

SB 486



BioEnergy Hawaii, LLC
New Ideas for Hawaii's Future

Hawaii State Senate
Regular Session of 2009
Energy & Environmental Committee

February 17, 2009
2:45 p.m., Conference Room 225

SB No. 486
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST INDUSTRIAL ENTERPRISES

Chair Senator Mike Gabbard, Vice – Chair Senator Kalani J. English and Committee Members:

Good Afternoon. I am Guy Kaniho, General Manager of BioEnergy Hawaii, LLC. A Hawaii limited liability company which is owned and managed by Pacific Waste, Inc. a Hawaii corporation with its principal offices in Kailua-Kona, Hawaii.

Pacific Waste is the largest waste hauling and disposal company on the Big Island. Its sister company, Aloha Waste Systems, Inc. operates on the Island of Maui. Pacific Waste collects and disposes of nearly 200 tons of Municipal Solid Waste ("MSW") everyday at the Pu'uanahulu landfill on the Island of Hawai'i.

BioEnergy Hawaii's primary business is the design, construction and operation of one or more, municipal solid waste to energy facilities in the State of Hawaii, wherein refuse derived fuel, ("RDF") is gasified in an advanced process for electrical generation to be distributed and sold into the electrical grid operated by the local utilities and / or to other users.



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In other words, in its initial facility, the BEH proposal is simply to take all the trash collected by Pacific Waste and others, including the County, in West Hawaii, sort it and put it into the gasifier which will turn it into fuel to power engines and produce electricity that can be sold to HELCO or other users.

The benefits of such a facility are numerous. First, it would produce electricity, perhaps as much as 10 megawatts, for use by individual residences and businesses using a renewable resource, trash. Such electrical power is produced without the use of fossil fuels thereby reducing the State's dependency on foreign oil.

It will also significantly reduce the amount of municipal solid waste flowing into the landfill thereby extending its life. This, in turn, will reduce the production of methane gas and subsurface leachate at the landfill, thereby improving air quality and our environment, our "Aina". Landfill space is a significant problem in our state and on the Island of Hawai'i in particular where the Hilo landfill is nearing closure. We simply do not have enough space to accommodate the MSW produced by residents, tourists, business and industry. This proposed waste to energy facility helps solve that problem by using the garbage as an energy source or feedstock.

At this time, it is BEH's intention to sequester carbon dioxide for the production of algae. Moreover, BEH is also committed to study the commercial viability of utilizing algae to produce biofuel to propel vehicles, power engines or for various other uses such as



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powering generators to produce more electricity and thereby further reducing our State's need for fossil fuels.

Our initial project has been presented to the Board of Directors of the Natural Energy Laboratory of Hawaii Authority ("NELHA") at Kailua-Kona on the Island of Hawaii and was given conceptual approval on May 27, 2008. We continue to work with the staff of NELHA to secure a sublease with terms and conditions beneficial to the state and commercially reasonable for BEH.

The approval of the legislation now pending before you will enable BEH to secure sufficient funds and make this initial facility a reality. I sincerely believe, as a lifelong resident, that this project will enhance both our economy and our environment. I urge you to support this bill.

I thank you for this opportunity to testify.

WRITTEN TESTIMONY

TESTIMONY BY GEORGINA K. KAWAMURA
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
ON
SENATE BILL NO. 486

February 17, 2009

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST
INDUSTRIAL ENTERPRISES

Senate Bill No. 486 authorizes the issuance of up to \$100,000,000 in special purpose revenue bonds to assist BioEnergy Hawaii, LLC, or a partnership in which BioEnergy Hawaii, LLC is a general partner, in the construction and operation of a cogeneration facility and related energy production facilities pursuant to Part V, Chapter 39A, Hawaii Revised Statutes.

The Department has a technical comment on this bill. Under Section 144 of the Internal Revenue Code of 1986, as amended, tax exempt financing for industrial projects are limited to \$10 million. We recommend that the project party consult with a bond counsel firm to determine if the project may qualify, under certain exemptions, for the full amount of tax-exempt financing.



