# RESPONSIBLE RAW MATERIAL MANAGEMENT AT THE BMW GROUP.

The BMW Group systematically analyses widely known risks that are typically associated with the extraction and processing of raw materials and draws up suitable measures based on findings. As a company, we pursue a proactive and preventive approach to raw material management.

BMW GROUP

ROLLS-ROYCE MOTOR CARS LTD

# TABLE OF CONTENTS.


| | |
|---|---|
| **Bauxite** | **3** |
| **Cobalt** | **4** |
| **Natural Rubber** | **7** |
| **Copper** | **10** |
| **Lithium** | **11** |
| **Tin, Tantalum, Tungsten, Gold - 3TG** | **14** |
| **Leather** | **15** |
| **Mica** | **16** |
| **Nickel** | **21** |
| **Platinum-group metals (PGMs)** | **24** |
| **Synthetic graphite** | **25** |
| | |
| **Active involvement in initiatives** | **26** |
| **Overarching policies and commitments** | **28** |

# BAUXITE.

Bauxite is an aluminium ore and the most important material in aluminium production. It is mainly formed by the weathering of silicate-rich rock in countries in the tropical belt. The biggest producers are Guinea, Australia and China.

## Applications.

- Wrought and cast alloys for car bodies and drives
- Wheels

## Risks.

- Human rights violations (including forced resettlements)
- Endangering the rights of local communities and indigenous peoples
- Contamination of soil, air, water and people by mining waste and dust emissions
- Deforestation and the associated loss of biodiversity
- Water consumption during extraction of bauxite
- Corruption and weak rule of law in certain countries
- Violation of workers' rights, e.g. freedom of association

## Preventive measures.

- Involvement in a project group with other OEMs to mitigate ESG risks in Guinea
- Direct sourcing of ASI-certified (CoC) material
- Collaboration with suppliers along the value chain to:
  - Reduce the need for bauxite by increasing the aluminium recyclate rate
  - Reduce $CO_2$ emissions

# COBALT.

Cobalt is a ferromagnetic heavy metal that enhances the stability and performance of lithium-ion batteries and is used as a (steel) alloying element. It is a critical raw material and mainly mined in the Democratic Republic of Congo (DRC).

## Applications.

- Batteries (high- and low-voltage)
- Alloys

## Risks.

- Environmental impacts of mining waste on water, soil, air and people, e.g. from acidic and toxic mine water
- Deforestation and the associated loss of biodiversity
- Violation of workers' rights through absence of occupational health and safety measures and inadequate remuneration
- Child labour
- Forced labour
- Armed conflict
- Endangering the rights of local communities and indigenous peoples
- Corruption

## Preventive measures.

- Contractual assurance by suppliers of compliance with ESG standards (e.g. certification)
- Collaboration with suppliers along the supply chain to:
  - Increase the recyclate rate
  - Reduce $CO_2$ emissions and conserve resources
- Raw material supply via selected suppliers
- Implementation of corrective actions after audits
- Establishment of traceability systems
- Implementation of Cobalt for Development field project

