SCR 121

DAVID Y. IGE Governor

SHAN S. TSUTSUI Lt. Governor



SCOTT E. ENRIGHT Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER Deputy to the Chairperson

State of Hawaii **DEPARTMENT OF AGRICULTURE** 1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEES ON AGRICULTURE & ENVIRONMENT & TRANSPORTATION & ENERGY

MARCH 29, 2017 2:44 P.M. CONFERENCE ROOM 224

SENATE CONCURRENT RESOLUTION NO. 121 URGING THE DEVELOPMENT OF A HAWAII GREEN FUELS INITIATIVE TO COINCIDE WITH INCREASE LOCAL FOOD PRODUCTION.

Chairpersons Gabbard and Inouye and Members of the Committees:

Thank you for the opportunity to testify on S.C.R. No. 121. This resolution urges the significant growth, development, intensification, and expansion of agriculture to incorporate dedicated food and biofuel feedstock growth to achieve the goals of food and biofuel feedstock sustainability and security through a "Hawaii Green Fuels Initiative". The resolution describes an "integrated food and biofuel supply chain" that "would create storage, pre-processing, and conversion refinery plants, and coupling increased food production with increased biofuel feedstock production would provide additional revenue for farmers and reduce the overall costs of local food production;" (page 2, lines 25-30). The Department of Agriculture supports the intent of this resolution to the extent that it supports production agriculture, and offers comments.

Chapter 205 is replete with renewable energy initiatives that are included as permitted uses on all agricultural lands. Some renewable energy facilities such as wind turbines, impact agricultural lands and activities less than others such as industrial scale solar energy facilities with a compatible but negligible agricultural activity. The



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proposed Hawaii Green Fuels Initiative must not disadvantage production agriculture and the resources fundamental to agricultural activities. Further, the proponents of this resolution should keep in mind that a farmer will only plant what he can sell profitably.

Thank you for the opportunity to present our testimony.



Legislative Testimony

Testimony Presented Before the Senate Committee on Agriculture and Environment And Senate Committee on Transportation and Energy Wednesday, March 29, 2017 at 2:44 p.m. By Rachel Novotny, Interim Dean And J. Kenneth Grace, Associate Dean College of Tropical Agriculture and Human Resources University of Hawai'i at Mānoa

SCR 121 – URGING THE DEVELOPMENT OF A HAWAII GREEN FUELS INITIATIVE TO COINCIDE WITH INCREASED LOCAL FOOD PRODUCTION.

Chairs Gabbard and Inouye, Vice Chairs Riviere and Dela Cruz, and members of the Senate Committee on Agriculture and Environment and Committee on Transportation and Energy:

Thank you for this opportunity to testify in <u>support</u> of SCR 121, urging the development of a Hawaii Green Fuels Initiative to coincide with increase local food production.

Hawai'i has made significant strides in transitioning from fossil-based electric power generation to greater reliance on renewable resources, and appears to be on a sound trajectory toward meeting its goal of 100% renewable electricity by 2045. However, unlike renewable electric power, which taps Hawai'i's excellent solar and wind regimes, only agriculture appears to have the potential to contribute significantly to the production of renewable "drop-in" transportation fuels, provide a large platform for the manufacturing of commercial products, and significantly reduce the amount of food imported into our state.

Producing home-grown food, bio-based fuels and electricity, and other manufactured products offers excellent opportunities to use Hawai'i's valuable land and water resources and reduce our state's reliance on imported food and fuel, strengthen and diversify Hawai'i's economy and open new markets for local agribusinesses, and have significant, positive environmental and social/community impacts. The timing of this effort is critical, since former plantation lands will become fragmented over time and less usable for biofuel crop production.

We appreciate the opportunity to testify in support of SCR 121.



46-063 Emepela Pl. #U101 Kaneohe, HI 96744 · (808) 679-7454 · Kris Coffield · Co-founder/Executive Director

TESTIMONY FOR SENATE CONCURRENT RESOLUTION 121, URGING THE DEVELOPMENT OF A HAWAII GREEN FUELS INITIATIVE TO COINCIDE WITH INCREASED LOCAL FOOD PRODUCTION

Senate Committee on Agriculture and Environment Hon. Mike Gabbard, Chair Hon. Gil Riviere, Vice Chair

Senate Committee on Transportation and Energy Hon. Lorraine R. Inouye, Chair Hon. Donovan M. Dela Cruz, Vice Chair

> Wednesday, March 29, 2017, 2:44 PM State Capitol, Conference Room 224

Honorable Chair Gabbard, Chair Inouye, and committee members:

I am Kris Coffield, representing IMUAlliance, a nonpartisan political advocacy organization that currently boasts over 350 members. On behalf of our members, we offer this testimony <u>in support of SCR 121</u>, urging the development of a Hawai'i green fuels initiative to coincide with increased local food production.

Hawai'i has set a goal of achieving 100 percent clean energy by the year 2045. Yet, our state remains the most fossil fuel dependent state in the nation, spending billions each year on imported oil. Little more than a decade ago, the islands derived 90 percent of our electricity from foreign oil.

Hawai'i's dependence on fossil fuel can best be explained by our state's economic dependence on tourism and the military, as well as our reliance on the shipping industry to deliver consumer goods and industrial materials. Our oil addiction is not just bad for the environment; it's bad for consumers: Hawai'i residents pay the highest electricity rates in the nation. Reducing our reliance on fossil fuels and generating 100 percent of our energy from renewable resources will, on the other hand, boost Hawai'i's economy by keeping an estimated \$3 billion in the islands that would otherwise be spent on imported oil.

