SB 237

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 12:08 AM
То:	AEN Testimony
Cc:	legechair@gmail.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Simon Russell	Hawaii Farmers Union United	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Sustainable Biofuel Agriculture in Hawaii

Comment in support of SB 237 by Dr. William Steiner, General Manager, Hawaii Oil Seed Producers (HOSPRO)

Hawaii Oil Seed Producers (HOSPRO) LLC is a federally recognized 501(c)5 corporation licensed as a tax exempt, nonprofit agricultural cooperative in Hawaii and operates under CFDA number 10.769 and NAICS code 0173.

HOSPRO was formed at the end of a phase I proof of concept study that examined the question of whether oil palms hybrids of American Oil Palm (Eleias oleifera) and African Oil Palm (Elaeis guineensis) would grow and thrive in Hawaii. Dr. William Steiner, then Dean of the College of Agriculture, Forestry and Natural Resources at the University of Hawaii in Hilo (UHH) tested the idea by importing phytosanitized seeds (an APHIS USDA requirement) of 3 varieties of hybrid oil palms from a company in Costa Rica. After sprouting and rearing the plants to a two-foot height, the young palms were given out to a dozen small farm holders scattered across the island of Hawaii to examine effects of differences in elevation, soil and climate, and whether rainfall, insects and fungi would impact survival and growth. The five-year study successfully ended in 2012 when Dr. Steiner stepped down as Dean. With farmer field support, they found that oil palm does very well in Hawaii, is slightly slower in maturing than in Central America but may be producing more fruit, grows well below 3000' with production beginning at 3 years and is highly resistant beyond the seedling stage to dozens of insects and fungi known to attack palms and other plants.

Further studies have now shown that we can interplant crops that withstand some shade like coffee, cacao and tea between the palm trees. We are planning on also seeing if maile vines will grow using the trees as a buttress and support. We are planting legume grasses between the rows to add nitrogen to the tree roots to reduce fertilizer inputs. Studies in Indonesia have shown that cattle can be grazed between the trees on the legume grass as well. Thus, oil palms, which is the largest edible oil source in the world, can provide a robust integrated growing system to quickly enhance the food, fiber and fuel security of Hawaii. Not only that, they provide protection for former sugar cane and pineapple fields that now only grow invasive species of weeds, and might serve as a replacement tree for the loss of Ohia due to the fungus currently killing it in vast numbers.

The byproducts of oil palm are also useful. Wet components (ground or pressed meal from the nuts, palm foliage, etc) can be used to make a supplemented, 12-14% animal feed as used in Indonesia to feed milk cows. The dry components (dead leaves, fruit husks, etc) can be used to make a compost to enrich fields with. The oil is not only used to make biofuel or edible oil; it is used in manufacture of dozens of food products, cosmetics, pharmaceuticals, and plastics. Thus, many new industries could be born in Hawaii to provide even more jobs and business opportunities beyond the expected hire of one agricultural technician per 20 acres of palm trees. This means that unlike sugar cane or pineapple or even threatened macadamia nut, if Hawaii moves away from using biodiesel as a fuel source, the trees and their oil could still be useful in a post-hydrocarbon economy. There would be no need to remove trees after their useful biofuel days were over.

The growers of the remaining 80 acres of trees asked me to obtain an oil extraction mill for them upon my retirement as Dean of Agriculture, Forestry and Natural Resource Management at UHH in 2012. The 8,000 trees that remain are now producing fruit and averaging 12-16 bunches per tree each weighing between 5-7 pounds even though they are 3 years away from reaching maturity. Our calculations shows this to be about 500 gallons/acre of potential vegetable oil. So we formed a 501c5 nonprofit agricultural cooperative, the Hawaii Oil Seed Producers LLC (HOSPRO) and sought and received USDA funding to obtain a small mill for such purpose and now seek a site to build the mill and begin producing oil. For this reason, we have asked the State Legislature for a capital grant in aid to obtain 11 acres of

land with a warehouse and shade house that suits our purpose, and an operations grant in aid to obtain and grow out 49,000 more trees because we have 2,100 acres and 10 more growers that want the palms. We are on the verge of expanding the original proof of concept into a firm industrial agricultural base for Hawaii, and in this regard have also support SB 1268 which will be to establish a vegetable oil industry in Hawaii which is exactly what we are doing and will further our goals and expectations.