# Cobalt for Development

**Region**
Kolwezi, Lualaba Province

**Country**
DR Congo

**Raw material**
Cobalt

**Project owner**
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

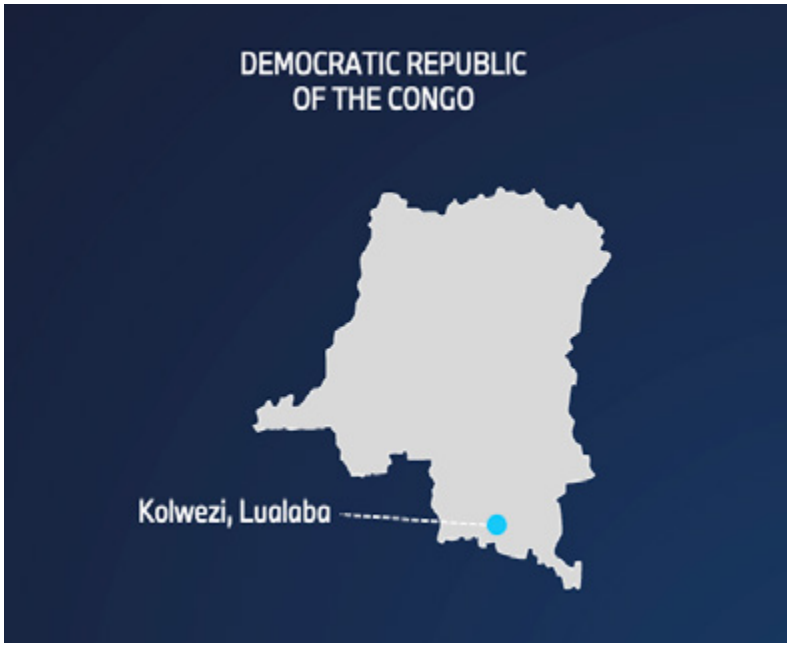
**Project partners – suppliers**
BASF, STIHL, Renault, EU-Commission

**Project launch**
March 2019

**Planned duration**
3+3+2 years

**Introduction.**
C4D has been improving living and working conditions in the ASM sector through innovative training around occupational safety, health and environmental management. The goal is to promote sustainable development by enabling access to education and alternative sources of income, and increasing financial resilience among mining communities in the DR Congo.

**Project goal.**
To test a process for formalising ASM (artisanal and small-scale mining) and micro-mining in the Democratic Republic of the Congo.



**The region and its challenges.**

The DRC holds the world's largest cobalt reserves. Approximately 20 percent of its cobalt production comes from ASM, which directly or indirectly sustains over one million people. Despite the significant risks involved, ASM remains a vital economic foundation for the region.

**Affected communities and their challenges.**

ASM presents opportunities for regional development. If working conditions are improved to meet national and international standards, ASM could be integrated more strongly into global supply chains – benefiting economic development and the protection of human rights.

**This project delivers on the following Sustainable Development Goals:**

Learn more about Sustainable Development Goals (SDGs).

# NATURAL RUBBER.

Natural rubber is a raw material obtained from the sap of rubber trees, mainly the Hevea basiliensis variety. It is highly elastic and durable. Owing to its unique physical and chemical properties, it is widely used to make various products such as tyres, gloves and other rubber-based products.

## Applications.

- Tyres
- Bearings and connectors

## Risks.

- Environmental impacts on water and soil from land use, deforestation and chemical use; associated loss of biodiversity
- Violation of human rights through forced or child labour
- Violation of workers' rights, e.g. inadequate remuneration of smallholder farmers and plantation workers
- Endangering the rights of local communities and indigenous peoples

## Preventive measures.

- FSC-certified tyres
- Implementation of the Living Rubber field project

# Living Rubber

**Region**
Island of Sumatra

**Country**
Indonesia

**Raw material**
Natural rubber

**Project leader**
BirdLife International

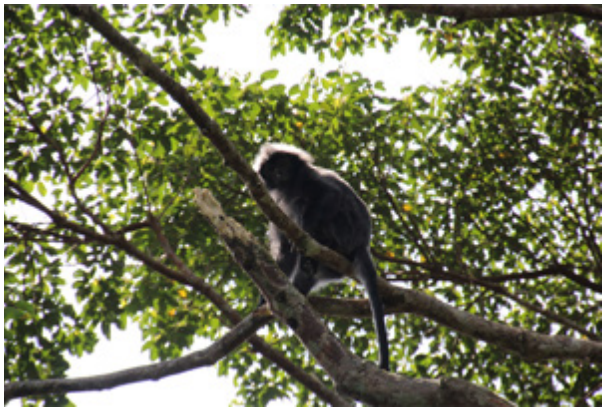
**Project partner – supplier**
Pirelli

**Project launch**
October 2021

**Planned duration**
3 years + 6 months

**Introduction.**
The Living Rubber project is dedicated to improving living conditions for the local indigenous community, with a particular focus on smallholder farmers and women. The aim is to help strengthen the social and environmental resilience of the natural rubber supply chain. Central to the project is the protection and conservation of native plant and animal species across the 2,700-hectare area covered by the Living Rubber project.

