

**SB 772**

**EDT**



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

**NEIL ABERCROMBIE**  
GOVERNOR

**RICHARD C. LIM**  
INTERIM DIRECTOR

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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 772**  
**RELATING TO BIOFUEL 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 772, which would expand the ethanol facility tax credit to include various biofuels; amend the definition of nameplate capacity; require a qualifying facility to be located within the State and to utilize locally grown feedstock for at least 75% of its production output; increase the amount of certified credits from \$12 million to \$20 million; and remove the 40 million gallon production per year cap. DBEDT prefers the Administration measure, SB 1245, which does not increase the total credit allowed.

We are unable to support the increase in the total incentive available from \$12 million to \$20 million to the extent as it is not included in the executive biennium budget. We recommend that the total amount available remain at the current level.

We would like to recommend some additional modifications.

On page 2, line 20, we recommend that the tax credit be clearly stated as thirty cents per gallon of nameplate capacity.

On page 2, line 21, we recommend maintaining a nameplate capacity of greater than 100,000 gallons. It was our understanding that the intent of the original legislation was to incentivize production facilities of a larger scale to encourage commercial scale production. To avoid potential confusion with beverage producers or hobbyists, we recommend maintaining a minimum nameplate capacity of 100,000 gallons.

On page 3, line 17, we recommend not changing the qualifying production dates to attract businesses and avoid negative perception of changing the law.

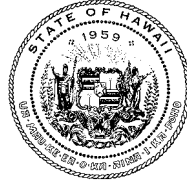
On page 5, beginning with line 18, we are concerned that it is not clear who selects the seven-day period for determining nameplate capacity, and which seven-day period is used for the calculation.

On page 11, line 11, we recommend that the taxpayer also report the type of biofuel produced.

Thank you for the opportunity to offer these comments.

NEIL ABERCROMBIE  
GOVERNOR

BRIAN SCHATZ  
LT. GOVERNOR



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## SENATE COMMITTEES ON ECONOMIC DEVELOPMENT & TECHNOLOGY AND ENERGY & ENVIRONMENT

### TESTIMONY OF THE DEPARTMENT OF TAXATION REGARDING SB 772 RELATING TO BIOFUEL FACILITIES

**TESTIFIER:** FREDERICK D. PABLO, INTERIM DIRECTOR OF  
TAXATION (OR DESIGNEE)  
**COMMITTEE:** EDT-ENE  
**DATE:** FEBRUARY 2, 2011  
**TIME:** 1:15PM  
**POSITION:** NO POSITION; CONCERNED WITH COSTS

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This measure modifies the current ethanol production facilities tax credit to provide a tax credit for biofuel production facilities.

The Department of Taxation (Department) takes **no position** on this measure; however has **concerns regarding its revenue loss.**

**DEFERRAL TO DBEDT ON POLICY**—The Department defers to the Department of Business, Economic Development & Tourism on the technical and policy aspects of this measure.

**SUPPORT FOR ALTERNATIVE ENERGY**—The Department supports the encouragement and implementation of alternative energy systems in Hawaii in order to lessen the State's dependence on alternative energy. As fossil fuel and petroleum prices become more volatile, Hawaii's ability to generate its own energy from home will make the State more secure and less reliant on others.

**CONCERNS FOR REQUIREMENT REGARDING LOCAL FACILITY AND FEEDSTOCK**—The Department has strong concerns regarding the amendments that require a local feedstock requirement in order to enjoy the

credit. Provisions such as this are commonly found unconstitutional preferences for local participation, which can infringe upon interstate commerce. The Department defers to the Attorney General on this issue; however raises it nonetheless.

**REVENUE LOSS & METHODOLOGY**—This measure will result in up to \$20 million in revenue loss each year, which is the maximum amount of credits that may be certified by DBEDT each year under existing law.

