



STATE OF HAWAII
DEPARTMENT OF HEALTH
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**Testimony in SUPPORT of SB0391 SD1
RELATING TO RECYCLING**

REPRESENTATIVE NICOLE E. LOWEN, CHAIR
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

March 18, 2025, 9:20 AM, Room Number: 325

1 **Fiscal Implications:** N/A.

2 **Department Position:** The Department of Health (Department) supports this measure and
3 offers comments.

4 **Department Testimony:** The Environmental Management Division, Solid and Hazardous Waste
5 Branch (EMD-SHWB) provides the following testimony on behalf of the Department.

6 The Department supports the intent of this measure to establish an end-of-life
7 lithium-ion battery management working group in the Hawai'i State Energy Office and agrees
8 that it is prudent to gather more information about the current options for end-of-life
9 lithium-ion batteries and develop policy to encourage proper recycling and disposal, as this
10 waste stream will increase in the future.

11 The Department would prefer to be a co-chair of this working group. Because of its
12 regulatory responsibility for solid and hazardous waste, the Department will likely be tasked
13 with implementation of policies developed by the Legislature based on working group
14 recommendations. Since having too many co-chairs could be difficult, the Department suggests
15 that the Department replace the Hawai'i Natural Energy Institute as co-chair.

1 Department staff working on the working group proposed by this measure and the
2 electric vehicle battery recycling working group proposed by SB0103 SD1 and HB0242 HD1
3 would likely to be the same. Small and medium format lithium-ion batteries found in consumer
4 electronics and larger lithium batteries found in electric vehicles have different chemistries,
5 distribution chains, and reuse, recycling, and disposal considerations, but also a great deal in
6 common. The Department defers to the Hawai'i State Energy Office regarding whether the
7 working groups can be effectively combined into a single working group producing a single
8 report to the legislature and for other specific recommendations relating to the working
9 group's structure, purpose, and financing.

10 Currently, the counties of Kaua'i, Honolulu, and Hawai'i offer small and medium format
11 lithium-ion battery collection services to their residents as either fixed collection locations or
12 via collection events, such as household collection events. If SB0103 SD1 or HB0242 HD1 are
13 passed, the electric vehicle battery working group should be prioritized. If the working groups
14 for small/medium format lithium-ion batteries and electric vehicle batteries are to be
15 effectively combined, more time will be required. Therefore, the Department recommends a
16 later date for the report required by this measure.

17 The Department recommends adding to the task force one representative from the
18 in-state lithium-ion battery recycling or collection industry and one representative from an
19 out-of-state lithium-ion battery recycling company.

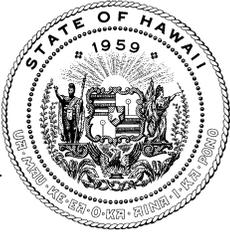
20 **Offered Amendments:** The Department recommends the following amendments:

21 On page 2, line 5, replace "Hawaii natural energy institute" with "department of health"
22 and on page 2, line 8, replace "department of health" with "Hawaii natural energy institute."

23 Change 2026 to 2028 on page 3 lines 17 and 18 so that the sentence beginning on
24 page 3 line 14 reads, "The working group shall submit a report...no later than twenty days prior
25 to the convening of the regular session of 2028."

1 Insert at page 3 line 9, “(9) One representative from the in-state lithium-ion battery
2 recycling or collection industry; (10) One representative from an out-of-state lithium-ion
3 battery recycling company;” and renumber subsequent paragraphs.

4 Thank you for the opportunity to testify on this measure.



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LT. GOVERNOR

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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.

C. Kimo Alameda, Ph.D.
Mayor

William V. Brillhante, Jr.
Managing Director



Wesley R. Segawa
Director

Craig Kawaguchi
Deputy Director

County of Hawai'i

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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March 14, 2025

COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Amy A. Perruso, Vice Chair

Hawai'i State Capitol

Honolulu, HI 96813

Re: Testimony in Support of Senate Bill (SB) 391 SD1 Relating to Recycling, which establishes Working Group to examine how to maximize the management of end-of-life lithium-ion batteries.

Dear Chair Lowen, Vice Chair Perruso and Committee Members,

The County of Hawai'i Department of Environmental Management is pleased to submit **testimony in support of Senate Bill 391 SD1**, which establishes Working Group to maximize the management of end-of-life lithium-ion batteries.

The increased prevalence of lithium-ion batteries in everyday consumer electronics poses a significant hazard to the environment, and the staff and facilities of the Department of Environmental Management's Solid Waste Division when improperly disposed. Establishing a proper Extended Producer Responsibility system to safely and conveniently collect and recycle these batteries would reduce the safety and environmental hazards as well as recover a valuable reusable resource.

The County offers the following **comments** to improve the bill. The bill should consider a comprehensive battery stewardship program that would cover multiple battery chemistries instead of just lithium-ion batteries. Battery management is quite different from the management of recyclable electronics; not every electronics recycling collector has the capacity or wants to recycle batteries thus these programs should be separate Extended Producer Responsibility (EPR) programs. The Product Stewardship Institute has worked with multiple stakeholders to develop model EPR legislation for battery recovery and helped some states enact EPR laws.

Thank you for your consideration.

Best Regards,

Craig Kawaguchi
DEPUTY DIRECTOR

cc: Mayor Kimo Alameda

Gene Quiamas, Acting Hawai'i County Solid Waste Division Chief
Tanya Buckley, Acting Hawai'i County Recycling Coordinator



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Toby Taniguchi, KTA Superstores, *Advisor*
Joe Carter, Coca-Cola Bottling of Hawaii, *Advisor*
Eddie Asato, Pint Size Hawaii, *Advisor*
Gary Okimoto, Safeway, *Immediate Past Chair*

TO: Committe on Energy and Environmental Protection

FROM: HAWAII FOOD INDUSTRY ASSOCIATION

Lauren Zirbel, Executive Director

DATE: March 18, 2025

TIME: 9:20am

RE: SB391 SD1 Relating to Recycling

Position: Comments

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, manufacturers and distributors of food and beverage related products in the State of Hawaii.

HFIA understands the intent of the measure and has the following comments.

This measure does not currently contain a definition of lithium-ion battery. We request that a definition be re-inserted which includes an exemption for medical devices including Class 1 over-the-counter medical devices. Many of these devices are sold at pharmacies and grocery stores.

Thank you for the opportunity to testify.



SIERRA CLUB OF HAWAI'I

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

March 18, 2025

9:05 AM

Conference Room 325

In **SUPPORT** of **SB391 SD1**: Relating to Recycling

Aloha Chair Lowen, Vice Chair Perruso, and Members of the Committee,

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **SUPPORTS** SB391 SD1, which will help to address the growing waste stream concerns associated with end-of-life lithium ion batteries.

Our islands' failure to account for our continuous production of solid waste, and the externalized costs of our consumption-based economy, have resulted in significant and ever-growing impacts to our environment, our public health, and overall quality of life. Leachates from our landfills threaten to contaminate our water resources and nearshore areas; toxic emissions and ash from O'ahu's waste-to-energy facility have raised the risks of lung and heart disease, neurological complications, reproductive issues, and cancer in nearby, largely Native Hawaiian communities; and our limited land areas and our sensitive environments and groundwater sources severely limit the space we have available to receive and store our waste byproducts.

Unfortunately, while lithium ion batteries are helping to reduce our dependency on fossil fuels and further our progress towards a net negative carbon footprint by 2045, a lack of disposal pathways for these batteries may exacerbate our solid waste conundrum. Notably, the storage, transportation, and disposition of such batteries present unique waste management challenges, particularly given the potential for fires and toxic chemical releases, the limited options for affordably off-shipping used and damaged batteries, and the lack of any proper lithium battery processing, much less recycling, facilities in our islands. As more and more electric vehicles and other devices and energy storage banks using lithium ion batteries are imported, these unique challenges will only increase over time.

Accordingly, the Sierra Club supports this measure's efforts to begin the process of researching and planning for the management of lithium ion batteries entering our waste stream, including through potential battery recycling and reuse. Not only may this head off a looming hazardous waste crisis, but innovative strategies for recycling and reuse could also result in educational opportunities and economic benefits for local residents and businesses.

Therefore, the Sierra Club of Hawai'i respectfully urges the Committee to **PASS** SB391 SD1. Mahalo nui for the opportunity to testify.



Environmental Caucus of The Democratic Party of Hawai'i

March 14, 2025

TESTIMONY IN SUPPORT OF SB391 SD1 RELATING TO RECYCLING

TO: Chair Nicole E. Lowen, Vice Chair Amy A. Perruso, and Members of the Committee on Energy & Environmental Protection

DATE: Tuesday, March 18, 2025

TIME: 9:20 AM

PLACE: Conference Room 325

Aloha Chair Lowen, Vice Chair Perruso, and Members of the Committee,

The Environmental Caucus of the Democratic Party submits this testimony in strong support of SB391 SD1, which establishes an End-of-Life Lithium-ion Battery Management Working Group and requires a report to the Legislature.

Lithium-ion batteries are integral to modern technology, powering everything from smartphones to electric vehicles. However, their disposal poses significant environmental and public health challenges. Without proper management, these batteries can leak toxic chemicals, contaminate soil and water, and contribute to greenhouse gas emissions when incinerated.

SB391 SD1 is a proactive measure to address these challenges by convening a working group to develop strategies for the safe and sustainable disposal and recycling of lithium-ion batteries. This initiative will:

- Protect Hawaii's environment by preventing hazardous waste contamination.
- Promote public health by mitigating risks associated with improper battery disposal.
- Support Hawaii's commitment to sustainability and renewable energy by fostering a circular economy for battery materials.

We commend the Legislature for recognizing the urgency of this issue and taking steps to ensure that Hawaii remains a leader in environmental stewardship. By establishing this working group, SB391 SD1 lays the groundwork for innovative solutions that will benefit our community and future generations.

We respectfully urge the Committee to pass SB391 SD1. Thank you for the opportunity to testify on this important measure.

Mahalo,

Melodie Aduja and Alan Burdick
Co-Chairs, Environmental Caucus of the Democratic Party

SB-391-SD-1

Submitted on: 3/15/2025 6:02:20 PM

Testimony for EEP on 3/18/2025 9:20:00 AM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Climate Protectors Hawaii	Support	Written Testimony Only

Comments:

Climate Protectors Hawaii **SUPPORTS** SB391 SD1! A working group will help Hawaii manage the recycling of lithium-ion batteries that are increasing with every year.



March 18, 2025

Tony Belot

91-56 Hanua Street

Kapolei, HI 96707

abelot@rdus.com

Representative Nicole Lowen, Chair
Committee on Energy and Environmental Protection

RE: SB 391, SD1, Relating to Recycling

Chair Lowen, Vice Chair Perruso, and members of the committee,

Radius Recycling (formerly Schnitzer Steel Industries), is a world leader in sustainable and environmentally responsible recycling. The Company was listed as one of TIME's 100 Most Influential Companies of 2023, recognized as the Most Sustainable Company in the World by Corporate Knights in 2025, and has been honored by Ethisphere as one of the World's Most Ethical Companies® for ten consecutive years.

SB 391, SD1, recognizes the need for Hawai'i to maximize the recycling and reuse of lithium-ion batteries and establishes a working group to recommend lithium ion battery management practices. An important goal for the state is to preserve our local environment while concurrently optimally utilizing resources through recycling.

As our organization routinely encounters these batteries in our recycling stream, we strongly support the inclusion of at least one or more representatives from **the automotive recycling** industry. Such a representative will, we believe, contribute a significant and valuable viewpoint, grounded in practical experience, concerning the safe, environmentally responsible, and efficient handling of end-of-life electric vehicles.

Radius Recycling is deeply appreciative of the intent of this measure to assure that there is proper recycling and disposal of EV batteries. We look forward to serving as a resource to policymakers on EV recycling.

Sincerely,

Tony Belot, Government and Public Affairs Manager, Radius Recycling

SB-391-SD-1

Submitted on: 3/15/2025 9:05:21 PM

Testimony for EEP on 3/18/2025 9:20:00 AM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Strong support for effective recycling



**TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
MARCH 18, 2025
SB 1298 SD2 RELATED TO RECYCLING**

Aloha, Chair Lowen and members of the House Committee on Energy and Environmental Protection. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii was founded in 1901 and is a statewide, not for profit trade organization committed to supporting the growth and development of the retail industry in Hawaii. Our membership includes small mom & pop stores, large box stores, resellers, luxury retail, department stores, shopping malls, on-line sellers, local, national, and international retailers, chains, and everyone in between.

We support SB 391 SD1. This measure establishes an End-of-Life Lithium-ion Battery Management Working Group. Requires a report to the Legislature; and is effective 1/1/2026.

Hawaii is making significant strides toward clean energy and sustainability, with strong policies promoting electric vehicles (EVs) and battery-powered equipment. However, there remains a critical gap in the infrastructure necessary to properly recycle and dispose of lithium-ion batteries once they reach the end of their lifecycle. Currently, our state does not have a dedicated lithium-ion battery recycling facility, leaving consumers, businesses, and government agencies with limited and costly options for disposal.

Without a proper recycling and disposal framework, these batteries pose environmental and safety risks, including fire hazards in landfills and contamination of soil and water. As Hawaii accelerates its transition to EVs and renewable energy storage systems, the need for a sustainable and local end-of-life battery solution becomes even more urgent.

Establishing this working group is a necessary first step in identifying best practices, exploring feasible recycling and reuse solutions, and ensuring that Hawaii is prepared to manage the increasing volume of lithium-ion batteries safely and efficiently. I urge the committee to pass this measure and help build a responsible and sustainable battery management system for our state.

Mahalo again for this opportunity to testify.

SB-391-SD-1

Submitted on: 3/14/2025 3:58:25 PM

Testimony for EEP on 3/18/2025 9:20:00 AM

Submitted By	Organization	Testifier Position	Testify
chris c.	Individual	Comments	Written Testimony Only

Comments:

The Working Group should consider a comprehensive battery (multiple chemistries) EPR, not just lithium-ion batteries.

Battery EPR program should be separate from electronics EPR program due to the considerable differences in safety, training and protocols for each type of recycling.

SB-391-SD-1

Submitted on: 3/17/2025 11:19:55 AM

Testimony for EEP on 3/18/2025 9:20:00 AM

Submitted By	Organization	Testifier Position	Testify
Steve Parsons	Individual	Support	Written Testimony Only

Comments:

Yes on this!