Testimony of Mr. David Howell

Director for Strategy

Battery Advocacy for Technology and Transformation Coalition (**BATT Coalition)**

Before the Subcommittee on Oversight and Investigations

U.S. House Committee on Energy & Commerce

May 21, 2025

INTRODUCTION

I am Dave Howell, Director of Strategy for the Battery Advocacy for Technology and Transformation Coalition (BATT Coalition). My professional background includes over 40 years of experience at the Department of Energy (including Oak Ridge National Laboratory) and the United States Air Force, planning and successfully executing complex research & development and manufacturing activities that include high-power/high-capacity battery research and manufacturing including critical minerals production and recycling.

The BATT Coalition is the voice for the U.S. domestic battery materials manufacturers working to establish, grow, and secure the domestic upstream manufacturing and recycling supply chain for lithium-based battery materials and components. The BATT Coalition supports the development and implementation of a comprehensive legislative and federal agency policy strategy that will maximize market incentives and trade protections necessary to grow this critical industry in the U.S. BATT Coalition member companies represent the battery upstream and recycling supply chain in extraction, synthesis, processing, and recycling to produce battery- grade and critical materials.

Our overall mission is to enable the domestic production of Li-ion battery materials, incentivize innovation to increase U.S. competitiveness and foster meaningful industrial partnerships. Through the BATT Coalition, our members provide a collective voice of battery materials processing and recycling

companies advocating for policy and regulatory goals that promote a long-term resilient domestic battery supply chain. BATT members actively engage in advocacy for relevant tax legislation, trade policy, and federal funding for technology commercialization. This is coupled with ongoing administration and agency advocacy to ensure favorable implementation of legislation and sustainable agency funding.

BACKGROUND

The domestic high-capacity battery supply chain is at a tipping point. The global lithium-based battery market is expected to grow by a factor of five to ten by 2030. Battery demand in the U.S. is expected to grow rapidly in the coming years in EV applications and a multitude of non-EV applications, such as in defense critical applications and in grid storage. High-capacity batteries, like Li-based batteries, are critical for defense power systems such as drones, soldiers carry batteries, and almost every major weapons system in DoD. These markets all utilize many of the same materials supply chains and typically only differ in cell design and format, which is why these markets are inherently interconnected. With no industrial base for commercial battery materials, there is no industrial base for DoD critical systems.

Policy actions in the 119th Congress are vital to building and protecting the domestic upstream battery materials supply chain. This is a critical area for U.S. energy dominance and innovation, as well as presents an urgent national security imperative to establish a strong supply chain free of Chinese influence. Failing to act in the short-term means ceding this market to China, who has already shown a willingness to embargo materials and technology to the U.S. that would undermine our economic and national security.

The main supply chain concerns exist in the upstream materials market - from materials extraction and recycling to material component production. China maintains an over 70% global market share of almost all battery materials from refined precursors to finished products such as cathodes and anodes. In addition, China controls well above 90% of the global market for some critical Li-ion

battery materials. China did not achieve this dominant market position by accident, but through large pre-competitive investments with state-sponsored control, unfair trade practices, price fixing behavior to stifle international competition, and questionable record on environmental and human rights standards.

In addition, Chinese state-backed investment continues to build infrastructure for current and future battery materials, regardless of material costs. This is in stark contrast to Western capital markets, where dips in mineral prices create difficulty in raising capital. For example, lithium prices have dropped from $60,000/tonne to $10,000/tonne in the last 24 months, which has stalled multiple North America projects. In contrast, Chinese firms continue to build factories based on projected future demand based on modeled costs around double what the market currently operates at.

BATT COALITION POLICY PRIORITIES

These are serious issues that must be addressed. Fortunately, Congress has an opportunity to act in 2025 to close these loopholes and provide the needed incentives and protections to grow a robust domestic battery materials supply chain as provisions of the 2017 Tax Cuts and Jobs Act (TCJA) expire at the end of 2025.

BATT members encourage Congress to pursue the following policy remedies to support a strong US supply chain for upstream and recycling of critical battery materials.

- **Tax Credit Repositioning and Alignment:** Increase 45X tax credit for electrode active materials from 10% to 25% and align 45X tax credits to require the same Foreign Entity of Concern (FEOC) restrictions and North American/Free Trade Agreement country sourcing requirements;
- **FEOC Enforcement:** Hill oversight to ensure FEOC Regulations are enforced, and that Original Equipment Manufacturer (OEMs) are strongly incentivized to use domestic battery materials;

- **Tariff Alignment:** Support inclusion of all lithium-based battery

  materials, components, and parts under Section 301 tariffs;

- **Sustainable Funding:** Support Federal agency funding to advance strategic funding solutions to support the upstream battery materials supply chain.

