Global Battery Alliance Launches World’s First Battery Passport Proof of Concept

- The Global Battery Alliance today launched the proof of concept for its Battery Passport at the World Economic Forum’s Annual Meeting in Davos.
- It has been developed over three years by the GBA’s members, including Audi.
- “More sustainable batteries are vital to our efforts to responsibly and successfully shape the shift towards e-mobility,” says Markus Duesmann, Chairman of the Board of Management of AUDI AG.

Davos/Ingolstadt, January 18th, 2023 – The Global Battery Alliance (“GBA”), the world’s largest multi-stakeholder organisation to establish a sustainable battery value chain by 2030, today launched the proof of concept for its Battery Passport at the World Economic Forum’s Annual Meeting in Davos.

The Battery Passport is key to facilitating the rapid scaling of sustainable, circular and responsible battery value chains to meet the targets of the Paris Agreement through electrification of the transport and power sectors. It has been developed over three years by the GBA’s members, who span the global battery value chain from the mine to recycling, including Audi, BASF, CATL, Eurasian Resources Group, Glencore, LG Energy Solution, Umicore, Tesla, Volkswagen AG, and IT solution providers as well as leading non-governmental and international organisations including IndustriALL Global Union, Pact, Transport & Environment, UNEP, UNICEF and many others, with the support of Government institutions like the German Ministry for Economic Affairs and Climate Action, and Natural Resources Canada.

**Vision: sustainable, responsible and circular battery value chains**

Batteries are the key to unlocking the energy transition. At the same time, batteries are material- and resource-intensive with inevitable social and environmental impacts throughout the value chain. This includes greenhouse gas emissions during material sourcing, processing and manufacturing of batteries and issues of child labour and human rights violations. Bringing transparency to battery value chains through the introduction of the battery passport is a critical step towards establishing sustainable battery value chains in a rapidly growing industry.

The Battery Passport is the GBA’s flagship initiative, establishing a digital twin of a physical battery that conveys information about all applicable sustainability and lifecycle requirements based on a comprehensive definition of a sustainable battery. It will bring new levels of transparency to the global battery value chain by collecting, exchanging, collating and reporting trusted data among all lifecycle stakeholders on the material provenance, the battery’s chemical make-up and manufacturing history and its sustainability performance.
The GBA’s Battery Passport is unique as it is a key instrument to implement a global vision of sustainable, responsible and circular battery value chains, based on data that is standardized, comparable and auditable. Its ultimate goal is to provide end-users with a quality seal based on the battery’s sustainability performance, according to reporting rules agreed by stakeholders from industry, academia, non-governmental organisations and government.

Example data from Audi
For the first time, the GBA has unveiled the illustrative results of its Battery Passport proof of concept at the World Economic Forum’s Annual Meeting in Davos. Publicly available on the Global Battery Alliance’s website, the prototype battery passports include example data from Audi and Tesla and their value chains partners relating to the battery’s technical specifications, material provenance, and reporting against key sustainability performance indicators (please note the disclaimer). This includes partial reporting of the battery’s carbon footprint, and child labour and human rights performance, according to rulebooks developed by members of the Global Battery Alliance for select materials, as well as information on the data collection across different steps of the value chains. By establishing this proof of concept, the Global Battery Alliance and its members are demonstrating how, by putting this data in the hands of end-users, the Passport will enable customers to make more informed purchasing decisions and drive sustainable sourcing, processing and manufacturing practices in the industry in the future.

Building on the ground-breaking efforts of the Global Battery Alliance, the concept of a Battery Passport has already been endorsed at the 2021 G7 Leaders’ Meeting, in the EU Battery Regulation and by the Canadian and U.S. administrations. A Battery Passport will become a mandatory requirement in the EU by 2026 with other regions likely to follow, which makes the launch of the GBA’s Battery Passport more important than ever to provide a globally harmonized framework for sustainability performance in the future.

