

Written Statement of
David H. Molinaro
Acting Director
Hawaii Center for Advanced Transportation Technologies
before the
Senate Committee on Agriculture and Environment
and the
Senate Committee on Energy, Economic Development, and Tourism
Friday, February 12, 2021
3:05 p.m.
State Capitol, Conference Room 224
In consideration of
SB934
RELATING TO MEASUREMENTS AND STANDARDS

Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha and Members of the
Committee.

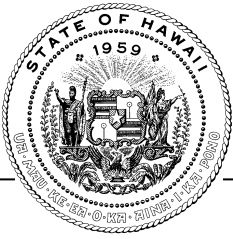
HCATT strongly **supports** SB934 as it helps Hawaii revised statute §196-10, Hawaii renewable hydrogen program legislative guidance to design, implement, and administer hydrogen demonstration projects, including infrastructure for the production, storage and refueling of hydrogen vehicles.

Widespread deployment of hydrogen fuel cell vehicles requires hydrogen fueling stations. Just as there currently are corner gasoline stations, there will be a need for hydrogen fueling stations (or stations that provide both gasoline and hydrogen). In the United States, only a small number of public hydrogen fueling stations currently exist. In Hawaii, there is currently only one such station.

Most hydrogen stations were established to support demonstration or experimental hydrogen-powered vehicle projects. Because these stations are first-of-a-kind, there is not a commodity-style standard station design. However, as automakers gear up to market fuel cell vehicles to American consumers (both to individuals and to fleet vehicle operators), the hydrogen and petroleum industries are gearing up in the construction of hydrogen fueling stations to service these vehicles.

Until such a time as there is wide-spread application of commercial hydrogen fueling infrastructure and the adoption of the regulations for commercial hydrogen measurement as set forth in National Institute of Standards and Technology Handbook 130 “Uniform Laws and Regulations in the Areas of Legal Metrology and Fuel Quality” in Hawaii, HCATT strongly supports the exemption of metering/dispensing of hydrogen as set forth in this Bill.

Thank you for the opportunity to present these comments



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
**SENATE COMMITTEES ON
AGRICULTURE AND ENVIRONMENT
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

Friday, February 12, 2021
3:05 PM
State Capitol, Conference Room 224

In support of
SB 934
RELATING TO MEASUREMENT STANDARDS.

Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha, and Members of the Committees, the Hawaii State Energy Office (HSEO) supports SB 934, 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 current focus of the HSEO, which is to retain and create jobs, deploy clean energy projects, and advance Hawaii's clean energy and decarbonization goals.

Therefore, we encourage your support of SB 934.

Thank you for the opportunity to testify.

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
Phone: (808) 973-9600 FAX: (808) 973-9613

**TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
AND ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

**FEBRUARY 12, 2021
3:05 P.M.
CONFERENCE ROOM 224**

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

Chairpersons Gabbard and Wakai 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.





SanHi

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: February 4, 2021

TO: Senator Mike Gabbard
Chair, Committee on Agriculture and Environment

Senator Glenn Wakai
Chair, Committee on Energy, Economic Development, and Tourism
Submitted Via Capitol Website

FROM: Tiffany Yajima

RE: **S.B. 934 – Relating to Measurement Standards**
Hearing Date: Friday, February 12, 2021 at 3:05 p.m.
Conference Room: 224

Dear Chair Gabbard, Chair Wakai and Members of the Joint Committees:

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

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.



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Joe Carter, Coca-Cola Bottling of Hawaii, *Chair*
Charlie Gustafson, Tamura Super Market, *Vice Chair*
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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 Agriculture and Environment and Committee on Energy, Economic Development, and Tourism

Senator Mike Gabbard and Senator Glenn Wakai, Chairs

Senator Clarence K. Nishihara and Senator Bennette E. Misalucha, Vice Chairs

FROM: HAWAII FOOD INDUSTRY ASSOCIATION

Lauren Zirbel, Executive Director

DATE: February 12, 2021

TIME: 3:05pm

PLACE: Via Videoconference

RE: SB934 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.



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Senator Mike Gabbard, Chair
Senator Clarence Nishihara, Vice Chair
Committee on Agriculture and Environment

Senator Glenn Wakai, Chair
Senator Bennette Misalucha, Vice Chair
Committee of Energy, Economic Development and Tourism

**RE: SB 934 - Relating to Measurement Standards – In Support
February 12, 2021; Via Videoconference; 3:05 p.m.**

Aloha Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha and members of the committees:

Servco is in strong support of SB 934, 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 will help promote the development of more public hydrogen stations.

Thank you for your leadership and for the opportunity to submit comments in support.

Peter Dames
Executive Vice President



**Testimony to
The Committee on Agriculture and Environment
And
The Committee on Energy, Economic Development, and Tourism**

**Friday, February 12, 2021
3:05 PM
VIA Video Conference
Conference Room 224, Hawaii State Capitol
SB 934**

Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha, and members of the committees,

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

Hawaii Gas is a national leader in the transmission and distribution 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 our 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.

Thank you for the opportunity to testify.



Email: communications@ulupono.com

SENATE COMMITTEES ON AGRICULTURE & ENVIRONMENT AND ENERGY, ECONOMIC
DEVELOPMENT, & TOURISM
Friday, February 12, 2021 — 3:05 p.m.

Ulupono Initiative supports SB 934, Relating to Measurement Standards

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

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, 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



John Uekawa, President
Dave Rolf, Executive Director

HADA Testimony in SUPPORT of SB934
RELATING TO MEASUREMENT STANDARDS
Presented to the Senate Committee on Agriculture and the Environment and the Senate
Committee on Economic Development and Tourism.
At the Public Hearing 3:05 p.m. Friday, February 12, 2021 in Room 224
VIA VIDEO CONFERENCE
Hawaii State Capitol
by David H. Rolf for the members of the Hawaii Automobile Dealers Association,

Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha, and members of the committees:

HADA members are in support of SB934 which amends section 486-52, Hawaii Revised Statutes, to exempt hydrogen fuels from measurement requirements.

The intersection of energy, jobs, quantum computing, driverless cars, homes, education, and the wellbeing of a society, is the focus of HADA's work on Hawaii's future.

Hydrogen, as a renewable fuel, offers great promise for Hawaii. We applaud the work of Servco, a HADA member, for that company's work in bringing hydrogen fuel cell vehicles to Hawaii and in developing a hydrogen production and fueling station. Hydrogen fueling infrastructure will be key to the customer adoption of renewable fuel vehicles in Hawaii.

HADA respectfully asks that the committee pass SB934 forward for favorable consideration.

Respectfully submitted,
David H. Rolf, for the members of the Hawaii Automobile Dealers Association

HADA

68 new car dealerships, 4,383 direct jobs, \$5.8 billion total sales, \$269 million Gross Excise Taxes paid



**SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

February 12, 2021, 3:05 P.M.
Video Conference

TESTIMONY IN SUPPORT OF SB 934

Aloha Chairs Gabbard and Wakai, Vice Chairs Nishihara and Misalucha, and members of the committees:

Blue Planet Foundation **supports SB 934**, 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.