

CARBON BIO-ENGINEERS, INC.
94-1221 Ka Uka Blvd., Unit 108-317
Waipahu, Hawaii 96797

HOUSE OF REPRESENTATIVES - REGULAR SESSION 2010
COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
February 2, 2010
8:30 AM, Conference Room 325

Bill No. 2497
Support (Y) N
Date 2/1
Time 8:51
Cat AF AS AX (B)C
Type (1) 2 WI

HB 2497 -RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS

Chair Rep. Hermina M. Morita, V.C. Rep. Denny Coffman and Committee Members:

Good Morning. My name is Michael Lurvey, Technology Consultant to and member of the Board of Directors of Carbon Bio- Engineers, Inc. (CBEI). Carbon Bio-Engineers, Inc. strongly supports HB 2497 Relating to the issuance of Special Purpose Revenue Bonds to help develop and expand its operations statewide. (Companion Bill is SB 2926). CBEI is a local Hawaiian company incorporated on October 23, 2009, to replace a previous similar enterprise which became a victim of a hostile takeover in August 2009.

CBEI has developed a hybrid system that utilizes Pressure, Pyrolysis, Gasification and Carbonization in a process which can reduce various organic and solid hydrocarbon feedstocks into carbon products and synthetic fuels. The CBEI process has a negligible effect on the environment by outperforming the minimum allowed Standard for EPA's Emission Limits.

Moreover, the process epitomizes the Hawaiian Culture's respect for the aina and the principles of caring for the land - "Malama Aina" - with one of the most sustainable and cleans technologies available in the world today. This results in lessened dependency on fossil fuels, reduction of landfill waste streams, transportation and disposal costs, and can indirectly provide lower priced electrical energy to the grid via local distributed generation.

As previously stated, CBEI continues working directly with its associates and DHHL, to engage in essential projects on the Island of Hawaii. These projects will process a range of organic streams from invasive species, biomass green-wastes, macadamia nut shells, and tires among other wastes. CBEI principals and associates participated in early 2009 in "Ground Breaking Ceremonies" with other Hawaiian Organizations to do control harvesting and processing of the invasive species known as "Gorse". Together we are working to clear thousands of acres of infested pasture lands in the ahupua'a known as Humu'ula on Mauna Kea.

These systems are designed to be mobile, portable, or stationary, thus giving the project the maximum flexibility to meet its specific requirements and to maximize the projects operations. The system is designed to have as a small a footprint as possible with the least possible negative impact to the surrounding area and the overall environment and ecology.

Further the system has been designed to do more than just reduce wastes; it is designed to convert those wastes into value added products as mentioned above. In addition to sales of electrical power to the local utilities, the use of thermal fluid output from the polygeneration facility would be utilized by existing and planned businesses for both manufacturing and processing enterprises with economic benefits to the surrounding community.

Finally, the use of special purpose revenue bonds does comport with the provisions of Part V, Chapter 39A, HRS.

We strongly recommend passage of HB 2497.
Thank you very much for your consideration.

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8:30 AM, Conference Room 325

HB 2497 –RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS

Chair Rep. Hermina M. Morita, V.C. Rep. Denny Coffman and Committee Members:

Good Morning. My name is Dante Carpenter, Secretary on the Board of Directors of Carbon Bio-Engineers, Inc. (CBEI). Carbon Bio-Engineers, Inc. strongly supports HB 2497 Relating to the issuance of Special Purpose Revenue Bonds to help develop and expand its operations statewide. (Companion Bill is SB 2926). CBEI is a local Hawaiian company incorporated on October 23, 2009, to replace a previous similar enterprise which became a victim of a hostile takeover in August 2009.

CBEI has developed a hybrid gasification carbonization process which can reduce various organic feedstock and tires (non-fossil fuel) into carbon products and synthetic gas. The CBEI process has a negligible effect on the environment by outperforming the minimum allowed for EPA's Emission Standards.