Following the successful launch of the proof of concept, the GBA will continue evolving the battery passport architecture, including the development of a comprehensive and streamlined indicator framework. The members of the GBA will work jointly on developing rules and mechanisms for performance scoring, data governance, assurance and verification, including of IT instruments. Once completed, this will allow for batteries to be benchmarked against the GBA’s verifiable definition of a sustainable and responsible battery in the future, identifying those that are best and worst in class and tracking progress in the industry through the issuance of a GBA quality seal for batteries.

Quotations from representatives from politics and economy
Inga Petersen, Executive Director of the Global Battery Alliance, said: “We are delighted to unveil our Battery Passport proof of concept, which is the result of many months of collaborative work with our members – ranging from automotive producers, mining corporations and technology companies, to NGOs, governmental bodies and other international organisations. This proof of concept is an important step towards giving investors, end-consumers and other stakeholders greater confidence in the responsible and sustainable production of EV batteries and the commitment to recycling and circularity.”
Dr. Robert Habeck, German Minister for Economic Affairs and Climate Action, said: “The Battery Passport proof of concept presented today is a very impressive first tangible result of the GBA, which my ministry has been supporting since 2019. The Battery Passport is a pivotal embodiment of the digital and green “twin transition” – it utilises the digital world to facilitate the decarbonisation of the real world and to promote circularity. We believe that global progress in green technologies is most efficient when we rely on globally compatible standards and a level playing field to minimize frictions between different markets in the industries we need to transform. Therefore, GBA’s work as an international actor is so important.”

Benedikt Sobotka, Co-Chair of the Global Battery Alliance and CEO of Eurasian Resources Group, founding member of the GBA, said: “The launch of the Battery Passport proof of concept is a major milestone on the road to creating a truly verifiable digital twin of a battery. The GBA’s Battery Passport is the first and only passport to be developed by stakeholders spanning the entire battery value chain, making it the standard bearer for battery transparency. Our attention will now turn to benchmarking Battery Passport data and issuing quality seals based on sustainability performance to provide a trusted source of data to end consumers, guiding purchasing decisions and triggering improvement actions across the value chain.”

The Honourable Jonathan Wilkinson, Canada’s Minister of Natural Resources, said: “The Government of Canada welcomes this milestone achievement for the Global Battery Alliance’s Battery Passport. We support strong multi-stakeholder efforts that promote responsible and sustainable global battery supply chains, including membership in the Sustainable Critical Mineral Alliance launched by Canada last month. Canada looks forward to continued collaboration with the GBA and its partners.”

“To achieve the Paris Climate Agreement multiple stakeholders like governments, industry, academia, and NGO’s need to work hand in hand. The Global Battery Alliance (GBA) brings together these actors to foster a sustainable, responsible and circular battery economy. The GBA targets to safeguard the environment, respect human rights, and economic development in line with the UN Sustainable Development Goals. The battery passport represents a very important achievement in this regard. It demonstrates how the GBA collaboration provides transparency for optimizing operations across the battery ecosystem. At BASF, sustainability is firmly anchored in our corporate strategy. Therefore, we are proud to be a founding partner of the GBA. We are supporting the GBA and the battery passport to stay frontrunners in sustainability in the automotive industry” said Martin Brudermüller, CEO BASF.

“As a cleantech leader, Canada supports the Global Battery Alliance’s Battery Passport in contributing to a cleaner and greener economy. Today’s announcement sets a positive path forward in the growth of the cleantech sector, which will benefit businesses and people around the world. As we transition to a net-zero future and strive to limit the carbon output of our supply chains, Canada will work with industry on a global scale to advance the sustainable and responsible production of EV batteries and vehicle manufacturing.” – The Honourable Mary Ng, Minister of International Trade, Export Promotion, Small Business and Economic Development
“More sustainable batteries are vital to our efforts to responsibly and successfully shape the shift towards e-mobility,” says Markus Duesmann, Chairman of the Board of Management of AUDI AG, which represents Volkswagen AG as lead brand in the project. “We have been committed to the development of the Battery Passport from the very beginning in 2017. Now, the proof of concept shows that even complex value chains can become transparent – an important step in making battery production more environmentally and socially compatible and strengthening the circular economy. Going forward, we hope many other organizations, regulators and industry players will join to make the Battery Passport a real shared global standard.”

