

EURASIAN RESOURCES GROUP



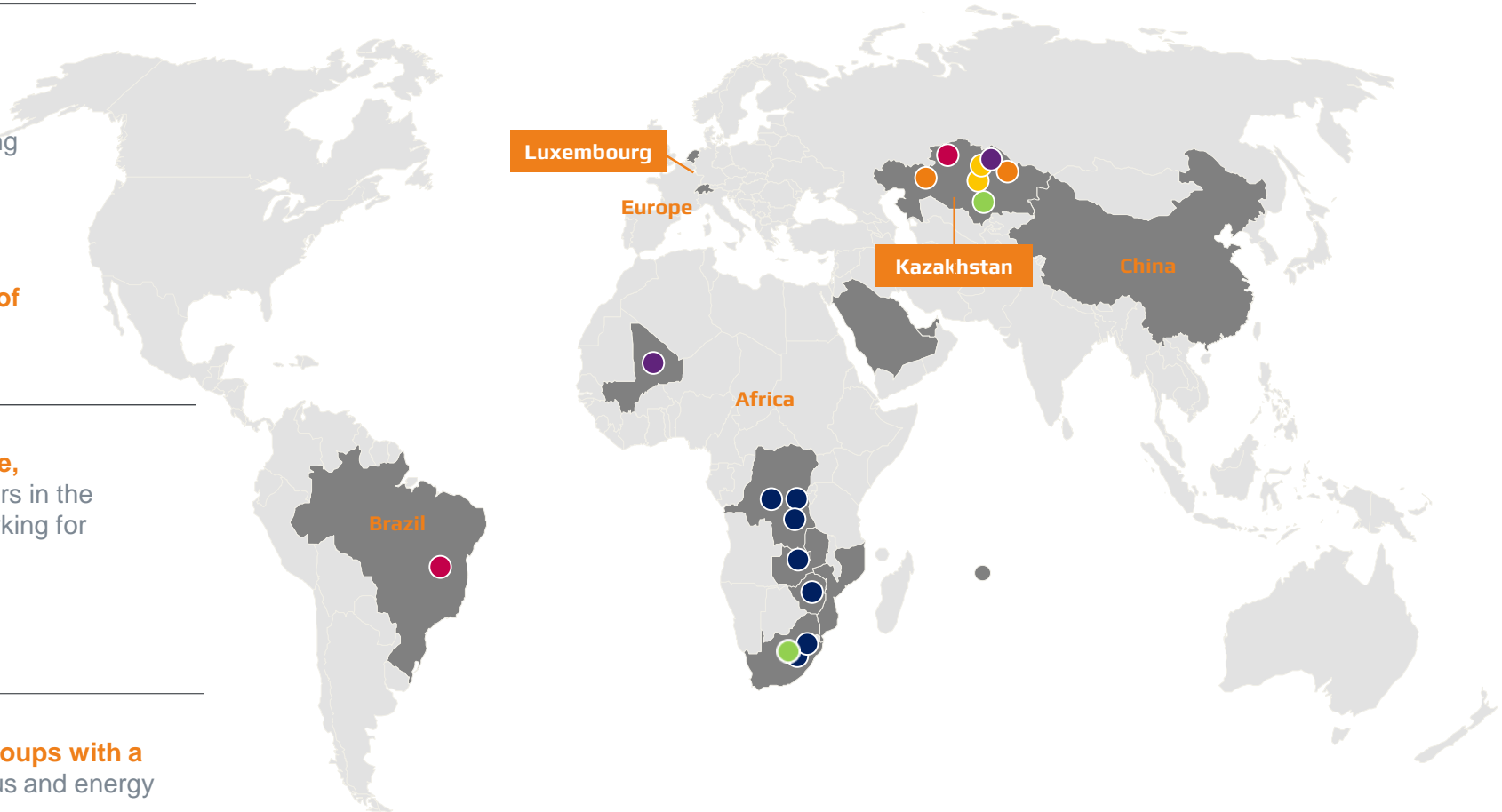
August 2023

> International Metals & Mining Major with a Diversified Portfolio and Fully Integrated Production Cycle

