



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

Tuesday, April 5, 2022
2:30 PM
State Capitol, Conference Room 308 & Videoconference

SUPPORT
SB 2570, SD2, HD1
RELATING TO ZERO EMISSION VEHICLE FUELING REBATES.

Chair Luke, Vice Chair Yamashita, and Members of the Committee, the Hawaii State Energy Office (HSEO) supports SB 2570, SD2, HD1, which establishes the zero-emission vehicle fueling system rebate program, establishes the rebate amount for the installation or upgrade of a hydrogen fueling system at \$200,000, establishes a hydrogen fueling system subaccount within the public utilities commission special fund, and reduces the allocation that the energy systems development special fund receives from the environmental response, energy, and food security tax from 8 cents to 5 cents and allocates the difference to the hydrogen fueling system subaccount.

HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy. A significant barrier to the adoption of zero emission vehicles is access to fueling stations, including hydrogen vehicles which have significant potential with medium- and heavy-duty vehicles. Creating rebates for hydrogen refueling stations supports the State's energy policy objectives to achieve a net-negative carbon economy as soon as practicable but no later than 2045. Incentivizing a broader set of zero emission transportation technologies provides greater flexibility in the decarbonization of ground transportation. Installing more public-facing hydrogen fueling stations potentially positions the State to pursue more federal hydrogen-related infrastructure funding.

HSEO provides the following comment concerning the amendment limiting the rebate to hydrogen refueling systems that do not store and dispense hydrogen fuel that is produced using fossil fuels. HSEO supports incentivizing the production of renewable hydrogen but notes that there could be complications in implementing a requirement that only stations fueled solely by renewable hydrogen are eligible for incentives. The requirement could require ongoing compliance reporting and enforcement mechanisms which could frustrate implementation and increase administration costs. A remedy requiring the hydrogen stations be co-located with renewable energy could create constraints in siting hydrogen stations given the considerable land required to provide enough renewable energy to supply a hydrogen station at scale. HSEO is willing to work with the Legislature and stakeholders on this issue to discuss potential solutions.

HSEO defers to the appropriate agencies for comment on funding and administering the rebate program.

Thank you for the opportunity to testify.



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Finance
Tuesday, April 5, 2022 at 2:30 p.m.

By

Richard Rocheleau, Director
Hawai'i Natural Energy Institute

And

Michael Bruno, PhD

Provost

University of Hawai'i at Mānoa

SB 2570 SD2 HD1 – RELATING TO ZERO EMISSION VEHICLE FUELING REBATES

Chair Luke, Vice Chair Yamashita, and members of the committee:

SB 2570 SD2 HD1 establishes the zero-emission vehicle fueling system rebate program. Establishes the rebate amount for the installation or upgrade of a hydrogen fueling system at \$200,000. Establishes a hydrogen fueling system subaccount within the Public Utilities Commission special fund. Reduces the allocation that the energy systems development special fund receives from the environmental response, energy, and food security tax from 8 cents to 5 cents and allocates the difference to the hydrogen fueling system subaccount.

Hawai'i Natural Energy Institute (HNEI) respectfully offers the following comments on this bill.

1) HNEI **supports the intent** of this bill and recognizes that locally produced green hydrogen has the potential to support our 100% renewable goals including the transportation sector. High costs have hampered the development of hydrogen infrastructure. This bill supports such infrastructure and will provide an opportunity to assess its value.

2) SB 2570 SD2 HD1 provides the following definition: "*Renewable hydrogen*" means *hydrogen produced entirely from renewable sources that have a life-cycle emissions of no more than fifty grams of carbon dioxide per kilowatt hour*". HNEI is concerned that the requirement of less than fifty grams of carbon dioxide per kilowatt hour may be too restrictive when assessing hydrogen production techniques availability in Hawai'i. HNEI also comments that a life-cycle limit based on the cumulative impacts of all steps in the hydrogen system (production, storage, transport and fueling losses) would be more representative of its impacts. We respectfully suggest that this language be amended to be "*renewable hydrogen*" means *hydrogen produced entirely from renewable*

sources as defined in HRS 269-91. that have lifecycle emissions of no more than fifty grams of carbon dioxide per kilowatt hour.

