

Statement of **Duke Hartman, P.E.**

Vice President, Business Development Makai Ocean Engineering, Inc. before the

SENATE COMMITTEE ON WAYS AND MEANS

Friday, March 31, 2017 09:30 a.m. State Capitol, Conference Room 211 In consideration of HB 592 HD1 RELATING TO ENERGY

Chair Tokuda, Vice Chair Dela Cruz, and Members of the Senate Committee on Ways and

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS HB 592 HD1** that extends the sunset date of the Alternative Energy Research and Development Pilot Program to June 30, 2019, and appropriates funds for the Program.

Means.

Makai is a locally-owned and operated technology company based in Hawai`i for over 44 years. One of the driving reasons behind Makai's existence is to help Hawai`i achieve energy independence using clean, alternative and renewable resources.

Hawai`i is blessed with abundant natural resources such as wind, solar, geothermal, hydro, biofuels, and ocean energy. While wind and especially solar contributions to the energy portfolio are now commercial and have grown significantly, other options like ocean energy have the potential to significantly contribute to the supply of base load / firm / constant renewable power, but are worryingly underrepresented. These alternative options are at the same place solar and wind was 20 years ago, and require R&D to reach the same level of maturity and commercialization.

Makai is currently performing R&D and working towards commercialization of ocean thermal energy conversion (OTEC) and at the Natural Energy Laboratory of Hawai`i Authority (NELHA) in Kailua-Kona. Makai employs eight highly-paid, highly-skilled engineers and scientists in the high tech / renewable energy field in rural Kailua-Kona. This program recently achieved a huge milestone of connecting to the grid, making Hawai`i the home of the world's largest operational OTEC plant, and the clear leader in the emerging market of ocean thermal energy.

Governor David Ige was present to dedicate the power plant and 'flip the switch.' In his keynote address he said, "One big difference with OTEC is that it is a firm power source; it allows us to generate electricity consistently... and in the evening hours when other renewable sources are not available, which really is the key to a 100% renewable future."



With the help of programs like this bill, Makai has been able to secure additional competitively awarded federal funding from the U.S. Navy, and bring home national honors, such as the Tibbetts Award. This award recognizes the very best in small innovative companies in the country whose technologies have made a strong economic impact in terms of high paying jobs, and demonstrating success in actually commercializing federal R&D. See the State's press release about the awards: http://governor.Hawai`i.gov/newsroom/latest-news/dbedt-news-release-htdc-small-business-grantees-honored-with-national-tibbetts-award-at-the-white-house/

This is why we **STRONGLY SUPPORT HB 592 HD1**. Not only would this program develop alternative energy technology for our 100% renewable future, it would enable our tech industry to compete and win more federal monies for technology development and support highpaying, highly-skilled professional jobs for our keiki here at home.

Thank you for the opportunity to offer these comments.



Written Statement of DR. PATRICK K. SULLIVAN PRESIDENT/CEO OCEANIT

Before the

SENATE COMMITTEE ON WAYS AND MEANS

March 31, 2017 9:30 a.m. State Capitol, Conference Room 211 In Support of HB592 RELATING TO ENERGY

To: Senator Jill N. Tokuda, Chair and Senator Donovan Dela Cruz, Vice Chair and Members of the Committees

From: Dr. Patrick K. Sullivan, President/CEO

Re: Testimony in Support of HB592

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support of HB52.

Hawaii's Alternative Energy and Research Development Program is an integral part in making the entire state energy sustainable. Hawaii is fortunate with its diverse resources such as solar, wind, hydro, bioenergy and geothermal which is ideal for the development of clean energy. The continuation of this program is important for Hawaii's economy as it will allow local companies to continue to do their research and development in renewable energy. In addition, it will keep high-paying, high-skilled jobs in Hawaii, furthering the State's commitment to renewable energy and supporting business.

We urge you to support HB592.

Testimony to the Senate Committee on Ways and Means Friday, March 31, 2017 at 9:30 A.M. Conference Room 211, State Capitol

RE: HOUSE BILL 592 HD1 RELATING TO ENERGY

Chair Tokuda, Vice Chair Dela Cruz, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 592 HD1, which extends the sunset date of the Alternative Energy Research and Development Pilot Program to June 30, 2019; appropriates funds for the Program.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 1,600+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

This bill would provide crucial support to local companies engaged in alternative energy research and helps these companies secure additional federal grants. The program supports the local economy by keeping high-paying, high-skill jobs as well revenue in Hawaii. It also strengthens the state's commitment to alternate energy opportunities.

