

An aerial photograph of a renewable energy site. In the foreground, there are large solar panel arrays. In the middle ground, several wind turbines are visible on a grassy hill. A large, rectangular battery storage facility with multiple rows of units is situated in the lower center. The background shows a valley with a river and more hills.

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GBA Battery Passport Operational Trials

Introduction for potential participants

Presentation overview

This presentation gives key information for potential participants in the upcoming **GBA Battery Passport Operational Trials**.

It includes an overview of the Global Battery Alliance (GBA) Battery Passport and milestones achieved to date, describes the **purpose, goals and parameters** of the Operational Trials, introduces the sustainability **Battery Benchmarks**, and sets out the core **value proposition of engagement** in the Operational Trials for participating companies.

The Operational Trials are a **major milestone** in the realisation of the GBA Battery Passport, and underpin the GBA's vision of sustainable battery supply chains powering a just and equitable clean energy transition.

Organisations wishing to learn more about the Operational Trials should contact secretariat@globalbattery.org.



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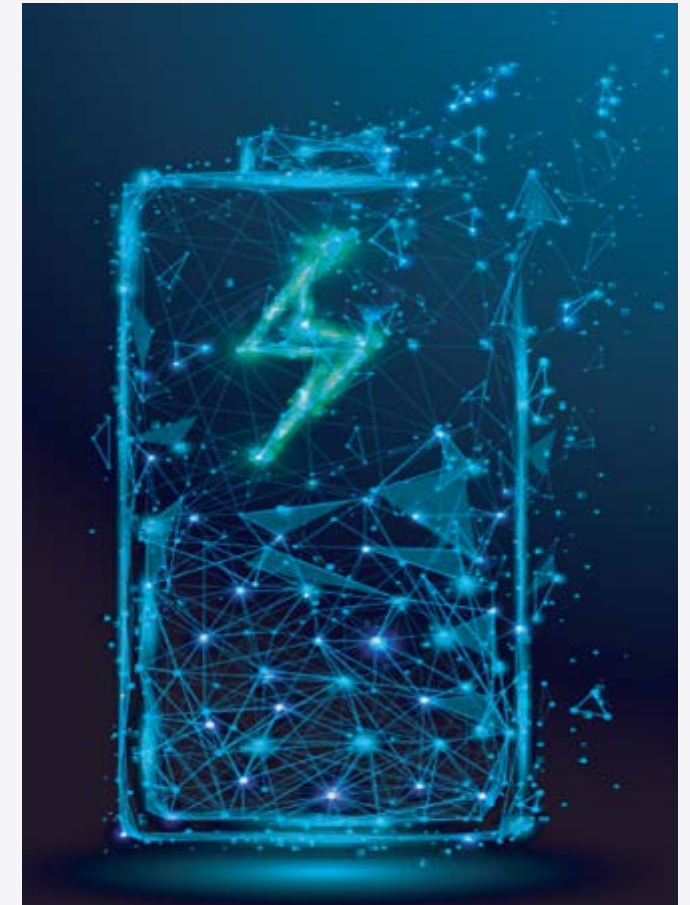
INTRODUCTION

The GBA Battery Passport

About the Global Battery Alliance

Who we are

- The **world's largest precompetitive multi-stakeholder partnership**, convening over 150 partners across the battery value chain from mining to recycling with stakeholders from civil society, international organisations and academia
- Bound by 10 Guiding Principles and a shared vision and mission to **scale a sustainable, responsible and circular battery value chain** by 2030 through collective action
- Uniquely positioned to build **common understanding on diverse stakeholders' expectations on sustainable batteries**
- Setting the global benchmarks for transparency and accountability in battery production and use under the umbrella of our **flagship Battery Passport** programme.





GBA members and supporters

PUBLIC ORGANISATIONS

Aalto University
Action Pour l'Education et la Defense des Droits Humains (APEDDH)
Battery Associates
Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)
Cornell Atkinson Center for Sustainability
Drexel University
EITI
European Bank for Reconstruction and Development (EBRD)
FBICRC
GFI (Green Finance Institute)
GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit)
Government of British Columbia

Government of the Republic of Zambia
Harvard Kennedy School (Jane Nelson)
Investissement Québec
International Trade Centre (ITC)
Ministry EAE Germany (VDI\VDE)
National Physical Laboratory
Natural Resources Canada
NYU Stern (Michael H. Posner)
OECD
Polish Chamber of E-Mobility Development
Propulsion Quebec
Sabanci University Nanotechnology Research and Application Center
The Faraday Institution

The International Institute for Sustainable Development (IISD)
The New York Climate Exchange
UC Davis
UL Research Institute
UNECA
UNEP
UNICEF
UNITAR
University of Geneva (Dorothee Baumann-Pauly)
World Economic Forum (WEF)
White & Case
World Bank Group
Xiamen University (Lin Boqiang)

INDUSTRY & BUSINESSES

3KEYS
AESC Ordos Co., LTD
Anglo American
BASF SE
Botree
CALB
CATL
Clarios
Cornex New Energy Co., LTD.
DENSO Automotive Deutschland GmbH
Electroder
ENEL
Engie
Ernst & Young
Euro Manganese
EVE Energy
FinDreams Battery
Finnish Minerals Group
FUCHUANG NANJING
GLC Recycle
Glencore
Gotion High-tech
Groupe Renault
Henkel
Hitachi High-Tech Europe
Huayou Recycling Technology
Hyundai Motor Europe Technical Center GmbH
IIED

Impact Facility
IndustriAll
Jiangsu Skytech Industrial Internet
Komatsu
LG Energy Solution
Marubeni
Microsoft
Midtronics B.V.
Nouveau Monde Graphite
Panasonic ENERGY Co., Ltd
REPT BATTERO
Rio Tinto
Ryde
Samsung SDI
SGS-CEC New Energy Technology
Shenzhen Precise Testing Technology
Siemens Energy
Siro Energy
SK tes
SQM Lithium Europe NV
Sunwoda
Tesla Inc.
Umicore
UP Catalyst
Volkswagen AG
Volvo Group
Xiamen Hithium Energy Storage Technology Co., Ltd.

