

Transatlantic Business Initiative and US Council for International Business
Recommendations on
Facilitating Circularity in Electric Vehicles Batteries
May 2024

The transition to a circular economy is paramount in furthering global sustainability goals, particularly within the electric vehicle (EV) industry, where battery technology plays a pivotal role. As leaders in innovation and regulation, the European Union (EU) and the United States (US) have a unique opportunity to collaborate to drive circularity in EV batteries. A joint approach with less bureaucratic hurdles would help businesses generate economies of scale. This involves regulatory cooperation that supports sustainable business practices and fostering public-private partnerships (PPP), so the EU and US can lead in modeling value chain circularity.

The Transatlantic Business Initiative (TBI) and the United States Council for International Business (USCIB) led a panel discussion on transatlantic bottlenecks and solutions to circularity in EV battery value chains as part of a workshop held by the Trade and Technology Council (TTC) Transatlantic Initiative on Sustainable Trade (TIST) in January 2024. In our discussion we mapped out the supply chains for EV batteries (from mining to finished product, including chemicals and intermediate materials), with a focus on recycling and recovery. We discussed key chokeholds that impair trade or deployment of materials, inputs, and technologies needed for recovery or recycling.

Our members have developed the following recommendations to facilitate transatlantic circularity in EV batteries. We also encourage the US and EU to undertake a similar exercise to identify additional facilitation measures to the below:

1. Overall

- Facilitate deeper cooperation in the development of compatible regulations and international standards on EV battery recycling. Consider how this might also extend to all batteries that use lithium ion. This cooperation should include elements linked to consumer safety, awareness, and participation.
- Consider opportunities to facilitate trade in used batteries (and related materials such as black mass) for recycling between the US and EU markets, including conversations on appropriate waste classifications and expanded use of pre-approved receiving facilities under the OECD Council Decision on the Control of Transboundary Movements of Wastes Destined for Recovery Operations.
- Foster public-private partnerships to bolster the innovation and resilience of the entire battery supply chain.
- Align terms and definitions relating to EV battery circularity: e.g. what is recycled content.
- Create a work stream to keep the TTC/TIST process ongoing.

2. Critical Minerals/Raw Materials

- Advance a trade and regulatory environment that expands US and EU access to raw materials that are responsibly extracted and produced with a low carbon footprint.

- Advocate for increased recycling initiatives for critical minerals in battery production.
- Provide incentives for research and development into innovative recycling technologies to recover valuable materials from end-of-life batteries.
- Ensure end-of-life batteries get into high-quality recycling streams and not in markets with poor recycling practices.

3. Promote Transatlantic Competitiveness

- Create a transatlantic “laboratory” to explore what policies work to drive circularity.
- Promote the ability of the US and EU battery industry to become more competitive by facilitating next generation digitalization and related techniques (digital twin techniques, simulation techniques, new collaborative techniques).
- Prioritize initiatives that effectively streamline requirements and ensure sufficient trust in product-specific standards, applicable regulations, and the resulting level of consumer protection. Avoid approaches that create additional burdens on the private sector and regulators.

4. Promote Recycling Innovation and Infrastructure

- Increase investment in recycling technologies that support EV battery circularity such as the US Department of Energy’s Electric Drive Vehicle Battery Recycling and Second-Life Applications Program.
- Provide incentives for the exploration of small-scale recycling initiatives, including on-site recovery and recycling, to complement larger circular economy efforts.
- Integrate recycling considerations into battery design to optimize circularity/end-of-life recovery processes, including developing the infrastructure in the US and EU to expand battery capacity at each stage.
- Cooperate in the development of transatlantic recycled content standards to encourage the use of recycled materials in battery production.
- Reform permitting and expedited processes to accelerate the development of recycling infrastructure.
- Support joint capacity building efforts with other markets to further these objectives and enhance the national quality infrastructure in those markets.

5. Coordinate on Regulations, Standards and Customs Classifications

- Facilitate compatible regulatory approaches and standards setting with respect to:
 - recycling standards for EVs,
 - definitions that promote recycling/circularity (including reusability),
 - Extended Producer Responsibility (EPR) schemes to manage end of life (waste collection, sorting, recycling),
 - promoting recycled content, including better transparency on product composition,
 - authorizing pre-approved recycling facilities to facilitate authorizations for transboundary shipments of certain batteries and related fractions for recycling, and
 - advanced chemical processes for recycling.
- Align regulations with UN Global Technical Regulations standards.
- Coordinate on methods/standards to verifiably measure performance, durability, recyclability, reparability/reusability, recycled content and quotas.
- Coordinate on preparation of technical guidelines for the classification and environmentally sound management of EV and other batteries currently being prepared under the Basel Convention.

6. Consumer Safety, Education, and Engagement

- Promote common/universal labelling, ensuring consistent information to consumers.
- Enhance consumer education initiatives to raise awareness of the importance of circularity and encourage responsible disposal and recycling practices.
- Incorporate consumer perspectives into regulatory frameworks to ensure alignment with consumer preferences and behaviors.
- Adopt regulatory approaches that take a holistic view of the compliance and safety risks to consumers across products' life cycles. This includes accounting for both pre- and post-market safety considerations in conformity assessment.

7. Global Collaboration and Policy Development

- Collaborate with international partners to inform on models for circularity and develop global policies and frameworks for enabling recycling at a global scale.
- Adopt evidence-based approaches to environmental risks in order to prevent unnecessary trade barriers.

8. Continued Dialogue and Standardization

- Establish a continuous government to government dialogue with robust industry engagement to keep transatlantic collaboration ongoing, practical, and productive to continued progress in circular economy initiatives.

Overall, the advancement of a transatlantic circular economy in the EV battery sector requires a multi-faceted, holistic, and risk-based approach encompassing regulatory cooperation, innovation, consumer engagement, and international collaboration. The EU and US should use the TTC and the TIST to implement the recommended strategies, not only to drive circularity within their own borders but also to serve as global leaders in sustainable battery production and recycling.