HOSPRO, for which I am not only a co-Founder but the General Manager, stands ready to assist Hawaii Department of Agriculture in reaching the goals of SB 237. Thank you for your consideration and time.



COMMITTEE ON AGRICULURE AND ENVIRONMENT

Sen. Mike Gabbard, Chair; Sen. Gil Riviere, Vice Chair; and Members <u>COMMITTEE ON TRANSPORTATION AND ENERGY</u> Sen. Lorraine Inouye, Chair; Sen. Donovan Dela Cruz, Vice Chair; and Members Public Hearing, February 6, 2017 at 1:15 p.m., Conference Room 224

TESTIMONY of WILLIAM F. ANONSEN MANAGING PARTNER/PRINCIPAL of THE MARITIME GROUP, LLC IN SUPPORT of S.B 237

My name is William Anonsen and I am the Managing Partner/Principal of THE MARITIME GROUP, LLC. We strong support SB 237 which would require the Hawaii Department of Agriculture establish a two-year advanced biofuels pilot program to expand the use of biofuels in helping the state achieve its mandated goal of 100% renewable clean energy for power generation by 2045. In addition, this pilot program has the capability of extending in elements that can improve the energy transportation and food production sectors.

Mother Nature had always satisfied man's energy needs in a renewable manner, until the industrial revolution pushed mankind to start exploiting the earth's fossil reserves: coal, fossil oil and natural gas. These energy reserves, although abundantly available, are not unlimited and are damaging our environment. The current and future circumstances necessitate that renewable energy programs be accelerated, with biofuels options serving to be a primary solution to address these energy requirements. Biofuels are an excellent option with their high efficiency providing the reliable and consistent firming of Hawaii's power grid, which are being supplemented by intermittent energy sources such as photovoltaic solar systems and wind turbines. Collectively these renewable energy sources will ensure we meet our RPS mandates.

Biofuels are a renewable energy source in that they are created from plants that can be regrown each year. The use of biofuels is basically carbon neutral, since the carbon produced when burning them is offset by the carbon consumed by the plants they came from. In Hawaii, biofuels can help reduce the dependence on foreign oils. Hawaii has the ideal climate year-round and soil conditions for biofuel crops; to produce a renewable and clean, local sustainable source of energy.

The potential benefits of biofuels are immense, to include, but are not limited to:

- Enhancing energy security and energy independence, in electricity power and the transport sector;
- Ability to provide significant livestock feedstock for cattle ranches, cow dairies, etc.;
- Contribution to a cleaner environment through reducing greenhouse gas and vehicular emissions;
- Helping to eliminate climate-changing fossil fuel, with clean, local and sustainable source of energy;
- Suitable lands that are currently underutilized will be put to the production, enhancing productivity;
- Creation of rural employment and diversification of the rural economy;
- Creation of new and increased markets for local produced agricultural products;

The following are some recommendations for the committee's consideration;

- Establishment of an implementation plan for a comprehensive biofuels program, to include state policies and strategies for the production and marketing of biofuels;
- Increased awareness of the potential for the production of biofuels throughout the state;
- Set up an institutional framework to promote biofuels by establishing a Biofuels Development Board or a similar autonomous organization to coordinate all aspects of the biofuel program;
- Study the available international experience in all aspects of biofuels including policies, feedstocks, technologies and business models;
- Formulate and adopt holistic and biofuels friendly policies and a workable and practical implementation strategy;
- Showcase pilot projects to demonstrate technology and the workability of the biofuel program.

The establishment of the proposed two-year advance biofuels pilot project is another critical step forward to significantly enhance our state's energy security, energy independence, and assist with our food security for livestock feed in a fiduciary environmentally responsible and economic manner. We can all be very proud that Hawaii is the first U.S. state to adopt this renewable energy standard, the most aggressive clean energy goal in the country, which is workable and is achievable.