NGOs & FOUNDATIONS

Alliance for Responsible Mines
China EV100
Calstart
Climate Works Foundation
Columbia Center on Sustainable Investment (CCSI)
CSR Europe
Council on Energy, Environment and Water (CEEW)
Engineers Without Borders
Canada
Enviu
EUCOBAT
Federation of international Mining and Mineral Activities (FAB)
Fundacion Chile
GAHP

GS1
International Women in Mining
Centro de Movilidad Sostenible (CMS)
Pact
Pure Earth
Rainforest Foundation Norway
Resolve
Responsible Mica Initiative
Rocky Mountain Institute (RMI)
SEDI Nigeria
Tallgrass Institute
The Electric Mission
Transport & Environment
Walk Free
WBCSD
World Resources Institute (WRI)

ASSOCIATIONS

Cobalt Institute
ECGA
International Lithium Association (ILiA)
Nickel Institute
Responsible Battery Coalition
Responsible Business Alliance
SAE International
TüV

TECHNOLOGY PARTNERS

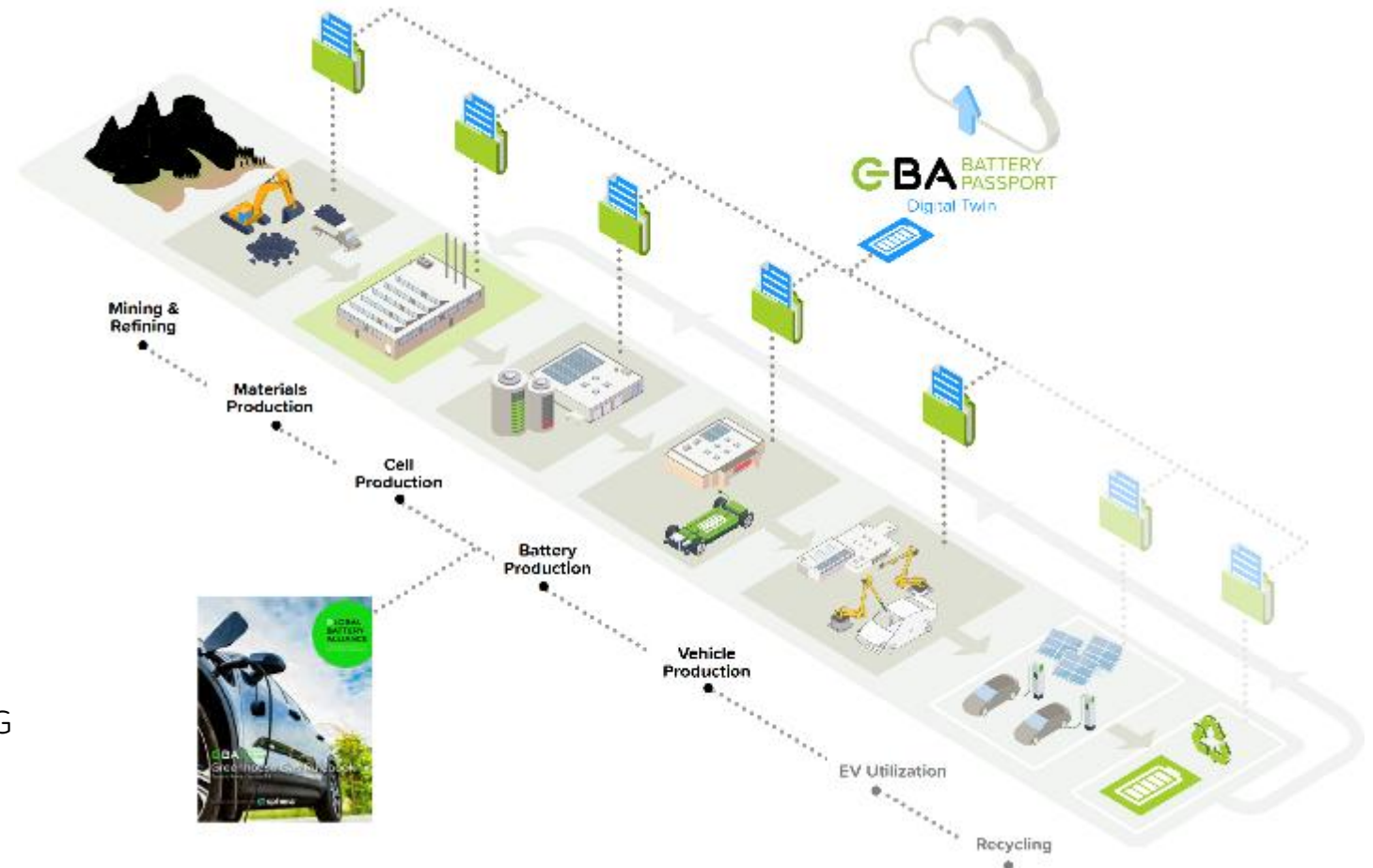
Circularise
Circular
Glassdome
Minviro Ltd
VistaNover
Governance Solutions Group
Unbox NBX BV
BNL Supplies B.V.
ReSource

The GBA Battery Passport

The Battery Passport vision is to develop globally harmonised, comparable performance expectations for responsible, circular and just battery value chains.

Accelerate the scaling of circular, responsible and just battery value chains by:

1. Establishing a **global battery passport ecosystem**, including harmonised sustainability performance expectations for batteries.
2. Making **company efforts** measurable, trusted and comparable.
3. Tracking and rewarding **improvement actions** across the value chain with a comprehensive ESG score for consumers.



