

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
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**TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE HOUSE COMMITTEE ON FINANCE

**MARCH 31, 2021
1:00 P.M.
VIA VIDEOCONFERENCE**

**SENATE BILL NO. 934 HD1
RELATING TO MEASUREMENT STANDARDS**

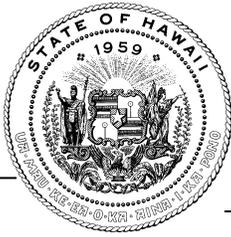
Chairperson Luke and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 934. This measure exempts hydrogen fuels from petroleum product measurement requirements. The Department supports the intent of this bill and offers comments.

The Department understands that hydrogen as a renewable fuel offers great promise in Hawaii. The Department currently does not have the technical skills and equipment to measure and certify hydrogen dispensers. Given that lack of regulatory oversight capacity at this time, the proposed amendment to HRS 486-52 exempting hydrogen from measurement standards relating to fuel would allow the Department to avoid the need to expand its staffing, training, and equipment resources beyond current levels. However, this may change in the future as the State continues to seek additional alternative energy sources and the science and technology underlying that effort evolves.

Thank you for the opportunity to testify on this measure.





HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON FINANCE

Wednesday, March 31, 2021
1:30 PM
State Capitol, Conference Room 308 and Via
Videoconference

In SUPPORT of
SB934, HD 1
RELATING TO MEASUREMENT STANDARDS.
(Written Testimony Only)

Chair Luke, Vice Chair Cullen, and Members of the Committee, the Hawaii State Energy Office (HSEO) supports SB 934, HD1, which would allow for the sale of hydrogen fuel and remove concerns or questions about potential resources, staffing, or equipment needed for the Department of Agriculture to regulate the sale of hydrogen fuel.

Hydrogen has an important role to play in Hawaii's energy portfolio, as a carbon-free energy storage mechanism, potential means of providing grid support, and provider of pollution-free fuel for both electricity and transportation.

Measures such as this one, that remove barriers to the commercial use of hydrogen, are supportive of the state's goal to achieve one hundred per cent renewable energy by 2045 and HSEO's mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

Thank you for the opportunity to testify in support of SB 934, HD1.



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Representative Sylvia Luke, Chair
Representative Ty Cullen, Vice Chair
Committee on Finance

**RE: SB 934 HD1 - Relating to Measurement Standards – In Support, Request
Amendment
March 31, 2021; Via Videoconference; 1:30 P.M.**

Aloha Chair Luke, Vice Chair Cullen and members of the committee:

Servco is in strong support of SB 934 HD1, which exempts hydrogen fuels from petroleum product measurement requirements.

The definition of fuel in the current law is broad and does not exclude hydrogen. Therefore, it implies that hydrogen must be sold on the basis of measure. There is currently no means for the State to measure and certify a hydrogen dispenser. The supporting infrastructure is not in place; technical expertise is needed and equipment needs to be imported. Servco's hydrogen fueling station in Mapunapuna was the first publicly accessible station in Hawaii.

SB 934 HD1 will help promote the development of more public hydrogen stations.

Thank you for the opportunity to submit comments in support of this measure. We ask for your favorable consideration in passing SB 934 HD1 **with an amendment to correct the effective date to “take effect upon its approval”**.

Peter Dames
Executive Vice President

March 29, 2021

From: Hawaii Hydrogen Alliance

To: Chair Wakai, Chair Gabbard, and Members of the
Committees:



Re: Support of SB 934/HB113, Relating to Measurement Standards

Aloha kakou,

The Hawaii Hydrogen Alliance (HHA) is a member-based nonprofit organization advancing the development of ‘green hydrogen’ using local, renewable energy resources in Hawaii and throughout the Pacific. Our focus is awareness, project showcasing, and technology commercialization for our member companies. Hydrogen is used as a clean fuel in various places, whether for transportation, grid electricity, or for industrial applications. Green hydrogen brings lower emissions, increased technical jobs, higher grid-resiliency, and energy-efficiency benefits.

We **support** SB 934 as written, exempting hydrogen from the existing measurement standards law because there is no measurement or certification system in place for hydrogen sales in Hawaii. The existing measurement standards are not applicable toward hydrogen and therefore it should be exempt from this law.