3) The development of hydrogen infrastructure has been hampered by high costs, restrictive hydrogen purity requirements, and low round-trip efficiencies. To ensure that the funding allocated to this rebate is utilized as intended, we respectfully suggest a 5-year sunset date to this reallocation at which time the efficacy of the program can be assessed, and the program can be extended if it is found to be meeting its objectives.

Thank you for the opportunity to provide this testimony on SB 2570 SD2 HD1.

DAVID Y. IGE
GOVERNOR



CRAIG K. HIRAI
DIRECTOR

GLORIA CHANG
DEPUTY DIRECTOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

**STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE**

P.O. BOX 150
HONOLULU, HAWAII 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

WRITTEN ONLY

TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON FINANCE
ON
SENATE BILL NO. 2570, S.D. 2, H.D. 1

April 5, 2022

2:30 p.m.

Room 308 and Videoconference

RELATING TO ZERO EMISSION VEHICLE FUELING REBATES

The Department of Budget and Finance (B&F) offers comments on this bill.

Senate Bill (S.B.) No. 2570, S.D. 2, H.D. 1, amends Chapter 269, HRS, to add a new section to: 1) require the Public Utilities Commission (PUC), in consultation with zero-emission stakeholders and the Hawai'i State Energy Office, to administer a Zero-Emission Vehicle Fueling System Rebate Program (Rebate Program) and allow the PUC to contract with a third-party administrator pursuant to Section 269-73, HRS, to operate the Rebate Program; 2) set eligibility criteria, dollar amounts per rebate, and other requirements for applicants who upgrade or install eligible hydrogen refueling systems after December 31, 2022; 3) exempt rebates from being considered as income for the purposes of State or county taxes; 4) amend Section 243-3.5, HRS, to reduce the allocation of the State Environmental Response, Energy, and Food Security Tax (Barrel Tax) to be deposited into the Energy Systems Development Special Fund (ESDSF) from \$0.08 to \$0.05 per barrel and allocate \$0.03 of the Barrel Tax to be deposited into the Hydrogen Fueling System Subaccount (HFSS); and 5) amend

Section 269-33, HRS, to establish the HFSS within the PUC Special Fund (PUCSF), but not subject it to the general fund lapse “ceiling” of the PUCSF set by Section 269-33(d), HRS, to fund the Rebate Program.

B&F notes that the bill currently does not provide a special fund appropriation for the HFSS to expend Barrel Tax revenues in support of the Rebate Program. In addition, while the change in Barrel Tax distribution will not result in any additional general fund loss, B&F defers to the University of Hawai'i and PUC on the impact of reallocating \$0.03 of Barrel Tax revenue from the ESDSF to the proposed HFSS.

Additionally, as a matter of general policy, B&F does not support the creation or continuance of any special fund or special fund subaccount which does not meet the requirements of Section 37-52.3, HRS. Special funds and any related subaccounts should: 1) serve a need as demonstrated by the purpose, scope of work and an explanation why the program cannot be implemented successfully under the general fund appropriation process; 2) reflect a clear nexus between the benefits sought and charges made upon the users or beneficiaries or a clear link between the program and the sources of revenue; 3) provide an appropriate means of financing for the program or activity; and 4) demonstrate the capacity to be financially self-sustaining. In regard to S.B. No. 2570, S.D. 2, H.D. 1, it is unclear if the proposed HFSS would be self-sustaining.

Thank you for your consideration of our comments.

TESTIMONY OF
JAMES P. GRIFFIN, Ph.D.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
HOUSE COMMITTEE ON
FINANCE

April 5, 2022
2:30 p.m.

Chair Luke and Members of the Committee:

MEASURE: S.B. No. 2570 SD2 HD1

TITLE: RELATING TO ZERO EMISSION VEHICLE FUELING REBATES.

DESCRIPTION: Establishes the zero-emission vehicle fueling system rebate program. Establishes the rebate amount for the installation or upgrade of a hydrogen fueling system at \$200,000. Establishes a hydrogen fueling system subaccount within the public utilities commission special fund. Reduces the allocation that the energy systems development special fund receives from the environmental response, energy, and food security tax from 8 cents to 5 cents and allocates the difference to the hydrogen fueling system subaccount. Effective 7/1/2050. (HD1)

POSITION:

The Public Utilities Commission (“Commission”) offers the following comments for consideration.

COMMENTS:

The Commission appreciates the intent of this measure to facilitate expanded availability of zero emission vehicle infrastructure.