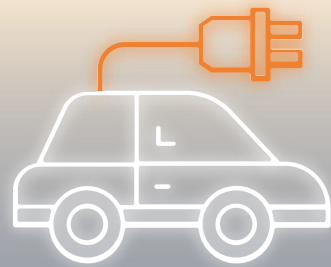


- **Eurasian Resources Group (ERG)** is a leading diversified natural resources group with integrated mining, processing, energy, logistics, and marketing operations
- **Headquartered in the Grand Duchy of Luxembourg**, ERG's main shareholder (40% stake) is the **Government of the Republic of Kazakhstan**

- Operating in **almost 20 countries in Asia, Europe, Africa and America** – one of the biggest employers in the global industry. **More than 80,000 people** are working for the Group
- **Supplying products to over 40 countries**
- **One of the most diversified mining & metals groups with a balanced product portfolio** in ferrous, non-ferrous and energy
- **Cost competitiveness:**
 - one of the world's most cost-efficient **copper and cobalt** producers;
 - enjoys highly-competitive first-quartile position on the global **aluminium** cost curve
 - global cost competitive industry leader in **high-carbon ferrochrome** production;



- | | |
|---|-------------|
| ● Ferroalloys | ● Iron ore |
| ● Alumina and Aluminum | ● Energy |
| ● Other Non-ferrous (copper and cobalt – core business) | ● Logistics |



Electric vehicles



Clean sources of energy



Infrastructure development



> Three Core Production Regions

In **Kazakhstan**, ERG represents **one third of the country's metals and mining industry**. Through its assets in Kazakhstan, ERG is the world's largest high-carbon ferrochrome producer by chrome content. It is one of the largest suppliers of iron ore in Eurasia and the country's only producer of aluminium. ERG is also **one of the largest electricity producers in Kazakhstan (17% share of the country's market)** and a **large railway operator in Central Asia** with capacity of over 13 k units of railroad park and transportation of 58 million tonnes per annum.



In **Africa**, ERG is a strategic investor with its core copper and cobalt production facilities in the **Democratic Republic of the Congo**. This includes **Metalkol**, the world's second largest standalone cobalt producer, which can produce more than 25 kt of cobalt per year, and **Frontier**, a large-scale producer of high-quality copper concentrate. ERG also holds a **portfolio of assets in other minerals** at different stages of development in **Mali, Mozambique, South Africa, Zambia, and Zimbabwe**.



