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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, March 18, 2025
9:20 AM
State Capitol, Conference Room 325 and Videoconference

In Support of
SB 391, SD1

RELATING TO RECYCLING.

Chair Lowen, Vice Chair Perruso, 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 (LIB) management working group within the Hawai'i State Energy Office and requires a report to the Legislature.

Given the diverse battery ecosystem—ranging from small rechargeable batteries found in various appliances and equipment such as cell phones, laptops, toys, e-bikes, and other small and large appliances to home energy battery storage systems and, finally, utility-scale energy systems—HSEO recognizes the need to address lithium-ion battery (LIBs) from a comprehensive approach, such as proposed within this working group. Accordingly, HSEO supports this bill and recommends that the broader working group be informed by the subgroups to foster effective collaboration and a holistic approach to disposal and recycling across different scales.

HSEO recognizes that there is a growing demand for LIBs and, with it, an increased need for disposal and recycling options. These batteries pose both chemical and electrical hazards, including risks of fire and hazardous material leakage in waste disposal facilities across the state. While Hawai'i currently manages LIBs as universal

waste, some states are proposing restrictions. When repair and reuse are not viable, recycling is preferred despite high shipping costs to mainland facilities.

HSEO also acknowledges the Hawai'i Natural Energy Institute (HNEI) 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 in 2022, 2023, and 2024, which informed our testimony.¹

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. HNEI'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 extended producer responsibility programs before implementing similar measures in Hawai'i.

HSEO's recommendations are based on the aforementioned comprehensive approach to this working group, which is inclusive of all battery types, noting that the language recommended is similar to that of SB 103, which focuses on electric vehicle batteries. Accordingly, HSEO recommends the following revisions:

On page 1, lines 5 through 17, HSEO recommends the following modifications:

- (b) The working group shall focus on:
 - (1) Best practices for end-of-life lithium-ion battery management, including enforcement and disposal options;

¹ 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~~] 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) [~~Feasibility of pursuing recycling options outside the United States~~] Assessment of the options to and impacts of sending lithium-ion batteries to overseas ports versus United States ports;
- (4) Cost analysis, infrastructure assessment, and enforcement considerations for establishing a lithium-ion battery recycling program in the State; and
- (5) Recommendations with requirements for establishing a lithium-ion battery stewardship program in the State; and
- (6) Final recommendations on best practices for end-of-life lithium-ion battery management at all scales; and
- (~~5~~)7) Environmental impacts of different management practices.

As the Department of Health is responsible for the implementation of the recommendations produced by the working group, the co-chairs should reflect this regulatory framework. On page 2, lines 5 to 8, HSEO recommends the following:

- (2) The director of the [~~Hawaii natural energy institute~~]health, or the director's designee, who shall serve as the co-chairperson of the working group;
- (3) One representative from the [~~department of health~~] Hawaii natural energy institute;

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 the findings of the subgroups and create a unified approach that considers the entire ecosystem. Accordingly, on page 3, lines 14 to 19, 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)~~ (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 supports its recommendations regarding implementation. Thank you for the opportunity to testify.