HAWAII STATE ENERGY OFFICE
STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 451-6648
Web: energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON WAYS AND MEANS

Thursday, February 27, 2025
10:30 AM
State Capitol, Conference Room 211 and Videoconference

In Support of
SB 103, SD1

RELATING TO ELECTRIC VEHICLE BATTERIES.

Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee, the Hawai‘i State Energy Office (HSEO) supports SB 103, SD1, with suggested amendments, to convene a working group within the Hawai‘i State Energy Office, co-chaired with the Department of Health, to examine options for recycling, reuse, or repurposing of electric vehicle batteries.

The rapid development of the electric vehicle (EV) industry brings exciting opportunities for innovation and sustainability. As we navigate the complexities of living in an island state, we have the chance to pioneer effective management practices that ensure health and safety while addressing regulatory requirements. For example, by incorporating circular economy principles that prioritize safety, affordability, and sustainability, we can help to develop local industries managing the processing of lithium-ion batteries (LIBs) at the end of their useful lifetime (EOL) and in a way that creates and retains good paying jobs in Hawai‘i, as well as set a positive example for others to follow and contribute to a greener future.

The batteries within electric vehicles provide a pathway towards decarbonizing our transportation sector. The Decarbonization Report prepared by HSEO pursuant to Act 238 (2022) and submitted to the Hawai‘i Legislature in December 2023 mentions

how “ground transportation sector tailpipe emissions comprise 38% of all transportation emissions in Hawai‘i. In 2019, ground transportation contributed 4.03 MMT CO2e, making up 18.3% of the aggregated state gross total of 22.01 MMT CO2e emissions.”[1] In addition to this observation, the report also states that decarbonization requires a two-pronged approach: reducing the amount of energy for ground transportation and transitioning to zero-emission vehicles. As Hawai‘i develops a more resilient energy economy, it is important that the transition be equitable, economic, resource-efficient, and above all practically executable.

HSEO agrees with the intention of convening a group of experts in technology, law, government, and industry to develop a report that can inform the management practices for EV batteries in Hawai‘i, along with the supporting required regulatory framework. HSEO acknowledges and greatly values the role and input of the Department of Health for the implementation of waste management policies and systems.

To that end, HSEO suggests one working group that would consider end-of-life lithium-ion batteries at all scales, with subgroups to focus on the different battery sizes (small and medium format versus large format), as these inform subtopics like collection points and packaging requirements. Since this bill title (“Relating to Electric Vehicle Batteries”) limits the scope to electric vehicle batteries, if the committee wishes to consider a holistic approach that includes a wider variety of batteries, another bill (SB 391, SD1, Relating to Recycling) may offer the opportunity for a broader working group.

This suggestion comes with the acknowledgment of the work Hawai‘i Natural Energy Institute (HNEI) intends to do with HSEO and the Hawai‘i Energy Policy Forum in a working group focused on requirements (i.e. insurance, utilities, land, first responders, State and Federal) for managing the processing of all EOL LIBs. Understanding these requirements is essential to the development of sound policy that the entire industry is likely to support and be able to execute. Previously, HNEI has published three reports that provide the following: an analysis of current battery

[1] Hawai‘i State Energy Office (2023). Hawai‘i Pathways to Decarbonization Report to the 2024 Hawai‘i State Legislature Act 238 (SLH 2022). Available at: https://energy.hawaii.gov/wpcontent/uploads/2022/10/Act-238_HSEO_Decarbonization_FinalReport_2023.pdf pages 102 and 106

management practices and the regulatory environment; recommended approaches for battery management and processing; volume estimates; and guidance on feasible policy frameworks.[2] All these efforts aim to provide a cohesive approach that recognizes Hawai‘i’s unique environment, particularly its reliance on off-island shipping.

HSEO is dedicated to developing solutions for effective repurposing and EOL management of EV batteries that enhance safety, cost-effectiveness, energy security, and the re-use of valuable materials.

Thank you for the opportunity to testify.

[2] Hawai‘i Natural Energy Institute (HNEI), three reports:

2022: *Final Report to Provide Recommendations on Waste Management of Clean Energy Products in Hawai‘i to the 2023 Legislature under Act 92 and HB 1333,* December 2022 (https://www.hnei.hawaii.edu/wp-content/uploads/2023-HNEI-Act92-Final-Report-Clean-Energy-Products-Waste-Management.pdf);

2023: *Policy Recommendations on Waste Management of Clean Energy Products in Hawai‘i – Supplemental Report to the Hawai‘i State Legislature in Accordance with HB1333*, December 2023 (https://www.hnei.hawaii.edu/wp-content/uploads/HNEI-Act92-Supplemental-Report-Clean-Energy-Products-Waste-Management.pdf);

2024: *Waste Management of EOL PV Panels and LIBs in Hawai‘i*, December 2024 (https://www.hnei.hawaii.edu/wp-content/uploads/Waste-Management-of-EOL-PV-Panels-and-LIBs-in-Hawaii.pdf).