SB686_FAV_CleanWaterAction_EmilyRanson.pdf
Uploaded by: Emily Ranson
Position: FAV

SB686 – Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)
Senate Education, Energy, and the Environment
February 18, 2025

Position: Favorable with Amendment

Dear Chair Feldman and Members of the Committee,

Clean Water Action supports SB686 to establish an extended producer responsibility program for batteries and battery-containing products.

As more and more of our electronic devices become portable, battery use has proliferated. Batteries pose unique risks when disposed of in the general waste stream – where they can cause fires, which can be particularly destructive in mixed municipal waste. Establishing a program to divert batteries from the waste stream has many co-benefits, including making trash safer and improving recovery.

For these reasons we urge a favorable report.

Best,

Emily Ranson
Chesapeake Regional Director
Clean Water Action
eranson@cleanwater.org

145 W Ostend Street
Suite 600
Baltimore, MD 21230

SB686 - EEE - FAV.pdf
Uploaded by: Nina Themelis
Position: FAV

BRANDON M. SCOTT
MAYOR

Office of Government Relations
88 State Circle
Annapolis, Maryland 21401

SB686

February 18, 2025

TO: Members of the Senate Energy, Education and the Environment Committee

FROM: Nina Themelis, Director of Mayor's Office of Government Relations

RE: **Senate Bill 686 - Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)**

POSITION: Support

Chair Feldman, Vice Chair Kagan, and Members of the Committee, please be advised that the Baltimore City Administration (BCA) **supports** Senate Bill (SB) 686

SB686 requires producers of batteries and battery–containing products to individually or as part of a battery stewardship organization to submit a battery stewardship plan to accept covered batteries and battery-containing products to the Department of the Environment for review and approval. The bill also restricts a producer of certain batteries or battery–containing products from selling, offering for sale, distributing, or importing certain batteries or battery–containing products without an approved plan. The bill establishes that a battery stewardship organization shall cover all costs of a battery stewardship program, including the costs to collect and process the covered batteries and battery-containing products as well as costs associated with public awareness and participation.

The City of Baltimore's Department of Public Works' (DPW) Less Waste, Better Baltimore plan advocates for extended producer responsibility initiatives to further waste diversion in Baltimore City. Currently, the City does not host their own battery recycling program and would benefit from the funding and support of the proposed battery EPR program to collect batteries at the 5 residential

recycling centers in the city. The bills requirement that the battery stewardship organization cover the cost of collecting the batteries as well as the public education for the program is critical, as access to funding for education and outreach limits DPW's ability to affect behavior change and divert waste.

Additionally, SB686 will improve access to battery recycling and increase safety for DPW crews that collect trash and recycling from our residents. In 2024 there were two separate incidents of battery-related fires from material collected from curbside recycling by DPW. Also, an estimated 5,000 fires occur annually at recycling facilities, and an increasing number of these fires are attributed to batteries. Diversion of batteries for recycling will improve safety conditions along the full stream of our recycling process from our laborers to those at the materials recovery facility.

Finally, Extended Producer Responsibility for Batteries and Battery-Containing Products will decrease contamination of our recycling stream and help Baltimore achieve the state-mandated 35% recycling rate. Our residential contamination rate of single stream volume was about 20% in 2024 and reducing that volume could save the City up to approximately $40,000 per year spent on contamination at the materials recovery facility.

The BCA remains committed to waste diversion efforts within the City, and across the state. For the above reasons, the BCA respectfully requests a favorable report for SB686.

2025.02.14_PSI Testimony_MD_SB_0686_Batteries.pdf
Uploaded by: Scott Cassel
Position: FAV

February 14, 2025

Senator Brian J. Feldman, Chair
Senator Cheryl C. Kagan, Vice Chair
Senate Education, Energy, and the Environment Committee
West Miller Senate Building, Room 2
11 Bladen Street
Annapolis, MD 21401

RE: SB 0686, Extended Producer Responsibility for Batteries and Battery–Containing Products

Dear Chair Feldman, Vice Chair Kagan, and Members of the Committee:

Thank you for the opportunity to submit testimony in **strong support** of SB 0686, which will establish a producer funded and managed stewardship program in Maryland for the collection and recycling of used primary, rechargeable, and medium-format batteries – a large majority of the batteries used by consumers today. SB 0686 will build on the State's existing battery recycling laws from the 1990's for mercuric oxide and rechargeable batteries by expanding the scope of covered batteries and making other program improvements based on lessons learned from 30 years of battery EPR implementation in the U.S.

Americans generate more than 3 billion used batteries each year, but just 15% of rechargeable batteries and an even smaller percentage of single-use batteries are recycled. In landfills, batteries can release hazardous materials like mercury and lead into the environment. By ensuring the proper collection and recycling of batteries, SB 0686 will prevent pollution.