“Batteries are the new oil, but to avoid the mistakes of the oil age we must ensure batteries are produced sustainably, their materials sourced responsibly, and the entire supply chain is circular. Transport & Environment has supported GBA’s work from the outset to cement sustainability and responsible sourcing into the global battery industry. The launch of the Battery Passport marks a key milestone on that journey. It will enable transparent disclosure of key sustainability and human rights data, thus improving transparency and trust across the supply chain.” Julia Poliscanova, T&E’s senior director for e-mobility.

About the Global Battery Alliance:
The GBA brings together over 130 leading international organisations, NGOs, industry actors, academics and governments to align collectively in a pre-competitive approach, in order to drive systemic change across the battery value chain. Incubated by the World Economic Forum in 2017 until its incorporation as a not-for-profit organisation in 2022, members of the GBA collaborate to achieve the goals set out in the GBA 2030 Vision and agree to the Ten GBA Guiding Principles. The GBA’s multi-stakeholder governance structure aims to ensure inclusivity in decision-making and strategic focus. Its Action Partnerships provide a collaborative platform for members to pool their expertise and achieve the shared goals of circularity, environmental protection and sustainable development.

About the Battery Passport Indicators:
To establish a globally harmonised framework for sustainability performance expectations for batteries, the GBA has recently launched several key performance indicators – the Greenhouse Gas Rulebook, Child Labour Index and Human Rights Index – which provide reporting frameworks for the Battery Passport and other passport solutions. The Greenhouse Gas Rulebook is a comprehensive framework for industry actors to calculate and track the GHG footprint of EV batteries. In doing so, it facilitates the collection of standardised, auditable, and comparable GHG data for batteries. The Child Labour and Human Rights Indices are the world’s first frameworks to measure and score the efforts of any company or product specific to the battery value chain towards supporting the elimination of child labour and respecting human rights.
The Audi Group is one of the most successful manufacturers of automobiles and motorcycles in the premium and luxury segments. The brands Audi, Ducati, Lamborghini and Bentley produce at 21 locations in 13 countries. Audi and its partners are present in more than 100 markets worldwide.

In 2022, the Audi group delivered 1.61 million Audi vehicles, 15,174 Bentley luxury automobiles, 9,233 Lamborghini sportscars, and 61,562 Ducati motorcycles to customers. In the 2021 fiscal year, AUDI Group achieved a total revenue of €53.1 billion and an operating profit before special items of €5.5 billion. More than 89,000 people all over the world work for the Audi Group, around 58,000 of them in Germany. With its attractive brands, new models, innovative mobility offerings and groundbreaking services, the group is systematically pursuing its path toward becoming a provider of sustainable, individual, premium mobility.

Disclaimer:

Audi and Tesla agreed to publish the results of the battery passport proof of concept to demonstrate the feasibility of collecting sustainability performance data, integrated with material provenance data and technical data, according to the GBA’s rulebooks and templates from every point of at least one supply chain. Given the pioneering nature of these efforts, the quality of the data presented in the proof-of-concept battery passports has not been fully verified and was partially complemented with reasonable data estimates and data from ongoing ESG efforts. To establish the proof of concept, Audi and Tesla and their value chain partners piloted the GBA tools only on select raw material supply chains, not all battery inputs. Therefore, the data presented within the battery passports represents exemplary data and does not purport to provide a full representation of the ESG performance of Audi or Tesla’s full battery supply chain. Accordingly, Audi and Tesla will not be held liable for any errors or omissions contained in the data provided and no representation or warranty, express or implied, is made regarding accuracy, adequacy, completeness, legality, reliability or usefulness of the data. The data may be subject to change without notice.