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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

Thursday, February 20, 2025
9:30 AM

State Capitol, Conference Room 229 and Videoconference

In Support of
SB 391, SD1

RELATING TO RECYCLING.

Chair Keohokalole, Vice Chair Fukunaga, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers support with amendments on SB 391, SD1, which establishes an end-of-life lithium-ion battery management working group within the Hawai'i State Energy Office and requires a report to the Legislature.

Given the diverse battery ecosystem, from AA batteries and e-bikes to home energy systems and utility-scale energy systems, it may be most efficient to explore options under one umbrella to address common elements of waste management, with subgroups to address variances in battery sizes. While HSEO disapproves of managing by committee, it recognizes an important role for the Department of Health given its role in implementation of battery waste systems and greatly values its input.

Product stewardship, also known as extended product responsibility (EPR), involves collaboration among manufacturers, retailers, users, and disposers to reduce the environmental impacts of products. Many states incorporate these objectives into their waste management plans, increasing recycling through cooperation with manufacturers and retailers.¹

¹ United States Environmental Protection Agency, *Basic Information: What is Product Stewardship?*, 2016: <https://archive.epa.gov/wastes/conserve/tools/stewardship/web/html/basic.html>

A unified umbrella of the working group will streamline the management of an end-of-life battery stewardship program informed by the subgroups to foster effective collaboration and a comprehensive approach to disposal and recycling.

HSEO also acknowledges the Hawai'i Natural Energy Institute and Dr. Michael Cooney, in particular, who has conducted extensive research to determine appropriate policy frameworks for Hawai'i's unique context and published three comprehensive reports published in 2022, 2023, and 2024.² The first two legislative reports acknowledged lithium-ion batteries (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. However, the potential profits from material recovery show promise.

Given the high regulatory environment for end-of-life (EOL) lithium-ion battery management, it's crucial to construct legislation that can succeed in this context. The Institute's third 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.

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>).

This approach allows for a cohesive strategy that does not disproportionately burden manufacturers. Product stewardship and stewardship organizations, which assist in running waste disposal and recycling programs, would be advantageous in Hawai'i's highly regulated environment of hazardous waste shipping. Considering how this bill essentially combines with the topic of SB 103, HSEO's recommendations are based on this proposed structure, which is inclusive of all battery types. For page 1 lines 6 thru 17, HSEO recommends the following language:

- (1) Recommendations with requirements on best practices for enforcement of end-of-life lithium-ion battery disposal;
- (2) Recommendations with analysis of requirements for various in-state versus out-of-state pathways to manage end-of-life disposal of lithium-ion batteries at all scales; inclusive of utilities, infrastructure, environmental impacts, and first responders' needs;
- (3) Assessment of the impacts of sending end-of-life lithium-ion batteries to overseas port versus United States ports;
- (4) Recommendations with requirements for establishing a lithium-ion battery stewardship program in the State; and
- (5) Final recommendations on best practices for end-of-life lithium-ion battery management at all scales.

Since this bill proposes one working group that would be responsible for formulating distinct subgroups based on various battery sizes and uses, HSEO estimates a longer timeframe may be necessary to distill findings of the subgroups and create a unified approach that considers the entire ecosystem. For page 3 lines 14 to 18, HSEO recommends the following:

- (e) The working group shall submit [a] an interim report of its findings and recommendations, including any proposed legislation, to the legislature no later than

twenty days prior to the convening of the regular session of 2026.

- (f) The working group shall submit a final report of its findings and recommendations, including any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2027.
- (g) The working group shall be dissolved on June 30, [~~2026~~] 2027.

As previously noted, HSEO considers the Department of Health to be a crucial collaborator in this effort and defers to it regarding implementation.

Thank you for the opportunity to testify.