

**FINAL**

**The Commission to Advance Lithium-Ion Battery Safety in Maryland; SB532 /CH950  
Friday, November 14, 2025, 10:00am – 12:00pm**

**Virtual Only**

Google Meet joining info

Video call link: <https://meet.google.com/hnv-qjyi-yjv>

Or dial: (US) +1 937-697-1271 PIN: 131 804 947#

More phone numbers: <https://tel.meet/hnv-qjyi-yjv?pin=2120952813691>

**Commission members attending the meeting virtually were marked present as follows:** Emil Nusbaum, Vincent Baker, David Black, Michael Cox, Garrett Fitzgerald, Haley Kotzker, Kitty McIlroy, Christopher Pilzer, Ginny Rogers, Justin Short and DeAndre Wilson.

**Commission members absent:** Taiwo Alo, Marc Boolish, Ivan Browning, Geoffrey Donahue, Christopher Neidhart, Nicholas Rodricks, and Robert Whittlesey.

Members of the public were in attendance.

**Staff in attendance:** Kenneth Bush and Penny Doty, MSP

**Presenters:** Chairman Emil Nusbaum – Draft Final Report Review and Updates

Roll call/attendance was completed by the Commission staff. The meeting was called to order at 10:07 a.m. by Chairman Emil Nusbaum. Chairman Nusbaum announced that a quorum had been reached as 10 out of the total 19 active Commission members were in attendance virtually at the time of roll call. Several members joined later and others dropped off due to conflicting obligations.

Chairman Nusbaum reported that he is working on soliciting/filling the vehicle propulsion battery manufacturer Commission seat that is currently vacant. Chair Nusbaum will provide the Commission an update regarding those efforts at a future meeting.

Chief Baker provided the Commission with a report summary of information he gathered from the Battery Safety Summit he attended. The summary included an overview of what he learned concerning battery safety development both on a technology front and policy front as well as best practices. Chief Bakers' overview can be briefly summarized as follows:

- ❖ Provided learning workshops related to chemistry, recycling and engineering. The subject of consumer apps and transportation was covered at length under engineering.
- ❖ Studies are finding that there is less chance of fire below 30% of charge.
- ❖ Shipping companies are not taking shipments of non-running used vehicles at this point due to risk and liability, but there is a huge demand for the product overseas.
- ❖ China manufacturing of micro-mobility devices, e-bikes and scooters require very rigorous product certifications. In mid-2026 those manufactured products will contain built-in alarms that will alert when the battery becomes unstable.
- ❖ Requirements/standards seem to be more robust than the USA for EVs and micro-mobility devices.
- ❖ There may be not much future for sodium batteries as the product doesn't measure up in respect to energy density and toxic gas release issues.

- ❖ Need to work with manufactures on increased standardization of batteries and plug-ins as the recycling value has plummeted and costs to decommission has skyrocketed. If efforts start today at warp speed, it will take another 10-15 years to catch up to the point of success.
- ❖ Chair Nusbaum provided a very informative presentation at the Summit and entertained a question and answer session afterwards for the participants.
- ❖ Recommended members take the opportunity to attend offered conferences covering the topic as it is very informative and worthwhile.

Chairman Nusbaum shared with the Commission an updated draft version of the Final Report (Draft Report Attached) that is due to the General Assembly by December 1, 2025. The Commission members discussed and recommended changes, updates, additions and format restructuring to the Report. Chairman Nusbaum simultaneously documented the recommendations via document notations for full-view by the Commission members. The discussions and report updates, recommendations and topic enhancements as presented/suggested by the Commission members can be summarized as follows:

