

18 January 2023

WEF Davos 2023: Eurasian Resources Group worked together with the Global Battery Alliance to launch the world's first Battery Passport Proof of Concept

The Global Battery Alliance (“GBA”), the world’s largest multi-stakeholder organisation to establish a sustainable battery value chain by 2030, where Eurasian Resources Group (“ERG”) is a founding member, 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.

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.”

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.

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 at the end of this release). 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.

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."

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.

About Eurasian Resources Group:

Eurasian Resources Group (ERG) is a leading diversified natural resources group headquartered in [Luxembourg](#) with integrated mining, processing, energy, logistics, and marketing operations. The Group operates in [15 countries](#) and is a major employer in the industry with more than 75,000 people working for it.

ERG is the world's largest high-carbon ferrochrome producer by chrome content and one of the largest producers of cobalt. It is also a large global supplier of copper and high-grade iron ore. In Eurasia, it is one of the largest suppliers of alumina and is Kazakhstan's only producer of high-grade aluminium.

In [Kazakhstan](#), ERG represents one third of the metals and mining industry. It is also a key power supplier and a large railway operator in Central Asia. ERG manages several of Kazakhstan's leading production entities, including **Kazchrome**, **SSGPO**, **Kazakhstan Aluminium Smelter (KAS)**, **Aluminium of Kazakhstan**, **Eurasian Energy Corporation**, and others.

In [Africa](#), ERG mines and processes copper and cobalt ore and produces copper metal and cobalt hydroxide. **Frontier** is the cornerstone of the Group's copper business, and ERG's **Metalkol Roan Tailings Reclamation (Metalkol)**, a major tailings

reprocessing operation in the Democratic Republic of the Congo, has recently become the world's second largest cobalt producer as well as a major supplier of copper.

The Group has its own supply chain on the continent through its logistics company **Sabot** as well as development projects which are focused on other minerals and products in South Africa, Zimbabwe, Mozambique and Mali.

In Brazil, ERG is developing **BAMIN**, an integrated mining and logistics project in the State of Bahia, which comprises the Pedra de Ferro iron ore mine, the Porto Sul deep-water port and the associated stretch of the new FIOLE broad-gauge railway.

ERG is a founding member of the Global Battery Alliance (GBA), hosted originally on the platform of the World Economic Forum. The GBA is dedicated to ensuring an ethical and sustainable global supply chain for the lithium-ion batteries that can power the Fourth Industrial Revolution and a low carbon economy through electric vehicles, renewable energy technologies and smartphones. Since its establishment in 2017, the GBA has grown to include more than 130 leading businesses and international organisations as members.

ERG is also a co-founder of the ReSource initiative, working together with CMO, Glencore, Umicore and Tesla. The initiative uses blockchain to track cobalt and other responsibly produced battery materials in real operating conditions from the mine to an electric vehicle.