**Project goal.**
To preserve the natural ecosystem, fight deforestation, improve the rights and quality of life of local indigenous communities, protect endangered species, and ensure natural rubber is traceable and sustainably grown.



**The region and its challenges.**

Hutan Harapan is Sumatra's last major lowland rainforest and uniquely biodiverse. But deforestation and extensive mono-cultures are destroying habitats and endangering tigers, elephants and gibbons.
Since 2007, local and international partners have been working to protect the forest. The Living Rubber project is part of the UN Decade on Ecosystem Restoration.

**Affected communities and their challenges.**

Indigenous communities such as the Batin Sembilan depend on the forest. Sustainable agroforestry offers a pathway to securing food, incomes and biodiversity. The aim is to balance productivity and environmental protection, primarily through sustainable agricultural practices that benefit both current and future generations.

**This project delivers on the following Sustainable Development Goals:**

Learn more about Sustainable Development Goals (SDGs).

# COPPER.

Copper is a soft metal, easily malleable and tough. Mainly used for its conductivity, it is a key enabler of electrification and the energy transition. It is mainly mined in Chile and Peru.

## Applications.

- Wiring harnesses
- High-voltage batteries
- Electric motors

## Risks.

- Environmental impacts of mining waste on water, soil and air, e.g. from tailings and mine drainage
- Water consumption in arid regions
- Land use owing to low-grade ores
- Endangering the rights of local communities and indigenous peoples

## Preventive measures.

- Collaboration with suppliers along the supply chain and conducting a research and development project to:
  - Increase the recyclate rate
  - Reduce $CO_2$ emissions and conserve resources
- Investments in innovative technologies via the venture capital fund BMW i Ventures, e.g. by the US startup Jetti Resources, to obtain copper from previously unusable resources and to reprocess tailings
- Copper pilot project (automotive industry dialogue): assessment, prevention and mitigation of risks associated with copper mining and processing in Peru; establishment of an ongoing dialogue with rights holders to coordinate preventive measures and corrective action and verify their effectiveness

# LITHIUM.

Lithium is the lightest metal on earth and characterised by its high reactivity. It is mainly traded in the form of lithium carbonate and lithium hydroxide, and mined primarily in Australia, Chile, China and Argentina.

## Applications.

- Batteries (high- and low-voltage)

## Risks.

- Water consumption in arid areas
- Land use
- Endangering the rights of local communities and indigenous peoples

## Preventive measures.

- Contractual assurance by suppliers of compliance with ESG standards (e.g. certification)
- Collaboration with suppliers along the supply chain to:
  - Increase the recyclate rate
  - Reduce $CO_2$ emissions and conserve resources
- Sourcing raw material from selected suppliers
- Establishment of a closed loop in China for the reuse of nickel, lithium and cobalt from high-voltage batteries
- Implementation of corrective action after audits
- Establishment of a traceability system
- Scientific study on the impact of lithium extraction on local water balance in Latin America (research summary in EN and ES)
- Investment by the venture capital fund BMW i Ventures in innovative lithium extraction technologies (US startup Lilac Solutions)
- Implementation of the Responsible Lithium Partnership field project

# Lithium Partnership

**Region**
South America, Salar de Atacama

**Country**
Chile

**Raw meterial**
Lithium

**Project owner**
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

**Project partners – suppliers**
Mercedes, VW, BASF, Fairphone

**Project launch**
November 2021

**Planned duration**
3+1 years

**Introduction.**
The Mesa Multiactor brings together around 20 organisations to work on a 30-point action plan for sustainable water management in Salar de Atacama – including a register of water rights, study analyses, a public library, water campaigns, and projects around drinking water supplies and the use of greywater.