- ❖ The Commission decided the executive summary was too long at the last meeting so a preamble was created and some of the recommendations were moved leaving the more concrete recommendations up front.
- ❖ Member McIlroy provided the Commission with a detailed overview of her additions to the report. The Commission member also provided additional recommendations and comments. The overview can be summarized as follows:
  - Public education – can be funded by EPR.
  - EPR should be able to fund the collection, processing and recycling of batteries involved in a fire event.
  - MDE cleanup would be founded by EPR.
  - Small and medium format batteries to be funded by EPR.
  - Small and medium devices could be covered under the State’s electronics law.
  - Certain states are looking to EPR to cover vapes.
  - Potentially ban single use vapes
  - Enabling authority has been given to agents like the BSO (Battery Stewardship Organization) to go after non-compliant manufacturers.
  - Manufacturers have been contacted. Programs like the BSO or PRO would work with our State as a liaison to communicate the new standards/requirements to manufacturers.
  - Member Short added that there is a flowchart of responsibility in the event a manufacturer does not respond to contact inquiries for which the next in line would be the seller and so forth until a responsible party can be enticed to participate in the assignment of assuming/accepting responsibility. Recommend model legislation to close that gap of imported batteries that aren’t part of BSO or PRO.
  - Example of model bills and legislation was included with specific mention of vape devices. Additionally, examples of vape model bills was included for consideration by the Legislature.
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  - Consider refundable deposit fee for vape devices.
  - Consider recommendation to expand EPR funding models to include training funds for MFRI. Chair Nusbaum will reach out to Member Boolish regarding this issue for his thoughts.
  - Include projected funding dollar amounts needed for MFRI to provide training, etc. in combination with designating where that pot of money will come from. Member Cox will talk with his constituents regarding the matter before additional language is included.

- Include in recommendations that micro-mobility devices must meet specific standards before being sold and adopt legislation similar to what New York has done. Also, consider expanding to include small and mid-size batteries that do not have similar/expansive model legislation in place at this time.
- Congress was considering a bill mandating that all batteries meet third party testing standards, but didn't become law. New York's legislation efforts only included micro-mobility devices.
- Include charging devices, not just batteries.
- Recommend standards to include/require correct labeling of batteries.
- Start efforts to standardize these batteries for enhanced safety, management repurposing and recycling. Member Short reported that ReMA is already working on requirements for the standardization of charging cables in EVs. Manufacturers are working on possibly standardizing EV batteries, but are still trying to figure out how to accomplish the goal.
- As mentioned previously in the meeting, the vacant seat from the vehicle propulsion battery manufacturer needs to be filled as their input is greatly needed. Chair Nusbaum is working on filling the vacant spot with a representative who will serve on more of a long-term basis scenario as the Commission has had company retention issues with past appointed members from this sector.
- Industry experts have reported that there is no replacement technology for lithium-ion batteries at this time or in the near future. Highlight in the report that we will be dealing with the waste stream of these batteries for the next 20 or 30 years at minimal.
- Note that other battery chemistries present the same risks as lithium-ion.
- Highlighting the challenges of proper disposal and recycling as there are significant costs associated with the action. Manufacturers are reporting that no amount of money will make an object more recyclable and profitable. Add to the EPR section.
- Member Short's organization has done a lot of great work in terms of promoting design for recycling which will be mentioned in the report.
- Encourage research and technology to gear towards increasing/enhancing product safety. On the design side, Member Short reported that the industry is exploring/working on production of different technologies with the goal of making them increasingly safe with increased energy density and cost effectiveness, but those efforts are about 10 years out.
- Batteries could be made to be more recyclable and recyclable at a lower cost. Additionally, batteries could be made more easily removeable lessening the removal process for shredding.
- For propulsion traction batteries, once producers are taxed with bearing the cost responsibility of such batteries at the end of life, perhaps they will be more motivated to drive a better design.
- The Commission reviewed the newly added conclusion section to the report and made comments and suggestions.
- The Commission was asked to review the Roster portion of the report to make sure all information is correct including, titles, professional designations, etc.
- Chair Nusbaum and members will continue to work on formatting and finalization of the report.
- An updated of the report will be distributed from the Chair to members for review prior to the next meeting.
- Possibly be a little more specific and reference/list other state model legislation that is in the works incorporating the most current language/topics/technology, thereby eliminating other not so current models that the State may want to disregard. This will show our legislators that other States are being proactive.
- Recommendations/resources were added for consideration when dealing with embedded batteries.
- Possibly add subsections within the report to make increasingly clear.

- The Commission agreed on recommending the General Assembly forgo any statewide requirements at this time for decommissioning of energy storage systems until the assigned work groups working on the initiative produce their finalized recommendations. This action will prevent cross streaming and conflicts of work already being addressed by other work groups.

Chairman Nusbaum entertained additional questions and comments from the Commission members regarding the updates and thanked the Subcommittee leaders and members for their hard work in compiling the recommendations for the Draft Report.

Emil Nusbaum will incorporate all the suggestions/recommendations and new input received from the members in the next Draft Report which will be presented at the next Commission meeting.

Chairman Nusbaum inquired whether there was any additional/remaining business the Commission wished to address, and upon hearing none, the meeting was adjourned at 11:08 a.m.

These meeting minutes were respectfully submitted by Penny L. Doty.