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 RELATING TO ELECTRIC VEHICLE BATTERIES

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

February 6, 2025, 9:00 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 of Health
- 6 (Department).
- 7 The Department supports this measure, which establishes an electric vehicle (EV) battery
- 8 recycling and reuse working group in the Hawai'i State Energy Office. The Department agrees
- 9 that it is prudent to gather more information about the current options for end-of-life EV
- 10 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
- 12 specific recommendations relating to the working group's structure and purpose and looks
- 13 forward to participating as co-chair.
- 14 Offered Amendments: None.
- 15 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

energy.hawaii.gov

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235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

## Testimony of MARK B. GLICK, Chief Energy Officer

## before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 6, 2025 9:00 AM State Capitol, Conference Room 325 and Videoconference

In Support of HB 242

#### RELATING TO ELECTRIC VEHICLE BATTERIES.

Chair Lowen, Vice Chair Perruso, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports HB 242, with suggested amendments, which convenes a working group within the Hawai'i State Energy Office, co-chaired with the Department of Health, to make recommendations for the 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 Hawaii, 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." In addition to this observation, the report also states that decarbonization requires a two-prong 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.

To that end, HSEO recommends adding HNEI as a member, as they have already, in collaboration with HSEO, researched the framework for management of EOL LIBs over three reports.<sup>2</sup> In addition, HNEI will, this year and in collaboration with HSEO and the Hawaii Energy Policy Forum, lead a new working group of participants across the full logistical train of participants in Hawaii, in defining the requirements (i.e. insurance, utilities, land, first responders, State and Federal) for a number of options to manage the processing of EOL LIBs. Understanding these requirements is essential to our development of sound policy that the entire industry is likely to support and be able to execute.

In support of this, HSEO also respectfully recommends the following:

1. One addition to page 3, line 7:

(3) One representative from the <u>battery</u> energy storage industry;

This provides clarity and supports the focus on batteries.

2. One addition to page 4, line 5:

Potential <u>stationary</u> energy storage systems as a second option,

This narrows the scope to systems that are pertinent to the bill and avoids potential confusion.

## Hawaiʻi State Energy Office HB 242 - RELATING TO ELECTRIC VEHICLE BATTERIES - Support February 6, 2025 Page 3

HSEO is dedicated to developing effective solutions for reuse and EOL management of EV batteries that enhance energy security and use of materials.

Thank you for the opportunity to testify.

- <sup>1</sup> 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: <a href="https://energy.hawaii.gov/wp-content/uploads/2022/10/Act-238">https://energy.hawaii.gov/wp-content/uploads/2022/10/Act-238</a> HSEO Decarbonization FinalReport 2023.pdf pages 102 and 106
- <sup>2</sup> 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 (<a href="https://www.hnei.hawaii.edu/wp-content/uploads/2023-HNEI-Act92-Final-Report-Clean-Energy-Products-Waste-Management.pdf">https://www.hnei.hawaii.edu/wp-content/uploads/2023-HNEI-Act92-Final-Report-Clean-Energy-Products-Waste-Management.pdf</a>);
  - 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 Kekūanāoʻa Street, Suite 41 · Hilo, Hawaiʻi 96720 · cohdem@hawaiicounty.gov Ph: (808) 961-8083 · Fax: (808) 961-8086

February 4, 2025

COMMITTEE ON ENERGY & 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 House Bill (HB) 242 Relating to Electric Vehicle Batteries, which establishes the Hawai'i State Energy Office's Electric Vehicle Battery Recycling and Reuse Working Group.

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 House Bill 242 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) 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. 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

cc:

Mayor Kimo Alameda

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



#### HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 6, 2025 9:00 AM Conference Room 325

In SUPPORT of HB242: Relating to Electric Vehicle Batteries

Aloha Chair Lowen, Chair Gabbard, Vice Chair Chang, Vice Chair Richards, and Members of the Committees.

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **SUPPORTS** HB242, which will help to address 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 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 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 Hawai'i respectfully urges the Committee to **PASS** HB242. Mahalo nui for the opportunity to testify.



February 6, 2025

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

Representative Nicole Lowen, Chair Committee on Energy & Environmental Protection

RE: HB 242, Relating to Electric Vehicle Batteries

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.

HB 242 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

#### Hawaii Electric Vehicle Association

hawaiiev.org noel@hawaiieva.com



February 4, 2025

#### SUPPORT FOR HB 242 (RELATING TO ELECTRIC VEHICLE BATTERIES)

Dear Chair Lowen, Vice-Chair Perruso, 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, which Establishes a working group within the Hawaii State Energy Office to make recommendations for the reuse and recycling of electric vehicle batteries.

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 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.

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.

Submitted on: 2/4/2025 8:52:58 PM

Testimony for EEP on 2/6/2025 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ted Bohlen	Climate Protectors Hawaii	Support	Written Testimony Only

## Comments:

Climate Protectors Hawaii **SUPPORT** studying the reuse and recycling of electric vehicle batteries.



#### HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

### FEBRUARY 6<sup>TH</sup>, 2025

#### **HB 242, RELATING TO ELECTRIC VEHICLE BATTERIES**

**POSITION: SUPPORT** 

Coalition Earth <u>supports</u> HB 242, relating to electric vehicle batteries, which establishes a working group within the Hawai'i State Energy Office to make recommendations for the reuse and recycling of electric vehicle batteries.

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.



February 5, 2025

House Committee on Energy & Environmental Protection (EEP)
Hawaii State Capitol
415 South Beretania Street
Honolulu, HI 96813

## RE: Redwood Materials' Written Testimony and Suggested Language for House Bill 242, Relating to Electric Vehicle Batteries

Dear Chair Lowen and Vice Chair Perruso and the Members of the EEP Committee,

As the leader in the sustainable end-of-life management of electric vehicle (EV) batteries, Redwood Materials is supportive of HB 242. We recognize the bill's significance in advancing sustainable practices in EV battery management and have some minor suggestions to improve the legislation and resultant working group. 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.

#### **Proposed Amendment**

Redwood Materials was an original member of CalEPA's The Lithium-ion Car Battery Recycling Advisory Group and played a pivotal role in advocating for the inclusion of an industry-first definition of an 'authorized propulsion battery recycler' in New Jersey's recently passed EV & Hybrid Vehicle Battery Recycling law. This was a significant measure in emphasizing the importance of advanced recycling capabilities and ensuring responsible end-of-life management of batteries beyond traditional, less efficient recycling processes.

In light of our experience and expertise, we propose a simple but important language amendment to HB 242. In addition to an e-waste recycler and automotive recycler, we strongly suggest the following language be included in the bill regarding membership on the commission:

'One representative from a company specializing in the recycling of electric vehicle batteries, with demonstrated expertise in providing end-of-life battery management solutions, including recovering materials from end-of-life batteries and manufacturing sustainable battery materials.'

This language change is vital to ensure that the commission or study group formed under this bill recognizes and integrates the unique expertise and capabilities required in advanced EV battery recycling and end-of-life management of EV batteries. This expertise should be explicitly reflected in the commission membership and is not adequately captured under the current framework.

Should this policy move forward, Redwood Materials expresses its keen interest and commitment to serve on Hawaii's working group, bringing our expertise and experience from our involvement in sustainable battery management in both 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 considering our testimony and proposed amendment to HB 242. We look forward to the possibility of a meaningful collaboration.

Sincerely,

**Daniel C. Zotos** 

Senior Manager of Public Affairs & Advocacy Redwood Materials

daniel.zotos@redwoodmaterials.com



DATE: February 5, 2025

TO: Representative Nicole Lowen

Chair, Committee on Energy and Environmental Protection

Representative Amy Perruso

Vice Chair, Committee on Energy and Environmental Protection

Submitted Via Capitol Website

FROM: Tiffany Yajima

**HB 242 – Relating to Electric Vehicle Batteries** 

Hearing Date: Thursday, February 6, 2025 at 9:00 a.m.

**Conference Room: 325** 

Dear Chair Lowen, Vice Chair Perruso, and Members of the Committee on Energy and Environmental Protection,

On behalf of the Alliance for Automotive Innovation ("Auto Innovators") we submit this testimony in **support** of H.B. 242, Relating to Electric Vehicle Batteries and request an amendment to extend the working group from one year to two.

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 suggest that the working group be given additional time to organize and develop

comprehensive battery management best practices. Therefore, we request an amendment to extend the working group to two years with a report to the legislature due 20 days prior to the opening of the 2027 legislative session.

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.

Submitted on: 1/29/2025 3:00:19 PM

Testimony for EEP on 2/6/2025 9:00:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
chris c.	Individual	Support	Written Testimony Only

### Comments:

The need for an Extended Producer Responsibility law for electric and hybrid vehicle batteries is long overdue.

Additionally a representative from each County's environmental management department should be included in the working group for a neighbor island perspective.

Submitted on: 1/29/2025 3:42:19 PM

Testimony for EEP on 2/6/2025 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

#### Comments:

I strongly support HB242 - a long overdue measure to address the ticking environmental time bomb posed by the aging of lithium ev batteries. These represent not only a disposal problem, but an issue which discourages the purchase of evs, and therefore hinders our progress toward our renewable energy goals. However I am disappointed that this bill does not include funding for staff and expenses for the proposed commission. I hope that it will be amended to provide some funding to see that the job gets done properly.

Submitted on: 1/30/2025 1:31:18 PM

Testimony for EEP on 2/6/2025 9:00:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Jacqueline S. Ambrose	Individual	Support	Written Testimony Only

### Comments:

YES to - Establishes a working group within the Hawaii State Energy Office to make recommendations for the reuse and recycling of electric vehicle batteries.

Submitted on: 2/5/2025 8:56:19 PM

Testimony for EEP on 2/6/2025 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Tamra Hayden	Individual	Support	Written Testimony Only

### Comments:

This would be a huge step in the right direction. To get some of our youth involved should give us insight to the world they wish to live in.