**Project successfully completed.**
In February 2025 the project concluded with the transition of the Mesa Multiactor into an independent foundation. The foundation continues to focus on water management in the Salar de Atacama. Its establishment has secured long-term financing and ensured that the project's impact will continue beyond its formal end.

**The region and its challenges.**

Located within the Lithium Triangle, the Salar de Atacama is one of the driest places on Earth. Lithium extraction here relies on mining brines, posing a risk to freshwater reserves and ecosystems. The aim is to safeguard water resources through sustainable and ecologically responsible extraction methods while also meeting global demand for lithium.

**Affected communities and their challenges.**

Water is vital to the survival of local indigenous communities. To address mistrust towards mining companies, transparent, multistage dialogue processes have been established. This multilateral approach fosters trust, tackles environmental concerns and empowers local communities to actively participate in decisions affecting their water resources.

**This project delivers on the following Sustainable Development Goals:**

Learn more about Sustainable Development Goals (SDGs).

# TIN, TANTALUM, TUNGSTEN, GOLD - 3TG.

3TG is a collective term for tin, tantalum, tungsten and gold. They are conflict minerals and primarily extracted in the Democratic Republic of Congo (DRC) and neighbouring regions and in the conflict-affected and high-risk areas (CAHRAs).

## Applications.

- Tin: shock absorbers
- Tantalum: condensers
- Tungsten: turbo chargers
- Gold: components for charging electronics, contact systems

## Risks.

- Armed conflict
- Child and forced labour
- Violation of human rights
- Violation of workers' rights
- Violation of international law
- Endangering the rights of local communities and indigenous peoples
- Environmental impacts of mining waste on water, soil, air and people, e.g. from acid and toxic mine water
- Deforestation and the associated loss of biodiversity
- $CO_2$ emissions and energy consumption from mining and processing gold

## Preventive measures.

- Enabling suppliers to implement OECD Due Diligence Guidance
- Establishment of traceability back to the smelter
- Collaboration with non-certified smelters on participation in audit programmes
- Increasing share of secondary tungsten content through a closed material loop at BMW Group plants in Austria and Germany

# LEATHER.

Bovine leather is obtained from cattle hides as a co-product of the beef industry. It is a versatile material and used for its feel, premium appearance and wear resistance, for instance in shoes, clothes, accessories, furniture and fittings for car interiors.

## Applications.

- Seat covers
- Interior fittings
- Steering wheels

## Risks.

- Environmental impacts on water and soil owing to improper treatment of wastewater from tanneries and livestock farms
- Deforestation, land use and the associated loss of biodiversity
- Violation of workers' rights owing to occupational health and safety risks for workers in tanneries, livestock farms and abattoirs
- Greenhouse gas emissions and water use in livestock farming, the feed industry and leather manufacturing
- Endangering the rights of local communities and indigenous peoples
- Endangering animal welfare on farms and during transport and slaughter

## Preventive measures.

- Identification and exclusion of critical rawhide suppliers
- Sourcing leather directly from Leather Working Group (LWG)-certified suppliers
- Increased use of chrome-free tanning agents, e.g. olive-tanned leather in the BMW iX
- Leather-free interiors as an option
- Promoting supplier commitment to compliance with ethical principles such as:
  - 3R principles (reduction, refinement, replacement)
  - The Five Freedoms of the Farm Animal Welfare Committee (FAWC)
  - The principles of the World Organisation for Animal Health (WOAH)

# MICA.

Mica is the name given to a group of minerals with various properties (e.g. heat-resistance, reflectiveness). Two particularly important types of mica are muscovite and phlogopite. The main mining countries are India, China and Madagascar.