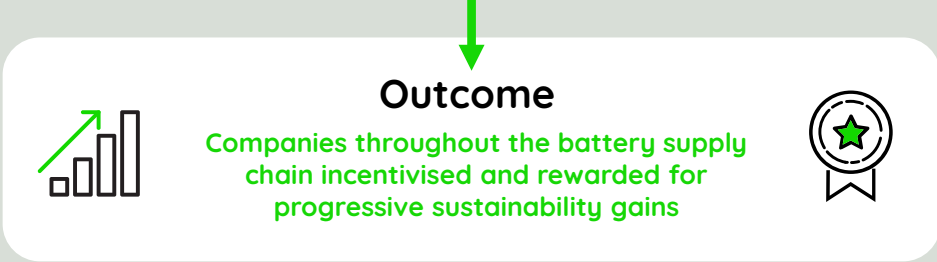
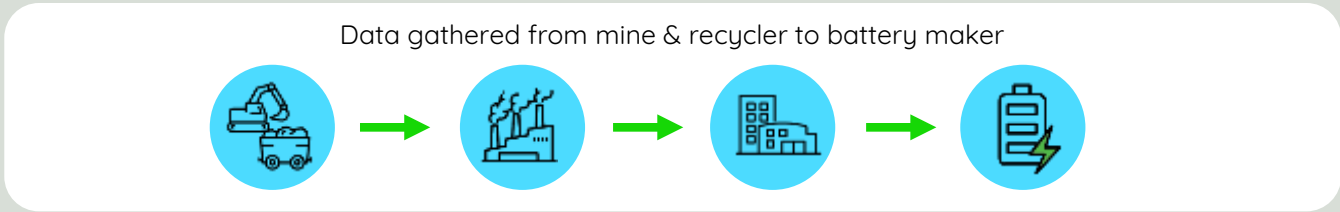
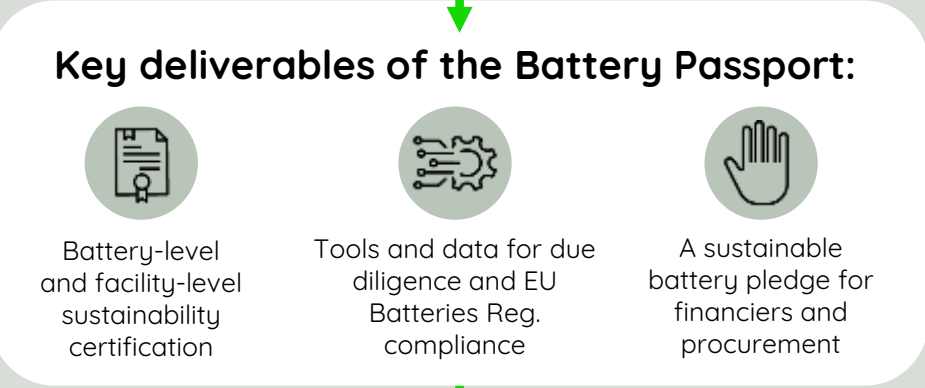
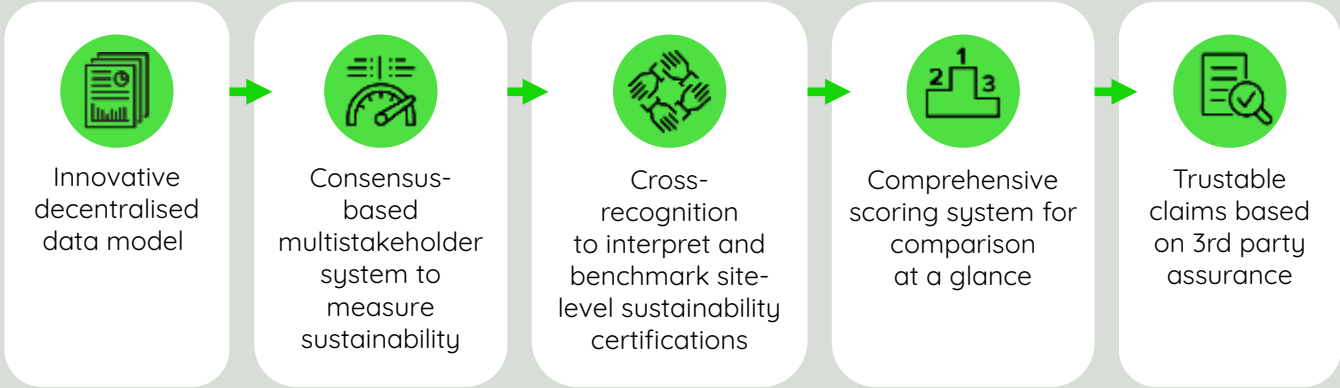
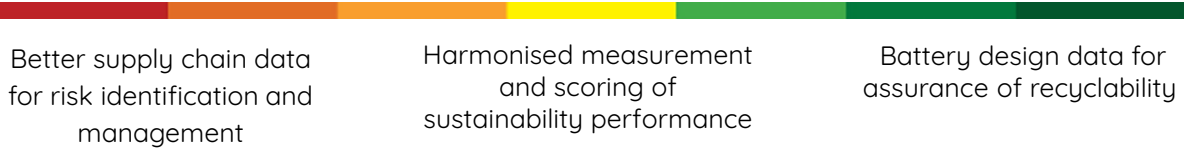


Do you know what you need to know about your battery?

Batteries power the clean energy transition, but...

- ... is the supply chain resilient?
- ... what are the supply chain impacts on people and planet?
- ... is the battery designed for circularity?

The GBA is developing answers



What have we achieved so far?

Since our founding in 2017, the GBA has been working with our growing membership to:

2019 - Define a **common vision** for a sustainable battery value chain

2022 - Develop the **foundational rulebooks** for the passport

2023 - Launch the **world's first battery passport** proof of concept

2024 - Launch the **largest pre-competitive effort** by cell-manufacturers to report against harmonized metrics capturing **80% of global EV battery market share**

2025 - Launch the **GBA Battery Benchmarks**



Facilitating dialogue and catalyzing collective action across the value chain

Launched on 25th Sept 2025

The GBA Battery Benchmarks

- First-ever **global sustainability benchmarks** for batteries, developed with over 150 leading organisations representing the battery value chain
- Covering 18 ESG issues **aligned with international regulations** (e.g. EU Batteries Regulation and OECD guidance for mineral due diligence and responsible business conduct)
- **Data assurance guidelines** to ensure shared data can be trusted
- Our update **Greenhouse Gas rulebook** (V2.1) to calculate the battery carbon footprint
- A **major milestone on the road** to a fully operational Battery Passport certification in 2027

The Battery Benchmarks



Battery Passport Sustainability
Benchmarking Framework

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Operational Trials

Purpose and goals

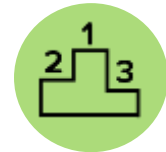
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What industry challenges will the Battery Passport Operational Trials address?



