

WRITTEN TESTIMONY

TESTIMONY BY GEORGINA K. KAWAMURA
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
ON
HOUSE BILL NO. 1336

Bill No. 1336
Support Y N
Date 2/11/09
Time 9:49 2
Cat AF AS AX B C
Type 1 2 WI

February 12, 2009

RELATING TO SPECIAL PURPOSE REVENUE BONDS TO ASSIST DIAMOND HEAD
RENEWABLE RESOURCES, LLC.

House Bill No. 1336 authorizes the issuance of up to \$144,000,000 in special purpose revenue bonds to assist Diamond Head Renewable Resources, LLC in the planning, designing, constructing, and equipping of an ethanol refinery on Oahu and for renewable electric power generation 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.

In addition, the Department recommends additional language be included in Section 3 of the bill as follows (new language underlined):

“SECTION 3. The special purpose revenue bonds and the refunding special purpose revenue bonds issued under this Act shall be issued pursuant to part V, chapter 39A, Hawaii Revised Statutes, relating to the power to issue special purpose revenue bonds to assist industrial enterprises.”

Diamond Head Renewable Resources LLC

Press Release

www.diamondheadrr.com
350 Ward Avenue suite 106
Honolulu, Hawai'i 96814

808 783 6322

Warner Kimo Sutton CEO

Bill No. 1336

Support Y N

Date 2/9/09

Time 9:52a

Cat AF AS AX B C

Type 1 2 WI

First closed system process ethanol plant in America to be located in Hawai'i

GHGs to be used for recycling with algae to carbon free and a closed system process.

Diamond Head Renewable Resources LLC, is a Hawai'i company that will build a commercial energy and ethanol plant in Honolulu. It will be the first refinery of its kind in America to include GHGs (Green House Gas) recycling with algae. It will be a closed system process by not just venting the CO₂ into the atmosphere. This means a zero carbon footprint. They will use waste and biomass not food, to produce the energy and ethanol. This green approach to alternative energy and fuels is an epiphany for the industry.

"We will have a large construction project in three stages and provide many new high tech jobs. The use of garbage and green waste will keep hundreds of thousands of tons out of Honolulu's landfills. Dumping will be free for most cellulosic waste that can be used." Said Warner Kimo Sutton CEO "Thus saving private companies thousands of dollars a year." "We can even use the methane from the land fill for energy to reduce GHGs."

Algae grown in a vertical biogenerator can 'eat' the CO₂ generated in the plant. Along with making oxygen the algae will be used in making biofuel. Algae research in Hawaii has many strains and the carbon sequestered will be sold as credits in a Cap and Trade system. The sun shining longer all year round in Honolulu will be a big plus growing algae. "We hope to use reverse osmosis processed waste water from sewer for the plant. The drying building will use solar resources." Sutton added.

The first of three phases will have a 5 MWe power plant and 12 MMgy second generation ethanol refinery. The process will be by gasification to syngas then used to make energy in a turbine generator or fuels through a catalyst. The ethanol technology is being piloted in Washington this Spring to be licensed by Diamond Head. The algae biogenerators are in pilot operation and ready for commercial operation when construction is started in a year. Federal incentives make the loans for this plant possible with most of the capital guaranteed. The final phase will make the plant three times as large as the first stage and take three years of expansion. The cost in 2009 dollars for all three phases is expected to be \$200 million.

End

Bill No. 1336

EEPtestimony

From: Nancy Ross [nancy@syntecbiofuel.com]
Sent: Wednesday, February 11, 2009 11:51 AM
To: EEPtestimony
Subject: HB1336

Support Y N

Date 2/11/09

Time 12:40 p

Dear Sir/Madam,

Cat AF AS AX B C

Testifier's name with position/title and organization; Nancy Ross, Syntec Biofuel Inc. Type 1 2 WI

The Committee the comments are directed to; COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

The date and time of the hearing; Thursday, February 12, 2009 9:00 am

Measure number; and HB1336

I support this bill to loan Diamond Head Renewable Resources in special bonds for the construction of a near zero carbon footprint to make ethanol and renewable energy here. This action will start the reduction of carbon in our atmosphere and have a local supply of ethanol while reducing waste and landfill.

Regards,

Nancy

Nancy Ross
Syntec Biofuel Inc.
Phone: 604-648-2092
Fax: 604-648-2091
Email: nancy@syntecbiofuel.com
Website: www.syntecbiofuel.com
Sign up at <http://www.syntecbiofuel.com/signup.html>.

Bill No. 1336

Support Y N

Date 2/10/09

Time 10:00 p

Cat AF AS AX B C

Testimony on HB1336

A new company is working to make an alternative energy refinery will WI not charge tipping fees and take green, cellulosic and non toxic waste to make energy. That company is Diamond Head Renewable Resources. This plant will be the first of its kind in the USA. A state loan will make this possible as commercial sources are not available for capital loans.

Diamond Head Renewable Resources LLC, is a Hawai'i company that will build a commercial energy and ethanol plant in Honolulu. It will be the first refinery of its kind in America to include GHGs (Green House Gas) recycling by algae. It will be a closed system process by not just venting the CO2 into the atmosphere . This means a near zero carbon footprint. They will use waste and biomass, not food, to produce the energy and ethanol. This three way approach to alternative energy and fuels is an epiphany for the industry.