## Applications.

- Car paints (metallic)
- High-voltage batteries (heat shield in casing)
- Car bodies (sound insulation)

## Risks.

- Child labour
- Deforestation and the associated loss of biodiversity
- Corruption
- Informal mining and trading of raw material

## Preventive measures.

- Regular auditing of mica processing companies by the Responsible Mica Initiative
- Implementation of corrective action after audits
- Piloting of a traceability system
- Implementation of the Bal Mitra Gram field project

# Bal Mitra Gram

**Region**
Jharkhand and Bihar

**Country**
India

**Raw material**
Mica

**Project leader**
Kailash Satyarthi Children's Foundation (KSCF)

**Project partners – suppliers**
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

**Project launch**
May 2022

**Planned duration**
3 + 2 years

**Introduction.**
The Bal Mitra Gram project supports children's rights in India's Mica Belt. When it comes to fighting poverty, the KSCF sees education as key and is working to provide schooling for children in 20 villages. Its efforts are supported by the BMW Group. The German development cooperation GIZ translates outcomes into measurable indicators. The project focuses on schooling, education and the prevention of exploitation and corruption.

**Project goal.**
To prevent child exploitation of any kind in mica mining communities by establishing child-friendly villages.

Focus: Child labour, child abduction, child marriage, corruption

**The region and its challenges.**

Jharkhand and Bihar have significant deposits of mica, yet poverty, inadequate infrastructure and seasonal insecurity force many families to rely on informal mining. Often, it is their only source of income, especially during the dry months – even though it exposes their children to serious risks.

**Affected communities and their challenges.**

Child labour in mica mining stems from extreme poverty. Educational opportunities are scarce, and child marriage and malnutrition remain widespread. Many parents feel compelled to involve their children in work.
Bil Mitra Gram aims to educate, inform and bring about structural reform to break the cycle of poverty and child labour for good.

**This project delivers on the following Sustainable Development Goals:**

Learn more about Sustainable Development Goals (SDGs).

# MiCare

**Region**
Ihosy

**Country**
Madagascar

**Raw material**
Mica

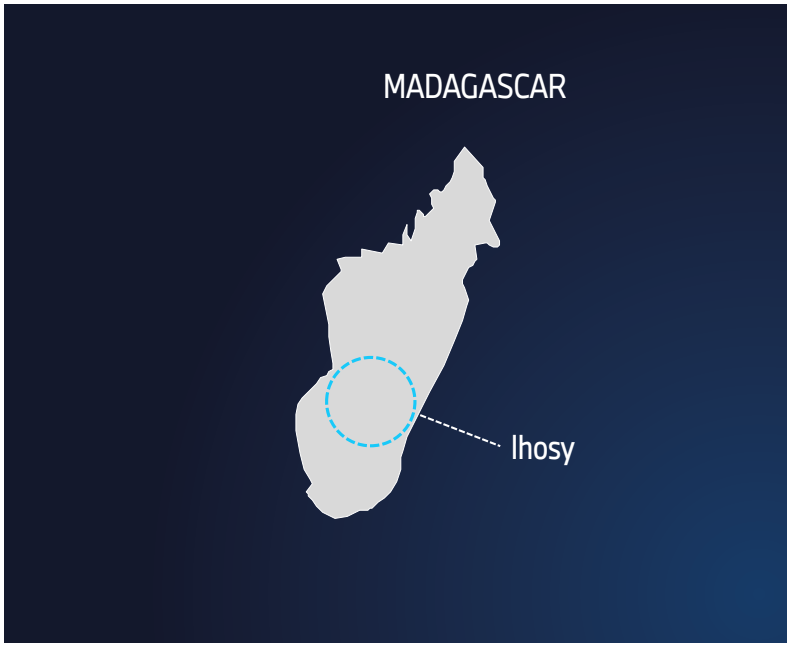
**Implementing partner**
Projekt-Consult GmbH

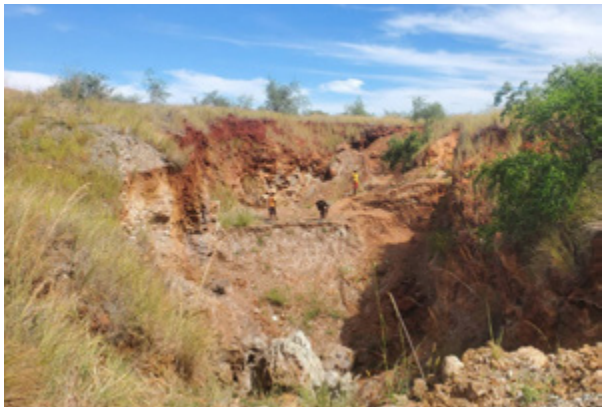
**Project partners**
DEG Impulse, Mercedes-Benz AG, Dr. Ing. h.c. F. Porsche AG