Battery mineral supply chains are often perceived as opaque, and fraught with negative environmental and social impacts. Trust is in short supply. There is no product level sustainability mark for batteries, despite their critical role in the clean energy transition. There is no **battery equivalent to timber certified by the FSC, cotton assured by Better Cotton, or Fairtrade foods**. The Battery Passport certification scheme will fill that gap.



Many sites in the battery mineral supply chain seek to showcase sustainability performance, build stakeholder trust, and harmonise sustainability efforts. However, the reporting and standards landscape is complex. **The Battery Passport provides interoperability, comparability and assurance.**



Companies in scope of the **EU Batteries Regulation** are under pressure to deploy **compliant** battery passports by 2027 and demonstrate ESG due diligence throughout their supply chains. The GBA Battery Passport is part of the solution.



Digital product passports can **enhance supply chain transparency and resilience, increase operational efficiency**, and help meet **regulator expectations for critical mineral tracking in the EU, the US, China** and beyond. But it's hard to move from theory to practice. The Operational Trials offer a pre-competitive testing ground.

Key activities for participants in the Operational Trials:

- ✓ Reporting against the GBA Battery Benchmarks and GHG Rulebook: the **only** global and comprehensive set of harmonised benchmarks to assess sustainability of batteries and their supply chains, and battery carbon footprint, developed through a **consensus-based multistakeholder process**.
- ✓ **Automated recognition** of voluntary sustainability standards in the supply chain, within a **harmonised** sustainability performance measurement system.
- ✓ Trialling third-party assurance mechanisms, ensuring that reported data is independently verified, **enhancing stakeholder trust**.
- ✓ Creation and exchange of digitally-signed datasets and credentials, including implementation of the **United Nations Transparency Protocol** extension for battery passports, and the option to use GBA-affiliated **digital wallet technology**.
- ✓ Self-assessment of readiness for **EU Batteries Regulation compliance**.
- ✓ Attainment of **prototype sustainability certification on physical batteries**, and **prototype site-level certification for facilities in the supply chain**.

Interoperation and collaboration

The GBA Battery Passport is a technology-agnostic framework. We emphasize pre-competitive collaboration and interoperability.



The GBA is the registered extender of the **UN Transparency Protocol** for battery passport data exchange. This open protocol allows for broad interoperability and decentralisation.



An GBA-ITC collaboration will support the Battery Passport Operational Trials. Key elements include digital signing of reports and credentials, and a **data gateway based on UNTP, to upload and share reported data with selected parties.**



The open data architecture adopted by the Battery Passport facilitates interoperation, including with **industry platforms** (e.g. in the automotive sector), supply chain companies' **in-house digital systems, certification schemes**, and **3rd party commercial solutions for supply chain engagement.** Interoperation will be tested in the Operational Trials.



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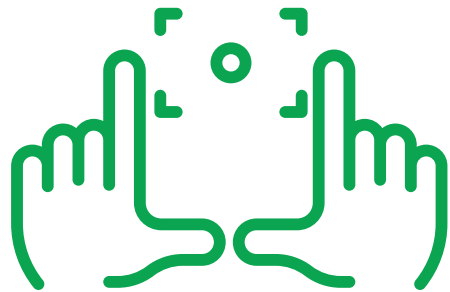
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Operational Trials

Parameters

Key parameters of the Operational Trials



The **mineral scope** of the Operational Trials will build on, but not be limited to, the four minerals specified in the EU Batteries Regulation - lithium, cobalt, nickel and natural graphite.

The **lifecycle scope** of the Operational Trials will be the cradle-to-gate production chain.

Battery **use cases** in scope of the Operational Trials include electric vehicle and e-mobility batteries, battery energy storage systems (for grid averaging, data centres, and other applications), mobile electronic devices, and beyond.

Operational Trials are scheduled to **launch at the GBA AGM**, during the week of 8th December 2025, and will run in Q1 and Q2 of 2026. Subsequent additional piloting rounds may be scheduled.

Full participation in the Operational Trials is exclusive to GBA member companies (suppliers can report against Battery Benchmarks at the invitation of a participating member company).

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Operational Trials

Battery Benchmarks

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About the Battery Benchmarks

 Represent the first definitive set of global metrics to assess a battery's sustainability performance for procurers, investors, and purchasers of battery products

 Reflect the views, expectations and consensus of the entire value chain

 Anchored in international regulations and standards to reduce complexity and create comparability for battery products whilst preparing companies to respond to regulatory requirements

 Include robust data assurance rules to avoid non-credible sustainability claims and ensure GBA certification is authoritative and trusted

 Will help accelerate the scaling of responsible and circular battery value chains



Battery Benchmarks: ESG modules

Harmonised,
comparable supply
chain risk
management –
Assurable via
existing standards

In partnership with:



... and more!

Core Modules

1. Risk and Sustainability Management Systems

2. Supply Chain Due Diligence

3. Stakeholder Engagement

Environment 	Social & Economic 	Governance 
Energy And GHG 4. GHG Emissions* 5. GHG Reduction And Energy Efficiency Environmental Safeguards 6. Biodiversity Loss 7. Pollution 8. Waste Management 9. Mine Waste Management 10. Natural Resource Stewardship Circularity 11. Circular Design** 12. Resource And Material Efficiency	Human Rights 13. Child Labour 14. Forced Labour 15. Use of Security Forces Labour Rights 16. Employment Terms 17. Freedom Of Association And Collective Bargaining 18. Occupational Health And Safety 19. Diversity And Non-discrimination Social And Community Engagement 20. Community Impacts 21. Indigenous Peoples' Rights*** Local Economy 22. Local Economic Development 23. Sourcing From Artisanal And Small-scale Miners Product Cost 24. Total Cost Of Ownership	Compliance & Good Governance 25. Business integrity & transparency 26. Product quality and safety Legend: ESG modules corresponding to risk categories of Annex X of the EU Battery Regulation (2023) – coverage in 2025 Beta release <i>ESG issues corresponding to Annex II risks of the OECD minerals guidance</i> Other salient ESG issues – coverage in 2027 framework