Moreover, the process epitomizes the Hawaiian Culture's respect for the 'aina and principles of caring for the land – Malama 'Aina – with one of the most sustainable and clean technologies available in the world today. This results in lessened dependency on fossil fuels, landfills, transportation and disposal costs, and can indirectly provide lower priced electrical energy to the grid via local distributed generation.

As previously stated, CBEI continues working directly with its associates and DHHL, to engage in essential projects on the Island of Hawaii. These projects will process a range of organic streams from biomass green-wastes to tires and macadamia nut shells, among others. CBEI principals and associates participated in early 2009 in "Ground Breaking Ceremonies" with other Hawaiian Organizations to process the invasive species, known as "gorse," to help clear thousands of acres of infested pasture land in the ahupua'a known as Humu'ula on Mauna Kea. Further, mobility and portability of the process facility equipment allows for maximum flexibility of operations with the least possible negative environmental impact(s) to the surrounding area(s) in which reduction of the various organic feedstock materials are being processed.

In addition to 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. Finally, the use of special purpose revenue bonds does comport with the provisions of Part V, Chapter 39A, HRS.

We strongly recommend passage of HB 2497.

Thank you very much for your consideration.

WAIMEA HAWAIIAN HOMESTEADERS' ASSOCIATION, INC.

P. O. Box 6753
Kamuela, Hawaii 96743
February 1, 2010

Bill No. 2497

Support (Y) N

Date 2/1

Time 10:29

Cat AF AS AX (B) C

Type (1) 2 WI

M KANANI KAPUNIAI
Pu'ukapu-Pastoral '90+
Director- **President**

BETTY LAU
Kuhio Village
Director - **Vice-President**

MAXINE KAHAULELIO
Pu'u Pulehu
Director - **Secretary**

A HOPPY BROWN
Pu'ukapu Pastoral '90+
Director - **Treasurer**

Kamoku/Waikoloa Nienie
Director

Pauahi
Director

ROBERT TERUKINA
Kuhio Village
Director

BERNARD ALANI, JR
Pu'ukapu-Farm >'85
Director

JOSEPH KEALOHA
Pu'ukapu-Farm '85+
Director

HENRY "SOLI" NIHEU
Pu'ukapu-Farm '85+
Director

TIARE FLORES
Pu'ukapu-Pastoral <90
Director

TO: Representative Hermina M Morita, Chair
Representative Denny Coffman, Vice Chair
Committee on Energy & Environmental Protection

FROM: M Kapuniai, President

RE: **HB2497**
RELATING TO THE ISSUANCE OF SPECIAL
PURPOSE REVENUE BONDS

Date/Time: Tuesday, February 2, 2010 8:30a.m.

Place: Conference Room 325
State Capitol
415 South Beretania Street

We **SUPPORT** this bill.

The issuance of this revenue bond will serve to:

- 1) Clear Hawaiian Homes trust lands of gorse, an invasive plant covering approximately 13,000 acres at Humu'ula, Hawaii
- 2) Provide jobs for beneficiaries, highly skilled and trainees
- 3) Turn an otherwise non-productive plant into a revenue stream
- 4) Prepare trust lands for beneficiary stewardship

We recommend passage of this bill.

We appreciate the opportunity to participate in this process.

Phone: (808) 890-2311 (Res) 936-0157(Cell)
Email: duke@sandwichisles.net

A member of the Sovereign Councils of Hawaiian Homelands Assembly

Pacific Crane & Equipment, Inc

P. O. Box 6753

Kamuela, Hawaii 96743

February 1, 2010

Bill No. 2497

Support (Y) N

Date 2/1

Time 11:26

Cat AF AS AX (B) C

Type (1) 2 WI

TO: Representative Hermina M Morita, Chair
Representative, Denny Coffman, Vice Chair
Committee on Energy and Environment

FROM: N Duke Kapuniai, President & CEO

RE: **HB 2497**
RELATING TO THE ISSUANCE OF SPECIAL PURPOSE
REVENUE BONDS

Authorizes issuance of special purpose revenue bonds for Carbon Bio-Engineers, Inc.
for development of non-fossil fuel energy production.