Currently, the maximum allowable tax credit for ethanol production is \$12 million per year. Expanding the facility tax credit to include various biofuels and increasing the amount of certified credits from \$12 million to \$20 million; and removing the 40 million gallon production per year cap, we assume that the potential revenue loss of this bill will be the maximum certified credits of \$20 million.

**Testimony before the  
Senate Committees on  
Economic Development and Technology  
Energy and Environment**

**S.B. 772 -- Relating to Biofuel 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. 772 amending the statutes to broaden the original intent from ethanol incentives to biofuel incentives for biofuel development in Hawaii. We respectfully offer an amendment under Hawaii Revised Statutes (“HRS”) § 235-110.3--biofuel facility tax credit--to broaden the statutes another step to include “other bio-based liquid fuels used in the generation of electricity” to meet the definition of “qualifying biofuel production” as proposed in S.B. 772:

- On page 6, lines 3-7, under “qualifying biofuel production” means, (changes in **bold**) “Qualifying [~~ethanol~~] biofuel production” means ethanol, biodiesel, biobutanol, bio-based diesel, bio-based gasoline, ~~or~~ bio-based jet fuel, or other bio-based liquid fuels used in the generation of electricity produced from renewable [~~organic~~] feedstocks, or waste materials, including fats, oils, grease, algae, and municipal solid waste.”

The HECO Utilities are committed to exploring and using biofuels in its existing and planned generating units. The amendment we propose will help biofuel production facility development. 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. 772 and our proposed amendment as a way to stimulate biofuel development In Hawaii.

Thank you for the opportunity to present this testimony.

**SB 772**

**RELATING TO BIOFUELS FACILITIES**

**JOEL K. MATSUNAGA  
CHIEF OPERATING OFFICER & EXECUTIVE VP  
HAWAII BIOENERGY, LLC**

**FEBRUARY 2, 2011**

Chair Fukunaga and Members of the Senate Committee on Economic Development and Technology:

I am Joel Matsunaga, testifying on behalf of Hawaii BioEnergy, LLC on SB 772, "Relating to Biofuel Facilities."

**SUMMARY**

Hawaii BioEnergy ("HBE") supports SB 772 (with amendments), which revises Section 235-110.3 of the Hawaii Revised Statutes by expanding the Ethanol Facility Credit to apply to liquid biofuels, encouraging the utilization of locally produced feedstock, and enabling facilities greater than 15 million gallons per year of production capacity to qualify. While HBE supports SB 772, the company believes some of the language contained in the proposed measure is unnecessarily limiting; thus, HBE has incorporated suggested changes to the proposed language which are outlined below. The amendments to HRS §235-110.3 as contained in SB772, as well as those proposed below, will help to reduce the state's dependence on imported fossil fuels as well as provide a needed economic stimulus to the state's agricultural and industrial sectors.

The amendments to SB 772 proposed below would change the credit from thirty per cent of nameplate capacity to \$0.30 per gallon to rationalize the credit with the allotted levels of funding and provide for greater administrative efficiency; extend the credit cap to apply to the total biofuel investment including related agricultural production; clarify that eligible biofuel production facilities can produce for transport and/or power generation; as well as clarify eligible bioconversion processes, and expand ASTM compliance criteria. HBE submits that the tax



dollars allocated for the existing incentive and any subsequent increase would be more than offset by the direct and indirect tax revenue biofuel facilities would generate. Should companies take advantage of the total funding in the initial years, a gradual escalation would help to attract additional investment in the sector and help the state to meet its increasing renewable fuels goals.

### **HAWAII BENEFITS FROM LOCAL BIOFUELS PRODUCTION**

Hawaii BioEnergy is a local company dedicated to strengthening the state's energy future through sustainable biofuel production from locally grown feedstocks. Among its partners are three of the larger land owners in Hawaii. HBE and its partners would like to use significant portions of their land to address Hawaii's existing and growing energy needs.

