

**SB 149**

**EDT**

BEFORE THE SENATE COMMITTEES ON  
ECONOMIC DEVELOPMENT & TECHNOLOGY  
AND  
ENERGY & ENVIROMENT

LATE

**SENATE BILL 149 RELATING TO BIOFUEL PRODUCTION FACILITIES**

Testimony of  
CHRIS ELDRIDGE  
Partner  
Aina Koa Pono, LLC

February 2, 2011  
1:15 pm, State Capitol Room 016

Chair Fukunaga, Chair Gabbard, and members of the Joint Committee:

Thank you for the opportunity to testify on SB 149, the Biofuel Production Facility Loan Guarantee Program which provides for up to \$1,000,000,000 in loan guarantee authority to build agriculturally based biofuel production facilities built in Hawaii. Aina Koa Pono **STRONGLY SUPPORTS** this legislation.

Hawaii depends on over 90% of its energy needs on imported fuel. The impact on Hawaii with rising oil prices as well as the availability of fuel would be more severe here than on other states in the Union. Recent pronouncements by John Hofmeister, past president of Shell Oil company, that gasoline prices will be \$5 per gallon in 2012 if true would have devastating impact on our state. Maui already has \$4 gasoline. Hofmeister's prediction was based on mainland pricing of gasoline which is currently about \$3 per gallon. This projects to greater than \$6 per gallon on Maui. What will this do to Hawaii's economy? BP has recently projected that the world demand for oil will increase by 40% by 2030 because of the increasing demand for oil by India and China. This also portends for higher prices as well a potential shortages of liquid fuel.

Hawaii cannot stand by waiting for the impact of either higher pricing or shortages. We need to do something now. If we have the will and determination, we can protect our State from these impacts. Because of the demise of the pineapple and sugar industries in Hawaii, we have large agricultural lands which have been laying fallow for many years. We need to get these lands back into productive use for both food and energy. But we must have the will and the foresight to provide the incentives needed for this to occur.

Building agriculturally based biofuel refineries in Hawaii has the potential to reinvigorate Hawaii's struggling agriculture industry while also helping to meet the renewable energy goals of Hawaii's Clean Energy Initiative. This initiative aims to

To: Chair Fukunaga, Chair Gabbard, and members of the Joint Committee  
Fm: Chris Eldridge, Partner of Aina Koa Pono, LLC  
Re: Testimony of SENATE BILL 149 RELATING TO BIOFUEL PRODUCTION FACILITIES  
Hearing: February 2, 2011 @ 1:15 pm, State Capitol Room 016

reduce Hawaii's reliance on petroleum fuels by 40% by 2030. We cannot get this accomplished unless we provide incentives for the private sector to invest in these projects.

Biofuel production facilities are very difficult to finance because most technologies are in their infancy with regard to commercialization. To encourage this industry, it is very desirable to provide incentives and financing support to encourage the development and construction of biofuel production facilities because these facilities will:

- Attract investments in Hawaii's economy that will spread across many communities and businesses;
- Create jobs in agriculture, construction, and biofuel refinery operations; and
- Assist the State to become energy self sufficient, reduce imports of foreign oil, and improve energy security.

The structure of this legislation will make this bill revenue positive for the state. Because of the terms of the loan guarantee stated in the legislation, the State is protected in the event of default, and if all of the guarantee is utilized then the State will have \$10,000,000 per year which could be used for energy or other purposes.

This Legislation will potentially help the Hawaiian economy in the following ways. The construction of biofuel production facilities is an investment in Hawaii's workforce that will pay dividends with the training, employment and development of skilled local workers. It has been projected that eleven jobs will be created for every \$1,000,000 spent on construction in the State. Economic projections also indicate that for every \$1 spent on the project at least 2 to 3 times that expenditure will be created in ancillary jobs created by the activity. In addition, because the incentive is for agriculturally related biofuel plants, numerous jobs will be created in the agricultural sector for growing the biofuel in addition to the jobs to run the biofuel plant. Our projection for the plant that we will build in Ka'u will create at least 300 construction related jobs for a period of two years plus an additional 150 to 200 jobs for the 20 to 30 years that the plant will be operational. If this were replicated 10 times, 3000 jobs would be created in the construction industry and 1500 to 2000 permanent jobs would be created in running the biofuel plant. Our belief is that if we want Hawaii to have an economic renaissance in the short term, these type projects are the only ones that have the potential of doing this in the short term. All other major potential development projects will not have an impact for at least 5 to 10 years from now.