Lithium-ion batteries, which are used in a growing number of products, have sparked fires in trucks and at recycling facilities that have caused millions of dollars in damage, worker injuries, and tragic deaths. SB 0686 would ensure sustainable funding for safe collection and recycling processes that reduce the incidence of fires, which increase insurance rates for businesses, especially at MRFs, transfer stations, and other solid waste management facilities.

Batteries also contain valuable materials such as steel, manganese, and zinc that are mined using energy-intensive processes that emit greenhouse gases. SB 0686 will ensure recovery of these valuable resources for use as

feedstock in new batteries and other products, thereby reducing the need for mining and GHG associated emissions. SB 0686 would also benefit battery recyclers and manufacturers by providing a continuous flow of high-quality material that allows for long-term investments in local recycling and manufacturing facilities, thereby creating jobs.

Sustainable funding provided through SB 0686 will also reduce the financial burden on local governments that, in the absence of a stewardship program, would bear the financial and managerial costs of battery management.

SB 0686 contains many of the best practices found in all successful stewardship laws, including:

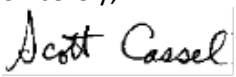
- The requirement to set minimum convenience standards to ensure equal access to the program statewide;
- Performance goals for collection quantities, recycling efficiency, and public awareness;
- Requirements to renew the plan every five years, which allows for improvement based on lessons learned from implementation and to adapt to changes as the program matures;
- Education and outreach requirements;
- Requirement that producers finance the program through cost-internalized mechanisms, rather than consumer fees;
- Annual reporting and transparency;
- Financial compensation to local government collection sites for the cost of collection;
- Funding for the State to oversee and enforce the law;
- Penalties for noncompliance with the law; and
- An eco-modulated fee structure to encourage product design that reduces environmental impacts.

Since 2014, Vermont, the District of Columbia, California, Washington, and Illinois have all enacted battery extended producer responsibility (EPR) laws similar to SB 0686. Recognizing the importance of battery management for pollution prevention, waste reduction, and a circular economy, many other states are pursuing similar legislation.

The Product Stewardship Institute (PSI) is a national policy expert and consulting nonprofit that pioneered product stewardship in the United States along with our members – hundreds of state and local government officials, including those in Maryland– and our partners from companies, environmental groups, academia, and international governments. Since 2000, PSI's facilitated dialogues, research, pilot projects, and policy models have helped shape most of the 141 EPR laws enacted for 20 industry sectors.

I respectfully urge you to support **SB 0686** for the financial, environmental and safety interests of Maryland's economy and communities. If you have any questions, please feel free to contact me at (617) 236-4822, or Scott@ProductStewardship.US.

Sincerely,



Scott Cassel
Chief Executive Officer/Founder

Battery Stewardship Support Testimony - SB686 (2-1
Uploaded by: Tom Taylor
Position: FAV

February 14, 2025

Testimony in Support of SB686, Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)

Position: Favorable

Dear Chair Feldman and Members of the Education, Energy, and the Environment Committee,

As a community volunteer actively engaged in environmental sustainability efforts, I am urging support for this battery stewardship legislation.

Batteries are becoming increasingly important in efforts to meet the need for clean and renewable energy. Good stewardship and producer responsibility are essential to meeting this need in a responsible way that obtains maximum benefit of battery power, ensures sustainable use over the entire life cycle of batteries, and minimizes any additional waste being added to our already overburdened waste stream.

Good battery stewardship will support these goals.

I urge a favorable vote on SB686.

Sincerely,

Tom Taylor
11-G Laurel Hill Road
Greenbelt, MD 20770
301-513-9524

SB0686-EEE_MACo_SWA.pdf
Uploaded by: Dominic Butchko
Position: FWA

MARYLAND Association of COUNTIES

Senate Bill 686

Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)

MACo Position: **SUPPORT WITH AMENDMENTS**

To: Education, Energy, and the Environment Committee

Date: February 18, 2025

From: Dominic J. Butchko

The Maryland Association of Counties (MACo) **SUPPORTS** SB 686 **WITH AMENDMENTS**. This bill creates a framework to establish more robust battery recycling infrastructure in Maryland, recognizing the significant safety and health concerns of those items remaining principally landfill material.

As policy makers continue the push toward electrification, Maryland residents will be purchasing an increasing number of electronics, most of those powered by some type of battery. Already, most household deceives are powered by batteries and when they reach the end of their lifespan, they are often disposed of, potentially creating dangerous situations for communities and county-operated infrastructure. SB 686 seeks to reduce waste and make communities safer by establishing a producer-driven entity focused on either creating or supporting existing battery recycling infrastructure. Importantly, counties that function as both collectors and recyclers will be eligible to receive reimbursement for both services, extending the capacity of local programs and providing more flexibility to local tax dollars.