One of the biofuel alternatives that HBE is pursuing is the production of jet fuel and other oil derivatives from micro-algae, and is already engaged in Phase II of a Hawaii-based, DARPA-funded algae project. Along with providing a local, renewable, and lower-carbon fuel source, expanded algae-based biofuel production will benefit the agriculture industry by providing a local source of protein for animal feed, fertilizers and other products. In addition to HBE's on-going algae-based biofuel projects, the company is moving forward with plans to develop locally produced high density fuels from sweet sorghum, eucalyptus and/or other dedicated energy crops. The feedstocks and conversion production pathways under consideration hold tremendous potential to displace fossil fuel imports given their relatively low input requirements, exceptionally high yields, and capacity to produce a portfolio of products including liquid fuels for transport and power generation while contributing feed, and other bio-based co-products to the local market.

In addition to the clear environmental and energy security benefits that local production would bring to bear, fostering Hawaii's biofuel industry would also provide needed economic stimulus to the state through direct investment, job creation, and demand for goods and

services. Based on an independent analysis commissioned by HBE, it's projected that a large-scale agricultural operation coupled with biofuels facility could provide up to 1,400 new direct, indirect and induced jobs, over \$115 million in value added or new wealth, and over \$17 million in annual tax revenue from combined indirect business and personal income taxes. Such benefits could be multiplied through additional investments in large-scale biofuels facilities supported through a facility tax credit.

While the environmental, energy security and economic benefits are clear, the state's ability to secure the substantial capital required for large-scale commercial facilities requires providing a degree of assurance to private investors that they will be able to recover their investment within a reasonable time horizon. Extending the current Ethanol Facility Tax Credit to incorporate biofuels more broadly would help to attract a wider range of investors and provide the additional support needed to help offset the technology and capital risk inherent in the establishment of new industries, particularly those that require new technology. The credit would also be self-sustaining as the additional business and income tax revenue generated by the industry could be applied to future credits. As such, the legislation directly ties the incentives to the local market, enables the removal of the 40 million gallon cap as proposed in SB 772, and provides support to a range of advanced and more efficient biofuel production technologies.

### **PROPOSED AMENDMENTS TO SB 772**

While HBE supports the extension of the Ethanol Facility Credit to include a range of biofuel production facilities, the company would like to propose the following amendments to SB 772 in order to maximize the credit's reach and impact:

- To revise the credit from "thirty per cent of nameplate capacity" to "thirty cents per gallon of nameplate capacity" to allow for greater administrative efficiency;

- To state in Section 2 (b) under “Investment” that “inventory” shall not qualify toward the credit;
- To incorporate in Section 2 (b) under “Investment” that “Direct capital expenditures in agricultural infrastructure, including irrigation and drainage systems, land clearing and leveling, establishment of crops, planting, and cultivation where the biofuel production facility and agricultural operations are integrated shall be eligible;”
- To clarify and expand the eligible conversion pathways in Section 2 (b) by incorporating a clause that “all qualifying production shall be fermented, distilled, transesterified, gasified, pyrolyzed, or produced by other physical, chemical, biochemical, thermochemical conversion methods;
- To incorporate in Section 2 (b) pertaining to “Qualifying biofuel production facility” “if intended for transport vehicles and/or power generation”;
- To eliminate in Section 2(b) ASTM standard D-4806 or D-6751 and replace it with “biofuel meeting the relevant ASTM specifications for that particular fuel,” as to broaden the scope of eligible fuels while still requiring that they meet ASTM specifications.

### **CONCLUDING REMARKS**

HBE is moving forward with projects that will help to address Hawaii’s energy future and believes that SB 772, with the amendments proposed, will help to accelerate and expand Hawaii’s bio-based renewable energy economy.

Based on the aforementioned, Hawaii BioEnergy respectfully requests your support for SB 772, with the above referenced amendments.

Thank you for the opportunity to testify.

