with technical advice from the Hawaii natural energy institute, to provide seed financing for commercially-viable biofuel development projects, pending adoption of a comprehensive plan for Hawaii's energy self-sufficiency based, in part, on

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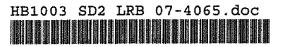
biofuels; and

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1	(3) Part IV tasks the department of business, economic
2	development, and tourism with the development and
3	preparation of a bioenergy master plan that will set
4	the course for the coordination and implementation of
5	policies and procedures to develop a bioenergy
6	industry in Hawaii.
7	PART II
8	SECTION 2. Chapter 304A, Hawaii Revised Statutes, is
9	amended by adding a new subpart to part IV to be appropriately
10	designated and to read as follows:
11	" . Hawaii Natural Energy Institute
12	§304A-A Hawaii natural energy institute; structure;
13	function. (a) There is established the Hawaii natural energy
14	institute at the University of Hawaii. The institute shall be
15	administered by a director to be appointed by the board of
16	regents upon recommendation by the president. The director of
17	the institute shall appoint the professional members of the
18	staff and other employees. The president and board of regents
19	shall have the same powers over the institute and its staff as
20	over the university and its facilities.
-	(b) The dimension of the inchibute chall coordinate the

(b) The director of the institute shall coordinate theinstitute's work with the energy resources coordinator in



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1	carrying	out duties pursuant to section 196-4 in the area of
2	research	and development of renewable energy sources.
3	(c)	The institute shall:
4	(1)	Develop renewable sources of energy for power
5		generation and transportation fuels by working in
6		coordination with state agencies, federal agencies,
7		and private entities;
8	(2)	Conduct research and development of renewable sources
9		of energy;
10	(3)	Demonstrate and deploy efficient energy end-use
11		technologies, including those that address peak demand
12		issues;
13	(4)	Aggressively seek matching funding from federal
14		agencies and private entities for its research and
15		development activities; and
16	(5)	Report annually to the legislature, no later than
17		twenty days prior to the convening of each regular
18		session, on its activities, expenditures, contracts
19		developed, advances in technology, its work in
20		coordination with state agencies and programs, and
21		recommendations for proposed legislation.

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1 §304A-B Advisory council to Hawaii natural energy 2 institute. (a) The institute shall establish an advisory council of seven members, appointed by the president from a list 3 of nominees submitted by the Hawaii energy policy forum and the 4 5 technology officer of the department of business, economic development, and tourism. The members of the advisory council 6 shall be from the general public, the energy industry, 7 technology providers, state agencies whose primary functions 8 9 relate to energy planning and policy analyses, and environmental groups, or other relevant stakeholder representatives as 10 recommended by the director of the institute and the energy 11 12 resources coordinator. Members shall be selected on the basis of their proven expertise and interest in the field of renewable 13 energy. The director of the institute and the energy resources 14 coordinator shall serve as ex officio nonvoting members of the 15 advisory council. 16

17 (b) The primary role of the advisory council shall be to
18 make recommendations to the director on the award of contracts
19 and grants funded through the institute.

20 (c) The advisory council may advise the director on
21 matters of strategic planning, goals and objectives, significant

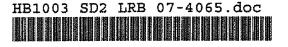
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initiatives of the institute, and other matters as determined by
 the director.

§304A-C Energy systems development special fund. (a) 3 There is established the energy systems development special fund 4 for the purpose of developing an integrated approach and 5 portfolio management of renewable energy and energy efficiency 6 7 technology projects that will reduce Hawaii's dependence on fossil fuel and imported oil and other imported energy resources 8 and move Hawaii toward energy self-sufficiency. 9 10 (b) The special fund shall be funded by: Appropriations from the legislature; 11 (1)Investment earnings, gifts, donations, or other income 12 (2)received by the institute; and 13 per cent from the environmental response fund. 14 (3)The Hawaii natural energy institute shall administer 15 (c)the special fund and may expend revenues from the special fund 16 for the following activities: 17 Obtaining matching funds from federal and private 18 (1)

- sources for research and development of renewable
 energy sources;
- 21 (2) Awarding contracts or grants to develop and deploy
 22 technologies that will reduce Hawaii's dependence on



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1	impo	rted energy resources and imported oil. Projects
2	may	be commissioned that:
3	(A)	Balance the risk, benefits, and time horizons of
4		the investment to ensure tangible benefits to the
5		Hawaii consumer, with priority given to short
6		term technology development;
7	(B)	Emphasize innovative and renewable energy supply
8		and energy efficient end use technologies
9		focusing on environmental attributes,
10		reliability, and affordability;
11	(C)	Enhance transmission and distribution
12		capabilities of renewable energy supply;
13	(D)	Enhance reliability and storage capabilities of
14		renewable energy;
15	(E)	Ensure that research, deployment, and
16		demonstration efforts build on existing programs
17		and resources and are not duplicated;
18	(F)	Address critical technical and scientific
19		barriers to achieving energy self-sufficiency by
20		reducing dependence on imported oil and imported
21		energy resources;



