



**Testimony to the Senate Committee on Ways and Means
Wednesday, April 3, 2019 at 10:20 A.M.
Conference Room 211, State Capitol**

RE: HB340 HD1 SD1 RELATING TO HAWAII TECHNOLOGY DEVELOPMENT CORPORATION

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB340 HD1 SD1, which appropriates funds to the High Technology Development Corporation (HTDC) for the Small Business Innovation Research Program (SBIR) and the Manufacturing Assistance Program (MAP). Additionally, this bill would also make appropriations into and out of, the Alternative Energy Research and Development Revolving Fund for the purpose of providing grants.

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.

HTDC has offered assistance to SBIR awarded companies since 1989; as a result, Hawaii companies have attracted 20 federal dollars in return to the state plus commercialization funding for every dollar invested through this program. Although the federal SBIR grant program has increased efforts to move companies through grant awards to commercial product sales, funds have not been dedicated towards these efforts. This bill would allow HTDC to continue to provide the necessary support of a commercialization assistance program to all phases in the program.

Continuing to support MAP is also vital to HTDC's mission. This program has become a positive resource to aid companies with their investments for manufacturing equipment, training of their employees on newly purchased equipment, energy efficiency, and feasibility studies. We believe that the continuation of this program will help fuel manufacturing in Hawaii to grow and provide more products for both local consumption and export, and this amendment will help companies in Hawaii to start or grow their operations.

HTDC and its programs actively support and advocate for the specific needs of Hawaii's technology and manufacturing businesses. We have seen a rising demand from local companies wanting to manufacture here in Hawaii in order to maintain quality control, as well as an increasing desire for 'Made in Hawaii' products from consumers globally, which will continue to economically benefit our state. HTDC and its programs are integral to the growth and success of these companies who seek information and guidance on what it takes to succeed in Hawaii.

Thank you for the opportunity to testify.



Written Statement of
Len Higashi
Acting Executive Director
Hawaii Technology Development Corporation
before the
Senate Committee on Ways and Means
Wednesday, April 3, 2019
10:20 a.m.
State Capitol, Conference Room 211

In consideration of
HB340, HD1, SD1
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee,

The Hawaii Technology Development Corporation (HTDC) **supports** HB340, HD1, SD1 that appropriates funds to the Hawaii Technology Development Corporation for the Small Business Innovation Research program and Manufacturing Assistance Program. The bill also makes an appropriation into and out of the Alternative Energy Research and Development Revolving Fund for the purpose of providing 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. HTDC has been providing Phase I matching grants to SBIR awarded companies since 1989 and started awarding Phase II and Phase III matching grants in FY16. A summary of the Phase II/III awards made by the matching grant program is listed below:

	FY16	FY17	FY18
Appropriation	\$2 MM	\$2 MM	\$1 MM
# of Applications	11	9	9
# of Awards	7	8	5
\$\$ Awarded	\$2 MM	\$1.9 MM	\$900 K
Federal SBIR \$\$ (match)	\$7.9 MM	\$10.9 MM	\$8.0 MM
Estimated New Jobs	17	70	15

The FY19 appropriation has not been awarded yet. Every year, there have been more qualified applicants than available funds. Since the Phase II/III program started in FY16, none of the applicants have received the full eligible amount. Over time, the program is anticipated to generate the same type of metrics of success as the Phase I matching program. For every dollar invested through the Hawaii SBIR program, Hawaii companies have attracted over 20 federal dollars in return to the State, plus commercialization funding.

In FY18, the MAP grant program funded 29 of the 51 applicants a total of \$930k with the companies investing over \$13.6 million. The program had \$876 million of total economic impact (2017). The Office of Naval Research Alternative Energy Research (HONR) grant program 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. HTDC supports the removal of the specific technologies to increase the application pool.

HTDC believes the grant programs provide leverage and positive economic development value for the State. We support this request provided it does not supplant the Governor's priorities in the Administrative budget. 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 Ways and Means
Wednesday, April 3, 2019
10:20am
State Capitol, Conference Room 211
In consideration of
HB340
RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.

Chair Dela Cruz, Vice Chair Keith Agaran, and Members of the Committee.

Makai Ocean Engineering, Inc. **STRONGLY SUPPORTS HB340** that makes an appropriation to HTDC to continue providing grants to businesses with federal small business innovation research (SBIR) award, and manufacturing programs.

Makai Ocean Engineering, Inc. is a locally-owned and operated technology company based in Hawaii for over 45 years and an active participant in the Small Business Innovation Research (SBIR) grant program. The SBIR program consists of three phases that encourages early stage investment and innovation in technology. Phase 1 provides a very small amount of money that is barely enough for proof of concept research. However, it is the Phase 2 and 3 funding stages that really provide a means of development for companies to transition the idea and research conducted in Phase I, to prototyping to commercialization.

According to HTDC, for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. The Hawaii SBIR program supports projects with vetted technology backed with federal funds. The state matching funds are critical in advancing development, which helps win later phase awards and assists in getting the technology out into the market. The SBIR matching grants assist companies that have a commercially-promising project that has a difficult development plan. Carefully selected matching grants represent more of a “sure bet” in terms of a successful and highly leveraged investment in economic development for the State, and growing our tech sector.