Since 2019, the Commission has managed the Electric Vehicle Charging System (“EVCS”) Rebate Program in consultation with electric vehicle stakeholders and in cooperation with the program’s administrator, Hawaii Energy. The program has been met with a robust response and has efficiently allocated funds to expand public charging infrastructure in the state. According to Hawaii Energy, the program to date has issued rebates for 43 new Level 2 EVCS installations, 62 Level 2 retrofits, 1 DC fast charger

("DCFC") installation, and 1 DCFC retrofit. The program also has 30 projects in the pipeline, totaling nearly \$200,000 in rebates.

The Commission has recently been alerted by the Department of Budget and Finance that the EVCS rebate program requires a direct appropriation in order for the Commission to expend deposited barrel tax funds, and that Act 75 (2021) does not provide sufficient authority to do so. Therefore, the EVCS program is currently constrained by a \$100,000 spending ceiling for FY 2022, which was created by the "seed money" deposited from the Energy Security Special Fund through Act 75.

To ensure that the Commission is able to expend barrel tax funds as intended for the EVCS rebate program, **the Commission recommends adding the following appropriation language, which would satisfy the EVCS rebate program pipeline through the end of FY 2022.**

SECTION [] . There is appropriated out of the electric vehicle charging system subaccount within the public utilities commission special fund the sum of \$500,000 or so much thereof as may be necessary for fiscal year 2021-2022 for the electric vehicle charging system rebate program established pursuant to sections 269-72 and 269-73, Hawaii Revised Statutes.

The funds appropriated shall be expended by the public utilities commission for the purposes of this part.

In addition, after consulting with the Department of the Attorney General, **the Commission requests an amendment to page 8, line 14 of this bill to ensure that an appropriation for the EVCS rebate program through FY 2022 does not lapse before the funds can be expended:**

SECTION 5. This Act shall take effect on July 1, 2050; provided the appropriation for fiscal year 2021-2022 for the department of commerce and consumer affairs for the electric vehicle charging system subaccount of the public utilities commission special fund shall lapse on June 30, 2024.

The Commission also recommends that similar appropriation language be added to account for expected barrel tax funds in the EVCS subaccount in FY 2023:

SECTION []. There is appropriated out of the electric vehicle charging system subaccount within the public utilities commission special fund the sum of \$1,000,000 or so much thereof as may be necessary for fiscal year 2022-2023 for the electric vehicle charging system rebate program established pursuant to sections 269-72 and 269-73, Hawaii Revised Statutes.

The funds appropriated shall be expended by the public utilities commission for the purposes of this part.

The Commission further recommends that the spending cap outlined in Section 269-72, subsection (d), HRS, be removed. This will ensure that the Commission is permitted to expend all appropriated funds.

Should the committee choose to create a zero-emission vehicle fueling system rebate program, the Commission also recommends adding appropriation language to account for expected barrel tax funds in the hydrogen fueling system subaccount in FY 2023:

SECTION []. There is appropriated out of the hydrogen fueling system subaccount within the public utilities commission special fund the sum of \$1,000,000 or so much thereof as may be necessary for fiscal year 2022-2023 for the zero-emission vehicle fueling system rebate program established pursuant to sections 269- and 269-73, Hawaii Revised Statutes.

The funds appropriated shall be expended by the public utilities commission for the purposes of this part.

Should the committee choose to create this new program, the Commission also recommends that the language on page 7, lines 14-18 be amended as follows, to ensure that funds intended for the zero-emission fueling system rebate program are not subject to the ceiling of the PUC Special Fund.

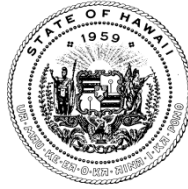
(d) All moneys in excess of \$1,000,000 remaining on balance in the public utilities commission special fund on June 30 of each year shall lapse to the credit of the state general fund; provided that this ceiling shall not apply to the ~~[subaccount]~~ subaccounts established in ~~[subsection]~~ subsections (e) and (f).

The Commission also recommends amending the rebate language to allow for rebates “up to” \$200,000. This flexibility will enable the Commission to scale rebates, as necessary, to ensure the most efficient use of program funds.

Finally, should the Committee choose to create this new program, the Commission notes that Section 269-73 may require amendments to allow the Commission to contract with a third-party administrator to operate and manage the zero-emission vehicle fueling system rebate program.