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Attached Agency of the Department of Business, Economic Development & Tourism, State of Hawaii



Statement of
RON BAIRD
CHIEF EXECUTIVE OFFICER
Natural Energy Laboratory of Hawaii Authority
before the
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
February 17, 2009
2:45 p.m.
State Capitol Conference Room xxx

in consideration of
SB0486
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST INDUSTRIAL ENTERPRISES.

Chair Gabbard, Vice-Chair English, and members of the Senate Committee on Energy and Environment, I am Ron Baird Chief Executive Officer of the Natural Energy Laboratory of Hawaii Authority, located in Kailua-Kona.

Bio Energy Hawaii presents an opportunity for us, as a society, to move forward toward energy independence and self-sufficiency in an important number of ways. Hawai'i is likely the most carbon intensive consuming society on earth. We need to consider reducing our carbon footprint while simultaneously achieving two other goals: reducing our dependence on imported fossil fuels and increasing self-sufficiency in the production of other goods. This project represents an important first step toward achieving all three and can serve as a model for similar projects elsewhere in the state.

Bio Energy Hawaii proposes to build a renewable, waste-to-energy facility at NELHA. This significantly reduces the amount of diesel fuel consumed by its trucks, achieves an unprecedented level of recycling glass, metal, and the like AND aims to:

- 1.) Produce 6 to 8 megawatts of electricity (enough to supply six to eight thousand typical Island of Hawaii homes). The energy would be produced from a renewable resource (waste) that otherwise clogs our environment with non-decomposable trash or otherwise contributes to our largest homegrown export --- waste paper.
- 2.) Recycle carbon dioxide from the gasification of the waste into energy. In today's world, recycling the carbon is an important contributor to reducing society's carbon footprint. Bio Energy Hawaii has committed to doing several things with the carbon dioxide from gasification: sell it to local farmers who otherwise import their carbon dioxide (used to stimulate plant growth) and use it in the production of biofuels from algae. In the latter regard, the company envisions that at worst, the algae is recycled

to generate additional electricity and ultimately will be used in a proprietary process to produce 6,000,000 to 8,000,000 gallons of biodiesel on an annual basis. Displacement of that much fossil fuel, at today's prices, saves the citizens of Hawai'i \$18 to \$24 million annually in the monies exported forever from Hawai'i to pay for imported fuels.

- 3.) What happens to the leftover biomass from fuel production? Research on that is being conducted vigorously and actively all over the world. The residual is a high protein material that likely can be rendered into animal foods. Hawai'i imports virtually all its cattle, hog, chicken, horse, fish and other animal foods. Making this residual into home grown animal feeds would create a beneficial effect for all our citizens, certainly not the least of which is the agricultural production sector.

The capital investment to help make this plant a reality, assuming the NELHA Board of Directors approves its lease application, could set the stage for similar operations designed to make our state more self reliant and less susceptible to wild swings in the price of fossil fuels.

NELHA supports the passage of this Bill into an Act as NELHA believes its passage and implementation will make a significant positive economic impact on the future of the state and its well-being.

Thank you very much for your consideration of my testimony and if you have any questions, I would be happy to take and answer them now to the best of my ability.

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 15, 2009 10:14 AM
To: ENETestimony
Cc: kimos@mac.com
Subject: Testimony for SB486 on 2/17/2009 2:45:00 PM

Testimony for ENE 2/17/2009 2:45:00 PM SB486

Conference room: 225
Testifier position: support
Testifier will be present: Yes
Submitted by: kimo Sutton
Organization: Individual
Address: 350 Ward Ave #106 Honolulu Hi
Phone: 808 7836322
E-mail: kimos@mac.com
Submitted on: 2/15/2009

Comments:

Aloha,

My name is Warner Kimo Sutton, CEO of Diamond Head Renewable Resources. We will be making a similar technology on Oahu. I am here to support the credit needed for this industry in this crisis. Hawai'i has this type of capital support and was first started in the Con Con of 1978 of which I was an elected Delegate. To fund expensive construction for alternative energy to replace fossil fuels this method is a godsend. No other industries have federal acts to support loans for second generation fuels. Because of that the state loans will be backed. These loans can help the future of jobs there too. This technology can help to decrease our dependence on foreign imported fuels and energy, keeping the billions of dollars leaving the state home. I ask you to please support this second generation biomass production method with your passing of this measure.

**Pacific Waste, Inc.
74-5588 Pawai Place
Kailua-Kona, HI 96740**

**HAWAII STATE SENATE – 25th LEGISLATURE
REGULAR SESSION OF 2009**

COMMITTEE ON ENERGY AND THE ENVIRONMENT

**February 17, 2009
2:45 PM - Conference Room 225**

RE: SB 486 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST INDUSTRIAL ENTERPRISES

Chair Sen. Mike Gabbard, V. C. Sen. J. Kalani English and Members:

Good afternoon. My name is Dante Carpenter and I speak in favor SB 486 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST INDUSTRIAL ENTERPRISES, namely for BioEnergy Hawaii, LLC. (BEH) (Companion HB 1628). For the past 10 years, I have been a member of the Board of Directors of Pacific Waste Inc., BEH owner and managing member for a project proposed in West Hawaii.

I sincerely believe that the total scope of this project which will combine state-of-the-art technologies proposed to be located in Kona in the Natural Energy Laboratory/Host Park area will help West Hawaii in general and NELHA in particular towards meeting its needs in the area of energy self-sufficiency.

As Mayor of Hawaii County from 1984 thru 1988 it was my pleasure to serve as one of seven ex-officio voting members of the then NELH Managing board. In fact, I specifically delegated and personally instructed then Deputy Managing Director Gregory Mooers to encourage the expansion of land and facilities by whatever means and to the greatest extent possible in light of the huge future potential of NELH!

In 1990, pursuant to Act 224, 1990 Hawaii Session Law, at 474-80, the legislature wisely consolidated management of the NELH and the adjoining Hawaii ocean science and technology (HOST) park to attract commercialization projects in concert with NELH activity. HRS chapter 227D (1993) replaced chapter 227 and established the Natural Energy Laboratory of Hawaii Authority (NELHA) to manage both NELH and HOST. Pursuant to 227D-1: "Research and technology park" means a tract of real property determined by the NELHA board as being suitable for use as building sites for projects engaged in research, development, demonstration, processing, or manufacturing activities or retail or commercial enterprises utilizing or in support of utilization of natural resources or geothermal energy. This includes, but is not limited to, research,

commercialization, training , education, technical analyses, pilot plant, or prototype product development, and may include the installation of improvements to tracts incidental to the use of real property as a research and technology park, such as water, sewer, sewage and waste disposal, and drainage facilities, sufficient to adequately service projects in the research and technology park, and provision of incidental transportation facilities, power distribution facilities, and communication facilities."

NELHA is thus empowered to do much more than its predecessor NELH. This broadened power and authority inures to its present day status. Indeed, as pointed out by CEO Ron Baird at a recent meeting, its authority extends throughout the State of Hawaii and is not merely limited to Keahole in Kona.

Moreover, as a marine-mechanical engineer formerly engaged in design and operations of raw sugar production machinery evaporation systems, including steam and electrical generation units, it's exciting to be a participant in the BEH proposal. The \$100 M + investment which includes technical processes that utilize various waste streams, the combination of CO2 generation to support the growth of algae in photo-bioreactor units, and ultimately the production of over 9 MW of electrical power for distribution to the tenants, neighbors Kona International Airport, too, is an exciting project for West Hawaii and NELHA.

The BEH Team is committed to complete an EIS, among other studies and ongoing discussions with staff of NELHA. Project Manager, Guy Kaniho, formerly managed the operations of Pacific Waste, Inc., the largest Refuse Hauler on the Big Island and competently represents the interests of BEH.

With the economy in a slump, NELHA's decreased funding support from state and federal sources, the exorbitant cost of energy, the challenge to make timely and bold decisions presents a mutual opportunity. We look forward to working with the NELHA Board, CEO Ron Baird and key staff members of NELHA, and all other cognizant private or government agencies.

Finally, in addition to the sales of electrical power to the local utilities, the use of thermal fluid output from the cogeneration facility would be utilized by existing and planned businesses for both manufacturing and processing enterprises with economic benefits to the surrounding community. The use of special purpose revenue bonds is in keeping with the provisions of Part V, Chapter 39A, HRS.

We strongly recommend passage of SB 486.

Thank you very much for your consideration.