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1	(G) Ensure that technology used and developed for
2	renewable energy production and distribution will
3	be commercially viable; and
4	(H) Give priority to resources that are indigenous
5	and unique to Hawaii; and
6	(3) Managing the portfolio of projects commissioned under
7	this subsection.
8	§304A-D Periodic evaluation. (a) Evaluations shall be
9	conducted of the projects and activities funded by the energy
10	systems development special fund. The evaluation shall assess,
11	using objective criteria, the degree to which the projects and
12	activities comport with and achieve stated objectives of the
13	energy systems development special fund pursuant to section
14	304A-C.
15	(b) The initial evaluation shall be conducted at the end
16	of the third year after the effective date of this Act, and
17	every three years thereafter by a two-person panel of
18	independent energy and environmental technical experts who shall
19	be appointed by the director of business, economic development,
20	and tourism and who are not affiliated with the Hawaii natural
21	energy institute. The panel shall submit a report of the

22 results of each evaluation to the legislature no later than



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twenty days prior to the convening of the following regular
 session.

3 §304A-E Plan of action. Prior to the initiation of any 4 projects or activities authorized by section 304A-C, the Hawaii 5 natural energy institute shall develop a plan of action in 6 coordination with the state energy resources coordinator with 7 the intent of promoting effective prioritization and focusing of 8 efforts consistent with the State's energy programs."

9 SECTION 3. Act 235, Session Laws of Hawaii 1974, is10 repealed.

11 SECTION 4. There is appropriated out of the general revenues of the State of Hawaii the sum of \$1 for fiscal year 12 2007-2008 and the same sum for fiscal year 2008-2009 to be 13 14 deposited into the energy systems development special fund established pursuant to section 304A-C, Hawaii Revised Statutes. 15 SECTION 5. There is appropriated out of the energy systems 16 development special fund the sum of \$1 or so much thereof as may 17 be necessary for fiscal year 2007-2008 and the same sum or so 18 much thereof as may be necessary for fiscal year 2008-2009 for 19 the energy systems development special fund established pursuant 20 to section 304A-C, Hawaii Revised Statutes. 21

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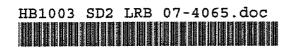
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1	The sums appropriated shall be expended by the University		
2	of Hawaii natural energy institute for purposes specified in the		
3	energy systems development special fund established pursuant to		
4	section 304A-C, Hawaii Revised Statutes.		
5	PART III		
6	SECTION 6. Chapter 196, Hawaii Revised Statutes, is		
7	amended by adding a new section to be appropriately designated		
8	and to read as follows:		
9	" §196-A Hawaii biofuels program. There is established,		
10	within the department of business, economic development, and		
11	tourism, a Hawaii renewable biofuels program to manage the		
12	State's transition to energy self-sufficiency based in part on		
13	biofuels for power generation and transportation fuels. The		
14	program shall design, implement, and administer activities that		
15	include:		
16	(1) Strategic partnerships for the research, development,		
17	testing, and deployment of renewable biofuels		
18	technologies and production of biomass crops;		
19	(2) Evaluation of Hawaii's potential to rely on biofuels		
20	as a significant renewable energy resource;		

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1	(3)	Biofuels demonstration projects, including
2		infrastructure for production, storage, and
3		transportation of biofuels;
4	(4)	Promotion of Hawaii's renewable biofuels resources to
5		potential partners and investors for development in
6		Hawaii as well as for export purposes;
7	(5)	A plan to implement commercially viable biofuels
8		development from year 2007 to 2010; and
9	(6)	A mechanism to evaluate the biofuels development
10		plan."
11	SECT	ION 7. Chapter 211F, Hawaii Revised Statutes, is
12	amended by	y adding a new section to be appropriately designated
13	and to rea	ad as follows:
14	" <u>\$21</u>	1F-A Biofuels development revolving loan fund. (a)
15	There sha	ll be established the biofuels development revolving
16	<u>loan fund</u>	, into which shall be deposited:
17	(1)	Appropriations made by the legislature to the fund;
18	(2)	Any gifts, donations, or contributions from public or
19		private sources;
20	(3)	All interest earned on or accrued to moneys deposited
21		into the fund; and