The Commission is willing to work with the Committee and stakeholders to develop language that ensures the continued funding and efficient operation of the EVCS rebate program.

Thank you for the opportunity to testify on this measure.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

April 5, 2022
2:30 P.M.

State Capitol, Conference Room 308/Teleconference

S.B. 2570, S.D. 2, H.D. 1
RELATING TO ZERO EMISSION VEHICLE FUELING REBATES

House Committee on Finance

The Department of Transportation (DOT) **supports** this measure that promotes the expansion of zero-emission vehicle infrastructure to in turn support the proliferation of zero-emission vehicles in our state.

The DOT requests your committee's consideration of deleting the restriction to only renewable hydrogen. This limitation may constrain options for the deployment of fuel cell electric vehicles and may delay adoption of these kinds of vehicles.

The DOT is committed to meeting the state's clean energy goals and supports the wide-spread adoption of electric and zero-emission vehicles. The DOT's track record includes a significant purchase of light-duty electric vehicles (EV) for its fleet in 2021 with plans to continue to convert its fleet over the next few years. Our current electrification contract for these vehicles enables the DOT to install charging stations and the charging service quickly and efficiently with no upfront equipment costs. There are photovoltaic panels installed at DOT field offices statewide designed to power EV charging stations in the near future. In addition, the DOT pursues strategies to support expansion of electric vehicle EV charging facilities across the state.

In addition to these efforts underway and the initiatives proposed in this measure, the DOT is also the lead for the State of Hawaii for the National EV Infrastructure formula program and the two new complementary discretionary funding programs, the Corridor Charging Grant Program and the Community Charging Grant Program. These programs aim to deploy publicly accessible EV charging infrastructure and hydrogen fueling infrastructure along designated Alternative Fuel Corridors and in communities. The DOT is working in close partnership with the Hawaii State Energy Office and the counties to develop the state electrification plan required for use of formula funds and access to additional discretionary grant funds.

Thank you for the opportunity to provide testimony.



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE
Tuesday, April 5, 2022 — 2:30 p.m.

Ulupono Initiative supports the intent of SB 2570 SD 2 HD 1, Relating to Zero-Emission Vehicle Fueling Rebates.

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 the 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 the intent of SB 2570 SD 2 HD 1, which establishes the Zero-Emission Vehicle Fueling System Rebate Program and establishes the rebate amount for the installation or upgrade of a hydrogen fueling system at \$200,000. This measure also establishes a Hydrogen Fueling System Subaccount within the Public Utilities Commission Special Fund and reduces the allocation that the Energy Systems Development Special Fund receives from the Environmental Response, Energy, and Food Security Tax from 8 cents to 5 cents and allocates the difference to the Hydrogen Fueling System Subaccount.

Ulupono supports clean, alternative fuel transportation as ground transportation makes up a significant portion of Hawai'i's reliance on imported oil. Hydrogen can potentially play a critical role as a renewable energy source to combat ground transportation's greenhouse gas emissions. While hydrogen's technology continues to improve, studies and strategic plans, such as those listed in SB 2283, may help to better inform how best the State can support the implementation of hydrogen as a renewable energy source.

As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that support the continued implementation of renewable energy resources throughout the islands.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i



SERVCO PACIFIC INC.
2850 PUKOLOA ST. STE. 300
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Representative Sylvia Luke, Chair
Representative Kyle Yamashita, Vice Chair
Committee on Finance

**RE: SB 2570 SD2 HD1 - Relating to Zero Emission Vehicle Fueling Rebates – In Support,
Request Amendment
April 5, 2022; 2:30 P.M.**

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

Servco is in support of SB 2570 SD2 HD1, which establishes the zero-emission vehicle fueling system rebate program and the rebate amount for the installation or upgrade of a hydrogen fueling system at \$200,000. It also establishes a hydrogen fueling system subaccount within the public utilities commission special fund, reduces the allocation that the energy systems development special fund receives from the environmental response, energy, and food security tax from 8 cents to 5 cents and allocates the difference to the hydrogen fueling system subaccount.

The demand for alternative forms of refueling vehicles will continue to grow in support of Hawaii's 100% energy goals. However, Servco respectfully requests that hydrogen refueling stations and fuel not be limited to renewable sources only but should be produced using diverse options, including fossil fuels. The reality is electric vehicle charging stations are ultimately sourced from fossil fuels and, as such, parity should be imposed as the state pursues more refueling choices for consumers.