Thank you for the opportunity to testify.





Written Statement of
Robbie Melton
Executive Director & CEO
High Technology Development Corporation
before the
Senate Committee on Ways and Means

Friday, March 31, 2017 9:30 a.m. State Capitol, Conference Room 211

> In consideration of HB592 HD1 RELATING TO ENERGY.

Chair Tokuda, Vice Chair Dela Cruz, and Members of the Committee on Ways and Means.

The High Technology Development Corporation (HTDC) **supports** HB592 HD1 that extends the sunset date of the Alternate Energy Research and Development Pilot Project to June 30, 2019 and appropriates funds for the Project.

As part of HTDC's vision to create 80,000 new innovation jobs in Hawaii earning \$80,000 or more by 2030, HTDC supports initiatives aimed at promoting technology and innovation jobs.

In FY16, the first year of the program, HTDC awarded \$1 million to 3 companies who secured \$11.3 million of federal funding from the Office of Naval Research for alternative energy projects. In FY17 HTDC anticipates awarding all of the \$1 million fiscal year 2016-2017 appropriated funds. HTDC believes the program supports the growth of companies with innovative renewable energy technologies in the State and moves Hawaii closer to its clean energy goal of 100 percent renewable energy by 2045.

We support this initiative as long as it does not replace our priorities requested in the Executive Budget.

Thank you for the opportunity to offer these comments.

Sent: Wednesday, March 29, 2017 10:00 AM

To: WAM Testimony

Cc: achung@navatekltd.com

Subject: Submitted testimony for HB592 on Mar 31, 2017 09:30AM

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing	
ann chung	Navatek	Support	Yes	

Comments: We strongly support HB592 HD1 extending the existing alternative energy grant administered by HTDC for additional 2 years. This is a great program supporting local companies doing renewable energy research and leverages federal funding helping these companies pursue even more federal grants. The program supports the economy by keeping high-paying, high-skilled jobs and keeping revenues in Hawaii, while furthering the State's commitment to renewable energy and supporting businesses.

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.

Sent: Wednesday, March 29, 2017 10:39 AM

To: WAM Testimony

Cc: klock@navatekltd.com

Subject: *Submitted testimony for HB592 on Mar 31, 2017 09:30AM*

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Kacey Lock	Individual	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.

Sent: Wednesday, March 29, 2017 10:03 AM

To: WAM Testimony
Cc: eschiff5@gmail.com

Subject: Submitted testimony for HB592 on Mar 31, 2017 09:30AM

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Eric Schiff	Individual	Support	No

Comments: I strongly support HB592.

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.

Sent: Wednesday, March 29, 2017 11:42 AM

To: WAM Testimony

Cc: tjpeltzer@hawaii.rr.com

Subject: Submitted testimony for HB592 on Mar 31, 2017 09:30AM

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Todd Peltzer	Individual	Support	No

Comments: I strongly support this bill.

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.

Sent: Wednesday, March 29, 2017 9:52 AM

To: WAM Testimony

Cc: awhite@navatekltd.com

Subject: *Submitted testimony for HB592 on Mar 31, 2017 09:30AM*

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Audra White	Individual	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.

Sent: Wednesday, March 29, 2017 10:44 AM

To: WAM Testimony
Cc: gary@navatekltd.com

Subject: *Submitted testimony for HB592 on Mar 31, 2017 09:30AM*

HB592

Submitted on: 3/29/2017

Testimony for WAM on Mar 31, 2017 09:30AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Gary Shimozono	Individual	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.

March 30, 2017

The Honorable Jill Tokuda Chairperson Senate Committee on Ways and Means State Capitol Honolulu, Hawai'i 96813

SUBJECT: Testimony on House Bill 592, HD1, Relating to Energy

Dear Chair Tokuda and Committee Members:

I write in support of HB 592, HD1 as a board member of the High Technology Development Corporation (HTDC). The bill provides funding to provide matching funds for U.S. Office of Naval Research (ONR) Energy Projects for another two years. Hawai'i has set ambitious goals to increase its use of renewable energy. The ONR matching fund program is integral to that effort.

I humbly ask for your vote in favor of the bill.

Thank you for the opportunity to testify.

Sincerely,

Elijah Yip