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1	(4) Any other moneys made available to the fund from other
2	sources.
3	(b) Moneys in the fund shall be used to provide low
4	interest or no interest loans for seed capital for, or to match
5	venture capital investments in, private sector and federal
6	projects for research, development, testing, and implementation
7	of the Hawaii biofuels program under section 196-A.
8	(c) The fund shall be administered by the Hawaii strategic
9	development corporation, and expenditure of money for loans or
10	other funding decisions shall be made by the corporation based
11	upon technical advice and recommendations provided by the Hawaii
12	natural energy institute and its advisory council."
13	SECTION 8. There is appropriated out of the general
14	revenues of the State of Hawaii the sum of \$1 for fiscal year
15	2007-2008 and the sum of \$1 for fiscal year 2008-2009 to be
16	deposited into the biofuels development revolving loan fund
17	established pursuant to section 211F-A, Hawaii Revised Statutes.
18	SECTION 9. There is appropriated out of the biofuels
19	development revolving loan fund the sum of \$1 or so much thereof
20	as may be necessary for fiscal year 2007-2008 and the same sum
21	or so much thereof as may be necessary for fiscal year 2008-2009
22	to provide loans or other funding authorized by the biofuels
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1	developme	nt revolving loan fund established pursuant to section
2	211F-A, H	awaii Revised Statutes.
3	The	sums appropriated shall be expended by the Hawaii
4	strategic	development corporation for the purposes of section
5	211F-A, H	awaii Revised Statutes.
6		PART IV
7	SECT	ION 10. (a) The department of business, economic
8	developme	nt, and tourism shall develop and prepare a bioenergy
9	master pl	an in consultation with representatives of the relevant
10	stakehold	ers. The bioenergy master plan shall address the
11	following	issues:
12	(1)	Specific objectives and timelines;
13	(2)	Water resources;
14	(3)	Land resources;
15	(4)	Distribution infrastructure for both marine and land;
16	(5)	Labor resources and issues;
17	(6)	Technology to develop bioenergy feedstock and
18		biofuels;
19	(7)	Permitting;
20	(8)	Financial incentives and barriers and other funding;
21	(9)	Business partnering;



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1	(10)	Policy requirements necessary for implementation of
2		the master plan; and
3	(11)	Identification and analysis of the impacts of
4		transitioning to a bioenergy economy.
5	(b)	The department of business, economic development, and
6	tourism s	hall submit an interim report of its progress,
7	including	any proposed legislation to facilitate the
8	finalizat	ion of a master plan or support preliminary findings to
9	accelerat	e the implementation of a bioenergy future for Hawaii,
10	to the le	gislature no later than twenty days prior to the
11	convening	of the regular session of 2008. The department shall
12	submit a	final report, including the bioenergy master plan, as
13	well as a	ny proposed legislation, to the legislature no later
14	than twen	ty days prior to the convening of the regular session
15	of 2009.	
16	SECT	ION 11. There is appropriated out of the general

revenues of the State of Hawaii the sum of \$1 or so much thereof as may be necessary for fiscal year 2007-2008 and the same sum or so much thereof as may be necessary for fiscal year 2008-2009 for the development and preparation of a bioenergy master plan that will set the course for the coordination and implementation

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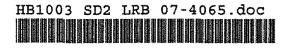
of policies and procedures to develop a bioenergy industry in 1 2 the State.

3 The sums appropriated shall be expended by the department of business, economic development, and tourism for the purposes 4 of this part. 5

PART V

SECTION 12. In codifying the new sections added by 7 sections 2, 6, and 7 of this Act, the revisor of statutes shall 8 9 substitute appropriate section numbers for the letters used in 10 designating the new sections in this Act.

SECTION 13. New statutory material is underscored. 12 SECTION 14. This Act shall take effect on July 1, 2020; provided that sections 304A-C, 304A-D, and 304A-E, Hawaii 13 14 Revised Statutes, shall be repealed on June 30, 2012.



Report Title: Hawaii Natural Energy Institute; Biofuels; Bioenergy

Description:

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Statutorily establishes the Hawaii natural energy institute of the University of Hawaii and creates the energy systems development special fund for the development of renewable energy and energy efficient technologies. Creates the biofuels development revolving loan fund, which will be administered by the Hawaii strategic development corporation, and the Hawaii biofuels program within department of business, economic development, and tourism, to manage the State's transition to energy self-sufficiency based in part on biofuels for power generation and transportation fuels. Requires department of business, economic development, and tourism to develop and prepare a bioenergy master plan that sets the course for the coordination and implementation of policies and procedures to develop a bioenergy industry in Hawaii. Appropriates funds. (SD2)