For example, Makai’s subsea cable laying software began as a Phase 1 SBIR (matched by State for \$20k in the year 2000) and then went on to Phase 2 and 3 and became the world’s #1 commercial cable laying software, with over \$30 million in commercial revenues and high tech jobs for Hawaii over the last 18 years. This is a direct multiplier of more than 1,500X for the State’s investment, not counting the indirect benefits of retaining some of the world’s best engineers in Hawaii and the additional technologies they have generated during this time.

Makai is currently working on a Phase 2 SBIR program focused on autonomous underwater vehicles, which could easily surpass the \$30 million cable laying software in terms of revenue to the state. Our federal customer noted that the work we had performed on the underwater vehicle under



the HTDC Hawaii State matching grant program was a key reason we were selected for an additional \$2.1 million award that is currently underway. Makai will be testing this underwater vehicle technology in Hawaiian waters in the summer of 2019 using local engineers.

In addition, Makai and Referentia were two local companies honored with a national award, the SBIR Tibbetts Award at the Whitehouse in January, 2017. This award recognizes the very best SBIR companies in the country whose technologies have made a strong economic impact in terms of high paying jobs, and displaying success in **actually commercializing federal R&D**. We need this HTDC administered program to make possible more national success stories by local companies. See the Governor's press release about awards here: <http://governor.hawaii.gov/newsroom/latest-news/dbedt-news-release-htdc-small-business-grantees-honored-with-national-tibbetts-award-at-the-white-house/>

Makai Ocean Engineering, Inc. has historically been an engineering services provider, but now, with the help of the State's current manufacturing assistance program, Makai is diversifying into low-volume manufacturing. Makai has been involved in marine-related engineering in Hawaii for over 44 years, and recently began a heat exchanger R&D program. Now, we are ramping up production a small manufacturing plant for heat exchangers on the Big Island of Hawaii, which is sustaining approximately 8 highly-skilled, high-paying STEM / engineering jobs in rural Kona. We have a strategic advantage for developing and manufacturing low-volumes of these components in Hawaii for two reasons: the U.S. Navy and Air Force's presence in Hawaii, and Makai already owns and operates a marine heat exchanger test facility and marine corrosion lab on the Big Island. As an example, Makai was recently awarded a contract to design a new heat exchanger for the U.S. Air Force's next generation aircraft, including the new F-35 fighter jet, and we hope to be manufacturing units over the coming years.

The program limits reimbursement to 20% of qualified expenses capped at \$100,000. Because they are matching funds, a manufacturer is eligible only if they are already making an investment in the local community and providing jobs. The program amplifies these efforts, and shows the State's support for local manufacturers willing to make the investment and commitment to adding jobs, and growing their businesses and the industry in Hawaii.

This is why we **STRONGLY SUPPORT HB340**, which would provide the state matching funds for federal SBIR programs and manufacturing assistance to enable companies to commercialize new technologies more effectively. Not only would this expansion of funding enable our tech industry to compete and win more Federal monies for technology development and manufacturing, it would provide 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

April 3, 2019
10:20am
State Capitol, Conference Room 211

In Support of
**HB340 RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT
CORPORATION**

To: Chair Senator Dela Cruz, Chair, Vice Chair Senator Keith-Agaran, and
Members of the Committee

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

Re: Testimony in **Support of HB340 HD1 SD1**

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support of HB340 HD1 SD1.

The technology industry in Hawaii has grown over the past 12 years and has made significant strides towards achieving the goal of diversifying and stimulating Hawaii's economy. The continuation of the Small Business Innovation Research ("SBIR") grants is crucial to move the technology towards prototyping, customer interface, and commercialization.

The objectives of the SBIR grants are: • To support economic growth and the diversification of our economy; • To launch new ventures based on technology innovations; and • To support the growth of the tech industry and the creation of intellectual property and innovation in the State via support of the Federal Government. The Federal SBIR program supports high-potential technology development that leads to the creation of intellectual property (IP) that can be licensed and exported to the world, and thus brings needed capital back to Hawaii.

We strongly urge you to **support of HB340** and we appreciate your continued support of the technology industry in Hawaii and its long term potential to diversify and strengthen Hawaii's economy during down cycles in our major industries.

HB-340-SD-1

Submitted on: 3/31/2019 4:26:46 PM

Testimony for WAM on 4/3/2019 10:20:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Chung	Individual	Support	Yes

Comments:

I STRONGLY SUPPORT HB340 relating to the Hawaii Technology Development Corporation which appropriates funds to HTDC for three very successful existing programs: Small Business Innovation Research (SBIR), Manufacturing, and Alternative Energy grants. These are very successful existing program that has been working for many years. I urge you to continue funding these very important programs. Based on data provided by HTDC, 20 federal dollars are returned to the State for every dollar invested through the SBIR program alone. These existing grant programs are successful in promoting innovation and stimulating economic development by supporting emerging technologies developed by Hawaii companies and creating innovation jobs – high-skilled, high-paying jobs that Hawaii needs. I URGE YOU TO PASS THIS BILL.