HAWAII STATE ENERGY OFFICE
STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

235 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 AGRICULTURE AND ENVIRONMENT
Monday, February 10, 2025
1:01 PM
State Capitol, Conference Room 224 and Videoconference

Providing Comments on
SB 391

RELATING TO RECYCLING.

Chair Gabbard, Vice Chair Richards, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 391 which expands the Electronic Device Recycling and Recovery Act to include the collection and recycling of certain lithium-ion batteries, requires manufacturers of lithium-ion batteries to recycle or arrange for the recycling of lithium-ion batteries sold in the State, and ensure the safe collection, storage, transportation, and recycling of batteries. HSEO defers to the appropriate agency regarding implementation.

The HSEO appreciates the intent of this bill. Extended producer responsibility (EPR), when adapted to meet Hawaii's specific needs, offers a promising approach for end-of-life (EOL) lithium-ion battery (LIB) management. This policy framework has proven effective in encouraging a circular economy and closed-loop system. As battery materials are derived from limited natural resources, EPR's focus on proper end-of-life management provides a pathway to keep these materials circulating in the battery economy.[1] By shifting responsibility from consumers to producers, EPR encourages recycling and reuse, benefiting the battery ecosystem, particularly given that the initial extraction of critical materials in some areas have raised human rights concerns.

[1] Product Stewardship Institute, *What is extended producer responsibility (EPR)?* (https://productstewardship.us/what-is-epr/)

The Hawai‘i Natural Energy Institute, under the leadership of Dr. Michael Cooney, has conducted extensive research to determine appropriate policy frameworks for Hawai‘i's unique context, resulting in three comprehensive reports published in 2022, 2023, and 2024.[2] The first two legislative reports acknowledged LIBs as the primary technology for electric vehicles and energy storage systems in Hawai‘i. With growing demand comes an increased need for disposal and recycling options. These batteries pose both chemical and electrical hazards, including risks of fire and hazardous material leakage. While Hawai‘i currently manages LIBs as universal waste, some states are proposing restrictions. When repair and reuse aren't viable, recycling is preferred, despite high shipping costs to mainland facilities. Potential profits from material recovery show promise.

Given the regulatory environment for EOL lithium-ion battery management, it's crucial to construct legislation that can succeed in this context. The Institute's most recent report recommended several key actions: developing a state-wide processing plan, establishing local pre-processing facilities, creating stewardship programs, implementing better tracking systems for imports and exports, developing multiple disposal pathways, and waiting for larger markets to establish EPR before implementing similar measures.

Considering this ongoing progress, HSEO recommends forming a working group rather than immediate legislative action. We suggest using language from SB 103 as a reference for establishing working group goals, focusing on:

1. Best practices for EOL lithium-ion battery management

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[2] Hawaii 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).

2. Cost, safety, and environmental impact comparison of in-state versus out-of-state recycling options
3. Feasibility of pursuing recycling options outside the United States
4. Cost analysis, infrastructure assessment, and enforcement considerations for a lithium-ion battery recycling program
5. Environmental impact assessment of different management practices

Due to distinct regulatory and programmatic requirements, we recommend separate working groups for electric vehicle batteries and non-electric vehicle batteries. Additionally, we find the Department of Health to be a crucial collaborator in this effort.

Thank you for the opportunity to testify.