To: Chair Fukunaga, Chair Gabbard, and members of the Joint Committee  
Fm: Chris Eldridge, Partner of Aina Koa Pono, LLC  
Re: Testimony of SENATE BILL 149 RELATING TO BIOFUEL PRODUCTION FACILITIES  
Hearing: February 2, 2011 @ 1:15 pm, State Capitol Room 016

We cannot emphasize enough the need for these incentives to attract private capital to invest in these projects for Hawaii. We have found that because of the lack of commercial biofuel projects already constructed, that private capital is reluctant to invest in these type plants. This legislation will assist greatly in attracting private capital to Hawaii so we can become energy self sufficient.

Thank you very much for allowing me to provide you my views of this legislation.



## COMPARATIVE ANALYSIS

ITEM	Biofuel Projects	Light Rail Project	CIP Projects
Total Cost	\$5,500,000,000	\$5,500,000,000	\$5,500,000,000
State Taxpayer Cost	15% \$830,000,000	\$3,850,000,000	\$5,500,000,000
Out of State Funding Provided	\$4,670,000,000	\$1,650,000,000	0
Impact of Project	Through 2017 at sunset of legislation	Through 2025 at completion of project	Immediate
Leverage in comparison to State Funding	6.7 to 1	1.43 to 1	0

We would like to provide a comparative analysis of the impact of various projects which are supported by taxpayer funds. We would like to say that we are extremely supportive of the light rail projects as well as CIP projects that the State is undertaking.

If you analyze the table above you can see that the taxpayers of Hawaii are paying for 70% of the light rail project and 100% of CIP projects. The economic impact of the light rail project will be over the next 15 years and the economic impact of CIP projects is immediate. If we assume that the agriculturally based biofuel projects have a total cost of \$5.5B which is the projected cost of the light rail project, these projects will have an economic impact through 2017 when SB 147 sunsets. Then the State will have leveraged \$830,000,000 to get \$5,500,000,000 worth of economic activity through 2017. If we make this comparison using our Ka'u project which is projected to cost \$320,000,000, we can develop 17 similar sized projects. Using our estimates we this infusion of capital will create 10,500 man years of construction jobs and 2600 to 3300 permanent jobs for agricultural workers and plant operators for a period of 20 to 30 years. If the amendment that we are proposing is adopted then if any of the projects which are undertaken under the provisions of this legislation fails to operate, then the State will have the economic activity of the project yet will not have expended any tax dollars for the project. On the other hand, if the project is successful, the State will have created economic activity over the next two years yet will not have to expend State taxpayer dollars until 2014 or beyond. We believe that this is a wise use of taxpayer dollars in that large economic activity is stimulated immediately, the State funding to create this economic activity is modest, we revitalize the moribund agricultural sector in Hawaii, and we move toward energy independence.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

**NEIL ABERCROMBIE**  
GOVERNOR

**RICHARD C. LIM**  
INTERIM DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [www.hawaii.gov/dbedt](http://www.hawaii.gov/dbedt)

Telephone: (808) 586-2355  
Fax: (808) 586-2377

Statement of  
**RICHARD C. LIM**  
**Interim Director**  
Department of Business, Economic Development, and Tourism  
before the  
**SENATE COMMITTEES ON  
ECONOMIC DEVELOPMENT AND TECHNOLOGY  
and  
ENERGY AND ENVIRONMENT**  
Wednesday, February 2, 2011  
1:15 PM  
State Capitol, Conference Room 016

in consideration of  
**SB 149**  
**RELATING TO BIOFUEL PRODUCTION FACILITIES.**

Chairs Fukunaga and Gabbard, Vice Chairs Wakai and English, and Members of the  
Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) has  
concerns about SB 149, which would require the State of Hawaii to act as a loan guarantor.

