



Written Statement of
Len Higashi
Acting Executive Director
Hawaii Technology Development Corporation
before the
Senate Committee On Energy, Economic Development & Tourism
Monday, March 16, 2020
2:55 p.m.
State Capitol, Conference Room 414

In consideration of
HB2717, HD1
RELATING TO THE ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT FUND.

Chair Wakai, Vice Chair Taniguchi, and Members of the Committee.

The Hawaii Technology Development Corporation (HTDC) **supports** HB2717, HD1 that extends the alternative energy research and development revolving fund lapse date from 6/30/2020 to 6/30/2021 and appropriates funds for the provision of grants by the Hawaii Technology Development Corporation.

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 growing tech and innovation jobs. In FY19, HTDC awarded three companies \$950,000. The companies brought \$10.5 million of federal dollars into the state. The program did not receive an appropriation in FY20.

HTDC believes this program provides leverage for state dollar and requests correction of the defective effective date. Thank you for the opportunity to offer these comments.



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

before the
Senate Committee on Energy, Economic Development, and Tourism
Monday, March 16, 2020

2:55pm
State Capitol, Conference Room 414

In consideration of
HB2717
RELATING TO THE ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT FUND

Chair Wakai, Vice Chair Taniguchi, and Members of the Committee

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS HB2717 WITH AMMENDMENT** that makes an appropriation to Alternative Energy Research and Development revolving fund.

Due to the importance of this program, we recommend removing the following statement, "The alternative energy research and development revolving fund shall be abolished on June 30, 2021, and all unencumbered balances shall lapse to the credit of the general fund". This program is helping Hawaii's companies advance alternative energy technologies that will ultimately help the state reach its 100% renewable energy goals. Removing this statement will allow the program to remain past 2021.

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 HB2717 WITH THE AMMENDMENT MENTIONED ABOVE**. 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.



Chamber of Commerce HAWAII

The Voice of Business

Testimony to the Senate Committee on Energy, Economic Development, and Tourism

**Monday, March 16, 2020 at 2:55 P.M.
Conference Room 414, State Capitol**

RE: HB 2717 HD1, RELATING TO THE ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT FUND

Chair Wakai, Vice Chair Taniguchi, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 2717 HD1, which extends the alternative research and development revolving fund lapse date from June 30, 2020 to June 30, 2021 and appropriates funds for the provision of grants by the Hawaii Technology Development Corporation.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 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.

In 2018 the Legislature established the alternative energy research and development program through Act 67 to further strengthen and support Hawaii companies that are conducting renewable energy research and development through contracts with the Office of Naval Research (ONR). This bill seeks to extend the program for one more year.

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. Local companies currently partnered with ONR are at the forefront of alternative energy research and development, and these efforts are likely to continue helping the State achieve its renewable energy goals.

Thank you for the opportunity to testify in support of HB 2717 HD1.