Counties thank both the advocates and the sponsors for proposing a plan to strengthen battery recycling and retain local autonomy. Counties offer the following amendment to ensure that facilities that collect and recycle batteries have adequate fire suppression technology installed:

> On page 11, after line 29, insert,
>
> **"(11) ESTABLISH REQUIREMENTS FOR THE INSTALLATION OF ADEQUATE FIRE SUPPRESSION TECHNOLOGY WITHIN THE APPROPRIATE POINTS OF THE BATTERY RECYCLING STREAM, INCLUDING AT COLLECTION AND OTHER RELEVANT FACILITIES.".**

SB 686 marks an important step in fortifying Maryland's battery recycling infrastructure. For this reason, MACo urges the Committee to issue SB 686 a **FAVORABLE WITH AMENDMENTS** report.

Ext. Comm. - Testimony - 2025 - Maryland SB 686 -
Uploaded by: Joshua Fisher
Position: FWA

February 13, 2025

The Honorable Brian Feldman
Chair, House Education, Energy, and the Environment Committee
Miller Senate Office Building
Annapolis, Maryland 21401

RE: SB 686 - Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)
Position: Favorable with Amendments

Chair Feldman:

On behalf of the Alliance for Automotive Innovation (Auto Innovators)[1], I am writing to provide the auto industry's perspective on SB 686 and to request an amendment. Our concern with SB 686, pertains to the potential impact it could have on batteries contained in vehicles other than the lead-acid vehicle battery. Beyond the powertrain battery in electric vehicles and the lead-acid battery many are aware of, vehicles also have smaller batteries in several other locations to keep various systems running. Similar legislation, such as the Illinois Portable and Medium-Format Battery Stewardship Act, (Public Act 103-1033), has plainly excluded batteries from the definition of a "covered battery" in vehicular uses.

For clarity, we would respectfully request the consideration of an amendment to exclude batteries used in vehicles like the Illinois law.

Autos are the most recycled consumer product, with 95% of retired passenger vehicles processed for recycling every year. From floor mats and fluids to aluminum and steel, approximately 86% of a car's material content is recycled, reused, or used for energy recovery. With respect to autos, there is an entire scrappage industry with the purpose of taking apart vehicles for their components that can be reused, resold, or recycled. Automakers rely on auto recyclers to remove parts that can be reused or remanufactured for use in other vehicles. These include engines, transmissions, doors, bumpers, starters, alternators, and water pumps. Other parts, like batteries, catalytic converters, tires and some plastics, are removed and recycled into new products. Adding vehicles to the requirements of SB 686 will disrupt the current ecosystem of vehicle recycling which is working well.

[1] From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – Auto Innovators represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. https://www.autosinnovate.org/

For these reasons, we request the following amendment:

(2) “COVERED BATTERY” DOES NOT INCLUDE:
(I) ANY MEDICAL DEVICE, PROVIDED THAT THE MEDICAL DEVICE IS NOT DESIGNED AND MARKETED FOR SALE OR RESALE PRINCIPALLY TO CONSUMERS FOR PERSONAL USE; OR
(II) A LARGE LEAD ACID BATTERY., OR
(III) A BATTERY THAT IS A COMPONENT OF A MOTOR VEHICLE OR INTENDED FOR USE EXCLUSIVELY IN MOTOR VEHICLES.

Thank you in advance for your consideration of our views. For more information, please contact our local representative, Bill Kress, at (410) 375-8548.

Respectfully submitted,

Josh Fisher
Senior Director, State Government Affairs
Alliance for Automotive Innovation

Maryland Recycling Network- SB0686 Favorable With
Uploaded by: Kitty McIlroy
Position: FWA

February 14, 2025

To: Maryland Senate Education, Energy and Environment Committee

Re: SB0686: Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)

Favorable with Amendment

As current President of Maryland Recycling Network (MRN), I am writing to provide favorable with amendment support of SB0686. I bring my experience managing electronics and battery recycling contracts over the last 11 years at the Northeast Maryland Waste Disposal Authority.

I also bring my experience as a Member of The Commission to Advance Lithium-Ion Battery Safety in Maryland (House Bill 468/Ch. 950, 2024 and SB 532/Ch. 949, 2024) and two of its Subcommittees (2024-Present):

1) The Prevent, Detect and Suppress Lithium-Ion Fires at Recycling Facilities Subcommittee; and

2) The Reusing, Recycling and Decommissioning Lithium-Ion Batteries Subcommittee;

I am not speaking on behalf of the Authority or the Commission.