Servco has invested millions of dollars into hydrogen production facilities and will continue to invest as we believe in its future. The long-term 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.

We ask for your consideration in passing the bill with our requested amendment. Thank you.

Peter Dames
Executive Vice President

April 5, 2022

From: Hawaii Hydrogen Alliance

Re: SB2570 SD2 HD1 - SUPPORT

Relating to Zero Emission Vehicle Fueling Rebates



To the House Committee on Finance (FIN):

Chair Rep. Luke, Vice-Chair Rep Yamashita, and Members of the Committee,

SB2570 takes a major step forward in creating a true “zero-emissions” transportation fleet in Hawai’i. The bill adds the language “zero-emissions” and includes “hydrogen fuel cell vehicles” to the existing electric-vehicle charging station rebate program. These two additions create an opportunity to drive down fossil-fuel demand for transportation, by creating an incentive for zero-emissions vehicle infrastructure.

The existing language in the rebate program only covers battery-based electric vehicles. This will broaden to hydrogen fuel-cell-based electric vehicles. WE SUPPORT!

The Hawaii Hydrogen Alliance is focused on increasing awareness for ‘green hydrogen’ production and use in Hawaii and across the Pacific. HHA represents companies and other stakeholders involved in the green hydrogen industry. Long-range aviation, maritime, and diesel-based ground transport are ideal markets for decarbonization using green hydrogen.

In summary,

- Proposed bill adds “hydrogen fuel cell vehicles”, which is another type of zero-emissions vehicle in the marketplace today
- Proposed bill adds “zero-emissions” as a qualifier for the rebate
- Proposed language changes will help to increase demand for hydrogen fuel cell vehicles that use green hydrogen (ie, zero-emissions hydrogen)

We support SB2570 SD2 HD1, and are thankful for the opportunity to present our testimony.

Mahalo,

Chuck Collins

Board Member

admin@hawaiihydrogenalliance.com



**Testimony to
The Committee on Finance**

Tuesday, April 5, 2022

2:30 PM

Conference Room 308 and VIA Video Conference, Hawaii State Capitol

SB 2570 SD2 HD1

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

Hawaii Gas **supports SB 2570 SD2 HD1**, which adds the installation and upgrade of hydrogen refueling stations to the electric vehicle charging system rebate program, renames Hawaii's Electric Vehicle Charging System, and relates to zero emission vehicle fueling rebates.

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-emission fuel source in our utility pipeline and as a reliable zero-emission fuel source for vehicles.

Beyond its use in our clean energy mix, hydrogen is seen as a reliable, long-ranging zero-emission fuel source for commercial and personal vehicles. Clean energy fuel is an essential element of the zero emission vehicle future, which is critical to meeting our 2045 clean energy goals. Hydrogen fuel cells for vehicles are a reality today, with Toyota offering a vehicle in Hawaii as an alternative to fossil fuel dependent vehicles. In fact, the government of Japan has pledged to increase the current number of fueling stations from 150 to 1,000 while also boosting the domestic supply of hydrogen to as much as 3 million tons by 2030, with the goal of expanding this to 20 million tons by 2050.

The promise of hydrogen as a fuel for alternative zero emission 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.

We agree that the inclusion in statute that zero-emission vehicles (ZEV) is vital and a crucial technology of the future and that hydrogen refueling stations are essential. This bill provides for new technology, including hydrogen, as we march towards our emissions mandate of 2045.

We urge the committees to pass SB 2570 SD2 HD1.

Thank you for the opportunity to testify.

Hawaii Electric Vehicle Association

hawaiiev.org
info@hawaiieva.com



April 4, 2022

Dear Chair Luke, Vice-Chair Yamashita, and members of the Finance Committee,

Hawaii Electric Vehicle Association (Hawaii EV) offers comments on SB2570 SD2 HD1.

