



**UNIVERSITY OF HAWAII SYSTEM**

**‘ŌNAEHANA KULANUI O HAWAII**

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

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Testimony Presented to the  
House Committee on Economic Development  
Wednesday, February 14, 2024 at 11:00 a.m.

by

Vassilis L. Syrmos  
Vice President for Research and Innovation  
University of Hawai'i System

HB 2356 – RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT  
CORPORATION

Chair Holt, Vice Chair Lamosao, and Members of the Committee:

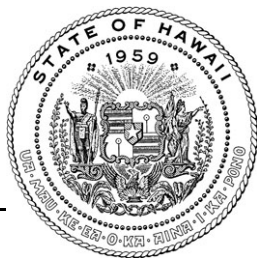
The University of Hawai'i supports HB 2356.

The University of Hawai'i shares a similar vision with the Hawaii Technology Development Corporation (HTDC) to help establish a thriving innovation-based sector to boost the local economy, create jobs and to develop a highly skilled technical workforce.

This measure seeks to increase the cap on HTDC's awards to businesses applying for the Hawaii Small Business Innovation Research Grant and the Small Business Technology Transfer Grant Program. Additionally, the measure classifies both the purchase of renewable energy systems and training on manufacturing equipment as eligible expenses under the Manufacturing Development Grant Program.

Continued or increased cap amounts for HTDC's award programs are crucial to moving innovation, commercialization and manufacturing efforts forward in the state.

The University of Hawai'i appreciates the opportunity to testify in support of this measure.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**  
KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI  
A HO'OMĀKA'IKA'I

**JOSH GREEN, M.D.**  
GOVERNOR

**SYLVIA LUKE**  
LT. GOVERNOR

**JAMES KUNANE TOKIOKA**  
DIRECTOR

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Statement of  
**JAMES KUNANE TOKIOKA**  
**Director**  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT**

Wednesday, February 14, 2024  
11:00 AM  
State Capitol, Conference Room #423

In consideration of  
**HB 2356**  
**RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.**

Chair Holt, Vice Chair Lamosao and members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) strongly supports HB 2356 that increases the cap for awards to assist businesses applying for the Small Business Innovation Research (SBIR) Grant Program and the Small Business Technology Transfer (STTR) Grant Program and add additional eligible expenses for the Manufacturing Development Grant Program.

To encourage new applicants to compete for the federal SBIR and STTR funds the Hawaii Technology Development Corporation (HTDC) aims to increase the cap for awards from (\$3,000 to \$6,000) that may be used to contract grant writing assistance. The current cap is no longer sufficient due to increased costs and by securing more grant writing assistance small businesses will receive higher award rates.

Additionally, in regard to the Manufacturing Development Grant Program, HTDC

is also adding purchasing renewable energy systems relating to manufacturing facilities as an eligible expense to offset high energy costs in Hawaii. These clarifications will grant more companies eligibility to participate in the Manufacturing Development Grant Program.

Thank you for the opportunity to testify.



Statement of  
**Hermann Kugeler**  
**Vice President of Business Development**  
**Makai Ocean Engineering, Inc.**  
before the  
**House Committee on Economic Development**  
Wednesday, February 14, 2024  
11:00 am  
Videoconference  
State Capitol, Conference Room 423  
In consideration of  
**HB2356**  
**RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.**

Chair Holt, Vice Chair Lamosao, and Members of the Committee.

Makai Ocean Engineering, Inc. **SUPPORTS HB2356** that makes an appropriation to HTDC to continue providing grants to businesses through the small business innovation research program, manufacturing assistance program.

Makai Ocean Engineering, Inc. is a locally-owned and operated technology company based in Hawaii for 50 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.

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 \$35 million in commercial revenues and high tech jobs for Hawaii over the last 20+ years. This is a direct multiplier of more than 1,750X 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 development of a temperature sensing tow cable. Makai was also recently awarded a Phase III for this program. In 2018 HTDC awarded Makai an HSBIR Phase I grant for this program, that we believe was a key reason we were selected for the Phase II and III awards. This program alone, has already resulted in a



direct multiplier of more than 120X the State's investment, in federal funds. This is expected to grow as the technology transitions to the Navy fleet and commercial markets in the coming years.

In addition, Makai was 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.

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 from 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, 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 **SUPPORT HB2356**, 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 SULLIVAN**  
**CEO, OCEANIT**

Before the  
**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT**

Wednesday, February 14, 2024  
10:00 a.m.  
State Capitol, Conference Room 423 and Videoconference

Offers Comments to  
**HB2356 RELATING TO THE HAWAII TECHNOLOGY  
DEVELOPMENT CORPORATION**

To: Representative Daniel Holt, Chair, Representative Rachele Lamasao, Vice Chair,  
and Members of the Committee

From: Dr. Patrick Sullivan, CEO

Re: Comments relating to HB2356

Honorable Chair, Vice-Chair and Committee Members:

Testimony in Support for HB2356

The technology industry in Hawaii has grown over the past 20 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.