Maryland Recycling Network members include public recycling managers, private sector and non-profit recyclers and individuals who support recycling. We promote sustainable reduction, reuse and recycling (the 3 "R's") of materials otherwise destined for disposal and the purchase of products made with recycled material content. We achieve these goals through education programs, advocacy activities to affect public policy, technical assistance efforts, and the development of markets to purchase recycled materials and manufacture products with recycled content.

We have direct experience operating recycling and composting programs in the private sector and municipal government level. We know the ins and outs of recycling in Maryland. Our experience informs our comments.

Maryland Recycling Network
c/o Mariner Management • PO Box 1640 • Columbia, MD 21044
Phone: (443) 741-8740 • www.MarylandRecyclingNetwork.org

We thank Senator Augustine for sponsoring this bill.

Most end-of-life battery collection and recycling programs come at a cost to local government and other collectors, thus widespread year-round, cost free at point of drop-off programs for battery recycling are very limited. There is no standardized statewide program set up to educate the public or fund a network of sites that accept batteries from the public at no cost. Thus, batteries often end up in the wrong collection streams, causing fires.

Fires are already frequently occurring in public and private solid waste and recycling collection sites, trucks and recycling facilities in Maryland.

The Commission to Advance Lithium-Ion Battery Safety in Maryland has been charged with addressing these issues comprehensively. Thus, MRN requests that the Commission is given time to finish its research and recommendations and deliver the final report, including policy best practices, due December 2025.

MRN looks forward to reading the final report results and working with Senator Augustine on creating the best model possible and creating a comprehensive solution for the State of Maryland.

Sincerely,

Kitty McIlroy
President
Maryland Recycling Network

The Maryland Recycling Network stands ready to serve as a sounding board and resource for legislators and others interested in pursuing our mission. Please do not hesitate to contact MRN via email phoustle@marylandrecyclingnetwork.org, phone 301-725-2508 or mail - MRN, PO Box 1640, Columbia MD 21044 if you have any questions or would like additional information regarding the above. We look forward to working with you to improve Maryland's recycling programs and thank you for your consideration and support.

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Background

Per additional recent experience:

- Testified before the U.S. Senate, Environment and Public Works Committee, on *"Improving Capacity for Critical Mineral Recovery through Electronic Waste Recycling and Reuse"* (July 2023);

- Co-Chair of the Solid Waste Association of North America's (SWANA) Lithium-Ion Battery Advocacy & Public Policy Sub-Workgroup (July 2024-Present); and
    - Member of the SWANA Lithium-Ion Battery Communications & Outreach Sub-Workgroup (July 2024-Present), and
    - Member of the SWANA Lithium-Ion Battery Facility & Vehicle Safety Sub-Workgroup (July 2024-Present);

- Advisor at the U.S. EPA In-Person Working Session focused on Mid-Format Consumer Battery Labeling and Collection (January 2025); and

Please see the background information presented below for further consideration:

Lithium-ion battery management is one of the most pressing issues, if not the most pressing issue, in the solid waste management and recycling industry right now.

The solid waste management sector is already consistently ranked as one of the most dangerous, deadliest labor sectors in the United States:

"Waste and recycling collection was fourth deadliest occupation in 2023…The latest Bureau of Labor Statistics data showed an increase in the rate of fatalities for the refuse and recyclable materials collection occupation. The number of fatalities in MRFs also increased… Waste and recycling jobs remain a potentially hazardous occupation, despite ongoing efforts to get out of the top 10 deadliest job category by investing in more safety training and technology for vehicles and facilities. The only occupations that had higher fatality rates in 2023 were logging, fishing and hunting and roofing…Solid Waste Association of North America CEO Amy Lestition Burke said in a statement that the organization was "very disappointed" in the results. "This data reinforces the need for safety improvements. The individuals who collect waste and recycling are making communities livable and sustainable. We all have a role to play to protect these everyday heroes.. "The increase in solid waste collection worker fatalities is concerning, and occurred from coast to coast and at small haulers, the large publicly traded companies, and local governments," said David Biderman, a safety consultant and former SWANA CEO,

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in an emailed statement that also noted this was one of the highest rates in years. “There are a wide variety of contributing factors to these tragic incidents. We know what these factors are, and need to address them.”[1]

“Solid waste collection workers are still on the list of the ten most dangerous jobs. From the truck itself to the collected garbage (***lithium-ion batteries,*** syringes, glass, and chemicals: MSW has a lot of unexpected hazards in store), from distractions like mobile phones to bad weather conditions, from pedestrians to other drivers: The sources of danger are manifold. And more waste means more risks… Safety campaigns and awareness have an effect…SWANA will continue leading industry efforts to reduce them even further and fulfill our Strategic Plan goal of getting solid waste collection workers off the list of the ten most dangerous jobs.”[2]