*Please refer to the GBA's GHG rulebook v.2.1

**Circular design to be revised for the 2027 edition

***Indigenous Peoples' rights under drafting and multi-stakeholder consensus building

Battery Benchmarks reporting modules example: Pollution

- ✓ Organised according to the OECD RBC guidance 6-step framework
- ✓ Level A anchored in compliance with EU Batteries Regulation

ISSUE MODULE: Pollution

Due diligence step	Benchmark level	The facility...
3. Cease, prevent and mitigate adverse impacts of pollution	Level A	Deploys on-site controls to monitor and address potential and actual negative impacts from air, land and soil, noise, vibration and water pollution on people and the environment, using a risk-based approach and following a materiality assessment. Has an emergency spill/leakage response plan.
	Level AA	Implements the mitigation hierarchy to address actual and potential impacts of pollution in line with set reduction targets.
	Level AAA	⁴² Reduces light, radiation and odour pollution levels below baselines defined using credible frameworks.
4. Track implementation of pollution prevention and reduction and results	Level A	Establishes monitoring procedures and protocols to track the implementation of action plans to prevent, reduce, and mitigate adverse impacts from air, land and soil, noise, vibration and water pollution , measured against baseline levels. Documents and monitors negative impacts of pollution on affected stakeholders and affected communities .
	Level AA	Engages affected stakeholders and community representatives, alongside qualified managers and workers and their representatives and/or trade unions, to track monitoring implementation and review results.
	Level AAA	Monitors pollution levels and impacts to stakeholders, including light, radiation and odour pollution , to ensure they remain below the baseline levels.
5. Communicate and report on pollution impacts, risks and improvement actions	Level A	Publicly discloses potential and actual impacts from land and soil, noise, vibration and water pollution originating at the facility , along with planned actions, progress, and results related to pollution .
	Level AA	Publicly discloses spill/leakage impact assessments and any subsequent legal actions or financial penalties. Engages stakeholders in participatory monitoring and consults affected stakeholders during any post-incident internal reviews.
	Level AAA	Makes light, radiation and odour pollution data available to affected stakeholders .
6. Provide for and cooperate in remediation of adverse pollution impacts caused or contributed to	Level A	⁴³ Establishes a grievance mechanism available to internal and external stakeholders to lodge complaints related to pollution . Remediates negative impacts from air, land and soil, noise, vibration, and water pollution and spills/leakages in consultation with affected stakeholders .
	Level AA	For residual significant impacts from pollutants arising from operational activities, when all other measures have been taken to prevent, minimise, and rectify such impacts, implements remedial steps in consultation with affected stakeholders .
	Level AAA	Remediates negative impacts from light, radiation and odour pollution in consultation with affected stakeholders .

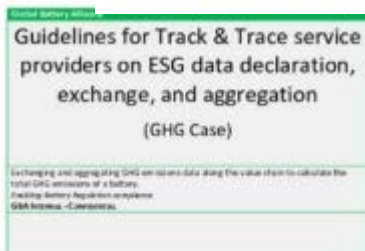
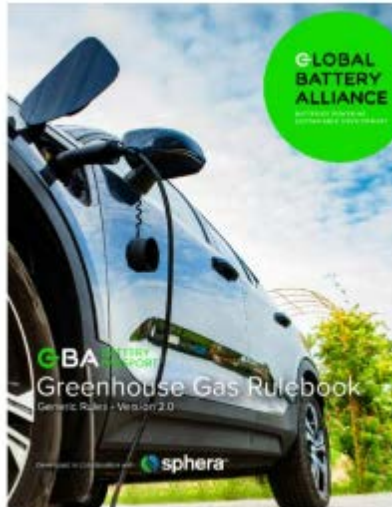
- ✓ Battery Benchmarks are mapped against existing regulations and standards, creating an efficient, harmonized framework

Due diligence step	Benchmark level	The facility...
3. Cease, prevent and mitigate adverse impacts of pollution	Level A	Deploys on-site controls to monitor and address potential and actual negative impacts from air, land and soil, noise, vibration and water pollution on people and the environment, using a risk-based approach and following a materiality assessment. Has an emergency spill/leakage response plan.
	Level AA	Implements the mitigation hierarchy to address actual and potential impacts of pollution in line with set reduction targets.
	Level AAA	⁴² Reduces light, radiation and odour pollution levels below baselines defined using credible frameworks.

		Regulations and international frameworks	Recognised Voluntary Sustainability Standards	Other Mapped Standards ^{ccxvii}
Due diligence step	Benchmark level	EU Batteries Regulation (2023) EU Conflict Minerals Regulation (2017) EU Forced Labour Regulation (2024) Canada Supply Chain Forced & Child Labour Act (2023)	ASI Performance Standard v3.1 (2023) ^{ccxvii} CopperMark/RMI RRA Criteria Guide (2023) ^{ccxlviii} IRMA Standard for Responsible Mining (2018) RMI Facility Standard 2025 TSM (2021-2024) Copper Mark JDDS (2022) RMI RMAP All Minerals (2022) RMI Supply Chain Due Diligence Plus (2025)	ICMM Mining Principles (2024) ^{ccclix} EITI Standard (2023) GRI 101 - Biodiversity (2024) CCCMC Due Diligence Guidance v2 (2022) CCCMC Mining Investment Social Guidelines (2017) GISTM (2020) ISO 05100: Energy management systems ISO 14001: 2015 Environmental Management Systems (EMS) ISO 26000 Guideline for Social Responsibility ISO 45001 OHS (2018)

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Battery carbon footprinting



Author:	European Battery Alliance
Editor:	European Battery Alliance

Document Updates

Version	Date	Author	Changes
1.0.0	22.02.2023	Dr. Sören Schmitt	Initial version of the document, covering the GHG case.
1.0.1	22.02.2023	European Battery Alliance	Changes and adding details of the document, covering the GHG case.
1.0.2	22.02.2023	Dr. Sören Schmitt	Changes and adding details of the document, covering the GHG case.
1.0.3	22.02.2023	Dr. Sören Schmitt	Changes and adding details of the document, covering the GHG case.