When the SBIR matching program started a few decades ago, Hawaii was ranked close to the bottom in the US. After this program, Hawaii's success ranking improved to 29<sup>th</sup> out of 50 States. Accordingly, there is a direct correlation between the State's SBIR Matching Grant Program and improving Hawaii's position in receiving federal SBIR funds. Adding more funds is expected to further improve Hawaii's position and contribute significant research capital into the State of Hawaii, providing a positive ROI, plus supporting the diversification of Hawaii's economy.



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JOSH GREEN, M.D.  
GOVERNOR

SYLVIA LUKE  
LT. GOVERNOR

Written Statement of  
**Wayne Inouye**  
**Director**  
Hawaii Technology Development Corporation  
before the  
**HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT**

Wednesday, February 14, 2024  
11:00 AM  
State Capitol, Conference Room #423

In consideration of  
**HB 2356**  
**RELATING TO THE HAWAII TECHNOLOGY DEVELOPMENT CORPORATION.**

Chair Holt, Vice Chair Lamosao and members of the Committee.

The Hawaii Technology Development Corporation (HTDC) strongly supports HB 2356 that increases the cap for awards to assist businesses applying for the Small Business Innovation Research (SBIR) Grant Program and the Small Business Technology Transfer (STTR) Grant Program and add additional eligible expenses for the Manufacturing Development Grant Program.

To encourage new applicants to compete for the federal SBIR and STTR funds the Hawaii Technology Development Corporation (HTDC) aims to increase the cap for awards from (\$3,000 to \$6,000) that may be used to contract grant writing assistance. The current cap is no longer sufficient due to increased costs and by securing more grant writing assistance small businesses will receive higher award rates.

Additionally, in regard to the Manufacturing Development Grant Program, HTDC is also adding purchasing renewable energy systems relating to manufacturing facilities as an eligible expense to offset high energy costs in Hawaii. These clarifications will grant more companies eligibility to participate in the Manufacturing Development Grant Program.

Thank you for the opportunity to testify.



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**Eddie Asato**, Pint Size Hawaii, *Immediate Past Chair*

TO: Committee on Economic Development

FROM: HAWAII FOOD INDUSTRY ASSOCIATION  
Lauren Zirbel, Executive Director

DATE: February 14, 2024  
TIME: 11am  
PLACE: Room 423

RE: HB2356 Relating to the Hawaii Technology Development Corporation

Position: Support

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, manufacturers and distributors of food and beverage related products in the State of Hawaii.

Chair Holt, Vice Chair Lamosao, and Members of the Committee,

HFIA is in support of this measure. Many local businesses have successfully made use of the programs that this measure supports and we believe the changes mentioned here will make them even more beneficial.

Allowing for the purchasing of renewable energy as an eligible expense for the Manufacturing Development Grant Program helps promote renewable energy usage and integrate sustainable energy into our local manufacturing sector. Clarifying that training is an eligible expense for this program also helps promote local manufacturing and workforce development within this sector. We urge the committee to pass this measure and we thank you for the opportunity to testify.





# Chamber of Commerce HAWAII

*The Voice of Business*

**Testimony to the House Committee on Economic Development  
Wednesday, February 14, 2024, at 11AM  
Conference Room 423**

**RE: HB2356 Relating to the Hawaii Technology Development Corporation**

Chair Holt, Vice Chair Lamosao, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports HB2356**, which increases the cap for awards to assist businesses applying for the Small Business Innovation Research Grant Program and the Small Business Technology Transfer Grant Program of the Hawai'i Technology Development Corporation, adds purchasing of renewable energy systems as an eligible expense, and clarifies that training on both new and existing manufacturing equipment is an eligible expense for the Manufacturing Development Grant Program.

As advocates for innovation, The Chamber endorses the increase of the allocation of funds for research and development purposes, especially for small businesses struggling to find the financial support needed to prosper in our state. Investing in these endeavors not only propels scientific progress but also cultivates a culture of creativity and problem-solving. By supporting R&D, we pave the way for groundbreaking discoveries, technological advancements, and economic growth, ensuring a more lucrative future for our state. The increased cap on award amount for small businesses will enable small business applicants to further pursue their endeavor for the benefit of our state.

HTDC has aided SBIR awarded companies since 1988; as a result, Hawaii companies have attracted federal dollars in return to the state plus commercialization funding for every state dollar invested through the program. This bill would allow HTDC to continue to provide the necessary support of a commercialization assistance program to all phases in the program for local businesses in Hawaii.

As stated in this measure, the manufacturing industry is a critical part of the State's economy. This program has become a positive resource to aid companies with their investments in manufacturing equipment, training, and energy efficiency purposes. Continued and increased funding of these grant programs will help fuel manufacturing in Hawaii to grow and provide more products for both local consumption and export.

To diversify Hawaii's economy and help Hawaii's economic recovery, the state needs to support Hawaii companies who are stuck between research and product realization.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small



# Chamber *of* Commerce HAWAII

*The Voice of Business*

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.

Thank you for the opportunity to testify.