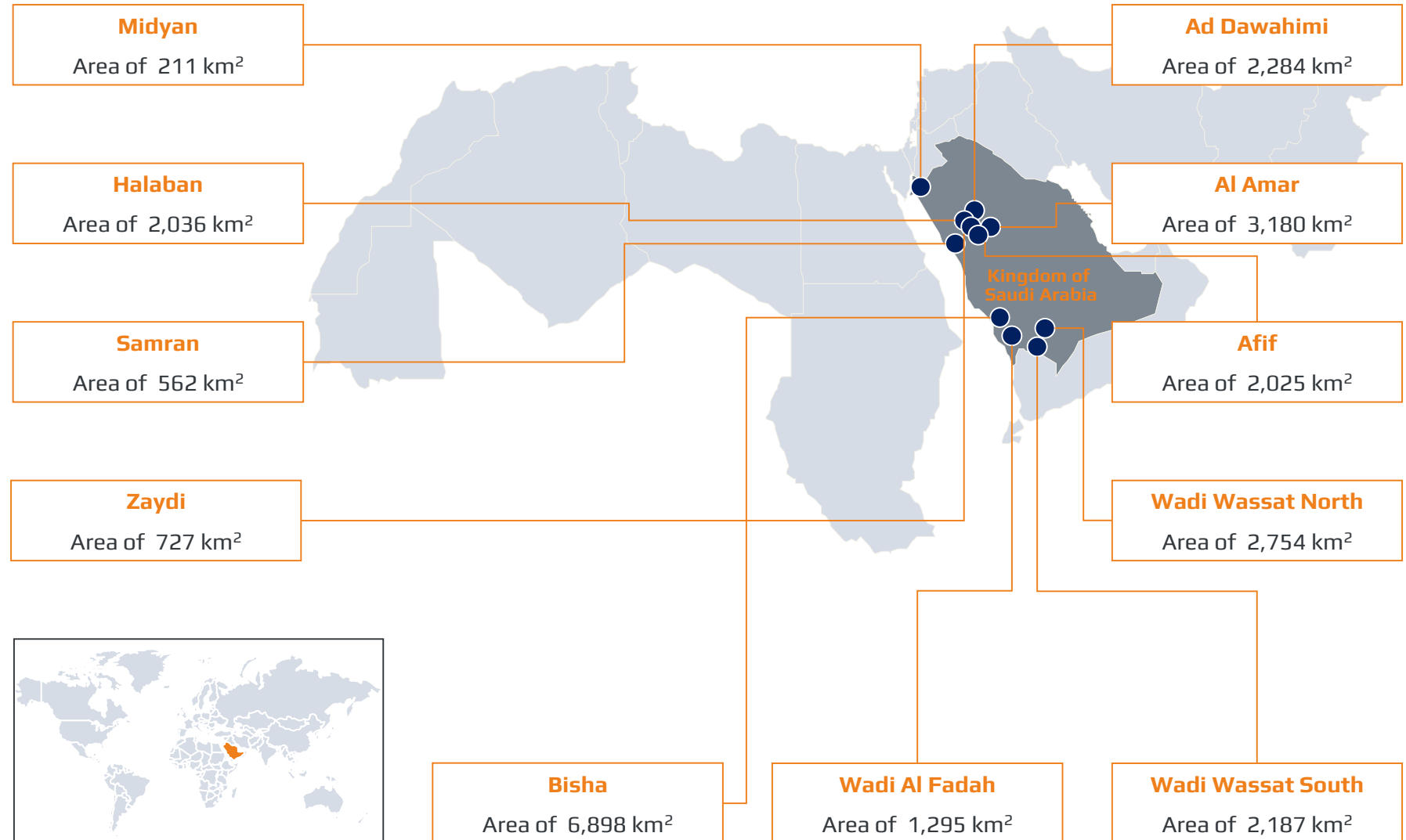
In **Brazil**, ERG is developing an integrated mining and logistics project that comprises the **Pedra de Ferro high-grade iron ore mine with target capacity of 26mtpa**, the **Porto Sul multi-use deep water port**, and **Stage 1 of the FIOL¹ transcontinental railway**. Pedra de Ferro should help making the State of Bahia the third largest iron ore producer in the country.



1. The West-East Integration Railway

In Saudi Arabia, ERG is Building a Regional Hub for MENA and Extensive Exploration, Plans to Invest an Initial \$50m in the Country

- ERG expanded into the Kingdom of Saudi Arabia in 2022. Offices include **headquarters in Riyadh** and a **large office in Jeddah**.
- The Group has applied for **exploration licenses** covering approximately 25,000 km², with **more applications being prepared**. This makes ERG's activities in Saudi Arabia **one of the largest mineral exploration programs in recent history**.
- ERG plans to **employ the latest technologies in Saudi Arabia**, making the country an innovative leader in smart technologies in exploration and mining.
- In **January 2023**, ERG has been granted **12 licenses totaling ~1,000km² in Ad Dawadimi** – famous mining area in Riyadh province.
- ERG signed an **MoU with Ma'aden regarding Mining Technology Intelligence Center (MTIC)** – a think tank with other industry players, universities and government authorities.



Operational overview



Metalkol

A cobalt and copper tailings reprocessing facility, second largest standalone cobalt producer globally in 2022

One of the largest suppliers of cobalt to China

Large producer of high-quality copper cathode (LME Grade A equivalent)

Facility description: a hydrometallurgical facility reprocessing historical cobalt and copper tailings deposited in the Kingamyambo Tailings Dam and Musonoi River. The two tailings deposits host resources of ~117mt at 0.31% cobalt and 1.40% copper.

Capacity:

25ktpa cobalt in hydroxide and ~100 ktpa copper cathode

Ownership: 95% ERG

Sustainability: launched Clean Cobalt Framework in 2018 (extended to include copper in 2021 as the **Clean Cobalt & Copper Framework**), independently assured by PwC, underscoring commitment to the production and sourcing of clean cobalt and copper **in compliance with OECD Due Diligence Guidance and with zero tolerance for child labour in the supply chain.** Transparency and traceability of cobalt is also being achieved through the application of **blockchain technology**. In 2022, the **Responsible Minerals Initiative (RMI)** confirmed that Metalkol is conformant with the Assessment Standards for the critical raw materials that it produces.