Due to the issues noted above, The Commission to Advance Lithium-Ion Battery Safety in Maryland (the Commission) was established to make legislative, regulatory, programmatic, and other recommendations regarding:

- Best practices, standards, and guidelines
    - (1) to prevent, detect, and suppress lithium-ion battery fires in consumer, transportation applications, and utility applications, with review and consideration of the National Fire Prevention 855 Standards for Grid Scale Storage and Safety;
    - (2) to prevent, detect, and suppress lithium-ion fires at recycling facilities;
    - (3) for reusing, recycling, and decommissioning lithium-ion batteries;
- The viability of extended producer responsibility for lithium-ion batteries;
- Training, education, and other information to better inform the public and first responders regarding lithium-ion battery safety; and
- Any other global issues the Commission may consider useful for enhancing the safety and reuse of batteries in the State.

The Commission began identifying and tracking battery safety and extended producer responsibility policies that would be relevant to the Commission’s objectives.

The four subcommittees (listed below) have been working to identify potential risks associated with lithium-ion battery applications relevant to their subcommittees, compiling existing literature and best practices, and identifying experts that can assist the

[1] https://www.wastedive.com/news/waste-recycling-worker-fatality-rate-2024/735975/?utm_source=Sailthru&utm_medium=email&utm_campaign=Newsletter%20Weekly%20Roundup:%20Waste%20Dive:%20Daily%20Dive%2012-21-2024&utm_term=Waste%20Dive%20Weekender

[2] Workplace saftey: Getting waste collection off the list of the most dangerous jobs | WMW

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Commission in its mission. Subcommittees are only meant to assist the Commission by providing recommendations and do not have the authority to make decisions on behalf of the Commission.

The Consumer and Transportation Applications Subcommittee is currently researching best practices and policies related to battery powered micromobility devices and vehicles powered by vehicle traction batteries. The Subcommittee is planning to receive a briefing from subject matter experts at Tesla on vehicle battery safety and first responder information.

The Utility Applications, with review and consideration of NFPA 855 Standards for Grid Scale Storage and Safety Subcommittee is reviewing an investigation published by Underwriters Laboratory's Fire Safety Research Institute on a battery energy storage system explosion that took place in 2019.

The Prevent, Detect and Suppress Lithium-Ion Fires at Recycling Facilities Subcommittee is working on collecting information on public awareness campaigns associated with promoting the responsible and safe disposal of lithium-ion batteries. The Subcommittee visited one of WM's facilities in December 2024 to build a stronger understanding of the risks of improperly disposed of batteries. The facility tour helped Commission members understand technology currently in use to prevent facility fires.

The Reusing, Recycling and Decommissioning Lithium-Ion Batteries Subcommittee is working to obtain expert speakers on battery second life and recycling to present to the Subcommittee.

In summary, the Committee has been attending presentations held by various experts across the battery lifecycle, and will need the remainder of 2025 to consolidate this information and present it in a set of best practice recommendations in its Final Report, due in December 2025.

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SWANA Testimony SB0686_Favorable with Amendments_F
Uploaded by: Kristyn Oldendorf
Position: FWA

SWANA
SOLID WASTE ASSOCIATION OF NORTH AMERICA

February 14, 2025

To: Maryland Senate Education, Energy and Environment Committee

Re: SB0686: Environment - Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)

Favorable with Amendment

The Solid Waste Association of North America (SWANA) appreciates the opportunity to support **SB0686**. SWANA is an organization of 10,000 public and private sector professionals committed to advancing from solid waste management to resource management through a shared emphasis on education, advocacy, and research. Our members include the individuals collecting and transferring materials, running recycling facilities, managing landfills, providing residential recycling services and outreach, and overseeing solid waste departments, among many other job functions throughout the industry.

SWANA's first strategic goal is to make the industry safer, and our strategic plan specifically includes the need to address lithium-ion batteries, as they are a growing safety risk for workers in the industry. Fires caused by lithium-ion batteries have been increasingly common as consumers mistakenly discard a variety of electronics in household trash or recycling. The SWANA Lithium-Ion Battery Workgroup is coordinating on creating resources focused on safety, advocacy, and consumer-facing education. SB0686 will help mitigate this risk by allowing consumers to have options for proper recycling.

In January 2025, SWANA and the National Waste & Recycling Association (NWRA) released a joint policy statement on the critical issue of proper lithium-ion battery disposal and the threat to the waste and resource management industry (https://swana.org/news/swana-news-archive/article/2025/01/14/NWRA-and-SWANA-Partner-to-Address-Lithium-Ion-Battery-Disposal-Challenges). In addition, SWANA and UL Standards & Engagement published an op-ed citing the need for proper battery collection and recycling (https://www.recyclingtoday.com/news/battery-fires-threaten-waste-management-workforce-clean-energy-transition/).