Mahalo for the opportunity to comment in support of S.B. 237

Sincerely,

William F. Anonsen

William F. Anonsen Managing Partner/Principal



Testimony to the Senate Committee on Transportation and Energy and Senate Committee on Agriculture and Environment Monday, February 6, 2017 1:15PM Conference Room 224, State Capitol RE: Senate Bill 237

Chairs Inouye and Gabbard, Vice Chairs Dela Cruz and Riviere and Members of the Committees on Transportation and Energy and Agriculture and Environment:

We support the intent of SB 237 to expand the use of cost-effective liquid and gaseous biofuels in the State of Hawaii.

Hawaii Gas is working on a number of initiatives to increase the use of gaseous biofuels in our business. For example, in August 2016, the City and County of Honolulu awarded the Honouliuli Waste Water Treatment Plant biogas project to Hawaii Gas. This project exemplifies how existing biogas resources can be used to generate a revenue stream for counties while helping the gas utility increase the amount of renewable energy resources used in its business. We continue to pursue additional sources of municipal biogas.

Hawaii Gas is also assessing the use of high-yielding energy crops coupled with high-efficiency pre-treatment and anaerobic digestion technology. This work may lead to significant production of gaseous biofuels in Hawaii that can be used for direct use, electricity generation and ground and marine transport.

Hawaii Gas would be pleased to be a part of the collaborative efforts that may result going forward.

Sincerely,

Joseph Boívín, Jr.

Joseph Boivin, Jr. Senior Vice President Hawaii Gas

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 11:57 AM
То:	AEN Testimony
Cc:	deborah@imaginariums.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Davis	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 11:33 AM
То:	AEN Testimony
Cc:	raphiell@gmail.com
Subject:	Submitted testimony for SB237 on Feb 6, 2017 13:15PM

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Raphiell Nolin	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 11:26 AM
То:	AEN Testimony
Cc:	tina@kiheiice.com
Subject:	Submitted testimony for SB237 on Feb 6, 2017 13:15PM

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tina Wildberger	Individual	Support	No

Comments: Please pass this bill to expand use of biofuel and continue to move Hawaii toward a 100% rewable energy future. Mahalo.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 10:29 AM
То:	AEN Testimony
Cc:	alohalways@gmail.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tanja Miller	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 9:34 AM
То:	AEN Testimony
Cc:	molivit@yahoo.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Isabelle Olivit	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 9:08 AM
То:	AEN Testimony
Cc:	ihemphi@live.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Denise Key	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 8:15 AM
То:	AEN Testimony
Cc:	reneeariley@hotmail.com
Subject:	Submitted testimony for SB237 on Feb 6, 2017 13:15PM

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Renee Riley	Individual	Support	No

Comments: I support Biofuel production and increased energy security. Since we now import about 90% of our energy, this is an important bill to help our Hawaiian islands become more energy sufficient.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 6:59 AM
То:	AEN Testimony
Cc:	taragrace808@gmail.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tara Grace	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 6:07 AM
То:	AEN Testimony
Cc:	katc31999@gmail.com
Subject:	*Submitted testimony for SB237 on Feb 6, 2017 13:15PM*

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Kat Culina	Individual	Support	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 4, 2017 10:24 PM
То:	AEN Testimony
Cc:	ahuntemer@aol.com
Subject:	Submitted testimony for SB237 on Feb 6, 2017 13:15PM

Submitted on: 2/4/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Angela Huntemer	Individual	Support	No

Comments: Aloha Chairs and members of the Committees, I urge you to carefully consider SB237. We all love renewable energy. However, research has shown that biofuels are not cost effective when taking in to consideration the loss of agricultural land for growing food and the carbon footprint of growing biomass and burning it. There are certain forms of "biofuels" that may be more friendly but this bill is not proposing those. Please vote NO! Thank you Senators.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 2:18 PM
То:	AEN Testimony
Cc:	tracy.emills@gmail.com
Subject:	Submitted testimony for SB237 on Feb 6, 2017 13:15PM

Submitted on: 2/5/2017 Testimony for AEN/TRE on Feb 6, 2017 13:15PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Tracy E Mills	Individual	Support	No

Comments: Aloha.

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