CONFORMANT

Location: 20km west of Kolwezi, Lualaba province in the Democratic Republic of the Congo

Operational overview



TNC Kazchrome

The world's largest high-carbon ferrochrome producer by chrome content

In 2022, Kazchrome received Platinum sustainability award from EcoVadis, putting it in 1% of the best global iron and steel producers

- **Facility description:** Chrome mining and processing facilities in Khromtau, ferroalloy plants in the cities of Aktobe and Aksu, manganese mining and processing facilities in Karaganda region
- **Products:** High carbon ferrochrome and other ferroalloys, refined ferroalloys (medium and low carbon), ferrosilicochrome, ferrosilicomanganese, ferrosilicium
- **Capacities:**
 - Donskoy GOK – 5.64 mtpa of chrome ore
 - Aktobe ferroalloy plant – 0.63 mtpa of ferroalloys
 - Aksu ferroalloy plant – 1.12 mtpa of ferroalloys
 - Kazmarganets mining enterprise – 0.48 mtpa of manganese ore and 0.16 mtpa of manganese concentrate
- **Key markets:** Japan, China, Korea and Europe
- **Key investment projects:** construction of the “10 years of Independence of Kazakhstan” underground mine, development of the Slimes 2 reprocessing facility.
- **Location:** four regions of Kazakhstan

ecovadis

TNC KAZCHROME JSC (GROUP)

has been awarded a

Platinum medal

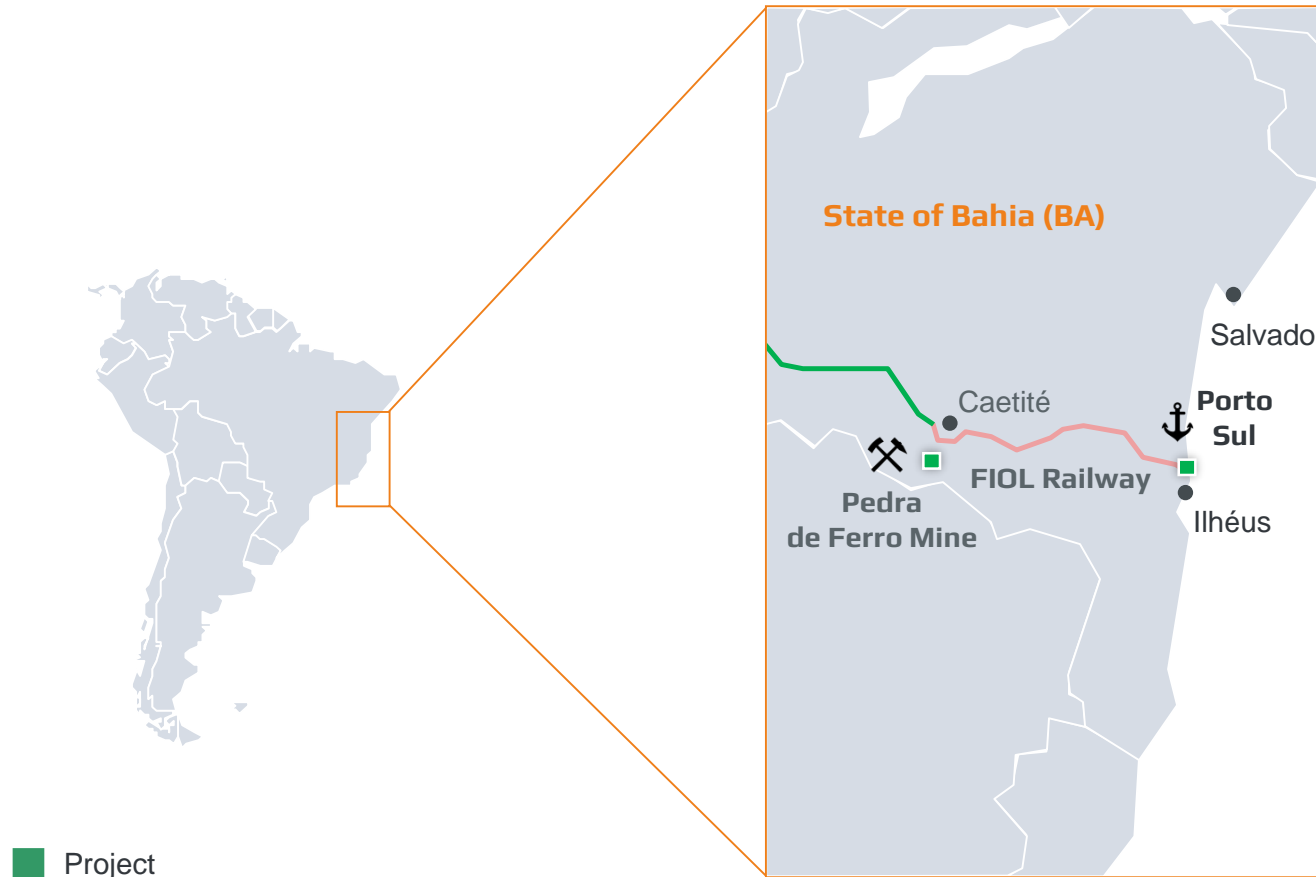
as a recognition of their EcoVadis Rating

