JOSH GREEN, M.D. GOVERNOR

> SYLVIA LUKE LT. GOVERNOR

MARK B. GLICK CHIEF ENERGY OFFICER



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of MARK B. GLICK, Chief Energy Officer

before the SENATE COMMITTEES ON TRANSPORTATION AND CULTURE AND THE ARTS AND AGRICULTURE AND ENVIRONMENT

Thursday, February 8, 2024 3:00 PM State Capitol, Conference Room 224 and Videoconference

Providing Comments on **SB 2967**

RELATING TO STATE VEHICLES.

Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Committees, the Hawaii State Energy Office (HSEO) offers comments on SB 2967 which mandates that fifty per cent of all heavy-duty motor vehicles in the State's fleet be hydrogen vehicles by an unspecified date, mandates that one hundred per cent of all heavy-duty motor vehicles by December 31, 2035, and defines heavy-duty motor vehicle and hydrogen vehicle.

HSEO's testimony is guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy. Ground transportation remains a substantial contributor to greenhouse gas emissions. In 2019, ground transportation contributed 4.03 MMT CO2e, making up 18.3% of the aggregated gross total of 22.01 MMT CO2e emissions in the state.¹ For Hawaii to meet its statutory target "to sequester more greenhouse gases than emitted as soon as

¹ State of Hawaii, Department of Health. Greenhouse Gas Inventory <u>Hawai'i Greenhouse Gas Emissions Report for</u> 2005, 2018, and 2019 (hawaii.gov)

practicable but no later than 2045", programs that support the adoption of zero emission vehicles are critical.²

HSEO offers comments given the concerns that the bill may unnecessarily predetermine a technological solution in hydrogen vehicles when there are existing competing technologies in battery electric vehicles that are available in the market. HSEO is not taking a position on a preference between either battery electric or hydrogen during a period of time in which technical innovation is quite robust and evolving. Therefore, Hawai'i would be best served, in HSEO's estimation, by taking advantage of the most cost-effective and technologically innovative emerging solution or solutions.

Also, HSEO points out that the definition of heavy-duty motor vehicles in the bill includes vehicles with a gross vehicle weight rating (GVWR) of 8,501 pounds or more, which encompasses not only traditional heavy-duty trucks but also vehicles commonly considered as light- and medium-duty. Class 2B trucks, such as the Chevy Silverado 2500, RAM 2500, and Ford F-250, fall under this category. Including these vehicles in the definition of heavy-duty vehicles may result in unintended consequences.

Thank you for the opportunity to testify.

² Hawai'i State Energy Office (2023). <u>Hawai'i Pathways to Decarbonization</u>, Act 238 Report to the 2024 Hawai'i State Legislature (Act 238 Report)

<u>SB-2967</u> Submitted on: 2/5/2024 2:32:32 PM Testimony for TCA on 2/8/2024 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Andrew Crossland	Individual	Oppose	Written Testimony Only

Comments:

I oppose this Bill.

Statement of Stanley J. Osserman Jr., President Tigershark, LLC Before the Senate Committee on Transportation and Culture and the Arts AND Senate Committee on Agriculture and Environment 8 February 2024 3:00 pm State Capitol Conference Room #224 In consideration of SB2967 Relating to State Vehicles

Chair Lee

Vice Chair Inouye and Distinguished Committee Members:

Chair Gabbard

Vice Chair Richards and Distinguished Committee Members:

I stand in strong support of this bill.

As the former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT), I continue to serve our state by promoting, among other things, clean renewable energy solutions. This testimony is NOT being given for compensation of any kind by any corporate or commercial entity. I am presenting to you today as a concerned "Life-Long" citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations, and public safety, among others. My goal is to help our government leaders, local, state, and federal, make good strategic choices.

Our funding at HCATT was from the US Air Force, and we built several "Hybrid Electric" vehicles including battery plug in and hydrogen fuel cell. Hydrogen vehicles are particularly well suited to the heavy trucks mentioned in this bill.

Hawaii is "Late to need" in moving away from fossil fueled vehicles to cleaner options. Thanks for helping us catch up by including hydrogen vehicles in the mix!!!

Brigadier General, Stanley J. Osserman Jr. (USAF Ret.)

President, Tigershark, LLC

<u>SB-2967</u> Submitted on: 2/6/2024 12:05:22 PM Testimony for TCA on 2/8/2024 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Victor K. Ramos	Individual	Oppose	Written Testimony Only

Comments:

Oppose.

Statement of Sidney Higa, Kapolei resident Before the Transportation and Culture and the Arts And Agriculture and Environment Committee 8 February 2024 3:00 pm Conference Room 224 In consideration of SB2967 Relating to State Vehicles

I stand in strong support of this bill.

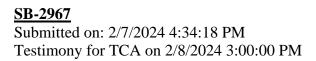
As a born and raised resident concerned about climate change and sea level rise, I am strongly supportive of using alternative fuels such as Hydrogen to replace CO2 emitting fossil fuels especially in the transportation sector and having 50% of State, County and Motor Carriers convert to zero emission Hydrogen as a fuel by 2035 aligns with the State Goal of 100% renewables by 2045.

Additionally, Hydrogen is a renewable fuel that is made from water, which Hawaii is surrounded by and has virtually an unlimited reserve within the ocean.

By using our natural resource we will also keep billions of dollars in Hawaii instead of sending it out of State to fossil fuel producing countries.

Sincerely,

Sidney Higa





Submitted By	Organization	Testifier Position	Testify
jerry Leslie Chang	Individual	Support	Written Testimony Only

Comments:

Aloha,

My name is Jerry Chang and I am speaking as an individual. I support SB2967 that will madate the purchase of Heavy Duty Motor Vehicles in the State fleet be hydrogen vehicles.

There are many, including the County of Hawaii who would like to purchase hydrogen vehicles, but without the access to hydrogen it won't be economically viable. Producers of hydrogen will not set up in Hawaii if there isn't offtakers for their hydrogen. It is the chicken and the egg scenario.

This bill will help us reach our energy goals for our island community and entirce hydrogen producers to produce green hydrogen to expand our options to replace our use of fossill fuels for our energy and transportation needs.

Mahalo for the opportunity to testify.

Jerry L. Chang