DHRR will have a large construction project in three stages over three years and provide many new high tech jobs. The use of garbage and green waste will keep hundreds of thousands of tons out of Honolulu's landfills. Dumping will be free for most cellulosic waste that can be used. Thus saving private companies thousands of dollars a year. We can even use the methane from the land fill for energy to reduce GHGs."

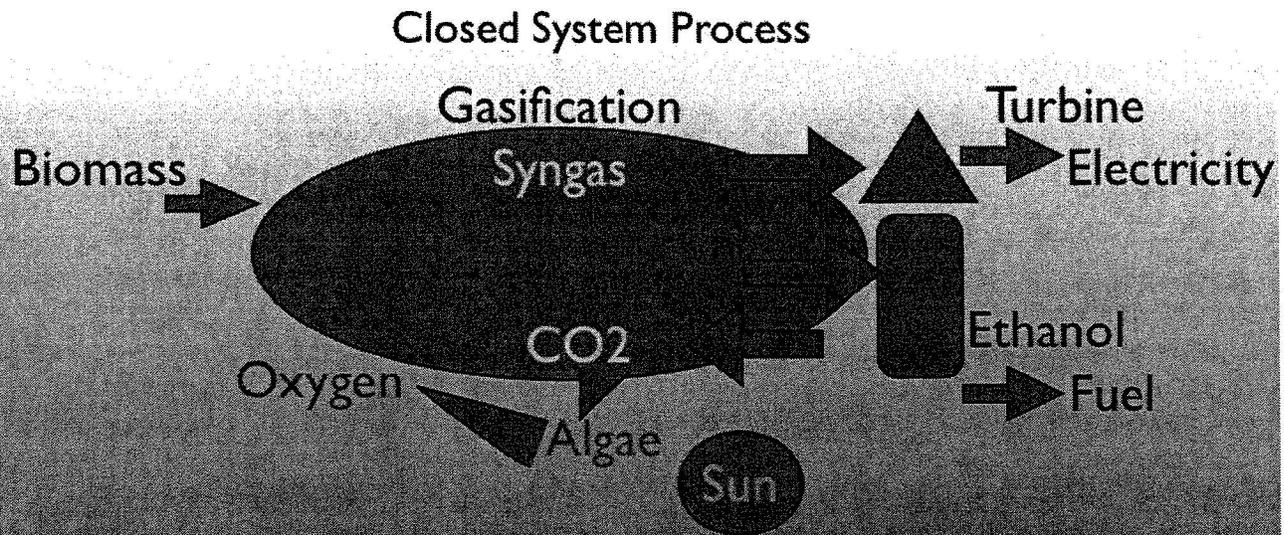
Algae grown in a vertical biogenerator can 'eat' the CO2 generated in the plant. Along with making oxygen the algae will be used in making biofuel. Algae research in Hawaii has many strains and the carbon sequestered will be sold as credits in a Cap and Trade system. The sun shining longer all year round in Honolulu will be a big plus growing algae . We hope to use reverse osmosis processed waste water from sewer for the plant. The drying building will use solar resources for more energy savings.

The first of three phases will have a 5 MWe power plant and 12 MMgy second generation ethanol refinery. The process will be by gasification to syngas then used to make energy in a turbine generator or fuels through a catalyst. The ethanol technology is being piloted in Washington this Spring to be licensed by Diamond Head. The algae biogenerators are in pilot

operation and ready for commercial operation when construction is started in a year. Federal incentives make the loans for this plant possible with most of the capital guaranteed. The final phase will make the plant three times as large as the first stage and take three years of expansion. The cost in 2009 dollars for all three phases is expected to be \$200 million.