**Project start**
2025

**Planned project duration**
3.5 years

**Project goal.**
The project aims to help strengthen responsible sourcing and due diligence practices along the mica value chain in Madagascar. To this end, childcare services are being established in selected mining regions and awareness-raising activities on children's rights are being carried out. Measures to promote occupational health and safety are also being implemented at selected mining sites and processing centers. In addition, the project supports the introduction of traceability mechanisms and the formalization of mining operations. Furthermore, training in climate-resilient farming methods helps strengthen food security in the mining regions. The project receives co-funding from German Federal Ministry for Economic Cooperation and Development (BMZ).





## The Region and its challenges.

Madagascar is one of the world's lowest-income countries. At the same time, it is a major exporter of mica, which is used, among other applications, for electrical and thermal insulation in high-voltage batteries. This makes the raw material highly relevant to the ramp-up of electromobility. The Ihosy region in the south of the country has significant mica deposits, making artisanal (small-scale) mining a key source of income. However, the sector is often informally organized and associated with human rights, social, and environmental risks.

## Affected communities and their challenges.

Due to recurring droughts, agriculture in the affected regions is often only possible on a seasonal basis and does not provide many families with a reliable source of income. Mica mining therefore represents a key source of income for numerous households and helps bridge income shortfalls. At the same time, the affected communities face various social and economic challenges. These include risks related to working conditions, income, children's rights, and food security.

## Targeted SDGs.

Erfahren Sie mehr zu den Sustainable Development Goals (SDGs).

# NICKEL.

Nickel is a hard and resistant transition metal used in lithium-ion batteries and (steel) alloys. With worldwide deposits concentrated in Russia, Indonesia and the Philippines, nickel is also considered a critical raw material.

## Applications.

- Batteries (high- and low-voltage)
- Alloys

## Risks.

- Environmental impacts of mining waste on water, soil and air, e.g. from tailings and acid mine drainage
- $CO_2$ emissions, especially from fossil fuel use in mining and processing
- Deforestation and the associated loss of biodiversity
- Violation of workers' rights through absence of occupational health and safety measures and inadequate remuneration
- Endangering the rights of local communities and indigenous peoples
- Violation of labour rights
- Weak state monitoring of existing environmental and social standards

## Preventive measures.

- Contractual assurance by suppliers of compliance with ESG standards (e.g. certification)
- Collaboration with suppliers along the supply chain to:
  - Increase the recyclates rate
  - Reduce $CO_2$ emissions and conserve resources
- Implementation of corrective action after audits
- Establishment of traceability systems

# Nickel Impact Program Indonesia

**Region**
Weda-Bay, Island of Halmahera

**Country**
Indonesia

**Raw material**
Nickel

**Project owner**
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

**Project partners**
Mercedes-Benz AG, Volkswagen Group

**Project launch**
September 2025

**Planned duration**
3 years

**Introduction.**
The Nickel Impact Program Indonesia (NIPI) is a collaborative effort to improve living conditions and protect the environment in communities affected by nickel mining in Indonesia. Through NIPI, efforts will focus on strengthening community health services, improving access to safe drinking water, and restoring aquatic ecosystems.

**Project goal.**
Addressing and reducing risks of nickel production in Weda Bay on the island of Halmahera in eastern Indonesia.