The [GBA Greenhouse Gas \(GHG\) Rulebook](#) is widely recognised in industry as the **‘gold standard’ for battery carbon footprint calculations**.

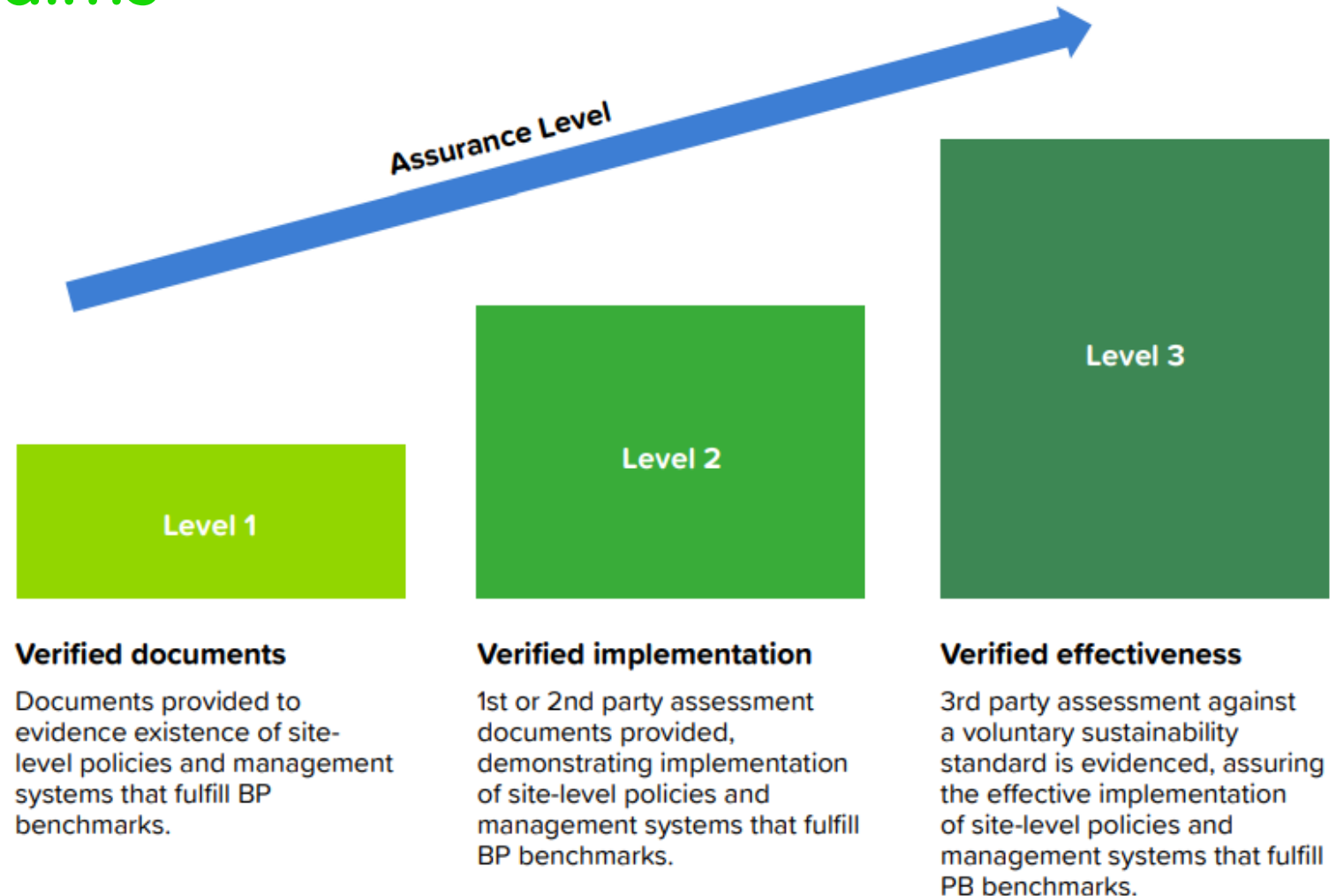
The Rulebook emphasises **interoperability**. It is fully compatible with **EU Batteries Regulation** reporting (including future alignment with planned Delegated Acts), while also supporting company efforts to reach strategic decarbonisation goals.

The GBA approach to GHG promotes and incentivises the use of primary data, augmented with high-quality secondary data, throughout the supply chain.

The Rulebook is accompanied by an innovative system of data exchange, allowing product carbon footprint data to be aggregated along the supply chain while **safeguarding commercial confidentiality**.

Data Assurance and Verification underpin the trustability of claims

- ✓ Veracity of the data contained in reports.
- ✓ Adherence to data exchange rules and a recognised Implementation Profile.
- ✓ Adherence to Battery Passport rules for data aggregation and scoring.