This will help to develop a new pathway for green hydrogen deployment in Hawaii through new clean energy standards that set the bar higher for emissions and fuel index. Applying old ways of thinking to new products and services does not help the ‘green hydrogen’ economy flourish in the way it can.

Green hydrogen brings lower emissions, increased technical jobs, higher grid-resiliency, and an interconnectedness of our energy, transportation, waste, and water systems to a degree that will improve our local economy and our natural environment.

We urge the committees to pass SB 934/HB113 to help advance the hydrogen economy in Hawaii.

Mahalo,

Chuck Collins
Board Member
Hawaii Hydrogen Alliance
www.hawaiihydrogenalliance.com
admin@hawaiihydrogenalliance.com



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE
Wednesday, March 31, 2021 — 1:30 p.m.

Ulupono Initiative supports SB 934 HD 1, Relating to Measurement Standards

Dear Chair Luke and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono supports SB 934 HD 1, which exempts hydrogen fuels from petroleum product measurement requirements.

Ulupono supports clean, alternative fuel transportation as ground transportation makes up a significant portion of Hawai'i's reliance on imported oil and the largest contributor to our State's greenhouse gas emissions. Allowing this bill's exemption will help enable hydrogen to be more broadly available, thereby advancing clean renewable ground transportation and provide immediate benefits to Hawai'i.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i



Tuesday, March 30, 2021
House Finance Committee
State Capitol Room 308 Teleconference
Honolulu, Hawaii 96813

RE: SB 934 Relating to Measurements and Standards

Dear Chair Sylvia Luke, Vice Chair Ty J.K. Cullen, and the Members of the House Committee on Finance,

The Western States Hydrogen Alliance (WSHA) **supports** Senate Bill (SB) 934 introduced by Senator Wakai. Our organization is comprised of original equipment manufacturers, technology providers, and public entities that are focused on the accelerated deployment of hydrogen and fuel cell technologies in the commercial and industrial sectors, including fuel cell electric vehicles in hard-to-electrify applications like trucking, busing, locomotive, aviation, maritime, and off-road equipment.

To improve the deployment of hydrogen fuel cell vehicles, we know that there is a great need for hydrogen fueling stations. Having only one station in all of Hawaii is not sufficient for a large roll-out of zero-emission hydrogen fuel cell vehicles. As fuel cell vehicles enter the market, it is necessary that the production of these stations is incentivized through the exemption of metering/dispensing of hydrogen as stated in the language of this bill.

WSHA strongly supports the adoption of SB 934 due to the support it gives hydrogen stations and consequently, hydrogen fuel cell vehicles. You may reach me at (818) 642-8064 and via email at Roxana@WesternStatesHydrogen.org.

Sincerely,

A handwritten signature in cursive script that reads "Roxana Bekemohammadi".

Roxana Bekemohammadi
Executive Director
Western States Hydrogen Alliance



HOUSE COMMITTEE ON FINANCE

March 31, 2021, 1:30 P.M.

Video Conference

TESTIMONY IN SUPPORT OF SB 934 HD1

Aloha Chair Luke, Vice Chair Cullen, and members of the Committee:

Blue Planet Foundation **supports SB 934 HD1**, which exempts hydrogen fuels from measurement requirements. The current measurement law may inadvertently include hydrogen fuels—even if the hydrogen is not developed from petroleum or hydrocarbon feedstocks. This measure will remove a potential barrier to broader deployment of green hydrogen fuels.

Green hydrogen, which is produced from renewable energy instead of petroleum, has the potential to become the “new oil” for Hawai‘i, providing everything from long-term, dependable energy storage, to aviation fuel (the world’s first hydrogen fuel-cell-powered flight for a commercial-size aircraft took place last September¹). The growth of green hydrogen projects globally has been remarkable over the past year, with energy market leaders like Shell, BP, Enel, Engie, Orsted and Equinor proposing projects, investments, and partnerships in low-carbon hydrogen. The green hydrogen project pipeline is now nine times larger than it was in October 2019.²

Just as with solar and battery storage, green hydrogen is set to play a substantive role in Hawai‘i’s overall energy mix, with its development likely to happen faster than anyone predicts. Senate Bill 934 will help unlock new possibilities in deployment of green hydrogen to support Hawai‘i’s 100% clean energy future.