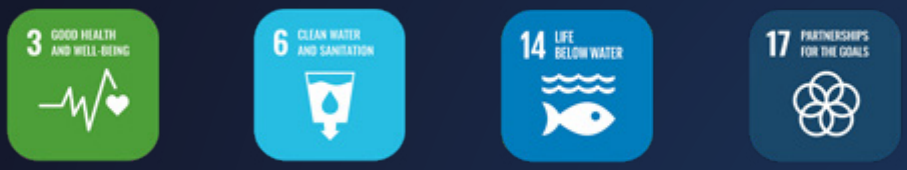
**The region and its challenges.**

Halmahera island contributes significantly to global nickel production, which is vital for electric vehicle batteries and stainless steel. However, the region is characterized by fragile ecosystems and communities exposed to certain risks, including pollution, health impacts, and biodiversity loss due to mining activities.

**Affected communities and their challenges.**

Through a participatory Community Forum, local communities together with representatives from national and regional governments and civil society organizations will jointly identify pressing issues in the affected areas and develop proposals and action plans to address the negative impacts of nickel mining and processing. In partnership with civil society and local authorities, NIPI plans to strengthen community health services and improve access to safe drinking water.

**This project delivers on the following Sustainable Development Goals:**




Learn more about Sustainable Development Goals (SDGs).

# PLATINUM-GROUP METALS (PGMS).

Platinum-group metals (PGMs) are a family of chemically related precious metals that include platinum, palladium, rhodium, ruthenium, iridium and osmium. They are known for their exceptional catalytic properties, corrosion resistance and high melting points. Platinum and palladium play a particularly critical role in environmental and energy technologies, as they enhance the efficiency of catalytic converters.

## Applications.

- Catalytic converters for exhaust
- Spark plugs
- Fuel cells for hydrogen-powered vehicles

## Risks.

- $CO_2$ emissions
- Environmental impacts of mining waste on water, soil, air and people, e.g. from tailings, acid mine drainage and dust
- Violation of workers' rights
- Endangering the rights of local communities

## Präventive Maßnahmen.

- Provision of raw materials by selected suppliers
- Sourcing secondary materials to increase recycling quotas and reduce $CO_2$ emissions
- Contractual assurance by suppliers of compliance with ESG standards (e.g. certification)

# SYNTHETIC GRAPHITE.

Although graphite is naturally occurring too, producing synthetic graphite allows its properties to be modified. Synthetic graphite can be reproduced from petroleum and coal products in a relatively short time.

## Applications.

- Batteries (high- and low-voltage)

## Risks.

- Environmental impacts on water, soil and air from production of raw material (petroleum, coal industry)
- Dependence on fossil raw materials
- $CO_2$ emissions
- Requires large amounts of energy and causes dust pollution from production
- Freedom of association
- Corporate transparency

## Preventive measures.

- Collaboration with suppliers to establish ESG standards
- Development of traceability systems

# ACTIVE INVOLVEMENT IN INITIATIVES.

To continue developing our responsible raw material management, we are actively involved in a number of material-specific as well as overarching raw material initiatives.

## WHAT'S THE VALUE-ADD OF MULTI-STAKEHOLDER INITIATIVES?

Effective management of critical raw materials requires consistent engagement with stakeholders including civil society and key actors across the supply chain. That's why the BMW Group actively participate in initiatives, associations and other forms of collaboration that have established multi-stakeholder governance and work to its principles. Multi-stakeholder governance – involving civil society as a minimum – ensures that project-related decisions are made and outcomes validated collectively by all the parties involved.

# OVERARCHING POLICIES AND COMMITMENTS.

**All raw materials.**

Anti-Entwaldungs-Policy (pdf, 342 kB)

Biodiversity Policy (pdf, 1 MB)

Stakeholder Engagement Policy (pdf, 1 MB)

Grundsatzerklärung zur Achtung der Menschenrechte (pdf, 4 MB)

**Leather.**

Deforestation Free Call to Action

**Natural rubber.**

High-Level Commitment for Sustainable Natural Rubber

**3TGs.**

Conflict Minerals Policy (pdf, 24 kB)

**PUBLISHED BY**

Bayerische Motoren Werke Aktiengesellschaft
Petuelring 130
80809 Munich
Germany

March 2026

www.bmwgroup.com