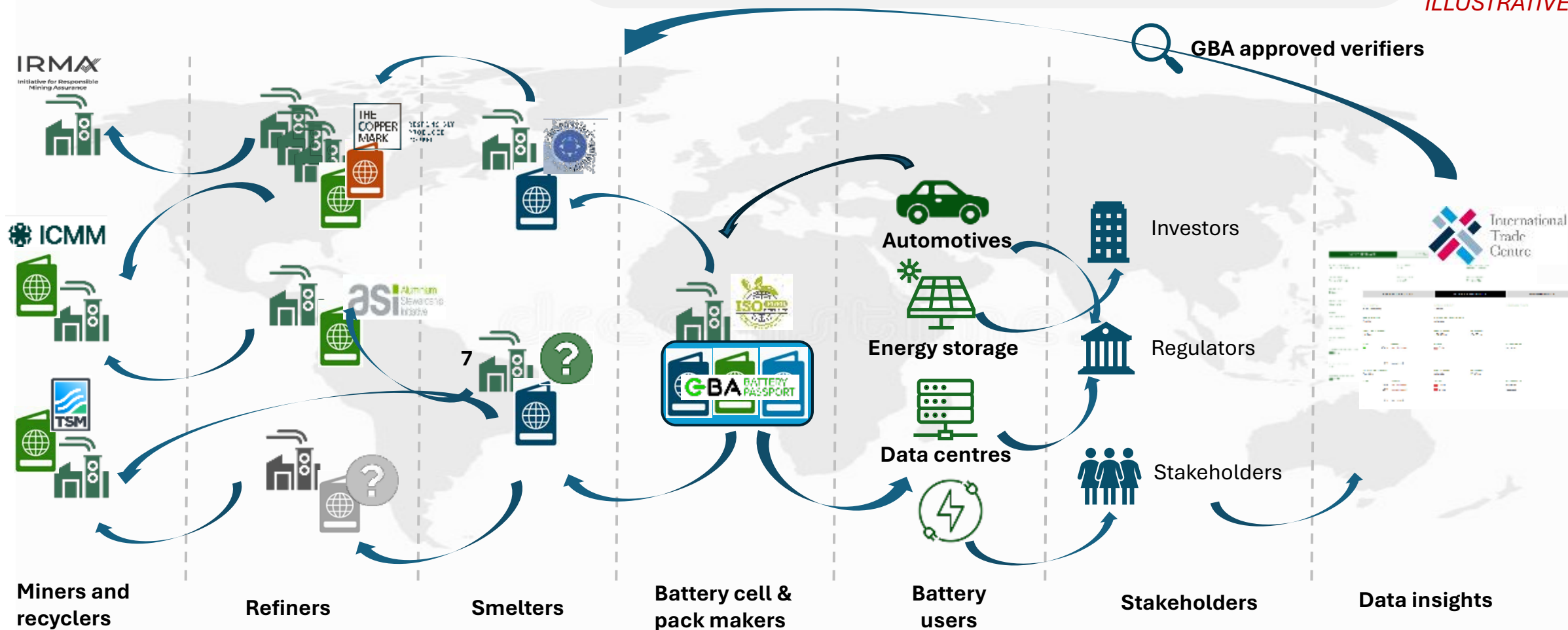
How does it work? Gathering insights with the Battery Passport

GBA Battery Benchmarks will generate:

- Verified due diligence data for regulatory compliance ✓
- Trusted sustainability claims for customers and investors ✓
- Material and battery traceability ✓
- Transparent engagement with stakeholders ✓

All underpinned by innovative Digital Product Passport technology, for exchange of verified data across the supply chain and beyond.

ILLUSTRATIVE



The GBA Gateway – an upcoming digital tool for Battery Passport data exchange

The GBA's partnership with the International Trade Centre (ITC) aims to support companies participating in the GBA Battery Passport by:

- Developing a **free-to-use, global public good tool** hosted by ITC, **removing technological barriers for smaller companies** in the value chains and allowing their participation in the GBA Battery Passport ecosystem;
- Developing the minimum necessary **technical infrastructure for implementation partners** in the GBA Battery Passport ecosystem, supported by capacity building of operators in the battery supply chain;
- Creating an **'insights' platform** providing global policymakers, civil society representatives and others with additional knowledge resources to help ensure sustainable, resilient global battery value chains.



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GENERAL BENEFITS FOR GBA MEMBERS

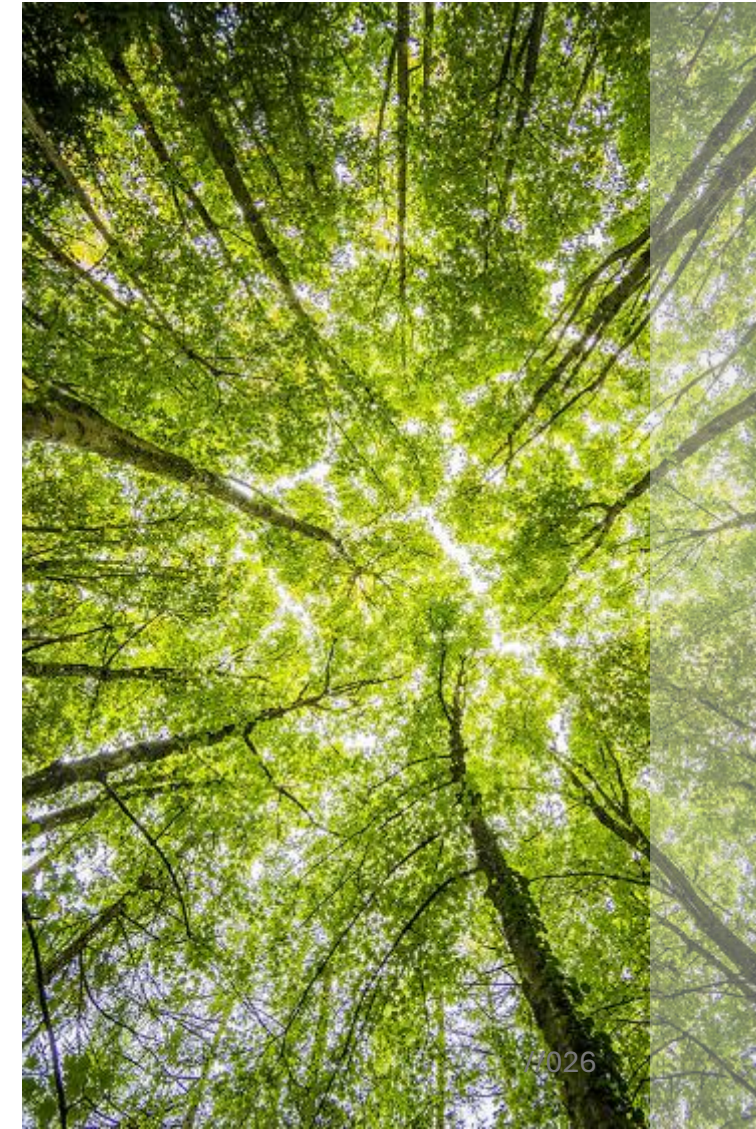
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Membership benefits

In addition to full participation in the Operational Trials, GBA membership offers companies the following benefits:

- As a member, relevant colleagues in your organisation gain access to our multi-stakeholder **working groups** to:
 - o Exchange with your peers on the evolving regulatory and policy landscape and co-design sustainability performance expectations to support global harmonization.
 - o Navigate the complexity in the voluntary standards landscape, establishing applicability across the value chain and at the product level.
 - o Exchange with solution providers and value chain partners on questions of data sharing, data privacy, and data assurance, together addressing and resolving challenges linked to interoperability and verification.
 - o Review and revise the GBA's Greenhouse Gas rulebook as the definitive global guidance to calculate the battery carbon footprint, working towards harmonisation of requirements and more.
- Become a candidate for our **governance bodies**, including technical Steering Committees and the Board of Directors
 - o Help determine the strategy and workplan of the world's foremost multistakeholder alliance in the energy storage space.
 - o **Cement your leadership reputation:** participate in high-level member-only events, connect with industry figures and secure speaking opportunities.
- Join our **events and networking** opportunities
 - o All members gain access to our Annual General Meeting to take stock of our progress, confirm our governance and input into the strategic direction.
 - o Benefit from exclusive networking opportunities with representation across the full battery industry eco-system.