The bill would require DBEDT to assume the lending risks that the private lending  
community is unwilling to take. We believe this would put the State in a precarious and  
disadvantaged position for the following reasons:

- To run an efficient and effective loan guarantee program requires extensive personnel  
and dedicated resources to conduct the appropriate and necessary financial loan  
qualification and underwriting criteria necessary to evaluate businesses. Financial  
institutions have dedicated entire departments to the qualification and underwriting

processes for businesses. DBEDT does not have this level of personnel and dedicated resources.

- We also have concerns about the role of, and impact on, the State in the event of a loan default placing the State as the responsible party as guarantor for the respective loans, especially during these challenging fiscal times that the State of Hawaii is presently facing.

Thank you for the opportunity to offer these comments.

**Testimony before the  
Senate Committees on**

**Economic Development and Technology  
Energy and Environment**

**S.B. 149 -- Relating to Biofuel Production Facilities**

**Wednesday, February 2, 2011**

**1:15 PM, Conference Room 016**

**By Cecily Barnes  
Manager, Biofuels  
Hawaiian Electric Company, Inc.**

Chairs Fukunaga and Gabbard, Vice-Chairs Wakai and English, and Members of the Committees:

My name is Cecily Barnes. I am the Manager of Biofuels for Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiary utilities, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO), hereby referred to collectively as the HECO Utilities.

We support S.B. 149 establishing a Biofuel Production Facility Loan Guarantee Program. As stated in the bill, a relatively small investment by the State in biofuel production projects will result in larger private sector investments in those biofuel projects. We have learned, through our recent request for proposals to supply the HECO Utilities with biofuel grown and processed in the State, that developers of advanced biofuel technologies face challenges obtaining the project financing because the biofuel technology and biofuel industry in Hawaii are in nascent stages with regard to commercialization. We support a State loan guarantee program as a way of providing incentives and financing support to encourage development of this industry. Supporting development of biofuel production facilities in the State will move us toward our goal of becoming energy self-sufficient, reduce imports of foreign oil, and improve energy security.

The HECO Utilities are committed to exploring and using biofuels in its existing and planned generating units. We are committed to the development of biofuels in the State as evidenced



by our Request for Proposal to supply locally grown and processed biofuels issued in March 2010 that has resulted in a 20-year offtake agreement award. The use of biofuels can reduce the State's dependence on imported oil and increase the amount of renewable energy from sustainable resources. This commitment by the HECO Utilities is demonstrated by the following initiatives:

- Installed a nominal 120 MW power plant in 2009 at Campbell Industrial Park that is operating with 100% biofuel as of November, 2010;
- Further testing of biodiesel in its diesel engines and combustion turbine at MECO's Maalaea power plant in 2011;
- Testing of Kahe 3 biofuel co-firing demonstration in a steam boiler generating unit in January, 2011.
- Provided 4 years of seed funding to the Hawaii Agriculture Research Center ("HARC") and the agriculture departments at the University of Hawaii's Manoa and Hilo campuses to conduct biofuel crop research with a 5<sup>th</sup> year of funding to follow this year; and
- Awarding of a 20-year contract to Aina Koa Pona to purchase 16 million gallons of biofuel annually, stimulating development of local feedstock and biofuel processing on the Island of Hawaii. This contract was filed with the Public Utilities Commission on January 6, 2011.

In conclusion, the HECO Utilities support S.B. 149 as a way to stimulate biofuel development in Hawaii.

Thank you for the opportunity to present this testimony.



**SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TECHNOLOGY  
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT**

February 2, 2011, 1:15 P.M.

Room 016

**(Testimony is 1 page long)**



**TESTIMONY IN SUPPORT OF SB 149**

Chairs Fukunaga and Gabbard and members of the Committees:

The Blue Planet Foundation supports SB 149, a measure that establishes a loan guarantee program for biofuel production facilities. Such a program will provide more comfort and certainty to developers and investors in Hawaii's biofuel production infrastructure.