-JUNE 2022-



> Key Assets | Iron Ore | BAMIN in Brazil

- **A large fully integrated mining and logistics project in Brazil; high quality iron ore mine, deep-water port and transcontinental railway**
- BAMIN is **making the State of Bahia the third largest iron ore producing region in Brazil**
- It has **some of highest-grade and lowest impurity iron ore in the world**, helping customers to very substantially **reduce carbon footprint**
- **An average 65.5-66% Fe DSO fines in 2022**



Pedra de Ferro Mine near Caetité

- **Commercial operations commenced in Jan 2021** and in 2021 BAMIN has already produced more than 1 mtpa of iron ore
- 535 Mt reserves at 42.4% Fe
- In December 2022, BAMIN reached 1 million tons exported
- **Target full capacity of 26 mtpa and total mine life of 30 years**
- High quality products: direct shipping ore (DSO) and direct reduction pellet feed (DRPF)
- Anchor shipper on the FIOIL railway and Porto Sul

Porto Sul

- **Multi-use deep-water port** near Ilhéus, capable of handling Capesize vessels up to 220,000 dwt
- Sole import/export point for the new West-East Integration (FIOIL) Railway)
- Initial use for dry bulks (iron ore, soy, grain and fertilizer)
- **Design capacity of 26 mtpa, expandable to >40 mtpa**

Stretch of the FIOIL railroad

- FIOIL railroad (between Caetité and Ilhéus) will be 537 km in length
- Following the project's route it will cross 20 municipalities and should handle up to **60 million tons per year** – with 60% of this capacity to be made available to other mining companies, in agribusiness and other sectors

Operational overview



Kazakhstan Aluminium Smelter (KAS)

The only producer of high-grade primary aluminium in Kazakhstan

- **Founded in 2007**
- **Facility description:** processing and smelting plant
- **Capacity:** more than 250 ktpa
- **Full integration with 'Aluminium of Kazakhstan'**
- **Key Markets:** Southern Europe, Turkey, Kazakhstan and CIS countries
- **Location:** Pavlodar

Aluminium of Kazakhstan (AoK)

The only producer of alumina in Kazakhstan

- **Capacity:** more than 1.5 mtpa
- **Key Markets:** Kazakhstan (KAS), China
- **Location:** Pavlodar plus open pit mining of bauxites in the Kostanai region (KBRU mines)

Operational overview



Frontier

Frontier mine comprises an open pit copper mine and processing facilities to produce copper sulphide concentrate

Facility description: high-grade copper sulphide ore treated through a conventional flotation circuit to produce high-quality copper concentrate with high sulphur and iron content and low impurities. Frontier hosts mineral resources of 231 Mt at 1% copper, equivalent to 2.2 Mt copper contained.

Products: Copper sulphide concentrate

Capacity: ~100ktpa copper contained in concentrate

Key markets: domestic and export markets

Location: Kishiba in the territory of Sakania in the Haut-Katanga Province, Democratic Republic of the Congo. The mine is within 2km of the Zambian border.



