



Written Statement of  
**Len Higashi**  
Acting Executive Director  
Hawaii Technology Development Corporation  
before the  
**House Committee on Finance**  
Wednesday, March 27, 2019  
2:30 p.m.  
State Capitol, Conference Room 308

In consideration of  
**SB1291, SD1, HD1**  
**RELATING TO THE ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT FUND.**

Chair Luke, Vice Chair Cullen, and Members of the Committee.

The Hawaii Technology Development Corporation (HTDC) **supports** SB1291, SD1, HD1 that appropriates funds into and out of the Alternative Energy Research and Development revolving fund for the Hawaii Technology Development Corporation to provide grants.

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. Last session \$1,000,000 was appropriated for the Alternative Energy Research and Development grant program. HTDC has completed the required public hearing on the proposed administrative rules for the program. HTDC has opened the application period and is on schedule to make FY19 awards before the end of the fiscal year. Act 67, SLH18 restarts the program that was last awarded in FY17. In FY17, all 3 companies that applied were awarded a total of \$950,000. The companies matched the state award with a total of \$10.2 million of federal funds.

Thank you for the opportunity to offer these comments.



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

Before the  
**HOUSE COMMITTEE ON FINANCE**

March 27, 2019  
2:30 p.m.  
State Capitol, Conference Room 308

In Support of  
**SB1291 RELATING TO THE ALTERNATE ENERGY RESEARCH AND  
DEVELOPMENT FUND**

To: Representative Sylvia Luke, Chair and Representative Ty J.K. Cullen, Vice Chair  
and Members of the Committees

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

Re: SB1291

Honorable Chairs, Vice-Chairs and Committee Members:

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.

Oceanit is in SUPPORT of SB1291



# Chamber of Commerce HAWAII

*The Voice of Business*

**Testimony to the House Committee on Finance  
Wednesday, March 27, 2019 at 2:30 P.M.  
Conference Room 308, State Capitol**

**RE: SB 1291 SD1 HD1 RELATING TO THE ALTERNATIVE ENERGY RESEARCH  
AND DEVELOPMENT FUND**

Chair Luke, Vice Chair Cullen, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** SB 1291 SD1 HD1, which appropriates funds into and out of the Alternative Energy Research and Development Revolving Fund for the Hawaii Technology Development Corporation to provide grants.

The Chamber is Hawaii's leading statewide business advocacy organization, representing 2,000+ 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.

The Chamber continues to support the State's efforts to promote and foster innovation research and development in Hawaii. Innovation is a proven catalyst for economic growth and the creation of high-skilled and high-paying jobs. This bill would help to provide necessary capital to help assist these small businesses in innovation research and expansion and provide support to grow their businesses to the next level and compete globally.

Thank you for the opportunity to testify.



To: The House Committee on Finance  
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action  
Date: Wednesday, March 27, 2019, 2:30 pm

**In support of SB1291 SD1 HD1**

Dear FIN Chair Luke, Vice Chair Cullen, and Committee Members—

Organizing for Action supports SB1291 SD1 HD1.

Hawaii's Alternative Energy and Research Development Program is an important part of accelerating Hawaii's progress toward zero emissions.

Mature technologies like solar, wind, hydro, bioenergy and geothermal all contribute to our goals, but there cannot be too many solutions to our zero emissions energy needs. The astonishing rise in PV efficiency and corresponding drop in prices only happened because of relentless R&D.

Developing technologies like OTEC, SWAC, wave energy and solar thermal need uninterrupted support. Better technologies that don't even exist yet can only come from R&D. That's why companies like, e.g., Apple, spend many billions every year on R&D.

The continuation of this program is also important for Hawaii's economy as it will allow local companies to continue researching and developing. It will keep high-paying, high-skilled jobs in Hawaii.

Please pass SB1291 SD1 HD1 and support continuing discovery and progress in zero emissions technologies.

Thank you for the opportunity to testify.

Brodie Lockard  
Hawaii State Climate Lead, Organizing for Action



Statement of  
**Hermann Kugeler**  
**Business Development Manager**  
**Makai Ocean Engineering, Inc.**

before the  
**House Committee on Finance**  
Wednesday, February 27, 2019  
2:30pm  
State Capitol, Conference Room 308

In consideration of  
**SB1291**  
**RELATING TO THE ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT  
FUND**

Chair Luke, Vice Chair Cullen, and members of the Committee

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS SB1291** that makes an appropriation to Alternative Energy Research and Development revolving fund.

Makai is a locally-owned and operated technology company based in Hawai'i for over 45 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) 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 has 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. Plans are in the works for new developments to move this technology even further.

Governor David Ige was present to dedicate the power plant and 'flip the switch,' and 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 Small Business Administration's Tibbetts Award. This national 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 and increasing taxable revenue for the state.

This is why we **STRONGLY SUPPORT SB1291**. 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 high-paying, highly-skilled professional jobs for our keiki here at home.

Thank you for the opportunity to testify.

**SB-1291-HD-1**

Submitted on: 3/26/2019 11:59:37 AM

Testimony for FIN on 3/27/2019 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ann Chung	Individual	Support	Yes

Comments:

I STRONGLY SUPPORT SB1291. Companies doing critical research in clean energy technologies are bringing in large numbers of federal funding to Hawaii and creating the high-skilled, high-paying jobs our workers need. This program supports and strengthens these efforts to further encourage high-impact, clean energy solutions not only proving that Hawaii is an ideal laboratory for the development of clean energy technologies but also creating economic growth and jobs. I URGE YOU TO PASS THIS BILL.

Mahalo for this opportunity to testify.

**LATE**

**SB-1291-HD-1**

Submitted on: 3/27/2019 2:24:37 PM

Testimony for FIN on 3/27/2019 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	O`ahu County Democrats Committee on Legislative Priorities	Support	No

Comments: