JOSH GREEN, M.D.
GOVERNOR OF HAWAI'I
KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAI'I

KENNETH S. FINK, MD, MGA, MPH
DIRECTOR OF HEALTH
KA LUNA HO'OKELE

STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

Testimony in SUPPORT of HB0242 HD1
RELATING TO ELECTRIC VEHICLE BATTERIES

REPRESENTATIVE KYLE T. YAMASHITA, CHAIR
HOUSE COMMITTEE ON FINANCE

February 20, 2025, 12:00 PM, Room Number: 308

Fiscal Implications: N/A.

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

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

The Department supports this measure, which establishes an electric vehicle (EV) battery recycling and reuse working group in the Hawai'i State Energy Office. The Department agrees that it is prudent to gather more information about the current options for end-of-life EV batteries and develop policy to encourage proper recycling and disposal, as this waste stream will increase in the future. The Department defers to the Hawai'i State Energy Office on any specific recommendations relating to the working group's structure, purpose, and financing and looks forward to participating as co-chair.

Offered Amendments: The department recommends replacing "2026" with "2027" on page 5 line 6 to be consistent with the change already made to the original version of the measure at page 4 line 7.

Thank you for the opportunity to testify on this measure.

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 Telephone: (808) 451-6648
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web: energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON FINANCE

Thursday, February 20, 2025
12:00 PM
State Capitol, Conference Room 308 and Videoconference

In Support of
HB 242, HD1

RELATING TO ELECTRIC VEHICLE BATTERIES.

Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee, the Hawai‘i State Energy Office (HSEO) supports HB 242, HD1, which convenes a working group within the Hawai‘i State Energy Office to examine options for reuse and recycling 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 (HB 332 HD1, 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 management practices and the regulatory environment; recommended approaches for

[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

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).

C. Kimo Alameda, Ph.D.
Mayor

William V. Brilhante, Jr.
Managing Director

Wesley R. Segawa
Director

Craig Kawaguchi
Deputy Director

County of Hawai'i

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

345 Kekūanāo'a Street, Suite 41 · Hilo, Hawai'i 96720 · cohdem@hawaiicounty.gov
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February 18, 2025

COMMITTEE ON FINANCE
Rep. Kyle T. Yamashita, Chair
Rep. Jenna Takenouchi, Vice Chair
Hawai'i State Capitol
Honolulu, HI 96813

Re: Testimony in Support of House Bill (HB) 242 HD1 Relating to Electric Vehicle Batteries, which establishes the Hawai'i State Energy Office's Electric Vehicle Battery Recycling and Reuse Working Group.

Dear Chair Yamashita, Vice Chair Takenouchi and Committee Members,

The County of Hawai'i Department of Environmental Management is pleased to submit testimony **in support of House Bill 242 HD1 with comments**, which will establish a Hawai'i State Energy Office Electric Vehicle Battery Recycling & Reuse working group to examine EV battery management practices.

As a result of the increased popularity of electric and hybrid vehicles a plan (e.g., extended producer responsibility system) for the reuse, recycling or disposal of vehicle propulsion batteries is long overdue. The County of Hawai'i does not have the resources to manage this emerging waste stream and believes that producers have the expertise and incentive to reuse or recycle their batteries in an environmentally sound manner.

The County offers the following comments on the bill to improve clarity and improve representation. Hybrid vehicles with batteries should also be included in the bill. A representative from each County's environmental management department should be included in the working group.

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

SIERRA CLUB OF HAWAIʻI

HOUSE COMMITTEE ON FINANCE

February 20, 2025 12:00 PM Conference Room 308

In SUPPORT of HB242 HD1: Relating to Electric Vehicle Batteries

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Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee,

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawaiʻi **SUPPORTS** HB242 HD1**,** which will help to confront the growing waste stream concerns associated with lithium ion batteries used in electric vehicles.

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 Oʻahu'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 electric vehicles are helping to reduce our dependency on fossil fuels and further our progress towards a net negative carbon footprint by 2045, the lithium ion batteries that power them 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 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 electric vehicle 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.

Accordingly, the Sierra Club of Hawaiʻi respectfully urges the Committee to **PASS** HB242 HD1. Mahalo nui for the opportunity to testify.

HB-242-HD-1
Submitted on: 2/18/2025 8:07:02 PM
Testimony for FIN on 2/20/2025 12:00:00 PM

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

Comments:

Climate Protectors Hawai‘i **SUPPORTS** this bill for a working group within the Hawaii State Energy Office to examine how to maximize the recycling and reuse of electric vehicle batteries.

HOUSE COMMITTEE ON FINANCE

FEBRUARY 20, 2025

HB 242, HD1, RELATING TO ELECTRIC VEHICLE BATTERIES

POSITION: SUPPORT

Coalition Earth **supports** HB 242, HD1, relating to electric vehicle batteries, which Eetablishes a working group within the Hawai'i State Energy Office to examine how to maximize the recycling and reuse of electric vehicle batteries and recommend electric vehicle battery management practices.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding. Additionally, an estimated $19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area–one-third of which is designated for urban use–without risking massive structural damage and, potentially, great loss of life.

Just two years ago, we witnessed the impact of the climate emergency on our shores. On August 8, 2023, wildfires swept across Maui and killed at least 100 people, making it one of the nation's deadliest natural disasters. The spread of the fires has been attributed to climate change conditions, such as unusually dry landscapes and the confluence of a strong high-pressure system to the north and Hurricane Dora to the south. The wildfires destroyed over 2,200 structures,

including numerous residential buildings, historic landmarks, and school facilities. In September 2023, a report from the United States Department of Commerce estimated the total economic damage of the wildfires to be roughly $5.5 billion. Investing in renewable energy generation could not be more urgent, given the growing threat of climate catastrophes to our island home.

Therefore, **our state should take steps to accelerate our transition to a clean energy economy and continue our fight against climate change, including by strengthening policies related to electric vehicles.** A growing number of people are adopting electric vehicles in Hawai'i. As of December 2024, there were about 35,000 registered electric vehicles in the state–a 30 percent increase from prior years. As electric vehicle usage continues to quicken and EV batteries enter the local waste stream, we should prepare proper recycling and disposal practices to prevent such batteries from damaging our environment.

For recycling purposes, EV battery packs are shipped to a facility specializing in battery disassembly and reprocessing of their components. Parts like steel, copper, and aluminum scrap metal usually go into the nationwide metals-recycling stream. The plastics may not be recyclable, but they constitute a small proportion of the total contents of an EV battery pack. EV battery cells, on the other hand, include lithium, cobalt, manganese, nickel, and, to a lesser extent, aluminum. When they are ground up, the resulting stream is purified in various ways, and the end of the process is a pure supply of the desired metals.

Additionally, an EV battery pack is assumed to be at the end of its life when it has no more than 70 to 75 percent of its original capacity. Yet, hitting this mark may take 10 years or more. Even with a quarter or more of peak capacity gone, aging battery packs still offer plenty of energy storage—20-to-90 kilowatt-hours, or up to three days' worth of electricity for the average U.S. household. Many experts believe a robust "second use" industry is emerging to buy and repurpose used battery packs, extending their lives by a decade or longer.

Coalition Earth is a nongovernmental organization that works to preserve the well-being of people and our planet. We champion policies that advance climate resilience, clean energy, public health, and economic fairness for working families. Contact us at info@coalitionearth.org.

Hawaii Electric Vehicle Association
hawaiiev.org
noel@hawaiieva.com

February 18, 2025

SUPPORT FOR HB242 HD1 (RELATING TO ELECTRIC VEHICLE BATTERIES)

Dear Chair Yamashita, Vice-Chair Takenouchi, and members of the Committee,

My name is Noel Morin. I am submitting testimony on behalf of Hawaii Electric Vehicle Association (Hawaii EV) in STRONG SUPPORT of HB242 HD1, which *Establishes a working group within the Hawai'i State Energy Office to examine how to maximize the recycling and reuse of electric vehicle batteries and recommend electric vehicle battery management practices.*

As the number of EVs on our roads continues to grow, it will be critical that we establish clear pathways to maximize the value of EV batteries and unlock economic benefits that exist in upcycling and recycling.

Batteries are valuable even after they are no longer of use in EVs – they may have 70-80% of their useful capacity. At this stage of their lifecycle, they can be repurposed as stationary batteries, which is already being done in other markets. These stationary batteries can be used to store energy in commercial and residential applications.

Of course, once fully depleted, these batteries must be recycled as they contain valuable minerals that can be repurposed to create new batteries. 'Mining' minerals already concentrated in depleted batteries is many times better economically and environmentally than virgin mineral mining.

HB242 HD1 is a critical step toward establishing an effective EV battery upcycling and recycling framework. The proposed working group will help Hawaii establish a best practice for this framework, ensure coordination with various stakeholders throughout the battery lifecycle (local and offshore), and ensure that we establish a process that prioritizes economic viability and environmental sustainability.

Hawaii EV urges the committee to pass HB242 HD1.

Thank you for the opportunity to testify.

Sincerely,

Noel Morin
President
Hawaii EV Association

Hawaii EV Association is a grassroots non-profit group representing electric vehicle owners in Hawaii. Our mission is to accelerate the electrification of transportation through consumer education, policy advocacy, and electric vehicle charging infrastructure expansion. For more information, please visit hawaiiev.org.

CLIMATE FUTURE FORUM

Date:	February 18th 2025
To:	Representative Kyle T. Yamashita, Chair Representative Jenna Takenouchi, Vice Chair Members of the House Committee on Finance
From:	Climate Future Forum
Re:	**SUPPORT for HB242 SD1**
Hearing:	**2/20/25 12:00P**

On behalf of the Climate Future Forum, thank you for the opportunity to testify in support of HB242. As a young person growing up in Hawaii, I have always been inspired by our state's commitment to sustainability and environmental protection. With electric vehicle (EV) adoption on the rise, it's exciting to see more people making the shift to cleaner transportation. However, one thing that often goes unnoticed is what happens to EV batteries once they reach the end of their life.

For my generation, the future is about more than just moving away from fossil fuels—it's about making sure that every part of our clean energy transition is truly sustainable. Right now, we don't have a clear plan for what to do with used EV batteries, and that's a problem. If we don't think ahead, we could end up with massive amounts of battery waste that harms the environment rather than helping it. That's why HB242 is so important. By creating a working group to study how to reuse, recycle, and manage EV batteries responsibly, we can ensure that our push for clean energy doesn't create new environmental challenges down the road.

As young people, we want to see Hawaii continue to lead on sustainability. We want to know that when we invest in an EV, it's not just reducing emissions today but also part of a long-term, circular system that values resources and minimizes waste. This bill takes a proactive approach to making sure that happens. It brings together experts from different industries to come up with real solutions for battery reuse and recycling before it becomes a crisis.

HB242 is about planning for the future with intention. It's about ensuring that Hawaii's leadership in clean energy isn't just about adoption but about responsibility and innovation. As someone who will inherit the outcomes of today's decisions, I strongly urge you to support this bill. Let's make sure that as we transition to EVs, we do it in a way that truly protects our island home for generations to come.

Thank you very much for supporting youth engagement in climate policy. We respectfully request that you pass HB242 out of your committee to ensure that Hawaii's clean energy future is both sustainable and forward-thinking.

Sincerely,
Tahan Bapna
Youth Leader of Hawai‘i Climate Future Forum

SERVCO

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Representative Kyle Yamashita, Chair
Representative Jenna Takenouchi, Vice Chair
Committee on Finance

RE: **HB 242 HD1 - Relating to Electric Vehicle Batteries – In Support**
February 20, 2025; 12:00 PM; Agenda #2
Conference room 308 & Videoconference

Aloha Chair Yamashita, Vice Chair Takenouchi and members of the committee:

Servco appreciates this opportunity to offer testimony in support of HB 242 HD1, which establishes a working group within the Hawaii State Energy Office to examine how to maximize the recycling and reuse of electric vehicle batteries and recommend electric vehicle battery management practices.

As the exclusive distributor for Lexus, Toyota, and Subaru in Hawaii, Servco has a strong presence in both sales and service aspects of the automotive industry in the state. Our experience in Japan and Australia also supports the adoption and efficient use of alternative fuel vehicles through consumer education and services.

Given the rapid adoption of EVs and the eventual end-of-life cycle of batteries, establishing a working group is appropriate. Servco would be interested in participating and sharing insights on management, regulation, and recommendations for developing a recycling and reuse framework for EV batteries.

This initiative aligns with Hawaii's efforts to address the growing need for proper EV battery management. As the number of EVs on Hawaii's roads increases, establishing clear pathways for maximizing the value of EV batteries and unlocking economic benefits through upcycling and recycling becomes critical. The working group will help Hawaii establish best practices, ensure coordination with various stakeholders, and prioritize economic viability and environmental sustainability in the EV battery lifecycle management process.

Thank you for the opportunity to provide comments in support.

Peter Dames
President & CEO

February 20, 2025

Tony Belot
91-56 Hanua Street
Kapolei, HI 96707
abelot@rdus.com

Representative Kyle Yamashita, Chair
Committee on Finance

RE: HB 242 HD1, Relating to Electric Vehicle Batteries

Chair Yamashita, Vice Chair Takenouchi, 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.

HB 242 HD1 recognizes the need for Hawai'i to maximize the recycling and reuse of electric vehicle batteries and establishes a working group to recommend electric vehicle 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

SanHi
GOVERNMENT STRATEGIES
A LIMITED LIABILITY LAW PARTNERSHIP

DATE: February 19, 2025

TO: Representative Kyle Yamashita
Chair, Committee on Finance

Representative Jenna Takenouchi
Vice Chair, Committee on Finance

Submitted Via Capitol Website

FROM: Tiffany Yajima

RE: **H.B. 242, H.D. 1 – Relating to Electric Vehicle Batteries**
Hearing Date: Thursday, February 20, 2025 at 12:00 p.m.
Conference Room: 308

Dear Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee on Finance:

On behalf of the Alliance for Automotive Innovation ("Auto Innovators") we submit this testimony in **support** of H.B. 242, H.D.1, Relating to Electric Vehicle Batteries. The Alliance for Automotive Innovation is the singular, authoritative and respected voice of the automotive industry. Focused on creating a safe and transformative path for sustainable industry growth, the Alliance for Automotive Innovation represents the manufacturers producing nearly 99 percent of cars and light trucks sold in the U.S. Members include motor vehicle manufacturers, original equipment suppliers, technology, and other automotive-related companies and trade associations.

This measure establishes a working group to study how to maximize the recycling and reuse of electric vehicle batteries and tasks the group to make recommendations on electric vehicle battery management practices with a report to the legislature before the 2026 legislative session.

As the representative of both the makers of electric vehicles and electric vehicle batteries, Auto Innovators is willing to and interested in serving as a resource to the state on this working group. We would also suggest that the group consider current programs that exist today to manage EV battery recycling, and support amendments that give the group additional time to organize and develop comprehensive battery management best practices.

First Hawaiian Center
999 Bishop Street, Suite 1400
Honolulu, HI 96813

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Currently, in the life cycle of a battery, when an EV battery begins to show signs of failure, these battery modules or packs can first be refurbished to as good or better quality and performance levels through the replacement of worn or deteriorated components which can be re-certified to OEM specifications. If a battery module or pack cannot be reused, these batteries and components can also be refurbished on the secondary market to fulfill a different use from what was originally intended. At the end of the life of a battery, EV batteries can be processed to recover the maximum amount of raw materials for reuse in similar or alternative industries.

For vehicles that have reached their end-of-life and that are unwanted without parts removed by a dismantler, Automakers have adopted a “Full Vehicle Backstop” program. The Full Vehicle Backstop program covers the whole electric vehicle and not just the battery. Under the program, the vehicle manufacturer is responsible to accept the vehicle and ensure that it is properly dismantled and the lithium-ion battery is properly reused, refurbished, or recycled.

As we continue the shift to an electric vehicle future, Auto Innovators is interested in supporting this working group to provide input on EV battery management practices.

Thank you for the opportunity to submit this testimony.

