



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

JOSH GREEN, M.D.
GOVERNOR

CHRIS J. SADAYASU
DIRECTOR

DANE K. WICKER
DEPUTY DIRECTOR

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Statement of
CHRIS J. SADAYASU
Director

Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON FINANCE

Monday, April 3, 2023
2:30 PM
State Capitol, Conference Room 308

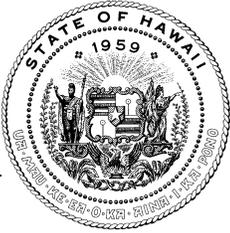
In consideration of
SB1520, SD2, HD1
RELATING TO THE HAWAII' I PACIFIC HYDROGEN HUB.

Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) **supports** SB1520, SD2, HD1, 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 support this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON FINANCE

Monday, April 3, 2023
2:30 PM
State Capitol, Conference Room 308 & Videoconference

In SUPPORT of
SB 1520, SD2, HD1

RELATING TO THE HAWAII PACIFIC HYDROGEN HUB.

Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 1520, SD2, HD1, 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 Hawai'i 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.



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Finance
Monday, April 3, 2023 at 2:30 p.m.

By

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

SB 1520 SD2 HD1 – RELATING TO THE HAWAII PACIFIC HYDROGEN HUB

Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee:

The University of Hawai'i supports the intent of SB 1520 SD2 HD1, 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 SD2 HD1, 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 SD2 HD1.



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Representative Kyle Yamashita, Chair
Representative Lisa Kitagawa, Vice Chair
Committee on Finance

**RE: SB 1520 SD2 HD1 - Relating to the Hawaii Pacific Hydrogen Hub – In Support
Monday, April 3, 2023; 2:30 P.M.; Agenda #2
Conference room 308 & Videoconference**

Aloha Chair Yamashita, Vice Chair Kitagawa, and members of the committee:

Servco is in support of SB 1520 SD2 HD1, 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 in pursuit of our clean energy mandate.

Thank you for the opportunity to provide comments in support.

Peter Dames
Executive Vice President



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COMMITTEE ON FINANCE
Rep. Kyle T. Yamashita, Chair
Rep. Lisa Kitagawa, Vice Chair

April 2, 2023

SUPPORT FOR SB1520 SD2 HD1 - RELATING TO THE HAWAII PACIFIC HYDROGEN HUB

Dear Chair Yamashita, Vice Chair Kitagawa, 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 SD2 HD1, 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.

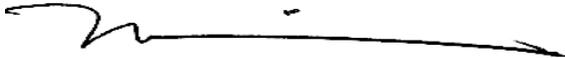
Finally, additional capital is needed to support the Hawai'i Pacific Hydrogen Hub fully. The development of the ecosystem will require infrastructure to produce green electricity for electrolyzed hydrogen production at scale. Geothermal energy is a key to abundant green electricity. Thus, funding should support the exploration and development of new geothermal energy production.

SB1520 SD2 HD1 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,



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



**Testimony to
The Committee on Finance**

Monday, April 3, 2023

2:30 PM

**Conference Room 308 & VIA videoconference
Hawaii State Capitol**

SB 1520 SD 2 HD1

Chair Yamashita, Vice Chair Kitagawa, and members of the committees,

Hawaii Gas **supports SB 1520 SD2 HD1**, 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; appropriates funds to the Department of Business, Economic Development, and Tourism for the Hawaii Pacific Hydrogen Hub.

Established in 1904, Hawaii Gas serves over 70,000 customers on all islands through its pipeline and delivery services, all of whom depend on the company for sustainable, reliable, and affordable gas for water heating, cooking, drying, and other commercial and industrial applications. The company employs some 350 professionals, over 75% of whom are members of the Teamsters Union.

Hawaii Gas distributes a blend of gas that ranges from low-carbon to negative-carbon emissions through approximately 1,100 miles of mostly underground utility pipeline statewide. Our main utility system includes a blend of gas that includes Synthetic Natural Gas (SNG), Renewable Natural Gas (RNG), and Hydrogen. Hawaii Gas leads the industry in the use of hydrogen in its pipeline.

Hydrogen is critical to the state's clean energy future, and this Hub would be a tremendously valuable asset towards meeting those clean energy requirements. Additionally, the opportunity to be selected by the Department of Energy for this Hub would place Hawaii at the forefront of clean energy work nationally.

Hydrogen is an essential tool in the nation's clean energy future. Having the Hub in Hawaii is good for the economy, the state's clean energy future, and the research and technology sector.

We urge the committee to pass the measure.

Thank you for the opportunity to testify.

SB-1520-HD-1

Submitted on: 3/31/2023 7:02:13 PM

Testimony for FIN on 4/3/2023 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

I support SB1520 SD2 HD1. Development of a hydrogen hub in Hawaii will not only aid our transition to a zero-emissions economy, but will likely provide a significant boost to the economy and bring federal funds into the state.

SB-1520-HD-1

Submitted on: 4/2/2023 2:09:34 PM

Testimony for FIN on 4/3/2023 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
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.

Workforce development programs can enable community members to develop the skills needed for stable, well-paying, and highly skilled jobs. People who are likely to benefit the most include those from disadvantaged backgrounds and those experiencing underemployment and unemployment. These programs can transform people's lives because people with stable, well-paying jobs more likely not only will lead successful, satisfying lives but also will leverage more resources to invest in and give back to the community.

The state should invest in programs to cultivate skills needed for the clean-energy industry. This industry will need a highly skilled workforce to find clean-energy sources, develop clean-energy technologies, design and build clean-energy projects, and operate and maintain them. Please invest in our community and our future renewable energy industry by supporting SB 1520.

SB-1520-HD-1

Submitted on: 4/3/2023 11:08:13 AM

Testimony for FIN on 4/3/2023 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Regina Gregory	Individual	Oppose	Written Testimony Only

Comments:

People claim that hydrogen is "clean" because it produces only water vapor. Water vapor is a greenhouse gas.