Municipalities often bear the cost of collecting and disposing of batteries. Many of SWANA's public sector members often speak of the challenges of the increasing cost obligations to manage their waste and recycling operations. A county or city may not be able to provide convenient and accessible battery recycling options to residents within their limited budgets.

The Commission to Advance Lithium-Ion Battery Safety in Maryland (House Bill 468/Ch. 950, 2024 and SB 532/Ch. 949, 2024) is currently working on recommendations to comprehensively address the challenges of lithium-ion battery collection, recycling, and safety in Maryland. SWANA recommends that SB0686 recognize the work of the Commission, give the Commission time to complete its final report, which is due December 2025 and will include policy best practices, and that it incorporate the recommendations of that report.

8484 Georgia Avenue
Suite 230
Silver Spring MD 20910

P 301-585-2898
SWANA.org

If you have any questions about these comments, or about SWANA, please contact Kristyn Oldendorf, SWANA's Director of Public Policy, at koldendorf@swana.org or 240-494-2237.

Thank you for the opportunity to support this bill and for your consideration.

Sincerely,

Kristyn Oldendorf

Kristyn Oldendorf
Senior Director of Public Policy and Communications
Solid Waste Association of North America (SWANA)

8484 Georgia Avenue
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Redwood Materials Testimony SB 0686 (2).pdf
Uploaded by: Ashley Seaward
Position: UNF

REDWOOD MATERIALS

February 14, 2025

Dear Senator Augustine and members of Education, Energy, and the Environment Committee,

We are reaching out with urgent concern over **SB 0686, Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act).** We support the intent of this legislation– to enhance the collection and recycling of end-of-life batteries, prevent them from ending up in our waste streams and landfills, and ensure the recovery of critical minerals and metals they contain – **but we must oppose this bill unless amended.**

As currently drafted, the bill risks stifling innovative collection methods and creating a monopoly by limiting battery collection to third-party entities that do not actually recycle what they collect. We advocate for a stewardship model that not only upholds the proposed collection framework but also robustly integrates and supports both Maryland recyclers and America's domestic battery recycling industry.

At Redwood, we are building the first U.S.-based closed-loop supply chain for lithium-ion batteries, which involves the collection, recycling, and re-manufacturing of batteries into critical components like cathode materials. Our efforts are designed to support Maryland and the nation's transition to sustainable energy and accelerate electric vehicle adoption, achieving recycling rates above 95% and substantially reducing the carbon footprint and cost of batteries.

We are actively innovating processes that drastically reduce the environmental impact of battery material production and enhance our national capabilities in managing end-of-life batteries on a large scale.

Key Achievements:

- Redwood's facility is the **United States' first nickel "mine" and only commercial-scale lithium source to come online in decades**. Unlike traditional mining projects that often take over a decade to become operational, we built and activated our facility in less than a quarter of the time.
- **Energy and Resource Efficiency:** Compared to traditional methods of processing mined ore into battery-grade materials, our approach is significantly more sustainable. Redwood uses 80% less energy, generates 70% less CO2 emissions, and requires 80% less water, setting new standards in resource efficiency. Additionally, nothing goes to landfill, and all processed water is recycled (except for basic sanitary waste).
- **The most sustainable recycling process:** According to an independent lifecycle analysis by Stanford University, our process achieves at least 40% fewer emissions than other recyclers. What's more—it's scalable. We can process over 40,000 metric tons (about 15-20 GWh) annually and are expanding by the day.

In line with the nation's clean energy ambitions –supported by a domestic battery supply chain— effective recycling policies can champion environmental stewardship and public safety while capturing and prioritizing necessary recycled feedstock for domestic battery production. Redwood Materials contributes to these goals by offering free, convenient, and widely accessible collection pathways for unwanted consumer batteries nationwide. Unlike manufacturers, we do not produce batteries but play a critical role in their proper management and eventual recycling. In addition to offering direct collection pathways to consumers, specialized battery recyclers like Redwood are working across the materials supply chain by partnering with electronic waste and metal recyclers to properly manage and recycle the valuable battery materials they collect.

An expanded EPR program as proposed should harness what the private sector is already achieving in this space while also promoting increased collection via the stewardship model. Collectively, we are not only capturing unwanted end-of-life batteries, but in turn, refining and remanufacturing them into battery materials to support American battery and automotive manufacturers in meeting domestic recycled content requirements. This crucial support will be hindered if recyclers like Redwood are limited in their ability to directly acquire feedstock through various, mutually beneficial channels, and in partnership with local recyclers.