  The recently introduced bipartisan Critical Minerals and Manufacturing Security Act (CMMSA) by Dr. Raul Ruiz (D-CA) and Congressman Gabe Evans (R-CO) represents an important first step in establishing favorable tax policies to this critical domestic industry.

BATT COALITION ADVOCACY AND ACTIONS

Tax Policy: Current tax policies incentivize downstream cell and module production at an unequal rate to all segments of the supply chain– where cell and module receive a roughly 40-60% 45X credit while being able to get upstream materials from China. In comparison, the critical minerals and electrode active materials supply chain receive a 10% credit. The major difference in these two markets is that the cell production that exists in the U.S. today widely supplies only the light duty electric vehicle market, where the materials produced in the upstream supply chain are supplied to all lithium based battery markets. While we have made strides in establishing future production, we are still far off from not being dependent on the whims of the Chinese government for the domestic battery supply chain.

Maintaining the status quo with tax policy will only serve to accelerate the Chinese market dominance for battery materials. The U.S. has some of the best resources to produce lithium in the world, but China's market interfering behavior and our lack of adequate incentives and protection from these practices have left us without the ability to capitalize on that advantage.

Congress must act to remedy this imbalance, unleash American energy innovation, and protect our national security interests. First and foremost, Congress needs to protect the supply chain from

Chinese market manipulation by amending the Advanced Manufacturing Production Credit (45X) to include sourcing the sourcing requirements from the 30D Clean Vehicle Credit (30D) to align with the recently introduced CMMSA. These loopholes undermine domestic producers and threaten U.S. economic security, emphasizing the need for stricter eligibility criteria and enhanced support for the domestic battery supply chain**.** These credits should all be harmonized to ensure there are no loopholes that allow U.S. taxpayers to fund Chinese material market development. However, the details of how this law is passed will be very important. Creating a credit with overly restrictive FEOC language, or sunsetting this credit before supply chains have an opportunity to move in accordance with the policy (5 years) would create market barriers for our industry that would be difficult to overcome.

H.R. 3200: The 'Critical Minerals and Manufacturing Support Act'

On May 5, 2025, Congressman Raul Ruiz (D-36th CA) and Congressman Gabe Evans (R-8th CO) introduced the H.R. 3200 'Critical Minerals and Manufacturing Support Act (CMMA)' a Bipartisan House Bill focused on securing a domestic battery critical mineral and processing supply chain.

CMMA amends the Section 45X Credit to better incentivize domestic production necessary for a robust and reliable American upstream battery materials supply chain. As currently designed, the 45X Credit fails to provide adequate incentives and protections necessary to spur a thriving domestic upstream battery materials market. Currently, 45X for the battery materials market does not contain restrictions on material sourcing which allows companies to source materials from Foreign Entities of Concern countries, like China, while still being able to access the credit. This lack of protection is a national security issue and means 45X fails to actually incentivize the development of domestic supply chains for key technologies as it was intended to do. The lack of restrictions on FEOCs allows companies owned and controlled by foreign adversaries to gain access to tax incentives even as they flood the market for critical battery materials and get generous incentives from their respective governments. This ultimately weakens the ability of the United States to build out a domestic critical

materials supply chain.

Furthermore, with regards to battery materials and components, the incentives in 45X for domestic critical material producers are far less than the incentives for producers the midstream and downstream supply chain. The CMMA rectifies both the issues of Foreign Entities of Concern and the insufficient incentives for critical material producers by including strong sourcing requirements and FEOC restrictions for the domestic battery supply chain and increasing the incentive from 10 to 25 percent for upstream producers of domestic critical minerals and materials. Specifically, CMMA would:

- Increase Section 45X Advanced Manufacturing Production Tax Credit for battery electrode active material production to 25% of production costs and includes the cost of raw materials in electrode active materials production costs.
- Include FEOC restrictions to the 45X Credit for battery components and materials to prohibit FEOCs from accessing U.S. government tax credits;
- Add North American/FTA material sourcing requirements to the eligibility rules for 45X Credits for battery components and materials.
- Modifies electrode active material definition to include (1) electrode active precursor materials used in the production of cathode and anode materials, (2) binders, (3) solid-state electrolytes, and (4) adds "Silicon which is silicon or silicon composite used as an electrode active material in battery anode'' as applicable critical material.

