



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.  
GOVERNOR

MARK B. GLICK  
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Testimony of  
**MARK B. GLICK, Chief Energy Officer**

before the  
**SENATE COMMITTEE ON WAYS AND MEANS**

Wednesday, February 22, 2023  
10:00 AM  
State Capitol, Conference Room 211 & Videoconference

In SUPPORT of  
**SB 1520, SD1**

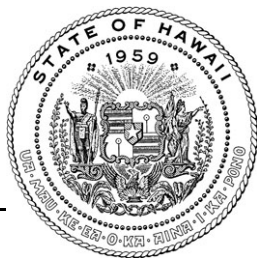
## **RELATING TO THE HAWAII PACIFIC HYDROGEN HUB.**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 1520, SD1, which requires the Department of Business, Economic Development, and Tourism (DBEDT) to work with the University of Hawai'i on workforce development in support of hydrogen energy, provided that the bill's passage does not replace or adversely impact priorities indicated in the Executive Budget.

The Full Application for the Hawai'i Pacific Hydrogen Hub proposal is due to the United States Department of Energy by April 7, 2023, with preselection interviews through summer and selection notifications anticipated during the autumn of 2023.

The HSEO is working with the University of Hawai'i Community Colleges in the [Good Jobs Hawai'i](#) program funded by the U.S. Department of Commerce, Economic Development Administration. Clean energy – including the Hawaii Pacific Hydrogen Hub and other related aspects of the State's hydrogen energy industry – is one of the focus areas of the Good Jobs Hawai'i initiative.

Thank you for the opportunity to testify.



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

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**CHRIS J. SADAYASU**  
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Statement of  
**CHRIS J. SADAYASU**  
Director  
Department of Business, Economic Development, and Tourism  
before the  
**SENATE COMMITTEE ON WAYS AND MEANS**

Wednesday, February 22, 2023  
10:00 AM  
State Capitol, Conference Room 211

In consideration of  
**SB1520, SD1**  
**RELATING TO THE HAWAII'Ī PACIFIC HYDROGEN HUB.**

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

The Department of Business, Economic Development and Tourism (DBEDT) **supports** SB1520, SD1, which requires DBEDT to work with the University of Hawai'i on workforce development activities that support the development of the Hawai'i Pacific Hydrogen Hub and other related aspects of the State's hydrogen energy industry and appropriates funds to DBEDT for these efforts.

The Hawai'i Pacific Hydrogen Hub aligns hydrogen production pathways that will develop new infrastructure and deploy hydrogen across Hawai'i's energy ecosystem and economy, resulting in clean energy investments, good paying jobs, and improved energy security. The Hawai'i State Energy Office is leading the Clean Energy and Skilled Trades sector of the Good Jobs Hawai'i workforce development program led by the University of Hawai'i Community Colleges, and DBEDT supports the continuation of this collaboration investing in the State's hydrogen energy industry.

Thank you for the opportunity to testify on this measure.



**UNIVERSITY OF HAWAII SYSTEM**

**‘ŌNAEHANA KULANUI O HAWAII**

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

**LATE**

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Testimony Presented Before the  
Senate Committee on Ways & Means  
Wednesday, February 22, 2023, at 10:00 a.m.

By

Della Teraoka, Interim Associate Vice President for Community Colleges  
University of Hawai'i System

SB 1520 SD1 – RELATING TO THE HAWAII PACIFIC HYDROGEN HUB

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

The University of Hawai'i supports the intent of SB 1520 SD1, which requires the Department of Business, Economic Development, and Tourism to work with the University of Hawai'i on workforce development activities that support the development of the Hawai'i Pacific Hydrogen Hub and other related aspects of the State's hydrogen energy industry.

The University of Hawai'i Community Colleges recently kicked off its [Good Jobs Hawai'i](#) program which includes clean energy as one of four sector focus areas. The Good Jobs Hawai'i initiative seeks to identify and meet current and future needs of Hawai'i's clean energy workforce. The Hawai'i State Energy Office (HSEO) is the lead organization for the Clean Energy and Skilled Trades sector of the Good Jobs Hawai'i program funded by the U.S. Department of Commerce, Economic Development Administration.

The University of Hawai'i supports the intent of SB 1520 SD1, on the condition its passage does not replace or adversely impact priorities as indicated in our BOR Approved Budget.

Thank you for the opportunity to provide testimony in support of SB 1520 SD1.



**Sustainable Energy Hawai'i**  
sustainableenergyhawaii.org

February 18, 2023

**SUPPORT for SB1520 SD1 - RELATING TO THE HAWAII PACIFIC HYDROGEN HUB**

Dear Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members,

I'm testifying on behalf of **Sustainable Energy Hawai'i**, a 501(c)3 non-profit dedicated to improving the quality of life for Hawaii Island residents. Our mission is to enable an economic, social, and environmental revival in Hawaii through a just transition to sustainable, 100% locally-sourced renewable energy and the creation of a thriving clean hydrogen economy.