> The Global Battery Alliance (GBA) where ERG is a Founding Member and its CEO is a Co-Chair



- ERG was one of the first organisations to seek collaborative solutions for the supply chain of the global li-ion batteries sector
- It supported the World Economic Forum to mobilise the Global Battery Alliance, a public-private multi-stakeholder collaboration
- The GBA was officially launched in 2017 in New York. Since then, it has grown to almost 150 international members

Vision - Develop an inclusive, innovative and sustainable battery value chain to power the Fourth Industrial Revolution

- ✓ In 2019 the GBA published, jointly with McKinsey, a landmark 2030 Vision report outlining a sustainable and circular battery value chain.
- ✓ At the WEF jubilee 50th annual meeting in Davos in 2020, 42 members of the Alliance, including businesses representing annual revenue of close to a 1 trillion US\$, endorsed 10 guiding principles.
- ✓ In January 2023, the GBA launched the first ever Battery Passport proof of concept
- ✓ The GBA also worked with international partners to launch its Greenhouse Gas Rulebook and Human Rights and Child Labour Indices.



Examples of corporate members



Examples of governments, international organisations and NGOs which are members of the GBA



> Some of ERG's Recent Multi-Stakeholder Collaborations and Commitments



ReSource

The first industry-level blockchain consortium

- A solution to trace responsibly produced cobalt and other battery metals from the mine to the EV.
- Founded by CMOC, ERG and Glencore; later joined by Tesla, Umicore and other partners.



COBALT INDUSTRY RESPONSIBLE ASSESSMENT FRAMEWORK (CIRAF) STATEMENT OF COMMITMENT

JANUARY 2019

CIRAF

Cobalt industry responsible assessment framework

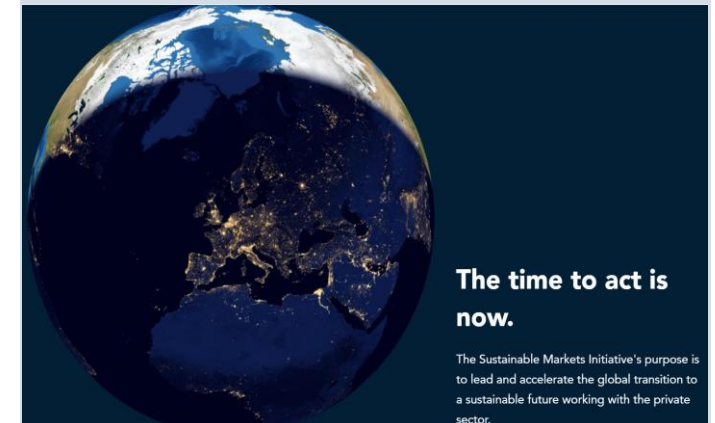
- A management tool designed for all companies.
- Consolidates due diligence actions being taken across the cobalt industry to demonstrate best practice and meet the expectations of civil society, the media and the cobalt market.



Sustainable Markets Initiative

'Terra Carta' under leadership of King Charles III and the Sustainable Markets Initiative
Provides a roadmap to 2030 moving towards a sustainable future

- Rooted in the transformative power of Nature and the energies, resources and innovation of the private sector.
- ERG was among the first 25 world-leading organisations to support the Initiative



> Other Key Success Stories

Partnership with the Good Shepherd International Foundation (GSIF) to support the Bon Pasteur Alternative Livelihood programme



- A funding agreement to support the programme at **Kolwezi in Lualaba Province**.
- The programme is aiming to **help break the cycle of violence and abuse against children and women in artisanal mining communities** and improve their living conditions.
- **Agreement commenced in 2017 for three+ years and was then extended.**
- **More than 3,000 children** have already been **protected** from the worst forms of child labour.

ERG's Clean Cobalt and Copper Framework

- The Framework aims to drive **positive outcomes for local communities in the DRC** and was **independently assured by PwC**



Contacts



9 rue Sainte Zithe
L-2763, Luxembourg



T.: +352 24 84 53 1
F.: +352 26 84 58 99



info@erg.net

www.eurasianresources.lu



30A Kabanbay Batyr Ave.
010000, Nur-Sultan, Republic of Kazakhstan



T.: +7 (7172) 59 21 33, 59 21 44
F.: +7 (7172) 59 21 77



erg@erg.kz

www.erg.kz