Wednesday, Feb. 2, 2011  
1:15 PM, Conference Room 016

COMMITTEES ON Economic Dev. & Technology and Energy and  
Environment

Senator Carol Fukunaga, Chair  
Senator Mike Gabbard, Chair

**In support of SB 772, Relating to Biofuel Facilities**

Testimony of Pacific Biodiesel, Inc.

Pacific Biodiesel, Inc. is the oldest biodiesel production company in the U.S., in continuous operation since its first plant was constructed on Maui in 1996. Having opened America's very first retail biodiesel pump and developed proprietary technology, we have built a solid reputation as a leading pioneer in the biodiesel industry. Pacific Biodiesel owns and operates two biodiesel plants in Hawaii, employs at least 30 residents and is currently developing a new, state-of-the-art, zero-waste biodiesel facility on the Big Island.

Pacific Biodiesel supports SB 772, which would amend an already existing and funded ethanol facility tax credit to also encourage increased production of biofuel in the State of Hawaii. Changing the support from just 'ethanol facility' to 'biofuel facility' would enable local companies to utilize this dormant incentive to expand biofuel production capacity statewide.

**We respectfully propose the following amendments to improve this bill:**

1. Remove references to "nameplate capacity" and award credits based on actual production (i.e. \$.30/gallon)
2. Remove the requirement to report intent "prior to construction of any new qualifying production facility" as it excludes existing production and creates undue hardship and unfair competition

Increasing the size and scope of allowable applicants would require the increased funding to \$20 million per year to avoid (as much as possible) the problems encountered by the federal Bioenergy Program. The federal Bioenergy Program greatly increased biofuel production but created an oversized pool of applicants for a limited amount of funding, ultimately reducing the shares of credits to individual companies significantly and crippling many of those businesses. In order for incentives to prove successful, there must be a meaningful pool of funds that we can count on, at least for a significant period.

While we realize the incentives in this bill were originally written for ethanol, they were also created more than eight years ago. In that time, the production costs of both ethanol and biodiesel have risen significantly. The biodiesel industry has been

struggling under the recent economic conditions as well as fluctuating petroleum prices. Many U.S. biodiesel production facilities are running at reduced capacity, have shut down entirely, or have gone bankrupt; furthermore, nearly all new biofuel facility construction has been stalled indefinitely. Current industry-wide costs for biodiesel plant construction are between \$2-\$3 per gallon of production capacity, depending on technology. Operation costs are increased by rising costs of supplies and input materials, labor, feedstock collection and processing, insurance, etc. Pacific Biodiesel is confident that the incentive provided by this bill is not overly generous for a biodiesel producer, or for any type of biofuel production. As an example, Pennsylvania enacted a \$0.75 per gallon incentive to save the biodiesel producers in the state from shutting down production.

Pacific Biodiesel urges the passage of SB 772, with proposed changes, which will allow more sustainable businesses to utilize an already well-constructed policy, propelling the state forward towards energy independence and encouraging jobs and economic growth through locally owned businesses. Companies such as Pacific Biodiesel can lead the State of Hawaii forward towards energy independence, new job creation and economic growth through locally owned businesses.

Thank you for the opportunity to testify,

Kelly King, Vice President  
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LATE



**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 772**

Chairs Fukunaga and Gabbard and members of the Committees:

The Blue Planet Foundation supports SB 772, a measure that expands the ethanol facility tax credit to include other liquid biofuels and makes other clarifications to the credit. This policy will provide greater support for Hawaii's diverse 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.

Blue Planet appreciates the conditions added to this measure that specify that the credit applies only to facilities using locally grown feedstock for at least seventy-five per cent of its production output. We don't necessarily want to replace one import (oil) with another one (imported oil crops).

Thank you for the opportunity to testify.

# TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

**SUBJECT:** INCOME, Biofuel facility tax credit

**BILL NUMBER:** SB 772

**INTRODUCED BY:** Fukunaga, Baker, Chun Oakland, Ige, 2 Democrats and 1 Republican

**BRIEF SUMMARY:** Amends HRS section 235-110.3 to change the name of the ethanol facility tax credit to the biofuel facility tax credit including changing any references to ethanol to biofuel. Stipulates that in order to claim the credit, the qualifying biofuel production facility shall be located within the state and utilize locally grown feedstock for at least 75% of its production output. The annual dollar amount of the tax credit during the eight-year period shall be equal to 30% of its nameplate capacity up to the first fifteen million gallons of production.

The credit shall be allowed to a biofuel production facility that commences production on or after January 1, 2013 and before January 1, 2021.

Amends the definition of “nameplate capacity” to mean qualifying biofuel production facility’s production design capacity, in gallons of fuel grade biofuel per year. Nameplate capacity shall be determined by the facility owner and shall not exceed the amount of production actually recorded during a consecutive seven-day period multiplied by fifty-two.

Increases the annual amount of certified credits from \$12 million to \$20 million in the aggregate. Repeals the limitation that the income tax credit shall be limited to 40 million gallons per year.

**EFFECTIVE DATE:** January 1, 2013; applicable to tax years beginning after December 31, 2012

**STAFF COMMENTS:** The legislature by Act 289, SLH 2000, established an investment tax credit to encourage the construction of an ethanol production facility in the state. The legislature by Act 140, SLH 2004, changed the credit from an investment tax credit to a facility tax credit. This measure proposes to change the ethanol facility tax credit to a biofuel facility tax credit, increase the amount of credits from \$12 million to \$20 million and repeal the \$40 million annual limit in order to claim the credit.

While it has been almost ten years since the credit for the construction of an ethanol plant in Hawaii was enacted and ground has not broken yet, it appears that there are other far more efficient biofuels which could be developed and, therefore, the existing credit, which is specific to ethanol, might not be available to assist in the development of these other types of fuels.

While the idea of providing a tax credit to encourage such activities may have been acceptable a few years ago when the economy was on a roll and advocates could point to credits like those to encourage construction and renovation activities, what lawmakers and administrators have learned in these past few

months is that unbridled tax incentives, where there is no accountability or limits on how much in credits can be claimed, are indeed irresponsible as the cost of these credits go far beyond what was ever contemplated. As an alternative, lawmakers should consider repealing this credit and utilize other strategies to encourage the development and use of alternate energy resources such as a loan program or the issuance of special revenue bonds for this purpose or perhaps even a specific appropriation of taxpayer dollars. At least lawmakers would have a better idea of what is being funded and hold the developers of these alternate forms of energy to a deliberate timetable or else lose the funds altogether. A direct appropriation would be preferable to a tax credit as it would provide some accountability for the taxpayers' funds being utilized to support this effort.

Finally, this proposal verifies what has been said all along about legislators latching onto the fad of the month without doing very serious research. While ethanol was the panacea of yesterday, lawmakers have learned that there are more down sides to the use of ethanol than there are pluses. Ethanol production demands more energy to produce than using a traditional petroleum product to produce the same amount of energy and the feedstock that is used to produce ethanol basically redirects demand for that feedstock away from traditional uses, causing those other products to substantially increase in price. Even algae, which was once thought of as a great alternative fuel, has been reported to consume more energy and resources than the energy that is produced from the substance. Lawmakers have a wealth of resource information at their finger tips through the Hawaii Natural Energy Institute upon which to draw and learn more about cutting edge research in this area.

Finally, when language is written so vaguely in an attempt to throw a broad net to attract all comers, that vague language can lead to misinterpretation and abuse as witnessed in the case of the tax credits for high technology research and investment. As such, this proposal should come under closer scrutiny instead of being left to interpretation by a taxpayer wanting to utilize the tax incentive to underwrite the cost of what would still be a questionable use of taxpayer dollars.

Digested 2/1/11