REDWOOD MATERIALS

February 20, 2025

House Committee on Finance (FIN)
Hawaii State Capitol
415 South Beretania Street
Honolulu, HI 96813

RE: Redwood Materials' Written Testimony for HB 242 HD1, Relating to Electric Vehicle Batteries

Dear Chair Yamashita, Vice Chair Takenouchi and the Members of the FIN Committee,

As the leader in the sustainable end-of-life management of electric vehicle (EV) batteries, Redwood Materials is supportive of the amendments made to HB 242 HD1 and respectfully requests a favorable vote from the FIN committee.

If HB 242 HD1 is approved, the proposed Electric Vehicle Battery Recycling and Reuse Working Group will include one representative from a company specializing in the recycling of electric vehicle batteries. We believe that the inclusion of this stakeholder group will allow for the unique expertise of specialized battery recyclers, such as Redwood Materials, to participate in this important working group and advance sustainable practices in EV battery management in Hawaii.

Redwood is at the forefront of ensuring that the United States meets its clean energy and electric vehicle (EV) ambitions. We are dedicated to developing a domestic, secure, and sustainable battery supply chain and work across the battery ecosystem with emphasis on repurposing and recycling end-of-life EV batteries.

In regard to recycling, our strategic approach includes:

- Recycling: We focus on collecting and recycling end-of-life lithium-ion batteries from consumer devices to EV battery packs, turning these items into high-value battery materials.
- Refining and Processing: Our facilities process and refine critical minerals contained in these batteries, ensuring their optimal reuse.
- Re-manufacturing: We specialize in re-manufacturing sustainable battery materials, particularly cathode active materials, essential for domestic battery manufacturing.

Our company's mission aligns with the objectives of HB 242, advocating for responsible and sustainable management of electric vehicle (EV) batteries at end-of-life. Today, Redwood receives more than 20 GWh of lithium-ion batteries annually, which equates to more than 250,000 electric vehicles, 1.57 billion cell phones, or 60,000 metric tons/year. The vast majority of lithium-ion batteries recycled in North America come through our doors.

Redwood's Engagement in Hawaii

Redwood recognizes Hawaii's pioneering role in sustainable energy and battery deployment. In collaboration with Kaua'i Island Utility Cooperative (KIUC), we've worked on decommissioning the first generation battery storage system at the Anahola substation, a 4.6 MWh battery energy storage system (BESS). The successful decommissioning and recycling of these initial projects serve as an industry model for future gigawatt-scale projects.

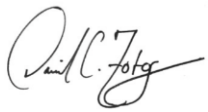
Additionally, we contributed to the EPA's Maui Wildfire Response by facilitating the safe transport of fire damaged lithium-ion batteries from Maui to our Northern Nevada facilities for proper recycling. This effort was part of our commitment to environmentally responsible practices in emergency situations. We have also engaged with the University of Hawaii in their research on EV battery recycling. By hosting their researchers at our facilities, we shared insights into our methods for EV battery circularity, aiming to contribute to broader knowledge in this field and inform local policy development.

Last year, over 250,000 electrified vehicles reached the end of their lifecycle in the United States, presenting a crucial opportunity for sustainable practices in battery management. Our involvement in policy development and environmental sustainability initiatives, both locally and nationally, positions us as a key contributor in this evolving industry.

Should this policy move forward, Redwood Materials expresses its keen interest in serving on the Electric vehicle battery recycling and reuse working group as the representative of a company specializing in the recycling of electric vehicle batteries. We believe we are well suited for this role due to our demonstrated expertise in providing end-of-life battery management solutions, including recovering materials from end-of-life batteries and manufacturing sustainable battery materials both in Hawaii and nationwide. Redwood Materials is committed to advancing our industry, driving circularity in battery material production, and collaborating with partners and policymakers. Regarding electric vehicles, we are dedicated to reducing costs, enhancing sustainability, and fostering innovation, contributing to a more sustainable future.

Thank you for your favorable consideration of this important bill.

Sincerely,



Daniel C. Zotos
Senior Manager of Public Affairs & Advocacy
Redwood Materials
daniel.zotos@redwoodmaterials.com

HB-242-HD-1
Submitted on: 2/18/2025 11:03:16 AM
Testimony for FIN on 2/20/2025 12:00:00 PM

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

Comments:

Where are the neighbor island Counties' environmental management representatives on the working group?

Didn't the manufacturers state previously that they had a "Full Vehicle Backstop" program to handle end-of-life EV batteries?