Biofuels will likely play a major role in Hawaii's clean energy future—particularly as a substitute for petroleum-based transportation fuels. Transportation fuels in Hawai'i can be made from renewable resources, such as biomass in various forms, algae, and waste products. These materials are neither as scarce nor as expensive as crude oil. Even more importantly, these materials are available here. Hawai'i should set a clear course for a steady, incremental transition to renewable fuels including local and sustainable biofuels.

We do want to ensure that the loan guarantee program encourages our clean, local, renewable energy industries. We want to avoid a distorted outcome where oil crops are being shipped across the Pacific (from potentially destructive sources, like former rainforest land) for use in Hawai'i. We don't necessarily want to replace one import (oil) with another one (imported oil crops). To avoid that outcome, we suggest amending the definition of "biofuel" in SB 149 (Page 4, lines 1-5) to specify Hawaii-sourced feedstock, somewhat like this:

"Biofuel" means liquid or gaseous fuel produced from organic sources such as biomass crops, agricultural residues and oil crops, such as palm oil, canola oil, soybean oil, waste cooking oil, grease, and food wastes, animal residues and wastes, and sewage and landfill wastes[-], provided that the feedstocks from non-waste biomass crops and non-waste oil crops be grown in Hawaii.

Thank you for the opportunity to testify.

TESTIMONY BY KALBERT K. YOUNG  
INTERIM DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE  
STATE OF HAWAII  
TO THE SENATE COMMITTEES ON ECONOMIC DEVELOPMENT AND TECHNOLOGY  
AND ENERGY AND ENVIRONMENT  
ON  
SENATE BILL NO. 149

February 2, 2011

RELATING TO BIOFUEL PRODUCTION FACILITIES

Senate Bill No. 149 establishes a biofuel production facility loan guarantee program administered by the Department of Business, Economic Development, and Tourism (DBEDT).

The Department would like to note that the program's aggregate \$1,000,000,000 loan guarantee amount will count towards the State's Debt limit and may affect the State's ability to issue general obligation bonds.

Pursuant to Article VII, Section 13 of the Constitution of the State of Hawaii, DBEDT is required to establish and maintain a reasonable reserve requirement for each loan guaranteed under this section. As the bill authorizes DBEDT to guarantee loans, DBEDT will be required to establish, fund, and maintain a reasonable reserve in order to meet the State Constitutional requirements to administer a loan guaranty program.

**HAWAII RENEWABLE ENERGY ALLIANCE**

46-040 Konane Place #3816, Kaneohe, HI 96744 – Telephone/FAX: 247-7753 – Email: [wsb@lava.net](mailto:wsb@lava.net)

**Officers**

President  
Warren S. Bollmeier II

Vice-President  
John Crouch

**Directors**

Warren S. Bollmeier II  
WSB-Hawaii

Cully Judd  
Inter Island Solar Supply

John Crouch  
SPSI, LLC

Herbert M. (Monty) Richards  
Kahua Ranch Ltd.

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII  
RENEWABLE ENERGY ALLIANCE BEFORE THE **SENATE COMMITTEES  
ON ECONOMIC DEVELOPMENT AND TECHNOLOGY, AND ENERGY AND  
ENVIRONMENT**

**SB 149, RELATING TO BIOFUEL PRODUCTION FACILITIES**

February 2, 2011

Chairs Fukunaga and Gabbard, Vice-Chairs Wakai and English and members of the Committees, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is a nonprofit corporation in Hawaii, established in 1995 by a group of individuals and organizations concerned about the energy future of Hawaii. HREA's mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of HREA's goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purposes of **SB 149** are to establish a biofuel production facility loan guarantee program administered by the department of business, economic development, and tourism; require adoption of rules; establish terms and restrictions; and require annual report.

HREA supports the proposed measure as it will help provide additional financing options for project developers.

Thank you for this opportunity to testify.