Date/Time: Tuesday, February 2, 2010 8:30 a.m.
Place: Conference Room 325
State Capitol, 415 So. Beretania St.

We write to **SUPPORT** this bill.

Carbon Bio-Engineers, Inc. will be utilizing a patented technology developed at the Hawaii Natural Energy Institute (HNEI) University of Hawaii, to reduce various waste streams to useful, high-yield marketable products; the thermal fluid to be processed will greatly contribute to the standards projected for co-generation facilities by the "*Hawaii Clean Energy Initiative*".

We look forward as a partner with Carbon Bio-Engineers, Inc. to continue this project by delivering the harvested feedstock and managing the processing component.

We have formed a partnership to pursue this major undertaking, a partnership without which this project could not have happened:

Pacific Crane & Equipment, Inc., 'Oiwi Lokahi O Ka Mokupuni O Keawe,
Department of Hawaiian Home Lands, Carbon Bio-Engineers, Inc.
Bacon Universal, Inc., Innovative Tractor Werkes, LLC

We facilitated the Ground-breaking for this collaborative Project at Humu'ula, Hawaii. during February, 2009.

Join us in "*Turning a Problem into an Opportunity*" (coined by Kelly Greenwell) by clearing trust lands for productive use, by producing clean fuel for HELCO and HECO, by bringing our islands' economy steps closer to self-sufficiency, and last by not least, by supporting employment opportunities for our families.

We write to **request full support for passage of this bill**, to authorize the issuance of a special purpose revenue bond to Carbon Bio-Engineers, Inc.

Thank you!

Phone: (808)890-2311 Cell: (808)936-1042
E Mail: duke@sandwichisles.net



TN DESIGN ASSOCIATES, AIA, INC.
Architecture and Planning

HOUSE OF REPRESENTATIVES – REGULAR SESSION 2010
COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 2, 2010
8:30AM, Conference Room 325

Bill No. 2497

Support ☒ Y ☐ N

Date 2/1

Time 11:36

Cat AF AS AX ☒ B C

Type ☒ 1 ☐ 2 WI

HB 2497 – RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS

Chair Rep. Hermina M. Morita, V.C. Rep. Denny Coffman and Committee Members:

Good Morning. My name is Timothy Newberry, RA, AIA, LEED, AP. President of TN Design Associates, AIA. Inc. TN Design Associates, AIA. Inc., and a member of the American Institute of Architects (AIA) Hawaii State Council, as such, I strongly recommends the passage of HB 2497 Relating to the issuance of Special Purpose Revenue Bonds to support, help develop and expand the use of new technologies statewide to alleviate our State's need to import fossil fuels for our energy needs. This type of technology is a perfect fit to our State's Hawaii Clean Energy Initiative.

Carbon Bio-Engineers Inc. (CBEI) is a local company, therefore the funds from this bond will remain here in the state, and help create much needed "Green Collar" jobs. CBEI has developed a hybrid system that incorporates two proven technologies, they are Gasification and Carbonization. The genesis of the technology was developed at our own University of Hawaii.

As an Architect, I strongly support a local technology that can put another arrow in the quiver of the Architect to help our profession fulfill the fiduciary responsibility to the 'Aina and the built environment. This technology has the ability to convert most carbon based waste into Clean Green Energy. This technology will allow the Architect to integrate it into the building systems to create not only Carbon Neutrality, but even Carbon Negativity.

In addition, this technology has the potential to create a new distributive electrical smart grid for electrical generation for the State, this means no more fossil fuel burning, air polluting centralized, archaic electrical generation systems of the past. Therefore, I strongly support the passage of HB 2497.

Thank you for your consideration on this Bill,

Timothy Newberry, RA, AIA