Increasing the 45X incentive to 25% would more closely align these materials with the 45X incentives for battery module production, although the proposed tax credit for electroactive materials are still well below the 45X tax credit for cell production. In addition, all of these supply chains serve dual use markets, so these incentives should have the direct impact of lessening the dependence of the DoD on Chinese materials markets.

In addition to these critical tax policy changes, BATT also strongly encourages action on additional policy and appropriations measures that will support the build out of a domestic critical materials supply chain. Specifically, we encourage Congress to work to develop a comprehensive strategic plan for the Department of Energy(DOE) and the Department of Defense (DOD) to achieve a resilient domestic battery manufacturing industry and ecosystem:

- **DOE IIJA Section 40207 Battery Materials Processing and Battery Manufacturing & Recycling Program:** Section 40207 provided DOE with $6.0 Billion to support competitive cost-shared grants aimed at building, retooling, or expanding manufacturing of batteries, battery components (such as cathodes, anodes, and electrolytes), battery materials refining and processing, and establishing recycling facilities to ensure that the United States has a viable domestic manufacturing and recycling capability to support a North American battery supply chain. Execution of this critical Federal support is critical to continue the progress of establishing a domestic battery and materials supply chain. These cost-shared grants, attract significant private sector funding (for every $1 of Federal funds spent the private sector matches more than $2) to establish the large-scale manufacturing and production facilities needed to compete with global competitors. The BATT Coalition advocates that Congress continue to support full funding and timely execution of this initiative. Many of these projects are not currently able to invoice the DOE due to some technicality during the new administration's review process. We encourage Congress to work with the administration to communicate review timelines for companies and accelerate the review for critical minerals projects.

- **DOE Loan Program Office funding:** LPO provides loans and loan guarantees available to help finance large-scale domestic energy and transportation manufacturing projects with industry. While significant capital is available for innovative energy and advanced transportation technologies, many domestic firms can still lack access to adequate debt capital. LPO bridges this gap by providing access to needed loans and loan guarantees when private lenders cannot or will

not until a given technology has reached full market acceptance. The BATT Coalition advocates that Congress continue to support full funding and timely execution of the DOE loan program. In addition, we advocate that LPO prioritize applications that support critical materials (including refined products) production.

- **National Defense Authorization Act (NDAA):** Include language in the NDAA Act to include sourcing requirements to incentivize procurement from non-Chinese sources.

- **Defense Production Act (DPA):** Include funding for the DPA Title III specific to the battery supply chain. Contrary to the light duty vehicle market, cell production in DoD is an area that struggles to meet economic viability due to the uncertain demand signal from DoD, and funding cell production in DPA Title III or IBAS would be greatly beneficial to this market.

- **Critical Materials Scale-Up:** Establish programs within the Agency's, including the Department of Defense (DOD) and the Department of Energy (DOE), to support manufacturing scale-up, address supply chain concerns, provide opportunity for a continuum of support for U.S. entities through technology, manufacturing, and commercialization readiness levels.

- **Federal Agency Strategy:** Establish a DOE and DOD Battery Joint Implementation Team to develop crosscutting initiatives and coordinate individual program office efforts to achieve strategic plan goals in critical minerals and materials.

- **Sustainable Funding:** Coordinate Federal Agency funding and initiatives to support innovation and advance strategic funding solutions to support the upstream battery materials supply chain. Specifically, the BATT Coalition advocates for DOE to continue robust funding support for Science and Innovation but also establish programs to (1) support manufacturing scale-up, (2)

address supply chain concerns, and (3) provide opportunity for a continuum of support for U.S. entities, linked together through technology, manufacturing, and commercialization readiness levels, in order to accelerate Lab-to-Market of technology innovations needed to leap-frog U.S. competitiveness. The BATT Coalition has submitted a letter to the committee to advocate for funding in this area and see the potential to reorient many DOE activities around to refocus efforts towards innovation in the upstream supply chain. Especially in light of major proposed programmatic cuts at DOE, this creates a lost opportunity to utilize the strength of U.S. innovation at our National Labs, Universities, and Industry to fight back against Chinese unfair market practices.

CONCLUSION

The Coalition is focused on informing decision makers with its unparalleled industry expertise and policy knowledge to determine the best way forward in growing our domestic industrial base for technologies and decoupling from China and other foreign sources. For too long, this topic has received secondary consideration in Congress for the benefit of other technology areas, wider policy goals, and funding priorities. We appreciate your leadership and consideration of these vital reforms to support the growth of the U.S. critical minerals and materials supply chain. The BATT Coalition stands by to be a resource on these critical matters to help navigate this complex industry.