Thank you for the opportunity to provide testimony.

¹ <https://www.cnn.com/travel/article/zeroavia-zero-emission-hydrogen-planes-spc-intl/index.html>

² “2050: The hydrogen possibility,” Woods Mackenzie, January 29, 2021.



SanHi

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: March 30, 2021

TO: Representative Sylvia Luke
Chair, Committee on Finance

FROM: Tiffany Yajima

RE: **S.B. 934, H.D.1 – Relating to Measurement Standards**
Hearing Date: Wednesday, March 31, 2021 at 1:30 p.m.
Conference Room: 309

Dear Chair Luke, Vice Chair Cullen, and Members of the Committee on Finance:

On behalf of the Alliance for Automotive Innovation (“Auto Innovators”) we submit this testimony in **support** of S.B. 934, HD1.

The Alliance for Automotive Innovation is the singular, authoritative and respected voice of the automotive industry. Focused on creating a safe and transformative path for sustainable industry growth, the Alliance for Automotive Innovation represents the manufacturers producing nearly 99 percent of cars and light trucks sold in the U.S. Members include motor vehicle manufacturers, original equipment suppliers, technology, and other automotive-related companies and trade associations.

This measure amends HRS § 486-52 to exempt hydrogen fuel from measurement standards. The automotive industry has made and continues to make a significant investment in hydrogen as a feasible fuel for motor vehicles. Hydrogen is a clean alternative fuel and any barriers for market acceptance should be removed.

Thank you for the opportunity to submit testimony in support of this bill.



**Testimony to
The Committee on Finance**

Wednesday, March 31, 2021

1:30 PM

VIA Video Conference

Conference Room 308, Hawaii State Capitol

SB 934 HD1

Chair Luke, Vice Chair Cullen, and members of the committee,

Hawaii Gas **supports SB 934 HD1**, which exempts hydrogen fuels from petroleum product measurement requirements.

Hawaii Gas is a national leader in the transmission and distribution use of hydrogen in our clean energy mix, and it is our vision to continue to lead the gas industry in its ability to safely, affordably, and reliably increase the amount of this zero-emissions fuel source in our utility pipeline.

Beyond its use in our clean energy mix, hydrogen as a clean energy fuel is an essential element of the alternative fuel vehicle future, which is critical to meeting the 2045 clean energy goals. Hydrogen fuel cells for vehicles are a reality today, with Servco bringing them to Hawaii as an alternative to fossil fuel dependent vehicles.

New technology and R&D require a new look at all aspects of that technology, and this bill rightly recognizes that petroleum measurements simply don't apply to hydrogen. The promise of hydrogen as a fuel for alternative fuel vehicles brings together all stakeholders in this arena, who agree that a sufficient runway is needed to make this valuable fuel source widely available to consumers. Exempting hydrogen from petroleum measurements is a vital element of that runway.

We urge the committees to pass SB 934 HD1.

Thank you for the opportunity to testify.



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Executive Officers

Joe Carter, Coca-Cola Bottling of Hawaii, *Chair*
Charlie Gustafson, Tamura Super Market, *Vice Chair*
Eddie Asato, The Pint Size Corp., *Secretary/Treas.*
Lauren Zirbel, HFIA, *Executive Director*
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Stan Brown, Acosta Sales & Marketing, *Advisor*
Paul Kosasa, ABC Stores, *Advisor*
Derek Kurisu, KTA Superstores, *Advisor*
Beau Oshiro, C&S Wholesale Grocers, *Advisor*
Toby Taniguchi, KTA Superstores, *Advisor*

TO:
Committee on Finance
Rep. Sylvia Luke, Chair
Rep. Ty J.K. Cullen, Vice Chair



FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: March 31, 2021
TIME: 1:30pm
PLACE: Via Videoconference

RE: SB934 HD1 Relating to Measurement Standards

Position: Support

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

We support this measure to exempt hydrogen fuel from petroleum product measurement requirements. Diversifying our fuel options can help make our energy sector more flexible and resilient. We thank you for the opportunity to testify.