



Written Statement of
Len Higashi
Acting Executive Director
Hawaii Technology Development Corporation
before the
House Committee on Finance
Monday, February 24, 2020
11:00 a.m.
State Capitol, Conference Room 308

In consideration of
HB2717, 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** HB2217, HD1 that extends the alternative energy research and development revolving fund lapse date from 6/30/2020 to 6/30/2021. 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 3 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.



Chamber of Commerce HAWAII

The Voice of Business

LATE

**Testimony to the House Committee on Finance
Monday, February 24, 2020 at 11:00 A.M.
Conference Room 308, State Capitol**

**RE: HB 2717 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** HB 2717 HD1, which extends the alternative research and development revolving fund lapse date from June 30, 2020 to June 30, 2021.

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.



LATE

183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The House Committee on Finance
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Monday, February 24, 2020, 11:00 am

Support for HB 2717 HD1

Dear Chair Luke, and members:

350Hawaii.org's 6,000 members support HB 2717 HD1.

Extending the alternative energy research and development revolving fund by a year will help to discover and develop more tools for fighting the Climate Crisis by reducing greenhouse gas emissions.

Solutions to the Crisis can take many years to find, develop and fine-tune. For example, Tesla just this month increased the range of its new Model Y from 280 miles per charge to 315, using adjustments to battery chemistry that took years to develop.

[<https://electrek.co/2020/02/06/tesla-model-y-official-315-mile-epa-range-most-efficient-suv/>] "Continued engineering progress of the Model Y all-wheel drive" is to thank for the added range, Tesla said. [<https://www.cnet.com/roadshow/news/tesla-model-y-range-performance-charging/>]

The entire EV industry is seeking alternatives to cobalt in their batteries because most of it comes from the Democratic Republic of Congo, under terrible conditions.

[<https://www.forbes.com/sites/jamesconca/2018/09/26/blood-batteries-cobalt-and-the-congo/#549501f4cc6e>]

Constant research is needed to invent, discover, develop and improve alternative energy. No one knows where or how the next breakthrough will occur. Keep the alternative energy research and development revolving fund going.

Brodie Lockard
Founder, 350Hawaii.org

LATE

HB-2717-HD-1

Submitted on: 2/23/2020 9:58:07 PM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sylvia Dolena	Pele Lani Farm LLC	Support	No

Comments:

As one of 350Hawaii.org's 6,000 members, I support HB 2717 HD1.

Extending the alternative energy research and development revolving fund by a year will help to discover and develop more tools for fighting the Climate Crisis by reducing greenhouse gas emissions.

Constant research is needed to invent, discover, develop and improve alternative energy. No one knows where or how the next breakthrough will occur. Keep the alternative energy research and development revolving fund going.

Solutions to the Crisis can take many years to find, develop and fine-tune. And we are running out of time!

Mahalo,

Sylvia Dolena

Statement of
Hermann Kugeler
Business Development Manager
Makai Ocean Engineering, Inc.
before the
House Committee on Finance
Monday, February 24, 2020
11:00am
State Capitol, Conference Room 308
In consideration of
HB2717
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 HB2717** 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 HB2717**. 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.

LATE

HB-2717-HD-1

Submitted on: 2/23/2020 6:28:04 PM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

LATE

HB-2717-HD-1

Submitted on: 2/23/2020 9:31:24 PM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	Individual	Support	No

Comments:

To: The House Committee on Finance

From: **Tlaloc Tokuda**

Date: Monday, February 24, 2020, 11:00 am

Support for HB 2717 HD1

Dear Chair Luke, and members:

As one of 350Hawaii.org's 6,000 members, I support HB 2717 HD1.

Extending the alternative energy research and development revolving fund by a year will help to discover and develop more tools for fighting the Climate Crisis by reducing greenhouse gas emissions.

Solutions to the Crisis can take many years to find, develop and fine-tune. For example, Tesla just this month increased the range of its new Model Y from 280 miles per charge to 315, using adjustments to battery chemistry that took years to develop.

[<https://electrek.co/2020/02/06/tesla-model-y-official-315-mile-epa-range-most-efficient-suv/>] "Continued engineering progress of the Model Y all-wheel drive" is to thank for the added range, Tesla said. [<https://www.cnet.com/roadshow/news/tesla-model-y-range-performance-charging/>]

The entire EV industry is seeking alternatives to cobalt in their batteries because most of it comes from the Democratic Republic of Congo, under terrible conditions.

[<https://www.forbes.com/sites/jamesconca/2018/09/26/blood-batteries-cobalt-and-the-congo/#549501f4cc6e>]

Constant research is needed to invent, discover, develop and improve alternative energy. No one knows where or how the next breakthrough will occur. Keep the alternative energy research and development revolving fund going. Mahalo,

Tlaloc Tokuda,

Kailua Kona HI 96740

LATE

HB-2717-HD-1

Submitted on: 2/24/2020 6:55:32 AM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Dear Chair Luke, and members:

As one of 350Hawaii.org's 6,000 members, I support HB 2717 HD1.

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me ke aloha 'Ä• ina,

Nanea Lo

LATE

HB-2717-HD-1

Submitted on: 2/24/2020 9:45:39 AM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
J Riverstone	Individual	Support	No

Comments:

Dear Chair Luke, and members:

As one of 350Hawaii.org's 6,000 members, I support HB 2717 HD1.

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Thank you

Jerry Riverstone

LATE

HB-2717-HD-1

Submitted on: 2/24/2020 10:13:13 AM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	We Are One, Inc. - www.WeAreOne.cc - WAO	Support	No

Comments:

Support for HB 2717 HD1

Dear Chair Luke, and members:

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www.WeAreOne.cc

LATE

HB-2717-HD-1

Submitted on: 2/24/2020 10:46:59 AM

Testimony for FIN on 2/24/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria Anderson	Individual	Support	No

Comments:

Constant research is needed to invent, discover, develop and improve alternative energy. No one knows where or how the next breakthrough will occur. Keep the alternative energy research and development revolving fund going. Please pass this bill.