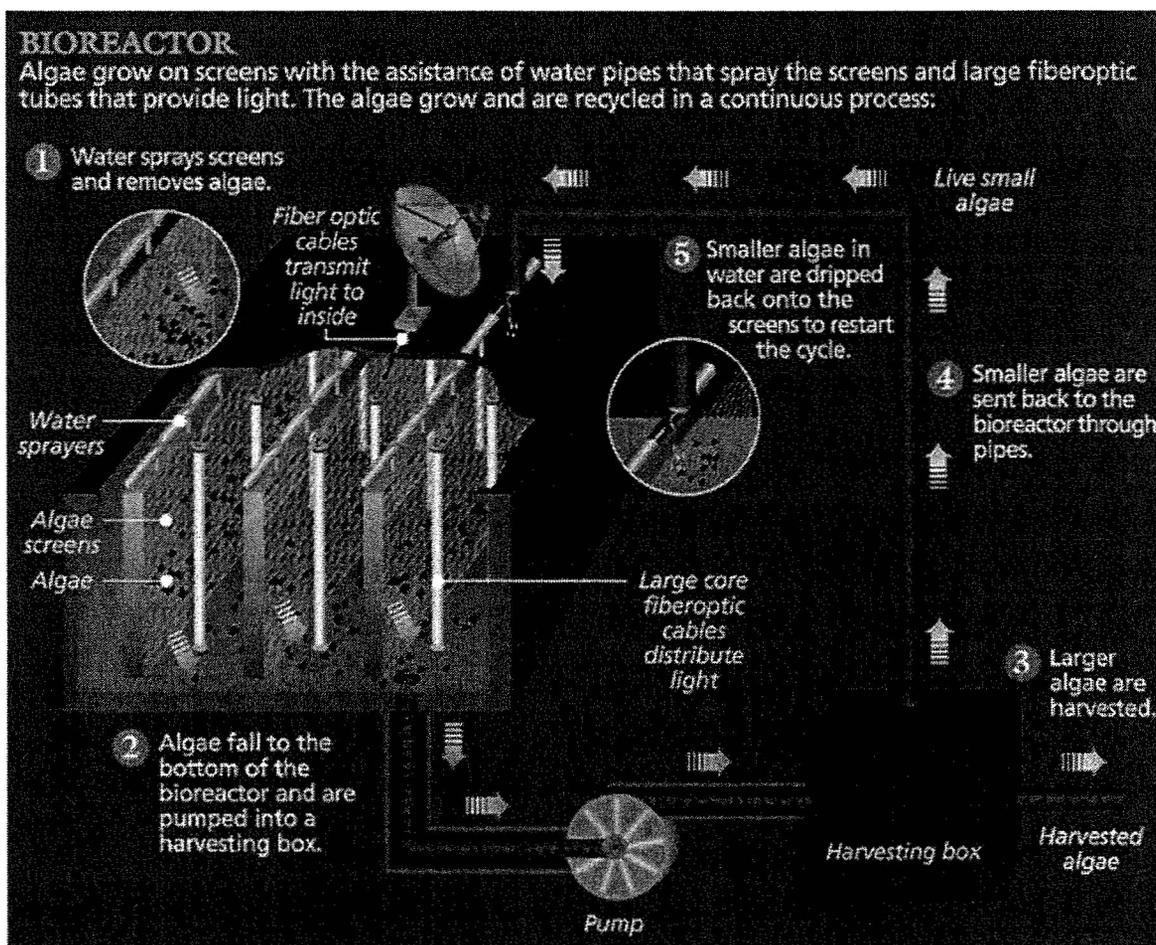
The Federal incentives include guarantees for loans like the one proposed for second generation cellulosic biomass to ethanol. They will cover about 75% of the proposed cost for the project. That is why a \$200 million project is asking for the \$144 million in the SPRB. New incentives will be coming out of the new administration with the Stimulus bill and DHRR will be a conduit for assistance to our ailing economy.

Diamond Head Renewable Resources LLC is working with two new technologies to make the plant ecologically friendly. The energy produced with a gasification process is 45% more efficient than H-power and is not polluting in this system. Diamond Head RR will work closely with both the State and City to bring this plant online as soon as possible.



Waste biomass to gasification and making synthetic gas. Syngas is run through the turbine for energy or a catalyst to make ethanol. The resulting CO₂ is fed into a biogenerator with sunlight to grow algae making Oxygen. Algae is used for biofuel and other products.

The ongoing research into algae includes production of hydrogen instead of oxygen in the photosynthesis. This byproduct is highly prized in research at UH and in the private sector. Algae is still a new process for reduction of sewer waste and cleaning of the ocean in outfalls. Algae is also an important feed for fish and in ocean sea farms the fish need the nutrients. The algae in research and development in Kona is even a food supplement. This new process of a vertical growth chamber will make several times the product per acre than ponds and algae is the fastest growing plant on earth. It produces thousands of plants overnight.



This combination of resources and technology will show the rest of the nation how to use waste and not make equal but less green house gases. Before this the standard was to not make more CO₂ than made in nature if it just was left to rot. This process of three technologies will reduce GHGs to produce fuel, energy, and carbon credits.

EEPtestimony

From: CHRISTINE SUTTON [csutton@queens.org]
Sent: Wednesday, February 11, 2009 8:02 AM
To: EEPtestimony
Subject: HB1336, Date of Hearing - Thursday, February 12, 2009 @ 9:00 AM

I support this bill(HB 1336) to loan Diamond Head Renewable Resources in special bonds for the construction of a near zero carbon footprint to make ethanol and renewable energy here in Hawaii. This action will start the reduction of carbon in our atmosphere and have a local supply of ethanol while reducing waste and landfill.

Christine Sutton, RN, CDN
Queens Medical Center

Bill No. 1336
Support Y N
Date 2/11/09
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EEPttestimony

From: rtoomey@clearwire.net
Sent: Wednesday, February 11, 2009 1:47 PM
To: EEPttestimony
Cc: Kimo Sutton
Subject: HB1336

I, Rory Soares Toomey, support this bill to loan Diamond Head Renewable Resources in special bonds for the construction of a near zero carbon footprint to make ethanol and renewable energy here. This action will start the reduction of carbon in our atmosphere and have a local supply of ethanol while reducing waste and landfill.

Rory Soares Toomey

Bill No. 1336

Support Y N

Date 2/11/09

Time 1:47p

Cat AF AS AX B C

Type 1 2 WI