An aerial photograph of a renewable energy farm. In the foreground, there are large solar panel arrays. In the middle ground, several wind turbines are visible on a grassy hill. In the background, there is a body of water and more hills. A battery storage facility with several large rectangular units is located in the lower right. The image is overlaid with a green circular logo in the top right and a white circle with the number 6 in the top left.

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Operational Trials

Value proposition

Battery manufacturers

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The Operational Trials will offer battery manufacturers the opportunity to pilot all core aspects of the GBA Battery Passport, positioning themselves to take a lead role in the rollout of the Battery Passport in 2027. Specific opportunities include:



Prototype product-level **sustainability certification** of batteries, linked to data dashboards through Digital Product passport technology.

Enhancing capacity to conduct **supply chain due diligence** against globally-recognised and highly credible **sustainability benchmarks**.

Progress toward **compliance with EU Battery Regulation** requirements for due diligence, supply chain mapping and battery carbon footprinting.

Robust comparative assessment of suppliers' sustainability performance, including recognition and measurement of attainment through **existing facility-level sustainability standards**.

Benefit from a **pre-competitive sandbox environment**, to establish data sharing and collaboration with the full battery supply chain.

An aerial photograph of a renewable energy facility. In the foreground, there are large solar panel arrays. In the middle ground, several wind turbines are visible on a grassy hill. In the background, there is a body of water and more hills. A large green circle is in the top right corner, and a white circle with a green number 7 is in the top left corner.

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Operational Trials

Value proposition

Automotive and Battery Energy
Storage System manufacturers

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Benefits for OEMs

The Operational Trials will offer battery purchasers the opportunity to engage their full battery supply chain, paving the way to meet associated regulatory requirements, demonstrate the sustainability of their batteries to stakeholders, and manage supply disruption risk. Highlights include:

- Prototype product-level **sustainability certification** of procured batteries, linked to data dashboards (e.g. through a QR label).
- Piloting **interoperability with leading industry platforms and in-house solutions**, for battery passporting through the battery lifespan.
- Rich underlying datasets, for **supply chain due diligence** against globally-recognised and highly credible **sustainability benchmarks**, that are **comparative** and assured by **robust 3rd party verification**.
- Progress toward **compliance with EU Battery Regulation** requirements for due diligence, supply chain mapping and battery carbon footprinting.
- Mapping of the supply chain and facility-level sustainability performance, recognition of **existing facility-level sustainability standards** and **management of reputation and supply disruption risks**.



An aerial photograph of a renewable energy facility. In the foreground, there are large solar panel arrays. In the background, several wind turbines are visible on a grassy hill. A small building or storage area is also present. The overall scene is a mix of green and blue, representing clean energy.

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Operational Trials

Value proposition

Miners, recyclers, refiners, material
and component manufacturers

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Benefits for miners, refiners and material producers

The Operational Trials will offer companies in the battery mineral supply chain (including miners, recyclers, refiners, material and component manufacturers) the opportunity to assess their sustainability performance against international best practices, gain stakeholder recognition and identify clear next steps to further enhance facility-level sustainability. Highlights include:

- Prototype facility-level **recognition for strong sustainability performance**, with labelling that will be **widely recognised and trusted by stakeholders**.
- Creation of **digital credentials for sustainability reporting**, using a highly interoperable framework that recognises facilities' existing **voluntary sustainability standards**, reflects core **regulatory requirements** and benchmarks global **stakeholder expectations**.
- **Product carbon footprinting** that supports facilities, and their purchasers downstream, to meet strategic decarbonisation goals and **fulfil regulatory carbon reporting requirements**.
- Enhanced **market visibility and branding opportunities**, based on trusted and verified sustainability claims.



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Operational Trials

Value proposition

3rd party assurance providers

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The GBA Battery Passport will require a range of inputs from 3rd party assurance providers; both during the 2025/2026 Operational Trials, and in the scaled-up Battery Passport from 2027 onward. These inputs will include:



- Desk-based verification of facilities' reporting against the GBA Battery Benchmarks for sustainability performance.
- Desk-based verification of facilities' implementation of GBA Battery Passport data aggregation, scoring and data exchange rulebooks.
- Verification of facilities' carbon footprint calculations in line with the GBA GHG Rulebook.
- Product-level certification of batteries for sustainability performance.
- Potential facility-level certification for sustainability in the battery supply chain.

3rd-party assurance providers are being recruited to participate in the 2025/2026 Operational Trials, to **co-design, elaborate and pilot** these verification and certification functions. Participation can be pro bono, or on a negotiated cost basis with participating companies.

Over 80% of global cell manufacturing capacity was represented in the 2024 pilots. In the Operational Trials, assurance providers gain access to networking and business development opportunities, through Working Groups, the GBA AGM (each December) and other forums.

The GBA is positioned to become the foremost global scheme for battery sustainability assurance, representing a significant new commercial marketplace for assurance providers.

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**GLOBAL
BATTERY
ALLIANCE**

BATTERIES POWERING
SUSTAINABLE DEVELOPMENT

GBA Annual General Meeting 2025

**9th-10th December
Brussels, Belgium**

Global Battery Alliance, Annual General Meeting 2025

9–10 December | Brussels,
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- GBA's flagship annual event
- Exchange insights on sustainability, regulation, and markets
- Network with industry, government, and civil society



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