

UNIVERSITY OF HAWAI'I 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 <u>as defined in HRS 269-91</u>. 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.