Hawaii EV recognizes that hydrogen fuel cell vehicles (FCEVs) are electric cars and have zero tailpipe emissions. However, for the following reasons, we continue to focus our efforts on accelerating the adoption of battery electric vehicles:

- Hydrogen/FCEVs are inherently inefficient. **Considering well-to-wheel efficiency, these vehicles are only around 22% efficient¹** (about three times less efficient than battery electric vehicles, a truly massive difference). We cannot afford to waste energy and need to opt for energy-efficient solutions.
- The hydrogen ground transportation ecosystem is costly. **A hydrogen fueling station can cost \$2,000,000.** Level 2 and DC Fast Chargers cost around \$10,000 to \$150,000, respectively.
- The market is churning out ever-increasingly diverse, affordable, longer-range EVs in response to consumer demand. We cannot say the same for FCEVs. **Global FCEV sales continue to be a small fraction of battery electric vehicles.** This has implications for servicing, fueling, and supplying FCEVs.
- There are obvious challenges associated with the creation of non-fossil fuel-based hydrogen. **Most of the global hydrogen is produced from coal or gas. To be meaningful in Hawaii, we first need to meet our need for affordable electricity and transportation and do so with an abundance of firm renewable power.** (We acknowledge that this measure *“Limits the rebate to hydrogen refueling stations that do not store and dispense hydrogen fuel produced using fossil fuels...”*.)

SB2570 SD2 HD1 allows for a separate rebate program to be created for hydrogen fueling stations. (The previous version suggested hydrogen fueling stations would leverage the EV Charging System Rebate Program funds.) With HD1, hydrogen fueling station rebates will not impact the availability of the funds for EV chargers.

Given the advantages of readily-available and supported battery-electric vehicles, we recommend that funds are used to develop hydrogen applications for sectors that are difficult to electrify, e.g., aviation, marine transport, and grid storage.

Thank you for this opportunity to testify.

Sincerely,

¹ <https://cleantechnica.com/2020/06/10/this-stunning-chart-shows-why-battery-electric-vehicles-win/>



Noel Morin
President
Hawaii EV Association

Hawaii EV Association is a grassroots non-profit group representing electric vehicle owners in Hawaii. Our mission is to accelerate the electrification of transportation through consumer education, policy advocacy, and electric vehicle charging infrastructure expansion. For more information, please visit hawaiiev.org.

Hawaii EV Board

Noel Morin, President
Nanette Vinton, Secretary and Treasurer
Bill Bugbee – Director
Tam Hunt - Director
Sonja Kass – Director
Rob Weltman – Director

Hawaii EV Clubs

Big Island EV Association
Kauai EV
Maui Nui EV
Tesla Hawaii Club



SanHi

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: April 4, 2022

TO: Representative Sylvia Luke
Chair, Committee on Finance

FROM: Tiffany Yajima

RE: **S.B. 2570, S.D.2, H.D.1 – Relating to Zero Emission Vehicle Fueling Rebates**
Hearing Date: Tuesday, April 05, 2022 at 2:30 p.m.
Conference Room: 308

Dear Chair Luke 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. 2570, SD2, HD1. This measure expands and renames Hawaii’s Electric Vehicle Charging System Rebate Program to establish a rebate for the installation or upgrade of hydrogen fueling systems.

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 is intended to incentivize the build-out of statewide infrastructure to support both electric vehicles and hydrogen vehicles. The automotive industry has made and continues to make a significant investment in hydrogen vehicles and the development of hydrogen fueling infrastructure. At the same time, we also recognize the importance of public, private and government support for infrastructure projects like hydrogen fueling stations. This measure would support the growing number of alternative fuel vehicles on the road today through a broader network of charging infrastructure where these vehicles can refuel.

We note that this measure was amended in the SD1 to make hydrogen fueling stations that store and dispense non-renewable hydrogen ineligible for the rebate. We respectfully ask the committee to remove this limitation. Hydrogen is a cleaner fuel and important technology pathway that can help the state achieve carbon reductions while growing the state’s electric vehicle market.

Thank you for the opportunity to submit this testimony.



Before the House Committee on Finance
Tuesday, April 5, 2022 at 2:30 p.m.

Testimony on SB2570 SD2 HD1 relating to Zero Emission Vehicle Fueling Rebates.

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

Thank you for the opportunity to provide support on Senate Bill 2570 SD2 HD1.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future. Energy efficiency is the cheapest option to help us achieve our 100% clean energy goal by eliminating waste and being more efficient.

Under the Hawai'i Public Utilities Commission's (PUC) direction, Hawai'i Energy has been managing the electric vehicle charging station (EVCS) rebate program that was initially funded in 2019 by the State Legislature (Act 142), and in 2021, provided continued funding with the passage of House Bill 1142 (Act 75).