Stewardship organizations and recyclers are not mutually exclusive, and we are advocating for a model that captures the reach and expertise of both while also banning the landfilling of batteries, encourages consumer education, and increases collection pathways. Given the immense scope of the challenge of uncollected or improperly discarded batteries posing public and environmental health and safety risks— existing and future collection programs will only complement the collection efforts required by SB 0686.

The provisions of SB 0686, should foster, not hinder, the continuation and expansion of existing and future battery collection efforts, whether these are conducted under a stewardship program or directly. We, therefore, please ask that you consider our proposed amendments to this bill, below. We strongly believe that the adoption of these amendments will lead to greater battery recovery rates throughout the state and improved safety for all.

Our proposed amendments include:

1. **Define "Specialized Battery Recycler" and “Electronic Waste Recycler” and Require Utilization of "Specialized Battery Recyclers" for End-of-Life Management of Batteries**

To embody the complete spectrum of e-waste and end-of-life battery management, this bill should define "specialized battery recyclers" and "electronic waste recyclers". This ensures that existing e-waste recyclers and full-service or “specialized” battery recyclers, are formally acknowledged within the bill, securing their role in advancing state recycling goals.

Requiring battery stewardship organizations to work with a specialized battery recyclers for the end-of-life management ensures that batteries will be managed responsibly and used to support a domestic, closed loop battery supply chain by recovering valuable materials, reducing reliance on foreign sources, lowering clean energy costs, and supporting sustainability goals.

2. **Allow Specialized Battery Recyclers and Electronic Waste Recyclers to Collect Outside of a Battery Stewardship Organization and Maintain Inventory of the Batteries They Collect**

Recyclers should be allowed to collect batteries from consumers and maintain inventory of those batteries if they are paying for collection and transportation and provide necessary data to the state. This bill does not provide the clarity needed for recyclers to continue collection and maintain inventory. By enabling recyclers to provide direct pathways to consumers, we facilitate not just collection but also more streamlined and efficient recycling of batteries. This approach enhances consumer convenience, increases recycling rates, and ensures safety and environmental compliance, all while encouraging the proposed stewardship program.

3. **Provide Retailers with Choice in Collection Methods**

Retailers should be able to partner directly with specialized battery recyclers or electronic waste recyclers rather than being limited to battery stewardship organizations. This flexibility would increase collection points, encourage innovation in recycling logistics, and improve convenience for consumers. By tailoring collection efforts to their business models, retailers could boost participation and reduce reliance on stewardship organizations.

4. **Do Not Limit Battery Stewardship Organizations to Only 501c3 Non-Profits**

Battery stewardship organizations should not be limited to only non-profit organizations. Limiting to non-profit organizations for the management of end-of-life batteries can hinder competition, stifle innovation, and limit the overall effectiveness of the program. By allowing for a diverse set of battery producer responsibility organizations (both for-profit and non-profit) that represent multiple producers can help build a more reliant recycling system through increased participation and investment as well as ensures that the program does not rely too heavily on a limited pool of organizations.

5. **Exclude Medium-Format Batteries from This Bill**

Medium-format batteries pose unique safety and infrastructure challenges. Managing them separately from small-format batteries allows for clearer policies, industry-specific solutions, and safer, more effective recycling. Excluding these batteries from the bill aligns with existing industry practices and avoids unnecessary complexity.

We urge you to amend SB 0686 to include these crucial additions, aligning the bill with the realities of modern end-of-life battery management, evolving recycling technologies and collection approaches, while bolstering national clean energy and recycling targets.

Sincerely,

Ashley Seaward
Manager of State Policy & Government Relations
ashley.seaward@redwoodmaterials.com

REDWOOD MATERIALS

SB 686
Uploaded by: Ashlie Bagwell
Position: INFO

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TESTIMONY REGARDING SB686
Being heard by the Maryland Senate Committee on Education, Energy, and the Environment
On Tuesday, February 18, 2025 at 1:00 PM

Dear Chairman Feldman, Vice Chairman Kagan, and Members of the Committee,

Thank you for the opportunity to provide these comments seeking a minor amendment to SB686, Extended Producer Responsibility from Batteries and Battery-Containing Products (Battery Stewardship Act). Tesla's mission is to accelerate the transition to sustainable energy and transportation and a key part of that mission is to ensure Tesla's batteries are reused and recycled. We have worked with legislators across the country to develop battery recycling programs specific to electric vehicle (EV) and energy storage system batteries and would certainly be interested in working with this committee on a similar effort in the future.