Biofuels could significantly advance Hawai'i's clean energy ambitions. Biofuels use organic matter to produce a predictable supply of green energy that can be stored in presently used power plants. Additionally, biofuels can be locally produced, directly creating job growth in the energy and farming industries. In May of 2016, the Sustainable Biodiesel Alliance provided a Pacific Biodiesel plant with the first United States-based certification of sustainability for a biodiesel plant. This certification reflects an investment in biofuel technology that has led to increases in the technology's efficiency, profitability, and sustainability as a renewable energy source that can be coupled with other renewables comprising Hawai'i's clean energy portfolio.

In 2011, Hawaiian Electric Company successfully used 100 percent renewable biofuel to fire a petroleum oil-fired steam turbine generator at Kahe Power Plant, believed to be the first time a utility-scale steam unit has fired on 100 percent biofuel at 100 percent capacity. Relatedly, biodiesel has been used in Maui's Ma'alaea Power Plant, which relies primarily on petroleum diesel for fuel. Biofuel originally obtained from Pacific Biodiesel has been used to avoid opacity (visibility of emissions) problems that lead to violations of air quality permits. Biofuel need not be implemented solely by large power companies, either, but could lift our state's agricultural industry. Unused agricultural land could be developed to generate biomass, providing economic security for both farmers, energy companies, and consumers.

Mahalo for the opportunity to testify <u>in support</u> of this resolution.

Sincerely, Kris Coffield *Executive Director* IMUAlliance



COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Sen. Mike Gabbard, Chair; Sen. Gil Riviere, Vice Chair; and Committee Members <u>COMMITTEE ON TRANSPORTATION AND ENERGY</u> Sen. Lorraine Inouye, Chair; Sen. Donovan Dela Cruz, Vice Chair; and Committee Members

Public Hearing, March 29, 2017 at 2:44 p.m., Conference Room 224

TESTIMONY of WILLIAM F. ANONSEN MANAGING PARTNER/PRINCIPAL of THE MARITIME GROUP, LLC IN SUPPORT of SCR 121

My name is William Anonsen and I am the Managing Partner/Principal of THE MARITIME GROUP, LLC. We support SCR 121 which encourages the development of a Hawaii Green Fuels initiative to coincide with increased local food production.

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 the development of a Hawaii Green Fuels initiative to coincide with increased local food production 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 this measure

Sincerely, William F. Anonsen

William F. Anonsen Managing Partner/Principal



TESTIMONY of GEORGE PRITCHARD EXECUTIVE VICE PRESIDENT CLEAN ENERGY SOLUTIONS IN SUPPORT of SCR 121

BEFORE THE SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT And the COMMITTEE ON TRANSPORTATION AND ENERGY

Wednesday, March 29, 2017, 2:44 p.m. Public Hearing – State Capitol, Conference Room 224

Thank you for the opportunity to submit testimony in strong support of SCR 121, which encourages the development of a Hawaii Green Fuels initiative to coincide with increased local food production.

Clean Energy Solutions is committed to programs that convert crops, crop residues, dedicated energy crops and agricultural wastes into economically and environmentally sustainable biofuels and value added co-products. The high cost of energy and livestock feed are significant hurdles for the local utilities and farmers in Hawaii, and this proposed biofuels pilot project to address the conversion of agricultural crops and byproducts to biofuels and protein feed, is an important step towards food sustainability.

Feedstock produced in Hawaii can be used directly as a biofuel to produce electricity in Hawaii. The local production of these biofuels could contribute to Hawaii's renewable energy objectives, reduce the impact of world oil price volatility, provide a measure of energy security, provide economic diversification, encourage increased agricultural production, and circulate Hawaii's energy expenditures within Hawaii's economy.

Thank you for the opportunity to provide testimony in strong support of SCR 121

CLEAN ENERGY SOLUTIONS

Sincerely,

George Pritchard

George Pritchard Executive Vice President

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 27, 2017 8:00 AM
То:	AEN Testimony
Cc:	ccampa1@msn.com
Subject:	Submitted testimony for SCR121 on Mar 29, 2017 14:44PM

<u>SCR121</u>

Submitted on: 3/27/2017 Testimony for AEN/TRE on Mar 29, 2017 14:44PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Carl Campagna	Individual	Support	No

Comments: Many thanks for the opportunity to submit testimony in strong support of this resolution. A vibrant biofuels industry based in Hawaii intended to coincide with the growth of local agricultural food growth is a Jobs solution for the state of Hawaii as much as it is an Energy security solution. Along with the farm to school program, we could provide the opportunity for local farms to grow by giving them a baseline revenue. This growth would bring about more jobs, both farming as well as higher paying tech jobs to run the processing plants for both food and biofuels. This would also support the increase in local food production and help bring the costs per unit down. In addition, this would spur the development of both fuel industries in an effort to address the high costs and volatility of the petroleum imports and create high paying and sustainable jobs. I see the opportunity to ramp down the solar PV incentives and ramp up the biofuels incentives. We can create a suite of tax, land use and tech based credits intended to bring investment and opportunity to the State of Hawaii.

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.

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<u>SCR121</u>

Submitted on: 3/26/2017 Testimony for AEN/TRE on Mar 29, 2017 14:44PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
John Begg	Individual	Support	No

Comments:

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