We support the HD1 amendment to create a separate hydrogen fueling system subaccount that would fund the installations of hydrogen fueling systems and not impact the existing EVCS Rebate program, which has provided rebates for the following types of EVCS (as of February 2022):

- Level 2 – 47 new installations and 66 retrofits
- DC Fast Chargers – 1 new installation and 1 retrofit

Also as of February 2022, the rebate program's funding was as follows:

Act 142 Funding - \$400,000

Act 75 Funding - \$100,000 (bridge funding provided on July 1, 2022)

TOTAL - \$500,000

Total rebates paid – \$472,500

Total funding remaining - \$27,500

Projects in pipeline (based on applications received) - \$190,508

By having a separate hydrogen fueling system subaccount, we will be able to continue implementing the EVCS rebate program and providing support to the projects in the pipeline and beyond.

We appreciate the efforts made by the State Legislature to support zero emission vehicle charging infrastructure in pursuit of our 100% clean energy mandate. Thank you for the opportunity to testify in support of Senate Bill 2570 SD2 HD1.

Sincerely,
Brian Kealoha
Executive Director
Hawai'i Energy

SB-2570-HD-1

Submitted on: 4/5/2022 8:19:56 AM

Testimony for FIN on 4/5/2022 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Jim Burness	Aloha Charge	Comments	Written Testimony Only

Comments:

Dear Finance Committee,

While Aloha Charge was strongly opposed to this bill when the EV and hydrogen rebates were intermingled, we are moving to a neutral position now that hydrogen will have a separate program. As such, we encourage the committee to not reverse course on that amendment.

Secondly, we would suggest two additional amendments: 1) The hydrogen program should focus on hard-to-electrify modes of transportation such as marine and aviation; and 2) Should the hydrogen program funds not get spent in any given year that the funds be transferred to the EV program.

Mahalo,

Jim Burness
CEO
Aloha Charge

SB-2570-HD-1

Submitted on: 4/1/2022 2:05:13 PM

Testimony for FIN on 4/5/2022 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
L Basha	Individual	Oppose	Written Testimony Only

Comments:

I would not like to see any tax money spent on supporting a technology which may become far too expensive in the near future. I recommend waiting until the future of hydrogen vehicles are cost competitive with electric vehicles. This rebate program may lead to developers building a facility which will quickly become obsolete and unusable, leaving the state to pay for the demolition and rehabilitation of the property.

SB-2570-HD-1

Submitted on: 4/1/2022 4:44:40 PM

Testimony for FIN on 4/5/2022 2:30:00 PM

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

Comments:

Clean hydrogen powered vehicles that emit only water as exhaust are already available, and are, in fact, present in Hawaii in very small numbers, but are not a practical transportation choice in most cases because of the near complete absence of hydrogen fueling stations. This bill provides incentives to change that and hopefully break the vicious egg-vs-chicken cycle.

SB-2570-HD-1

Submitted on: 4/4/2022 11:17:44 AM

Testimony for FIN on 4/5/2022 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Paul Bernstein	Individual	Oppose	Written Testimony Only

Comments:

Aloha Chair Luke, Vice Chair Yamashita, and members of the Finance Committee:

I'm writing in opposition to SB2570. Presumably, the motivation to expand zero-emission vehicle fueling systems to include hydrogen is to increase the penetration of zero-emission vehicles. But this bill has three serious shortcomings.

1. The cost-effectiveness of reducing emissions by funding hydrogen fueling stations instead of EV charging stations is dreadful given the extremely low penetration of hydrogen powered vehicles compared to electric vehicles. With limited funds, we should put them where we get the greatest emission reductions for each dollar expended.
2. It fails to ensure that the vehicles would be truly zero emitting as currently most hydrogen is produced from fossil fuels, which actually leads to a hydrogen powered vehicle having more emissions than a current gasoline powered vehicle. Therefore, the bill needs to be amended so that only green hydrogen (or at least a percentage of green hydrogen consistent with the existing RPS standard) can be used to fuel the hydrogen tanks at the station.
3. This bill is regressive as it benefits the wealthy, for only they can afford to purchase hydrogen powered vehicles.

Respectfully,

Paul Bernstein

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Submitted on: 4/5/2022 10:41:00 AM

Testimony for FIN on 4/5/2022 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Kenneth Eisner	Individual	Oppose	Written Testimony Only

Comments:

I oppose this bill. Hydrogen should focus on hard to electricity sections like Aviation and Marine applications. Mahalo