Unlike those EV battery efforts, SB686 is focused on other batteries including smaller and medium format batteries. The bill also specifically calls out large lead acid batteries, such as those typically found in vehicles providing low voltage power, as not being included. Maryland already has a regulatory framework in place for recycling those batteries. There has been a lot of advances in low voltage battery technology in recent years, and Tesla recently started to utilize lithium-ion batteries for low voltage power instead of lead acid. Given the size of these batteries, SB686 may inadvertently loop them into a regulatory scheme that does not make sense for them. Given the seemingly clear intent to focus on batteries outside of motor vehicles, Tesla suggests the below amendment to Part VI, 9-1738 (G)(2) that would clarify the bill language in ensure low voltage motor vehicle lithium-ion batteries are not under the scope of the bill.

(2) "COVERED BATTERY" DOES NOT INCLUDE:

(I) ANY MEDICAL DEVICE, PROVIDED THAT THE MEDICAL DEVICE IS NOT DESIGNED AND MARKETED FOR SALE OR RESALE PRINCIPALLY TO CONSUMERS FOR PERSONAL USE; ~~**OR**~~

(II) A LARGE LEAD ACID BATTERY~~.~~ **OR**

(III) AN AUTOMOTIVE BATTERY.

I apologize for not being able to be with you in person to share these comments but am available to speak with the committee as it moves forward.

Thank you for your consideration.

Sincerely,

Zachary Kahn
Senior Managing Policy Advisor
Tesla, Inc.

SB0686_LOI_NWRA_Env. - EPR Batteries & Battery-Con
Uploaded by: Drew Vetter
Position: INFO

Collect
Recycle
Innovate

National Waste
& Recycling Association℠

Senate Education, Energy, and the Environment Committee
February 18, 2025
Senate Bill 686 – *Environment – Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)*
LETTER OF INFORMATION

The Maryland chapter of the National Waste and Recycling Association (NWRA-MD) is a trade association representing the private solid waste industry in the State of Maryland. Its membership includes hauling and collection companies, processing and recycling facilities, transfer stations, and disposal facilities. NWRA-MD and its members submit this letter of information on Senate Bill 686.

NWRA-MD and its members support extended producer responsibility (EPR) for hard-to-manage items, including batteries. Batteries in the waste stream pose serious safety hazards for waste and recycling companies. Lithium-ion batteries, in particular, can spark fires when damaged or improperly disposed of, endangering workers and facilities. These fires are difficult to control and have caused millions of dollars in damages. Additionally, leaking batteries release toxic chemicals, creating environmental and health risks. Proper disposal through designated battery recycling programs is essential to prevent these dangers.

We supported *House Bill 468/Senate Bill 532* from the 2024 Legislative Session to create a Commission to Advance Lithium-Ion Battery Safety in Maryland. NWRA-MD was included in the membership of this Commission, and we have been actively engaged in discussions about how to better manage batteries in the waste stream and reduce fire hazards, which are particularly hazardous to our workers on hauling vehicles and in our facilities. The Commission has created a "Prevent, Detect and Suppress Fires at Recycling Facilities" subcommittee. As required under the bill, the Commission submitted an interim report in December 2024 on its progress so far. A final report is due on or before December 1, 2025. We expect the final report to contain recommendations on managing batteries in the waste stream. While we support EPR for batteries, we suggest waiting for the Commission's final report before adopting legislation on this topic may be prudent. Thank you for the opportunity to comment on this legislation.

For more information:
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410-244-7000

MDE SB686 INF.pdf
Uploaded by: Jeremy D. Baker
Position: INFO

The Maryland Department of the Environment
Secretary Serena McIlwain

SB 686
Extended Producer Responsibility for Batteries and Battery-Containing Products (Battery Stewardship Act)

Position:	Informational
Committee:	Education, Energy, and the Environment
Date:	February 18, 2025
From:	Leslie Gray, Government Relations Officer

The Maryland Department of the Environment (MDE) offers the following **INFORMATIONAL** testimony on SB 686.

Bill Summary
SB 686 establishes a Battery Stewardship program with an advisory council and a battery stewardship organization to oversee recycling and end-of-life management for covered batteries and battery-containing products. The proposed legislation would require any producer of the covered battery or battery-containing product to register with the battery stewardship organization and would not be permitted to sell in the state if not registered by July 1, 2027.

Position Rationale
Broadly, while MDE supports further diversion of batteries from landfills, the department would need additional resources to implement the requirements of the bill. To ease program implementation, MDE would like to offer suggestions to provide further clarity. MDE anticipates that the current definition of "Battery-Containing Product," which applies to products containing or packaged with two or more covered batteries, will significantly limit the scope of the law, and will not be a major means to divert batteries from landfills. MDE recommends revising the definition to apply to products containing one or more covered batteries.

To provide clarity, MDE also recommends specifying a size or weight threshold for "large lead acid battery," and defining the terms "rechargeable," and "recycling efficiency rates."

MDE hopes that this information regarding SB 686 is helpful and is available to answer any questions.

Contact: Leslie Gray, Government Relations Officer
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