*Disclosure: Sustainable Energy Hawai'i is a Hawai'i Pacific Hydrogen Hub consortium member.*

**Sustainable Energy Hawai'i supports SB1520**, which requires *"the Department of Business, Economic Development, and Tourism to work with the University of Hawai'i on workforce development activities that support the development of the Hawai'i Pacific Hydrogen Hub and other related aspects of the State's hydrogen energy industry. Appropriates funds to the Department of Business, Economic Development, and Tourism for the Hawai'i Pacific Hydrogen Hub."*

Hawai'i has a unique opportunity to establish a strategic green hydrogen ecosystem, one that would provide clean energy solutions across the Pacific region, contribute to geopolitical security (via energy security for the U.S. Indo-Pacific Command), enable decarbonization of sectors that are difficult to decarbonize (e.g., aviation, maritime, and heavy ground transport, high-heat industrials, and fertilizer production), and contribute to our economic well-being through energy resilience, food security, jobs, and revenue.

Enabling this ecosystem will require tremendous capital, technology, and people. The latter is of special concern since this hydrogen ecosystem will require new jobs and skill sets across several sectors, e.g., geothermal energy production, hydrogen and derivative energy carrier production, storage, and transport, hydrogen and fuel-cell propulsion system maintenance, fuel bunkering, and environmental monitoring. These spaces will require a variety of jobs that our local workforce must fill. To make this a reality, we must act now to deploy relevant workforce development programs.

Finally, additional capital is needed to support the Hawai'i Pacific Hydrogen Hub fully. The development of the ecosystem will require infrastructure to produce green electricity for

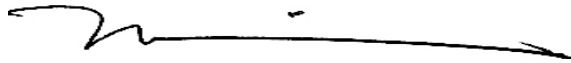
electrolyzed hydrogen production at scale. Geothermal energy is a key to abundant green electricity. Thus, funding should support the exploration and development of new geothermal energy production.

SB1520 represents a critical step towards developing the Hawai'i Pacific Hydrogen Hub, a key to our energy security, sustainability, and resilience.

Please pass this measure.

Thank you for this opportunity to testify.

Respectfully,

A handwritten signature in black ink, appearing to be 'Noel Morin', written over a horizontal line.

Noel Morin, Chairman, on behalf of the Sustainable Energy Hawai'i Board of Directors:

Peter Sternlicht – Treasurer | Kanani Aton – Secretary | David De Luz – Director | Desmon Haumea – Director | Jerry Chang - Director | Stanley Osserman - Director



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Senator Donovan M. Dela Cruz, Chair  
Senator Gilbert S.C. Keith-Agaran, Vice Chair  
Committee on Ways and Means

**RE: SB 1520, SD1 - Relating to the Hawaii Pacific Hydrogen Hub – In Support  
February 22, 2023; 10:00 A.M.**

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee:

Servco is in support of SB 1520, SD1, which requires the Department of Business, Economic Development, and Tourism to work with the University of Hawaii on workforce development activities that support the development of the Hawaii Pacific Hydrogen Hub and other related aspects of the State's hydrogen energy industry.

The demand for alternative forms of renewable fuel will continue to grow in support of Hawaii's 100% energy goals, and the Hawaii Pacific Hydrogen Hub will play a key role in realizing a sustainable energy economy.

Servco has invested millions of dollars into hydrogen production facilities and will continue to invest as we believe in its future. The long-term production, processing, and export potential of hydrogen across the globe is not only a revenue generating opportunity but also yields environmental benefits.

We appreciate the efforts made by the State Legislature to make improvements to the program in pursuit of our clean energy mandate.

Thank you for the opportunity to provide comments in support.

Peter Dames  
Executive Vice President

**SB-1520-SD-1**

Submitted on: 2/16/2023 6:04:58 PM

Testimony for WAM on 2/22/2023 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

A regional hydrogen hub could be an economic driver for Hawaii, as well as a resource to help us meet our de-carbonization goals. We will need hydrogen for buses, inter-island aircraft, heavy machinery, and many other items which are not easily powered by batteries. With abundant resources to produce green hydrogen, in the form of solar, geothermal, and ocean thermal energy, Hawaii could become a major exporter of hydrogen. This is a good investment in our future.

**SB-1520-SD-1**

Submitted on: 2/20/2023 10:38:40 PM

Testimony for WAM on 2/22/2023 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Alice Kim	Individual	Support	Written Testimony Only

Comments:

The hydrogen hub industry can offer the State of Hawaii quality jobs, economic growth opportunities, renewable energy storage, and a way for Hawaii to achieve 100 percent clean energy by 2045. As geothermal energy can provide the state a constant, virtually unlimited source of energy, geothermal can play a huge role in hydrogen fuel development.